JUL 2 1923

Engineering News-Record

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June 28, 1923

Placing the Sucker Creek Bridge Span: Temiskaming & Northern Ontario Ry.

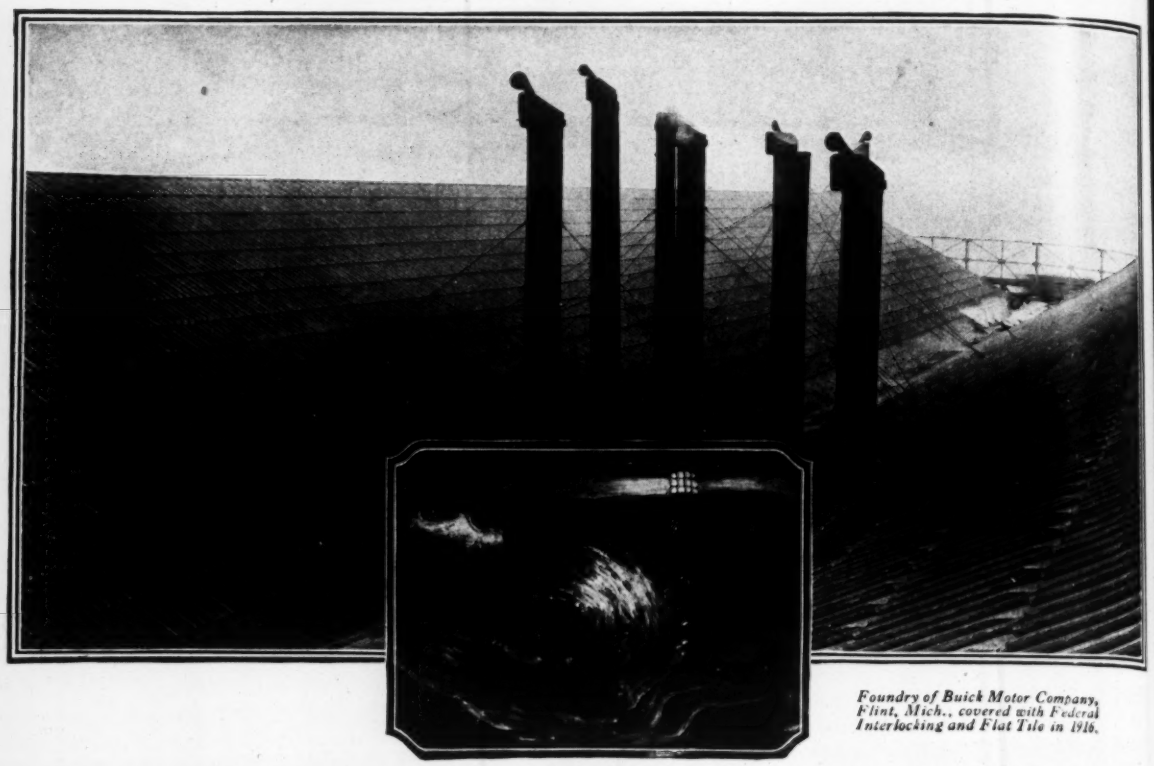
Extending an Ontario Provincial Railway to Hudson Bay

St. Louis Plans Wider Streets to Relieve Traffic Congestion

Report of International Road Congress Conference Held Recently at Seville, Spain

Earth Dam Built by Flooding Dry Fill
By Albert S. Fry

Also Ten Short "Job and Office" Kinks



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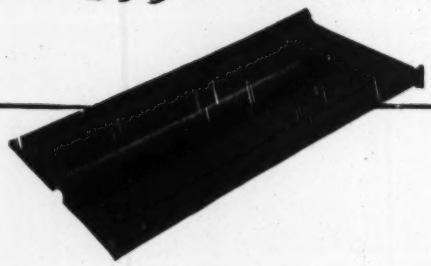

A Consolidation of Engineering News and Engineering Record McGraw-Hill Company, Inc.—JAMES H. MCGRAW, President

ENGINEERING NEWS-RECORD

DEVOTED TO CIVIL ENGINEERING AND CONTRACTING

E. J. MEHREN, Editor
FRANK C. WIGHT, Managing Editor

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Leviathan—Queen of the Seas

TO TAKE a ship, the largest in the world in tonnage, which had lain at anchor for over three years, and which never in her nine years had made a normal voyage, and so to re-equip her and re-design her that she becomes the fastest liner afloat is a feat worthy of notice. That is what American naval engineers have done to the "Leviathan." When the old "Vaterland" made last week the 25-hr. run of 687 nautical miles—an average of 27.48 knots—she broke the record held by the "Mauretania" by 11 miles and 0.44 knots. The world's largest ship is also the fastest and she becomes so by the work of the American engineers who entirely changed the driving power with which the Germans were never able to approach the speed just made. The "Leviathan" is not the entire American merchant marine but she is the queen ship of the fleet. It behooves Americans, especially those who bewail our lost prestige on the seas, to patronize her and her sister ships.

More Bridge Floor Fires

NEW evidence of the reality and seriousness of the fire hazard in wooden bridge floors continues to accumulate. Three destructive bridge fires have just been added to the record, as reported in the current week's news. The loss in any such fire is large enough to warrant careful attention to the fire hazard at the time of construction. Development of adequate fire-protective construction will doubtless require time. A useful beginning, however, was made a year ago through the work of a special co-operative committee which reported on the subject after detailed study. The report, published in *Engineering News-Record* of Nov. 9, 1922, lays particular emphasis on the value of firestops, a device that has hitherto found only occasional use. That it is a worth-while protection may be judged from the account of the recent Stevens Point fire, which repeats the story of many former fires in the matter of rapid longitudinal spread of the flames along the bottom of the floor, under the stimulus of an evident longitudinal chimney effect. In the absence of access openings through the floor such a fire, once started, is virtually beyond control. The simple and cheap expedients of firestops and access openings are capable of saving most of the loss caused by bridge floor fires.

Fundamentally Wrong

EVERY aspect of the conflict between the Pennsylvania R.R. and the Railroad Labor Board, which came to a climax in the formal rebuke of the railroad company last week, is unfortunate. Primarily it is unfortunate that the labor board is not provided with power to enforce its decisions even though as in this case the wisdom of its finding is to be questioned. Without such power it will soon become useless. In fact it may already be useless for now there is no reason why the labor organizations should not follow the example of the Pennsylvania. In the second place it is unfortunate that the labor board let the case come to this climax knowing, as it must have, that it lacked the power of enforcement. The question at issue was a debatable one; the law does not specifically state what form the employee representation shall take, and consequently need not have been made an issue as long as the actual dispute between the Pennsylvania and its employees was on a fair way to settlement. And finally it is unfortunate that the railroad company defied the labor board even though it considered the findings fundamentally wrong. If they were wrong the case could have been reopened and the Pennsylvania could have gone into the court with clean hands, and could, moreover, have looked to its employees to abide by the board's findings in some future time when the situation might be reversed. Now it can do neither. We believe that the principle for which the Pennsylvania was fighting is right, but that its method of conducting the fight is wrong. If the great corporations openly defy this administrative tribunal how can they or the country expect individuals or minor organizations to respect it.

Connecticut Still Vacillates

THE vacillation and delay in the adoption of a policy and method for water pollution control in Connecticut, noted in these columns in 1921, has been continued by the action of the 1923 legislature. The result is postponement of action for two more years and an apparent further befogging of the main points at issue. The governor acted wisely in vetoing the emasculated bill outlined in our news section, since it virtually let go scot free industrial plants located in cities and might have handicapped if not ruined the so-called "country" mills and factories, as well as any others discharging their wastes directly into streams instead of into public sewers. Too much stress seems to be laid by the governor upon the public health aspects of the bill in view of the fact that, as he states, public water supplies are protected by existing laws.

Highway Department Turnover

IN an average session of three months the legislatures of our states have more or less completely overturned fourteen highway departments. This is about 30 per cent turnover—a figure fairly comparable in size with those which are turning gray the hair of contractors and other employers of labor. Of course such a turnover in highway administration is not recorded every year. Last winter was open season for highway departments and the political pot-hunters were active. It is not however the percentage of turnover that is significant, but the fact that state governors and legislators and even the voters who pay the bills regard with entire complaisance the disrupting of a business organization of the magnitude of a state department of highways.

The 14 states which have changed partly or wholly their highway executives and managers are each doing an annual business of between $5,000,000 and $10,000,000 in road construction and maintenance. If a similar turnover should occur in private businesses of corresponding magnitude bankers and business associations would take a high hand in correcting a situation regarded as dangerous to industrial and commercial existence. There is evidently a vast need that the public should be made to realize that their highway departments are immense business organizations of a highly specialized character doing an annual business which surpasses in money value all but a few nation-wide private enterprises. Changes in personnel, often, and even drastic reorganization, occasionally, are required in highway departments, as in other business organizations, but neither popular impulse nor political expediency should be the inspiration for such action. Both were large influences in this year's changes.

Human Nature and Tunnel Driving

DRIVING tunnels isn't all machine work; a knowledge of human nature helps. Out on the Pacific Coast recently in one of the latest power tunnels a new drill better fitted than the old ones to drill the 20-ft. and deeper holes demanded by the new large rock sections was set up alongside the standard drills. Despite the fact that the drill had been tested out in this particular heading by the foreman and shown to work well, the crews did not get good results with it. It was too heavy, they said, and there was no denying the fact that it was often out of order. Too often, in fact, for such a substantially built device. Strangely enough, too, foreign material, such as pieces of file, was generally found in the mechanism when it was turned in as "out of order." The superintendent did not quit, however. He merely withdrew the drill from this particular heading, waited until the incident was no longer in the limelight and then "stored" the drill in the tool house at a heading where the lightest drills on the job were in use. Gossip about such matters gets around a camp quickly and soon after the drill arrived a driller on his way in to his work stopped at this tool house and asked to see "that —— —— drill those fellers at adit 3 couldn't make work." He looked it over carefully and then called to his helper, "Come on, we take this one in." With the larger and more effective tool the two men completed their drilling thirty five minutes ahead of the others and then walked out of the tunnel *taking the drill with them.* After this, prejudice against the new type of drill was no longer a menace; instead a demand for it sprung up and within six months it was used exclusively throughout the entire project and was giving entire satisfaction with a more rapid rate of progress than was possible before.

Municipal Construction and Money-Costs

THE rise in construction costs and in the interest or yield rate for bonds is a double handicap on municipal improvements. The construction-cost index for June is 220.7 against 166.62 for June, 1922, and 273.8 for the peak of June, 1920, or it is 32 per cent higher than a year ago, 121 per cent above the 1913 level and only 19 per cent under the peak. The cities have, therefore, to pay more for the work they require. At the same time the interest or yield rate on municipal and state bonds has been going up in the last few months. For the week ending June 15 the yield rate on bonds offered by 16 states and municipalities was 4¼ or higher for seven issues, while in only one instance was the yield rate as low as 4 (Troy, N. Y. 1 to 20-year 4½'s selling at 4). The actual interest rates were 5 per cent or more for 8 of the 16 offerings and below 4½ for only 1 of the 16 lots. Earlier this year interest rates of under 4½ and yield rates of about or under 4 were frequent. Were it not for the fact that many of these bond issues are offered to finance improvements to which there have been commitments not readily put aside, the unfavorable market for materials, labor and money would cause a sharper and more immediate decline in the volume of construction work than has yet been the case. If present construction- and money-costs keep on the up grade the need for municipal improvements and consequently the lag is bound to increase. Eventually much of it will be met although some projects are bound to die. Under such conditions there is more need than ever for wise discrimination between the work that should be undertaken, regardless of unfavorable conditions, and that which without undue sacrifice may be postponed to a more auspicious time.

A Disheartening Dismissal

NO MOVE ever made has been more destructive of the morale of the engineer in the federal service than the peremptory ousting of Arthur P. Davis as director of the United States Reclamation Service. For forty years Mr. Davis has faithfully served the government and through regular and deserved promotion had risen to become the executive head of a bureau of more distinctly engineering character than any other of similar size under civilian control, a bureau, moreover, which engineers have successfully administered since its initiation. And yet he is removed without explanation and with no opportunity for defense, to meet the needs of what must be regarded as purely partisan politics. The administration cannot well escape the charge of debauching the government service in the interests of self perpetuation.

The incident has two sides, that of Mr. Davis himself, with its implication as to all other engineers in the government, and the larger one of the administration of government engineering bureaus, with its implications regarding a department of public works. As for Mr. Davis he will be able now to enter a consulting practice which has long awaited him at a compensation much greater than he has heretofore enjoyed, taking with him the respect of his professional associates to compensate him somewhat for his reflections on the ungratefulness of republics. His fellow engineers in the government know, however, that one of the compensations they have felt they enjoyed in public employ, the security which is supposed to make up for the numerous superior attractions of private employ, is at the mercy of any political superior who chooses to override the civil service laws by the simple subterfuge of abolishing the office. This knowledge cannot help but increase the already great difficulty of providing competent engineers for the work the government has to do.

What is in the mind of the Secretary of the Interior in this dismissal it is not permitted us to know. He takes refuge in the sole statement that he prefers to have reclamation work in charge of a business man rather than an engineer, but in order to avoid the necessity of showing wherein the engineering control has been unsatisfactory he abolishes the office of director

and substitutes a new one of commissioner, thus depriving the automatically removed director of a hearing on his dismissal. And to succeed this engineer who has grown up in the service, one of the most competent men in both the science and business of reclamation in the world, the secretary—a doctor of medicine whose life work has been the conduct of an asylum for the mentally deficient—appoints a not too successful country banker who has been a governor of Idaho. Is there any reason why the charge should not lie that the administration politicians want to have the leverage of the Reclamation Fund to use where it will do the most good? If Mr. Davis was incompetent he is entitled to know in what particulars; if the engineering control of an engineering activity has been a failure the engineers of this country are entitled to know wherein that failure lay and how a so-called business administration made up of doctors and politicians is to be superior.

The engineers who have been favoring a federal department of public works must be profoundly depressed by this incident. It has been their contention—and it has been the contention of this journal—that the engineering operations of the government must be administered by engineers who could be remote from political interference and thus free to devote to the government the full measure of their professional service. Dr. Work has shown how difficult it will be to keep the politicians out of government engineering. He has made some who are opposed to the military system of public works feel that the stability of that system is a virtue as well as a defect. It may be deadening to initiative and inducive of arbitrary class distinction but it does prevent political control.

Training for Leadership

LAST week at Ithaca the Society for the Promotion of Engineering Education carried as a slogan at the masthead of the program the brave words—"Training for Leadership." Around that slogan the program was built, starting with an address by the dean of the college where the meeting was held and ending later in the week with an after dinner speech by the president of the society. In between, the rôle of the engineer as a leader in industry, business, transportation and public service were discussed by specialists in those lines of endeavor. It is no secret that these addresses, all well prepared, some eloquent and all thoughtful, left the hearers cold—not to the desirability, or even inevitability, of the engineer assuming a leader's part in the world's affairs, but to the possibility of so training him in his undergraduate days as to insure for him such a part.

There is an old story of a little boy who when asked what he was going to do when he grew up answered, "I'm going into the millionaire business." So too the advertising pages of certain magazines are filled with instructions how to earn fabulous weekly incomes or to dominate one's fellows merely by following some prescribed system available at so much per course or per week. To set out avowedly to train engineering students so that they become leaders of men savors too much of a little boy's vague ambition or of a charlatan's easy road to success. The engineering teachers realized this and they emphasized it.

This does not mean that the engineering teachers, any more than the bulk of the profession, question for a minute the world's need for the leadership that the engineering type of mind can give. As Dean Kimball so well pointed out the military leader, who ruled by force, has passed away; the legal leader, who rules by precedent must similarly succumb to the revolutionary developments and discoveries that render precedent useless as a rule for future guidance not only in the material but even more in the social and spiritual; there remains the scientific leader, who is guided by fact and fact alone but who possesses that one essential of the imaginative spirit, the willingness, nay more, the anxiety to believe that anything is possible. The engineer, who gives the skeleton of science a corporeal existence and breathes into it life, must step forward out of the crowd into the forefront of the world.

How then can the embryo engineer be trained to take this leading place? By specifically guiding him individually toward leadership; by consciously directing his course of study to that end? Hardly. Leaders are born not made. Few privates carry the marshall's baton in their mental knapsack. To take the mass of the human material presenting itself for an engineering education and to attempt to mold it toward the one end of directing the affairs of this world would be to grievously overestimate the importance of training and, more than that, of the engineer's place in the world. All the educator can do is to formulate as well as he can those qualities of thought and practice which characterize the engineering type of mind and methods, qualities that the changing character of the world make ever more necessary for the conduct of the world, and then endeavor so to instruct the student that he will go forth endowed, within his own limitations, with those qualities. If he knows the laws of nature, can by reasoned processes apply those laws to specific cases and can persuade other men that his application is not only correct but profitable, he will have the essentials of leadership. The remainder of the way lies in himself and the teacher can do little more than point it out.

One paragraph in an address at Ithaca by W. E. Wickenden, of the American Telephone & Telegraph Co., is a clear expression of this thought. "There are some things which colleges can do to a higher degree than any other institution. They can train men to think logically, to study effectively, to investigate with discrimination, to plan intelligently, to work systematically, to express themselves with clarity and vigor, to appreciate and enjoy things of beauty and to pass valid judgments on their own work and that of others. There are some things which colleges can do to a less complete degree, such as training men to know other men's minds, to estimate human relations, to co-operate with their fellows, to strike a just balance between details and general relations and to decide issues on the basis of evidence, even when it is not wholly conclusive. There are other services which they can render in degrees which vary widely with the individual's capacity for response, such as to stimulate the imagination, to clarify the ethical sense, to develop self-confidence and the willingness to assume the consequences of one's own decisions, to recognize ability and to delegate responsibility."

It was with full recognition of these possibilities and limitations that the engineering teachers regarded the slogan at last week's meeting. If they continue to recognize them in their work of teaching, the slogan has its value as a beacon to steer by. It is far from being a complete chart of the voyage.

Ontario Provincial Railway Extending to Hudson Bay

New 190-Mile Line to Encourage Settlement and Develop Mineral and Power Resources—Airplanes Check Surveys—Construction Methods—Electrification

WITH a port on James Bay (Hudson Bay) for its objective, but with the main purpose of opening up new country for settlement and mineral development, the Temiskaming & Northern Ontario Ry. is building a 70-mile extension north from its present terminal at Cochrane, Ont., as the first section of a 190-mile line to Moose Factory at the south end of James Bay. It is expected that contracts for the construction of the remainder of the line will be awarded this summer. Special features noted in this article are the exploration and location survey work, use of airplanes to check ordinary surveys, construction methods and equipment, water power development and the recommended electrification of the present main line. Views of the work and the country are shown in Figs. 1 and 2, and Fig. 3 is a map of the new line.

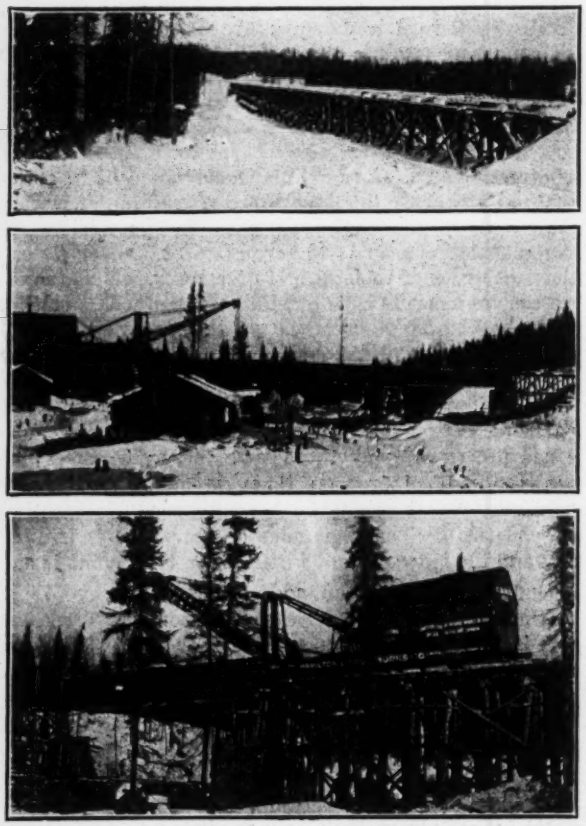


FIG. 1—BRIDGE AT SUCKER CREEK; T. & N. O. RY.
Top; temporary structure, with trestle approach to be filled later. Middle and bottom; placing two 85-ft. spans on concrete piers, Mile 20.3.

Government Railway Project—This railway was built by and is both owned and operated by the province of Ontario, under the control of a commission appointed by the Provincial Government. In 1902 the Province commenced the construction of a colonization railway northward from North Bay, on the Canadian Pacific Ry., to New Liskeard at the head of Lake Temiskaming. For about a thousand miles through Ontario the transcontinental line of the Canadian Pacific Ry. crosses the south face of the great "pre-Cambrian shield," which extends from the Great Lakes northward to Arctic waters, and is the largest and most important physiographic feature of Canada. This area had been commonly thought to have no economic resources, other than its rapidly diminishing pine and spruce forests, and it was quite unpopulated, except for sparse settlements along the Canadian Pacific Ry. The provincial railway was primarily projected to open to settlement large areas of fertile clay land that lie between Lake Temiskaming and James Bay, and form what is now known as the northern Ontario clay belt.

About two years later the Dominion Government undertook the construction of the National Transcontinental Ry. between Quebec and Winnipeg. The route of this railway across the Province of Ontario lay entirely in the drainage area of the rivers draining into Hudson Bay, and in a large part through the above clay belt. The Provinical railway was later extended northward to meet the Dominion railway, reaching the connecting point at Cochrane in 1908, thus facilitating the construction of the new Transcontinental line eastward and westward from this point.

At that time it was expected that the Temiskaming & Northern Ontario Ry. would be a connecting link between the Grand Trunk Ry. and the proposed Grand Trunk Pacific Ry., for a route from Toronto to Winnipeg and the Pacific Coast. But owing to war conditions and the Grand Trunk's loss of control of its Pacific extension this plan never became operative. At present the Grand Trunk, the National Transcontinental and the Grand Trunk Pacific are all absorbed in the government system of the Canadian National Railways.

Although the Temiskaming & Northern Ontario Ry. has remained as a local line it has served the development purpose for which it was originally projected. A great area of the clay belt is being cleared and put under cultivation, pulp and paper mills have been established, numerous hydro-electric installations have been made and the construction of the railway has led to the discovery and development of silver and gold mines of international repute. In fact, it is said that with the construction of this railway the frontier of Ontario was moved about 250 miles further north. When the National Transcontinental Ry. was projected, running westward across the northern and practically unknown part of Ontario, it was shown that it would open up a great territory of good but hitherto inaccessible country north of the "height of land." With the new railway now being extended north from this line to James Bay another strip of land will be made accessible and the frontier moved still further northward.

The winters are long and cold, with a minimum temperature of 30 to 35 deg. below zero, and there is snow on the ground for at least five months of the year. The summers are short, usually hot and dry, but the nights are cool. There are only about two months without frost.

Mineral Resources—As to the mineral developments in this region, Dr. C. V. Corless, director and manager

of the Mond Nickel Co., in an address before the Canadian Club of Toronto, stated that probably the greatest advantage of the extension of the Provincial railway will be in rendering the shores of James Bay and Hudson Bay and the tributary rivers accessible to explorers and prospectors for four or five months of the year. The Hudson Bay Ry., in Manitoba, will have a similar effect when completed. He predicted the discovery of great mineral wealth in this newly opened territory. Referring to the five great groups of mines already found on the southern fringe of the pre-Cambrian shield (Lake Superior iron, Michigan copper, Sudbury nickel, Cobalt silver and Porcupine gold) Dr. Corless said: "These five fabulously rich mining areas with numerous other minor discoveries, some of which may develop into very important mines, are all situated in a small part of the pre-Cambrian shield, the part we have very incompletely examined merely because it was accessible. The remainder of this vast shield is similar in glaciation and geological formation. Further, where prospectors have secured a new point of attack, as near The Pas, in Manitoba, made accessible by the Hudson Bay Ry., they have discovered valuable mineral deposits."

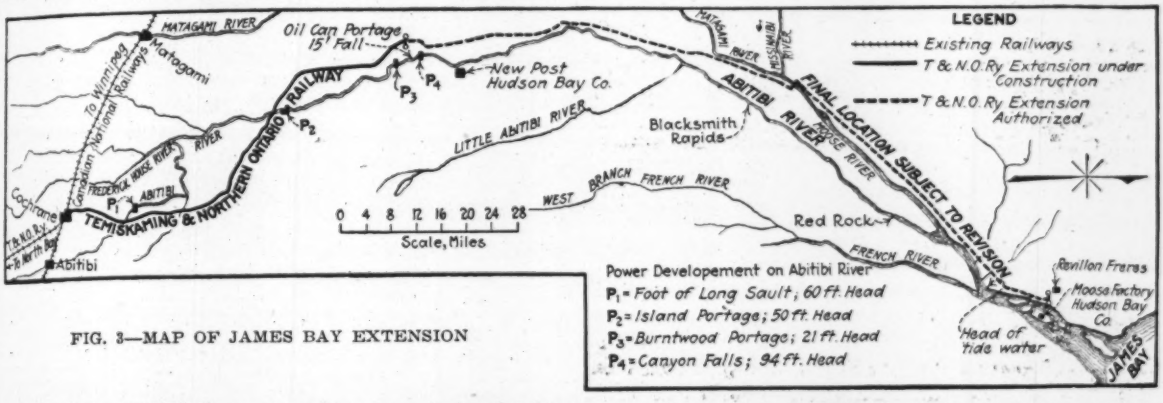


FIG. 3—MAP OF JAMES BAY EXTENSION

Exploratory Work—Exploration surveys north of Cochrane have been carried on intermittently for several years. Little was known of this territory except along the larger rivers, of which traverse surveys had been made. Traveling by canoe routes was relatively easy, but the forests on either side were practically impassable. During these early surveys information was collected respecting the timber, soil, water powers and mineral resources. An examination was also made of all possible harbors on the south side of James Bay.

It was found that there would be no serious construction difficulties to determine the location of the extension. The problem was, therefore, the location of a route that would best serve to develop the intervening territory, and that would reach a terminal on tidewater at which a harbor could be developed to meet the requirements of whatever navigation should offer. The mouth of the Moose River proved to be the most desirable site for a harbor, with the terminal located on the west bank of the river opposite Moose Factory, which is an old Hudson Bay Co. post on an island in an estuary of the river. It is anticipated that the construction of a railway to Moose Factory will create considerable interest in James Bay and Hudson Bay, and that during the navigation season of five months a considerable amount of coastwise shipping will be carried on. From a geological standpoint the prospects of finding valuable minerals along the shores of Hudson Bay are very favorable, but as the bay is practically inaccessible very little prospecting has been done. In selecting the route from Cochrane to Moose Factory the most direct line has not been followed, but it is believed that the route as adopted will open a large area to settlement and will better serve to promote the establishment of pulp and paper mills on the Moose River and its tributaries.

Ordinary and Airplane Surveys—Initial surveys were carried on by methods usually followed in northern Canada, the only means of transportation being canoes in summer, and toboggans and dog teams in winter. Subsequent to the completion of the exploratory surveys and the selection of a route, the Laurentide Air Service, Limited, established an air station near Cochrane, at which a number of modern seaplanes are available for commercial flying, and the railway engineers have made some use of the machines.

These seaplanes were not available when the exploratory and reconnaissance surveys were made, but it is considered that they can be used to advantage in making exploratory surveys in unmapped country. After the completion of the reconnaissance surveys the engineers used the seaplanes to a slight extent to check up results of their previous surveys. It has been the experience on this work, however, that aerial surveys cannot take the place of preliminary instrumental surveys, since the topography of the country is such that the slope of the river valleys, etc., cannot be determined with sufficient accuracy without levels from trial lines. On the other hand, the flights made have served to check the information which was obtained by more laborious methods.

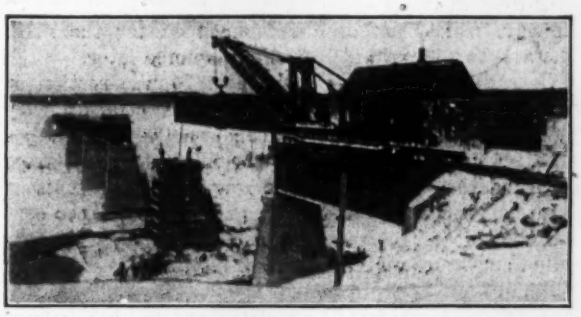


FIG. 2—PLACING 110-FT. SPAN; ABITIBI RIVER BRIDGE March 20, 1923. Note double-boom erection car. Spans on the far shore were erected before the temporary trestle removed.

Final location surveys are now being completed to Moose Factory by two survey parties. Each party con-

sists of a chief of party, transitman, leveler, topographer, two rodmen, two chainmen, four to six axmen, cook, cookee and two to four packers or canoemen. A transport party is responsible for transportation of supplies to main caches, from which the location parties draw when required. The entire operation is in charge of a chief locating engineer who co-ordinates the work of the various parties.

In connection with the location surveys, topographic surveys have been made of the water-powers on the Abitibi River (see Fig. 3) in order to determine clearances for structures crossing the Abitibi and its tributaries. In all cases these structures are being designed so that they will not restrict the future development of water-power sites (see Fig. 4). Information obtained from the hydrographic surveys was used also in connection with the studies for the electrification of the railway, which has been recommended for the main line and two important branches, as noted later.

Construction Work—On the first 70-mile section of the James Bay extension the work is comparatively light, the grading averaging about 14,000 cu.yd. per mile. About 40 per cent of the fill material is from cuts and the balance from borrow pits. The limit of free haul is 500 ft. Maximum grades are 0.4 per cent southbound and 0.6 per cent northbound, with a maximum curvature of four degrees. Roadbed width is 18 ft. on fills and 24 ft. in cuts. The location profile showed no solid rock, but a small quantity has been encountered in some of the deeper cuts. All clearing has been done on the 99-ft. right-of-way, this work being handled generally by the stationmen preparatory to the work of grading.

Side borrowing is done usually by stationmen, using wheelbarrows for making the fills. In some places where the land is drier than usual, scrapers have been used to make embankments from side ditches. Line cuttings are generally taken out by pick and shovel, the material being removed in narrow-gage dump cars hauled by horses. Two steam shovels are in operation, both with 2½-yd. dippers. One is being used for ballast and the other for filling dump-car trains.

The contractor's equipment is of standard gage, except that small narrow-gage cars are used in taking out line cuts. Owing to the nature of the country it is difficult to move steam shovels ahead of the standard-gage track. Air-operated dump cars of 16-yd. capacity are used for making fills, the number of cars per train varying from six to twelve. Temporary trestles made from round timber, on piles where necessary, are used in making embankments with these trains. At the end of April, track had been laid to Mile 44.4, where foundations for a large bridge across the Abitibi River were being constructed. The grading between this bridge and the end of the contract at Mile 70, was fairly well covered.

There has been comparatively little trouble from sliding cuts, but the bottoms of a few cuts have been very soft, necessitating cross logging to hold up the track. Nor has there been excessive settlement of fills, except in one cut at Mile 5 where a 14-ft. embankment had to be carried across a marsh. As a rule the embankments are not originally made above grade line to allow for settlement. There is naturally some slight settlement, but this is taken up later by using train hauled material, which is generally sand, providing better drainage than the material usually found in line cuts. It has not been necessary to use cross logging under the embankments on account of swamps.

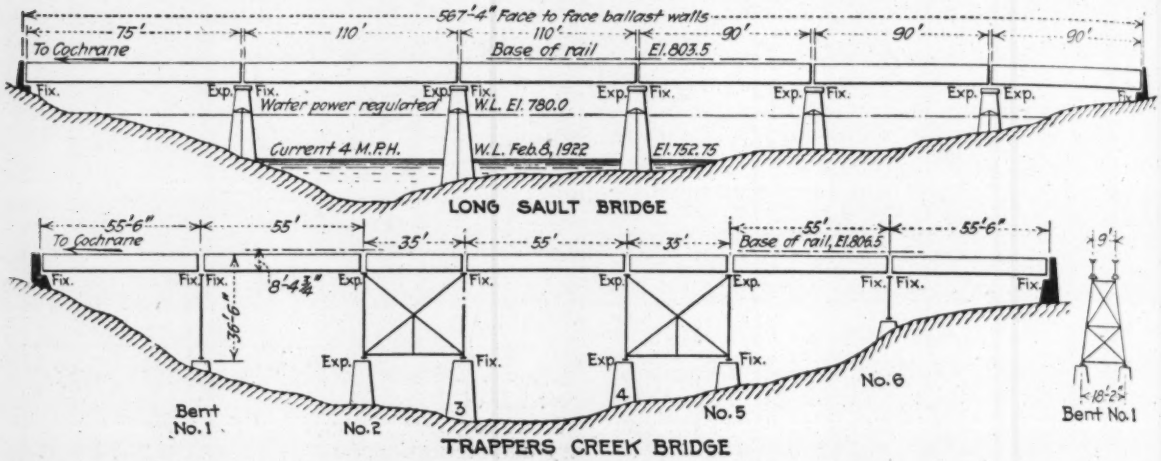


FIG. 4—TYPICAL BRIDGE AND VIADUCT CONSTRUCTION

Structures and Track—All structures are of permanent construction. The smaller culverts are of reinforced-concrete pipe, except in a few cases where corrugated metal pipe is used on account of greater facility of transportation. The larger culverts are of a flat-top type built of reinforced concrete. In the deep clay of glacial origin pile foundations are necessary for most of the structures. Spruce suitable for piling is generally found adjacent to the right-of-way. The larger creeks have deep ravines and these are crossed by steel trestles, the clay banks of the creeks not being sufficiently stable to permit the construction of large culverts or high abutments.

Typical bridge work is shown in Figs. 1, 2, 4 and 5. The largest structure is the crossing of the Abitibi River, Mile 44.4, which has a 220-ft. deck truss center span and plate girder flanking spans on concrete piers, with steel trestle approaches. All structures are designed for Cooper's E-60 loading and in accordance with the Canadian Engineering Standards Specifications. Trouble was experienced in unwatering pier 2 of the Abitibi River bridge at the Long Sault, Mile 11.3, and in order to avoid delay to tracklaying a temporary

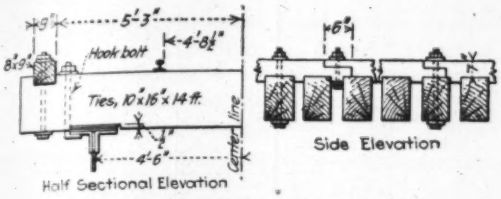


FIG. 5—DETAILS OF BRIDGE DECK

structure was erected between piers 1 and 3. During the winter, when tracklying was suspended, this temporary structure was removed and the two 110-ft. spans were placed, as shown in Fig. 2.

Bridge decks, Fig. 6, have ties spaced about 14 in. c. to c. with 8x9-in. guard timbers boxed or dapped over the ties. To prevent breaking of the ribs between the daps, four 3-in. nails are driven in each rib before the timber is dapped. These timbers are spliced either over or between the ties, as shown, according to the length of the timbers. Since gravel and cement for bridge foundations had to be brought in by rail, temporary trestles were built at several structures in order to avoid delay. The temporary trestle of the Sucker Creek bridge, Fig. 1, will be filled.

Track is being laid with 80-lb. rails of A. S. C. E. section, laid to break joint and spliced with heat-treated angle bars. Fig. 6 shows a Roberts tracklaying machine at work on a muskeg or swamp fill. The ties are of local jack pine, untreated, with 18 ties per 33-ft. rail length. Pit gravel is used for ballast and is 10 in. deep under the ties. Passing sidings 3,000 ft. long are provided at intervals of six miles and the turnouts have No. 11 frogs. The location of stations will depend on settlement. Woven-wire 52-in. fencing for the right-of-way is attached to 8-ft. cedar posts, placed 16½ to 33 ft. apart.

Swastika-Kirkland Branch—In order to assist the development of the Kirkland Lake gold mining area, about five miles east of Swastika (on the existing main line south of Cochrane), a branch line is being built eastward along this mineralized zone. It is intended to build about twenty-five miles this summer, and probably the line will be extended ten miles further to the interprovincial boundary. Preliminary surveys are now being made. This will be built as a comparatively cheap branch line, using 10-degree curves and 2 per cent grades where necessary. By using these maximum grades and curves, the grading quantities will be only about 15,000 cu.yd. per mile, about evenly divided between rock and sand. There will be no structures of importance.

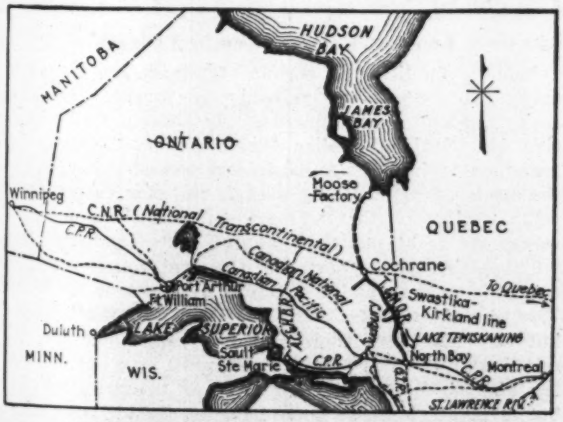


FIG. 7—KEY MAP OF NORTHERN ONTARIO

Electrification—In connection with this railway it is of particular interest to note that after careful study electric traction was recommended in 1922 as economical for the 250-mile main line from North Bay to Cochrane and for the two branches to Porcupine and Iroquois Falls, 33 and 7 miles respectively. Power could be developed at hydro-electric plants along the line and on the basis of using 3,000-volt direct current it was estimated that the reduction in operating expenses would be materially greater than the interest charge on the investment. Although the amount of traffic is less than is usually considered necessary for economical operation by electricity, this condition is said to be more than counterbalanced by the power cost. Thus, coal for the locomotives averaged $9.50 per ton in 1921, while it is estimated that current can be generated and delivered to the trolley wire for not more than ⅜c. per kw.-hr. The total cost of equipment, exclusive of generating plants, is estimated at $11,215,000.

Immediate electrification was not recommended, it being considered that further investigation should be made, especially as to hydro-electric installations, and that complete plans and specifications should be prepared first so that definite bids for the work can be invited.

FIG. 6—TRACKLAYING MACHINE ON MUSKEG FILL

Engineers and Contractors—For the 70-mile section now under construction the general contractors are Grant, Smith & Co. & McDonnell, Vancouver, B. C., who have sublet the clearing and grading to Noehren & Mannix, of Calgary, Alberta, and the concrete masonry to C. D. French & Co., of Montreal, Que. Steel bridge work, including erection, has been let to the Hamilton Bridge Works Co., Hamilton, Ont. It is expected to have this section completed in October, 1923, at an approximate cost of $3,500,000. Final location surveys are being made for the remainder of the extension to Moose Factory, and the contract for this construction will probably be let about August, 1923.

The Temiskaming & Northern Ontario Ry. is under the jurisdiction of a commission appointed by the Provincial Government, with Geo. W. Lee as chairman. The engineering staff consists of S. B. Clement, chief engineer; W. R. Maher, chief locating engineer; A. L. McDougall, division engineer in charge of construction, and A. A. McRoberts, assistant engineer in charge of design of structures. The investigation and report on electrification was made by Mr. Clement in conjunction with J. G. Kerry, Toronto, consulting engineer for the Commission.

Further Tests on Concrete-Encased Steel Floor Joists

STRENGTH TESTS of concrete-encased steel beams reported in *Engineering News-Record* of May 3, p. 800, were extended in subsequent tests to higher loads and to vibratory loads, and the observed stresses were compared with calculated stresses on the basis of reinforced-concrete action of the composite structure. The results, recently reported by Profs. H. M. Mackay, Peter Gillespie, and C. Leluau to the steel fabricators' section of the Canadian Manufacturers' Association, are held to indicate that in such encased-beam construction the concrete and steel act together to form a composite beam, which may be designed by the usual reinforced-concrete T-beam theory; that this action may be utilized to effect a considerable economy in floor design; and that the limits of bond stress between concrete and steel which should be observed in such design require further tests to determine them. The experimenters also report that it is advantageous to provide for continuity at the ends of the beams by reinforcement passing through the top of the slab, that the shear reinforcement provided by the webs of the beams will tend to eliminate failure from diagonal tension, and that these encased beams are in a more favorable position than reinforced-concrete beams because of the fact that the concrete carries no stress from dead-load.

Previous Tests—As reported the live-load was carried up to 220 lb. per square foot which was double the design live-load for a stress of 16,000 lb. per square inch in the beams; the panels were 15 x 16 ft. in size, of which a slab area 10 ft. wide and 16 ft. long carried by two 10-in. 22.4-lb. I-beams spanning .16 ft. and spaced 5 ft. apart was subjected to load. In the further tests the live-load was carried up to 365 lb. per square foot, or 3½ times the design live-load or more than twice the design total load. This increased the live-load flange stress in the steel from 7,600 lb. per square inch to 14,750 lb. per square inch, and made the total flange stress (dead plus live) 21,500 lb. per square inch. Slight haircracking in the lower portions of the beam encasement, one or two cracks extending to near the bottom of the slab, appeared during the higher stages of loading. The test was discontinued because it proved impracticable to place more load on the panel. Comparison of the measured steel stresses with those computed by calculation of the structure as a reinforced-concrete assemblage showed the observed results to lie between those calculated for the case of full tension in the concrete and the case of no tension in the concrete; in the latter case a part of the slab was counted as acting with the beam encasement to give T-beam action, this slab width extending four times the slab thickness to either side of the beam encasement. In the lower stages of loading the results agreed closely with those for the case of tension in the concrete, while in the upper stages of loading the results diverged more and more toward the other basis of calculation.

Before carrying out the tests under increased load, the panels were loaded with a concrete mixer of gross weight 10,400 lb., and this mixer, containing a 500-lb. charge of stone and operated by compressed air, was run "at a good speed" for two days. Its weight produced bending moments corresponding to those of a uniform live-load of 115 lb. per square foot. Strain-gage and deflection readings taken before and after the running of the mixer checked the weight of the mixer but indicated no vibration effect, and some slight haircracks that had been noticed in the previous tests showed no further extension, "although the amount of vibration produced would have been quite excessive in a building."

Truck Load Limits Reduced by New California Law

THE MAXIMUM load that may be carried by motor vehicles operating on improved state or county roads in California was reduced by the recent legislature in that state. Heretofore the limit for vehicle and load has been 30,000 lb.; this is reduced to 22,000 lb., effective Aug. 31, 1923, but vehicles weighing 10,000 lb. or more which are registered prior to Aug. 31, 1923, may operate with 24,000 lb. gross until Dec. 31, 1926.

Cities and counties may by ordinance increase the permissible weights but may not reduce except on unimproved roads, on bridges or for emergency. The maximum permissible weight per inch width of tire channel base is fixed at 700 lb. and the total gross weight for 6- or 8-wheel vehicles is set at 34,000 lb. Only one trailer may be used, whether laden or unladen. Body widths are limited to 96 in. over all, but cities or counties may increase this. The limiting speeds are established as follows:

Gross Weight	Maximum Speed
9,000 lb. but less than 12,000	25 miles per hour
13,000 lb. but less than 22,000	15 miles per hour
Over 22,000 lb.	10 miles per hour

Trucks or trailers constructed to carry 4 tons of load are limited to 15 miles per hour, laden or unladen.

Taxes and fees will be as follows: For each motor vehicle, trailer or semi-trailer, registration fee, $3; for the first set of license plates $5, each additional set $3.

Motor vehicles, trailers and semi-trailers equipped with solid tires will pay a weight tax on the following basis:

Unladen Weights	Tax
Under 3,000 lb.	$10.00
3,000 and under 6,000 lb.	20.00
6,000 and under 10,000 lb.	30.00
10,000 lb. or more	40.00

Pneumatic-tire vehicles pay one-half the foregoing weight tax and vehicles weighing less than 3,000 lb. and with cushion tires are considered as equipped with pneumatic tires. A gasoline tax of 2 cents per gallon goes into effect Sept. 30, 1923.

Leasing Engine Terminal Plants

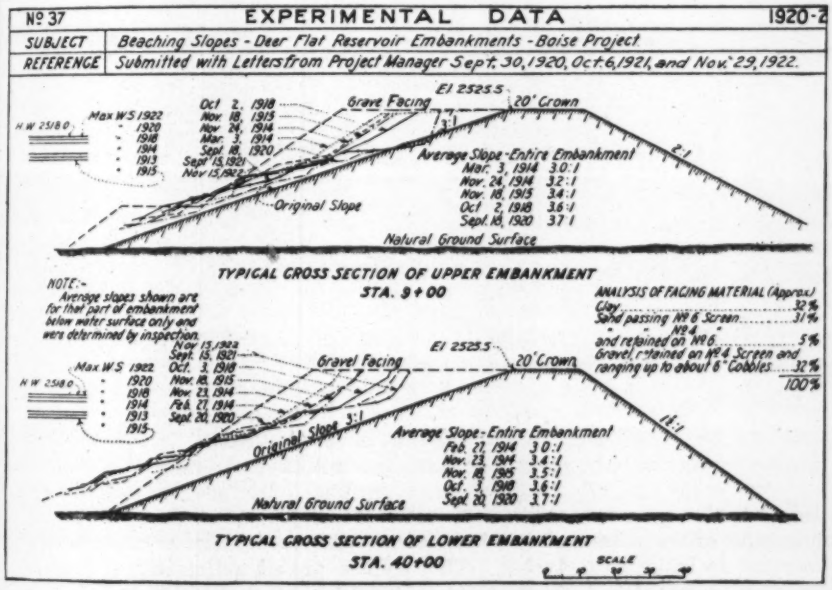
Modern facilities at engine terminals are needed in many cases where the railways are unable to finance such needed improvements. To meet this condition the National Boiler Washing Co., Chicago, has arranged to install its plants and special apparatus on the basis of payment by rental, the plan being somewhat similar to that of car equipment trusts. Payments are to be made on monthly notes and the plant will remain the property of the contracting company until the railway makes the final payment on the lease. The plan is similar to that of car equipment trusts, but the cars carry their own mortgage while the terminal equipment is put on mortgaged property. While the plant is being paid for it is an operating charge, but after all the lease notes have been paid the railroad can take title to the property and put it into capital account at its depreciated value.

Observations on Beaching Slopes on Reservoir Embankment

Abstract of Paper by C. A. Bissell, Engineer, U. S. Reclamation Service, in March "Reclamation Record"

FOR eight years cross-sections have been taken of the Deer Flat reservoir embankment of the Boise Project of the U. S. Reclamation Service to determine beaching slopes. Originally, the finished slopes were purposely much in excess of the present ones, but profiles for the last two years indicate they are now practically stable.

The reservoir is formed by taking advantage of a natural depression in the hills and closing the gaps by earthfill dams. The length of the upper dam is 4,000 ft. and of the lower one 7,200 ft. The former has a maximum height of 70 ft. and the latter 40 ft. The area of the reservoir is 9,800 acres and its greatest length, almost squarely facing the lower embankment, is nine miles. At the time of construction the extensive area and exposed position of the lake indicated that at times the wave action would be strong and that protection was accordingly important. No rock was to be found in the vicinity of either embankment and the distance from railroad connections made the importation of rock from a distance very expensive. The same conditions made the cost of concrete high and pavement with this material would also have been expensive. The importance of the question was emphasized by the great extent of the water slope in each embankment and it was finally concluded to try the experiment of protecting these slopes by an excess quantity of coarse gravel.



BLEACHING SLOPES OF UPPER AND LOWER DEER FLAT DAMS
Reproduced from *Reclamation Record*, March, 1923

After finishing the dam to the lines required by the drawings, with 3 to 1 water slope and 20-ft. top width, the equipment on the ground was employed in widening the top by dumping from cars on the water slope the coarsest material available, moving the tracks outward as the top width of the embankment increased. This material was composed of water-worn sand and gravel, varying from cobbles of 50-lb. weight through all the intermediate sizes to very fine sand, the proportion of coarse material varying some but not much. In this way the upper embankment received about 95,000 cu.yd. of extra material, which was deposited on the water slope, taking its natural angle of repose and widening the top of the embankment to a width varying from 51 to 67 ft. A larger quantity was necessary on the lower embankment as this is much longer. It required about 226,000 cu.yd. of material.

Cross-sections have been taken periodically, beginning in 1914, to determine the slopes to which this gravel had washed down. A recent letter from J. B. Bond, project manager, states that cross-sections taken last fall show no material changes over 1921 conditions, the difference being so slight that they would not show up on cross-sections of the scale of the drawing.

In 1922 Deer Flat Reservoir was filled to its maximum designed capacity on April 20 and was held at that stage until May 5, after which date it was gradually drawn down.

At the time of construction it was estimated that it would be possible to repeat the process of gravel reinforcement at least twice before reaching the cost of paving the entire water slope. It seems certain that this never will be required. At the lower embankment the advent of the railway since the embankment was constructed opens the possibility of employing either rock or concrete at some future date should further operations appear to be required. The present indications are that considerable economy is likely to be accomplished over the cost of paving the embankment slopes by the usual methods at time of construction.

Sixty Long Timber Columns Tested

RESULTS of tests of 60 columns of Southern yellow pine and coast type Douglas fir, 12x12 in. x 24 ft. long, have just been reported by the Forest Products Laboratory, Madison, Wis. These tests are part of a much longer test series, intend to extend over a four-year period, covering both green and air-dried material, summer-cut and winter-cut, of various grades from clear and dense to defective and light-weight. The columns so far tested include 40 of Southern yellow pine, most of them true long-leaf pine, and 20 of Douglas fir. The length was chosen to give a true long column, that is, one which would fail by buckling without exceeding the elastic limit of the material; shorter columns cut from the larger ones are to be tested later. In all three groups composing the set of 60 columns, the average of the ultimate (maximum) load of the several columns was 95 to 96 per cent of the Euler load computed from the constants of the column and its modulus of elasticity, the latter having been obtained in a preliminary bending test. The columns were tested "under what may be considered pin-end conditions." In the three series the lowest and highest failure loads were 201,500 and 432,600 lb.; 187,900 and 418,400 lb.; and 182,000 and 406,300 lb. The last figure is based on 19 columns, the twentieth having been found to have a defect that required its exclusion from the series. The tests have been interpreted as indicating "that there is little, if any, difference in the long-column strength of the two species," namely, Southern yellow pine and Douglas fir.

Results of 2x2-in. columns cut from the large timbers showed failure loads proportional to their stiffness moduli, indicating "that knots in themselves do not greatly affect the column strength."

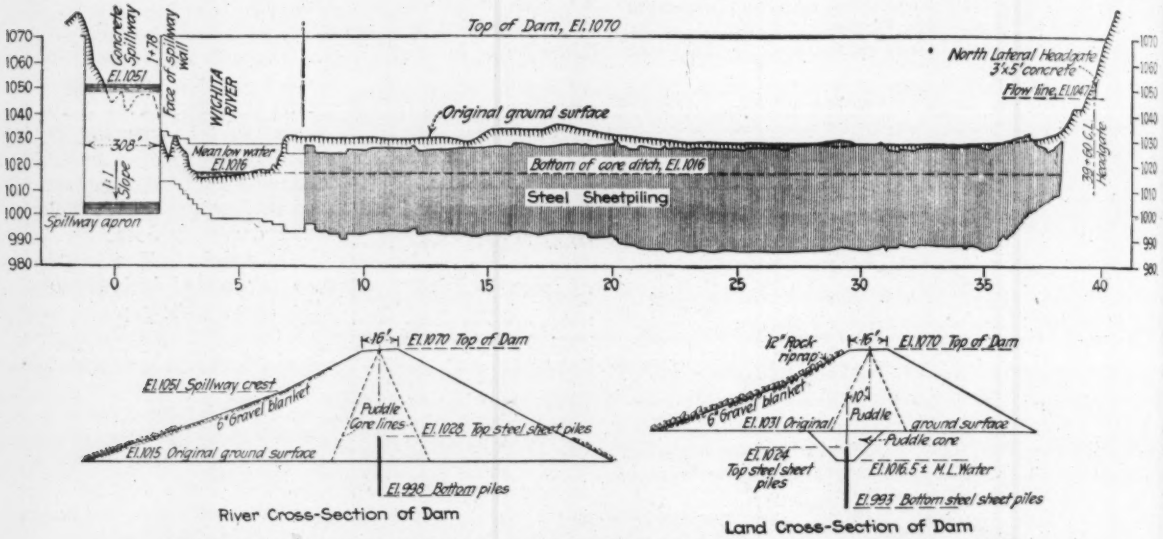
Earth Dam Built by Flooding Dry Fill

Depth of Dry Fill Successfully Compacted by Flooding Was Remarkable Feature of Diversion Dam for Water Supply and Irrigation at Wichita Falls, Texas

By Albert S. Fry
Morgan Engineering Co., Memphis, Tenn.

A POROUS earth, easily soaked, made the flooding method particularly advantageous for constructing the smaller of the two earth dams for the irrigation and water supply development near Wichita Falls, Texas (*Engineering News-Record*, June 21, p. 1080). It is thought that in building this dam greater depths of fill were consolidated by flooding than in any previous operation. Fills 3 ft. deep were successfully consolidated and dried out ready for the succeeding lift of embankment in from seven to twelve days.

As described in the preceding article the main storage dam of the development works is supplemented by a smaller diversion dam. While this will be a costly structure when completed, the topography of the country is such that it was more economical to build both a storage dam and a diversion dam than it was either to build a storage dam at the site of the present diversion dam or to construct an irrigation canal extending 15 miles from the storage dam to the site of the diversion dam. Under the plan which was adopted, the diversion dam will raise the level of the water about 20 ft. above the valley floor to the elevation of the intake into the main irrigation canal which carries the water to the agricultural lands and to Wichita Falls.



DIVERSION DAM, WICHITA FALLS WATER SUPPLY AND IRRIGATION DEVELOPMENT

Construction—Construction of the diversion dam began in January, 1922. The cutoff trench was excavated 10 ft. upstream from the center line of the dam by a walking dragline machine. Material from the trench was deposited in both toes of the dam. The excavation extended an average depth of 15 ft. to low water level in the river, which was nearly the same elevation as the river bed. In the bottom of the trench, a row of steel sheet piling, weighing 35 lb. per square foot, was driven to refusal into the underlying shale. The top of the piling extended a minimum distance of 8 ft. above the bottom of the trench. The longest piling driven was 43 ft.

Before backfilling the trench with clay puddle, it was pumped full of water from the river. Material from a borrowpit on the downstream side of the dam was loaded into dump wagons by a tractor and elevating grader. Two dump wagons were connected together and were drawn by tractors. The first method used was to dump the wagons at the edge of the cutoff trench but this method was abandoned because of the difficulty in getting the material into the trench. By the second method the material was dumped at the downstream toe of the dam and moved by a dragline excavator into the trench. This method proved satisfactory. The earth from the trench which had been put into the toes of the dam was leveled down to a height of about 4 ft. and the dragline moved along on this material in refilling the cutoff trench. In depositing the material, the bucket was dumped near the edge of the trench so that the tendency would be for the heavier particles to deposit along the side of the trench and the very fine material to deposit in the center and along each side of the piling, thus taking as much advantage as possible of the hydraulic grading of the material.

For a distance of about 700 ft. at the beginning of the work, after the material from the cutoff trench had been leveled down to a height of about 4 ft. above the general surface, the puddle core was extended up to this level in the same manner as that used in refilling the trench. However, on account of the cost of puddling, this method was discontinued for the remainder of the dam and the puddle was carried up only to the original ground surface and the fill up to the 4-ft. level

FLOODING THE EMBANKMENT IN SECTIONS 300 FT. LONG
Settling 3-ft. fills under water pumped in after deposition by teams and wagons. Material has 45 per cent voids and dries quickly.

was made in the same manner as the fill for the remainder of the dam.

Originally it was intended to roll and sprinkle the earth embankment but it was found that the material was adaptable to the use of settling under water and this method has been used. Material for the embankment is being taken from borrow pits both up and downstream from the dam, hauled on to the dam and placed in lifts about 3 ft. deep. After about 100,000 cu.yd. of material had been placed by the dragline machine rehandling the material into the embankment, after it had been dumped at the toes from wagons, the method was discontinued and the remainder of the dam is being built by teams and dump wagons.

In each lift the embankment is separated into sections about 300 ft. long by small levees along the sides and across the embankment. These sections are flooded with sufficient water pumped from the river to cover the fills with a pool 1 ft. deep. This amount of water is ordinarily sufficient to saturate the material thoroughly, but in case it is not more water is pumped on later. The time for the entire lift to become saturated varies according to conditions. Where the material was placed in the embankment by the dragline excavator, the earth where the dragline traveled was packed so hard that it required from 4 to 8 days for complete saturation. Where the fill is made by teams or tractors and wagons, the time of saturation is reduced to 3 or 4 days. When tests show that saturation is complete, the pool is drained, and the material dries out in from 3 to 8 days, depending largely on the temperature, so that the next lift can be placed.

It is planned to top out the dam with teams just as the present valley section is being built, except that the flooding method will probably be discontinued above the elevation of the spillway and the material which is too dry to compact suitably by team travel will be sprinkled.

The material available for this dam is very favorable to the flooding method of construction, as it contains about 45 per cent of voids, therefore saturates readily and dries out in a short enough time so that the work is not delayed waiting for the fill to become firm enough to work upon. The economy of this method of construction depends on the character of the soil as to whether or not it will become saturated easily. Heavy soils which do not saturate readily require the fill to be placed in thin layers. In other places where the Morgan Engineering Co. has used this method of construction, material has been placed in layers of only 12 or 18 in. Where such low lifts are necessary, the unit cost of the embankment is increased and other methods of construction may be more economical. On the diversion dam, however, the soil was adaptable to lifts of as much as 3 ft. and accordingly the flooding method offered an economical way to construct the embankment.

The rock riprap has not yet been placed on the diversion dam, but particular care will be taken in laying the stones and all of the openings between the stones will be hammered and rammed full of spalls with a sledge down to the gravel blanket. It is believed that by taking these extra precautions in placing the riprap, the comparatively thin layer (6 in.) of riprap adopted will be more satisfactory than a thicker layer with the rocks merely dumped on to the face of the dam. The riprap constructed in this manner will be so nearly solid that very little if any material will be sucked out by wave action through the interstices between the stones.

Spillway—The concrete spillway section of the diversion dam is located in the side of the hill at the south end of the dam. It was necessary to set this section over into the hill in order to secure a good foundation at a reasonable depth for the heavy concrete overflow section. The headgates and intake to the main irrigation canal are located just above the south end of the spillway and the intake structure will be joined to the spillway. An approach channel to the spillway through the side of the hill and a channel below the spillway to lead the water from the stilling pool back into the river channel are being excavated.

BACKFILLING CUTOFF TRENCH WITH DRAGLINE
After the trench was dug piling was driven down the center extending 8 ft. above the bottom of the trench and water was pumped in. The backfill was placed in water.

Excavated material is being placed in the river channel beginning at the south bank and crowding out to the north, leaving a part of the old channel at the north side of the present channel about 75 ft. wide to carry the flow of the river. The material across the channel is being placed in the toes of the dam, leaving a trench in between the toes which finally will be filled with puddle. Steel sheet piling will then be driven through the puddle across the channel. There will be some surplus material from the excavation for the spillway and the intake works in addition to that required in the embankment across the river. This surplus will be hauled across the river channel on a pile trestle and placed in the earth section of the embankment just north of the river channel.

Clay Blanket—In order to protect the restricted section of river channel from washing excessively during such floods as may occur, a 3-ft. blanket of clay has been placed on the sandy bottom of the river bed. On the downstream toe of this clay blanket, riprap 15 or 20 ft. wide has been placed extending along the bed

of the river. A timber flume 60 ft. wide and 50 ft. long with suitable cutoff and wing-walls at the entrance will afford additional protection to the river channel gap. At the downstream end of the flume, a plank mattress securely wired to the lower end of the flume with the downstream edge free to move up and down as the sand is scoured out will prevent destructive action at the outlet. This mattress is in sections 10 ft. wide and 15 ft. long, wired securely together. The flume will have a depth of 5 or 6 ft.

The construction of the storage dam was sufficiently advanced by March 1, 1923, so that ordinary floods could be controlled by allowing the water to store above the constructed portion of the dam and thereby prevent damage to the diversion dam from such floods. The temporary flume constructed across the restricted section of the river channel will carry the water which comes in from the drainage area between the two dams without danger to the works. Should an unusually large flood occur which would require the opening of the conduits in the storage dam to the point where they would pass a large volume of water, the temporary flume would not be sufficient and there world be risk of losing part of the embankment at the diversion dam. Under the contract this risk is assumed by the contractor.

FILLING IN RIVER CHANNEL AT DIVERSION DAM

To prevent scouring of the narrowed channel during floods the sand and gravel in the river bottom were blanketed with clay.

Berlin Sewage Farms in Use Fifty Years

Sewage farming is still used in Berlin, according to a letter from Dr. Ruths of the city administration. The only change since the irrigation fields were put in use in 1873 has been the enlargement of the settling tanks so that nearly all the suspended matter in the sewage is removed before the sewage is applied to the land. This makes possible a higher rate of sewage application than before as well as the continuous use of the fields. The effluent from the irrigated areas, says Dr. Ruths, is perfectly clear and increases the fish population of the river into which it is discharged. Distribution is by open ditches. Sandy soil, once sparsely covered with grasses or trees, now produces fruit, vegetables or, if in grass, five or six crops of hay annually. The volume of sewage pumped to the sewage farms is about 500,000 cu.m. daily (132 m.g.d.). The area irrigated is some 11,000 hectares (27,000 acres).

Elastic Modulus of Sand Foundation Measured in Holland

TESTS of the elastic modulus of the foundation material were necessary for the safe and economical design of a very large tide lock about to be built at Ymuiden, where the Amsterdam Canal enters the North Sea. The results were recently reported by M. Wolterbeek, of the public-works department of Holland; an abstract is given by A. Bijls in *Le Génie Civil* of May 26. Proper calculation of the bending moment in the floor of the lock requires a knowledge of the elastic reaction of the sub-soil. This reaction was taken as proportional to the vertical deformation, but for the numerical calculations it was necessary to determine the modulus of the soil, or the load per square inch per inch of depression. This quantity was determined by measurement on the bottom of a shallow pit exposing undisturbed, saturated sand (below groundwater level). A square bearing block was placed on the floor of this pit, carrying a loading platform confined by post guides on either side. Bearing blocks of various sizes were used in different tests, the length of side ranging from 4 in. to 28 in. (areas 100, 500, 1,000, 2,500, and 5,000 square centimeters). A marked lag in the deformation was observed, both in loading and in unloading. It was assumed, however, that any depression remaining 24 hours after unloading was permanent, and by this criterion the total depression in each instance was divided into elastic and permanent. For a load of 5½ lb. per square inch or 800 lb. per square foot, the permanent deformation was less for the large than for the small bearing blocks, while the elastic compression increased quite decidedly with the size of bearing block, amounting to 0.08 mm., 0.20, 0.29, 0.58 and 1.34 mm., respectively, for the five sizes of block. The modulus of elasticity correspondingly decreased from 1,730 lb. per square inch per inch for the small block to 102 lb. for the largest block.

Panama Canal Transits

The rapid increase in the United States intercoastal trade is shown by a comparison of the record of Panama Canal transits for the month of April for the past four years: 1920, 7 vessels; 1921, 19; 1922, 24; and 1923, 95 vessels.

Road Surfaces and Motor Transport

International Congress at Seville, Spain, Considers Six Questions Equally Divided Between Surfacing Methods and Highway Transport Practice

(Special Correspondence)

PRIMARILY the discussions of the International Road Congress which was held May 6 to 13 at Seville, Spain, were concerned with the needed changes in road construction to meet the increasing burden of automobile traffic. There were six questions submitted to reporters, as follows:

1. Surfacing of roads with concrete.
2. Use of bitumen and asphalt for surfacing.
3. Laying of tramway-rails on the various kinds of road surface.
4. The development of motor transport.
5. General traffic regulations.
6. The problem of traffic on congested roads and streets of towns.

Preprints were furnished to the delegates, containing reports from 13 countries and from 149 persons of whom 81 were residents of the United States. The method of operation of these congresses is: A number of individual reports from competent reporters are received from the various countries. These are then referred to a general reporter, who, through custom, is a native of the country in which the congress is held. The general reporter then summarizes the individual reports and draws conclusions in so far as these seem to be justified. These conclusions are then put before the congress for discussion and action.

The conclusions are taken up in caucus by delegates from the nations. In this case the French delegation had prepared conclusions which in many cases were entirely rewritten from the conclusions of the Spanish reporters. The French conclusions formed the basis of discussion by the English caucus, and finally the conclusions as modified were presented to the final meeting of the congress and adopted. The delegates from the United States had no official standing, and were invited to share in the English caucus.

With respect to the conclusions, the following is noticed: First, in drawing up conclusions which will apply to the colonial possessions of France in Morocco, to Paris, London, and the United States, the form must be very general, and would appear to be mainly a citation of the obvious. In the second place, delegations from the Latin countries appear to regard these conclusions as very important, since they could be taken to be directive of action by those who had power to regulate the construction and use of roads in their respective countries.

Again, the Latin nations concluded that subsidies should be granted to automobile transport, which is entirely opposed to the views of the United States. In fact, in Italy, where the railroads are under governmental ownership and regulation, subsidies are granted to motor transport lines which of course are only established to fill the needs of passenger transport for isolated districts which do not enjoy modern transportation or are not served by the railroad. The government grants a concession for the operation of such lines by private persons, and meets the deficit in the operation. Similarly, the Italian government has granted a concession for the construction and operation by private persons of a road exclusively for automobiles from Milan to the Italian Lakes. The French railroads operate passenger bus service over the highways. In fact, the acute controversies arising in the United States between the leaders of thought in the railway and highway fields do not seem to have arisen on the continent. Indeed, it may be remarked that the recent measurements of highway traffic in New England show that only a small portion of traffic is really competitive, and instances again the necessity of informing oneself before feeling.

A traveler, desiring to appraise highway development in Europe, or to reach conclusions from the experiences of these countries in highway transport, must make up his mind to devote considerable time to examination, and to learn the reasons for the conflicting reports, as, for instance, the relative economy of the tramway and motor bus operation in the cities of England. The economic conditions and the habits of the people are so different from those of the United States that care must be exercised in transferring principles and practices in either direction. The United States has been forced to build new roads to carry the remarkable burden of automobile traffic, and has the wealth to finance these constructions. The continental nations have roads well located, well drained and with solid road-beds, but not the economic conditions with which to face a widespread extension of motor transport. However, in some places, the increase of motor vehicle movement corresponds with that in the United States. The problem in the continent is distinctly one of surfacing existing roads.

While the conclusions of the congress are very general, yet the engineers of these countries will find in the reports a body of useful information.

Deliberations of the Congress—The congress was held in two sections, the first dealing with resurfacing of roads was attended by approximately 200 persons; the second dealing with more general phases of highway transport, was attended by approximately 50 persons. Approximately 600 persons in all were in attendance. The usual difficulties of international congresses were experienced in the time lost in translating remarks into two other languages than that of the speaker; and at this particular congress there was considerable lack of formality of debate. As in many other meetings of associations, considerable energy appears to be misused in the formulation of the obvious. There is also a common tendency to frame ideas into conclusions without respect to the data of experience and experiments. The vast body of experimental data available to the road engineers of the United States does not seem to have been known by the European engineers.

Entertainment—The very hospitable local committee had provided for the delegates an interesting program of entertainments characteristic of Andalusia. The

organ recital in that most glorious of all cathdrals, the Seville Cathedral, will linger long in the memory of the delegates. After the congress an excursion was provided to Granada and Cordova.

Question 1. Surfacing of Roads with Concrete—In the continent the desire to obtain a cheap construction that will be more resistant to heavy modern traffic has led to various forms of construction in which stone blocks or broken stone are bound together with lean or rich mixtures. For instance, the Cornet system in Belgium uses a binder of ten parts of slag, two parts of slaked lime and one of cement. The road is constructed of two layers of broken stone between which a layer of mortar is interposed. The first layer of stone is leveled and rolled, and a bed of mortar, approximately 1½ in. thick, is laid. Then a second layer of stone is spread and also rolled. The operation is expected to fill the voids in the stone road with mortar.

Recourse is also had in France and Italy to special patented products such as "Rhoubenite" and "Soliditit." Rhoubenite is an invention of a Belgian engineer, R. Houben, who endeavored to obtain an impermeable concrete by incorporating saw-dust impregnated with a special mixture of tar and bitumen, thus producing a powder which is mixed in a proportion of about 60 liters to 400 kilos of cement. The powder is added to the concrete mixer. After a few turns of the mixer, the concrete is carried in trucks to the site of the work. This Rhoubenite was used first in 1912 on the road from Brussels to Namur.

In all, some 72 installations of various forms of roads bound together with cement are reported from Belgium from 1910 to 1920, and 18 of these are of so-called Rhoubenite.

In Italy two trials of Portland cement concrete for roads were made in 1911. During 1914, 1915 and 1916, some ten concrete road constructions were reported in Italy. The esplanade in front of the central station in Milan is reported as in excellent condition after eight years' wear under rubber-tired wheels. Other roads in Milan, supporting traffic of an industrial type, are rapidly deteriorating, but are reported to have been executed in a very imperfect manner. Italians have made use of the system called "Soliditit," first in 1913 in a tunnel under the Quirinal, but without success.

Two concrete facings were made in 1920 and 1921 on a highway supporting a traffic of more than 3,000 vehicles per day. One of these roads which was flat and very damp, contains many cracks and deep ruts. The surface of the other, a 45 per cent grade, remains in good condition. At the Octroi gate on this last road, where the wheels must follow two narrow tracks, a wear of 2 cm. has been measured.

The Italian engineers stress the importance of a solid foundation under concrete slabs, so there may be continuous support; and also advise against the construction of two-course concrete roads.

In Holland, 1920, authorization was given to construct concrete facings for a length of 150 m., divided into three sections of 50 m. each: first, a section of 1:2:4 gravel concrete; second a two-course construction with a lean base; third, reinforced-concrete pavement of a mix of 1:1½:3. The work was installed in the spring of 1921. On the national highway between Amsterdam and Amersfoort the construction seems to have been conducted under careful management, and was opened to traffic after a period of one month. The first section, after 10 months' use, had to be reconstructed with asphalt blocks, and the second section showed enough wear to inconvenience the traffic; the third, reinforced section, has shown no signs of disaggregation. No difference is noticed in the amount of cracking between the reinforced and non-reinforced part of the roadway.

The reports from nine English engineers were incorporated in a report by Alfred Dryland of Middlesex County, England, summarizing their experience with concrete pavements during the last four or five years. A number of experimental installations of concrete roads have also been made in Spanish countries.

The congress concluded that cement concrete for carriage ways formed of materials of good quality and suitably proportioned, built on sound and well-drained foundations, are capable, if the work is carefully executed, of withstanding considerable traffic of heavy vehicles fitted with rubber tires, but that further investigations are required as to the effect of traffic consisting of a large portion of steel-tired vehicles. A mix of 1:2:3½ was recommended. One of the American delegates expressed his opinion that concrete pavements might be constructed of much leaner concrete, possibly 1:3:6. The congress mentioned the use of special cements as justifying the adoption of different proportions. It did not appear advisable to express an opinion as to whether reinforced concrete should be employed in preference to mass concrete, and thorough studies were recommended. The question of providing expansion joints against the effect of various temperatures and humidity was also to be studied. Interesting results have already been obtained following the adoption of a resurfacing method whereby a matrix of sand and lime is added to the macadam during or subsequent to the laying.

Question 2. Surfacing Roads with Bitumen and Asphalt—There has been a much more extended experience in the use of asphalt than in the use of concrete. There are approximately 105 miles of highways faced with bituminous materials in France. Experience with bituminous surfaces on national roads in France extends from 1912 to 1922. Those previous to 1918 were largely experimental, although certain roads constructed in 1913 have withstood a heavy burden of traffic in good shape. An experiment by Michelin is quoted as showing 25 per cent decrease in cost of rolling traction on bituminous roads from those of macadam roads. The French reporter says that the life of the heavily traveled macadam roads in the Seine-et-Oise Department is about one year, and that the cost of the bituminous surface is recovered within three years.

A French reporter lays the cause of the waves in bituminous surfaces to the action of the roller, and suggests a ramming machine as a substitute for the roller.

The English reporters refer to many miles of main roads on which two-coat asphalt surfacing has been laid directly on the existing macadam roadbed. Rock asphalt is found in many places throughout the continent, principally in Switzerland, France, Germany and Sicily. After being reduced to a powder it is spread on the road surfaces and compressed. The percentage of bitumen varies from 6 per cent to 16 per cent. The desirable proportion for working in Great Britain is found to be about 10 and 11 per cent. The

rock is mined and shipped in lumps by steamers. When it arrives at the works it is broken into medium-sized fragments and subsequently ground in pulverizing mills. After being heated it is transported, at a temperature of 340 deg. F., to the road, where it is raked and rammed to the necessary thickness of approximately 2 in., then laid on a cement concrete base. In Great Britain the use of rock asphalt is limited mainly to city streets. Italy has used rock asphalt extensively, the production being 106,000 tons in 1920. In 1849 a road in Switzerland was surfaced with this powdered asphalt rock. In 1860 this material was used for the first time in Zurich where now two-thirds of the total area of the streets is of compressed asphalt surfacing. It is reported that this material is too slippery for roads with steep grades. The limit of grade is 2½ per cent, whereas rolled asphalt can be used up to 4 per cent, according to the Swiss report.

The conclusions of the congress with respect to bituminous and asphalt surfacing were very general. It was recommended that research work should proceed, to determine the cause of corrugations and the means by which they could be avoided.

Question 3. Laying Tramway-Rails on Road Surfaces—The subject of laying tramway-rails on various kinds of road surfaces engaged the serious attention of the congress. It seemed odd to Americans to learn that rails may be laid directly on natural soil of gravel or sand, but a conclusion of this kind is no doubt written to cover conditions in the colonial territory such as Morocco. An interesting construction used by Mr. Brodie at Liverpool is to interpose a bed of pitch between the rail and the concrete foundation as the only fastening. The rail is raised clear of the surface, when practically set, and supported on hard wooden pieces of the same length as the width of the base of the rail, so that the rail is set in position true to line and level. These wooden pieces do not exceed ¾ in. in thickness. Temporary lines of sand or chippings are then laid just clear of the edges of the base of the rail, and a tempered mixture of pitch and oil, to which an equal bulk of hot sand has been added and thoroughly mixed in, both being at a temperature of about 300 deg. F., is then poured into the space between the upper side of the concrete and the under side of the rail until it comes up slightly over the upper side of the base, and completely surrounds and fixes in position the wooden packing pieces. When the mixture cools, the temporary lines of sand or chippings, which acted as small dams to retain the liquid pitch mixture, are removed. The mixture when cool sets to a semi-plastic consistency, and takes a firm grip both of the rail and the concrete, and forms an excellent bond, keeping the rail in exact position, so that no movement of the rail is permitted, and shutting out absolutely the possibility of water finding its way down between the rail and the concrete.

The method when carried out thoroughly, has done away with the trouble from rising sets or displaced paving alongside the rail in tramway streets.

The hold which a satisfactory mixture has on the concrete and the rail is well seen when moving the rail for reconstruction purposes. In such cases it becomes necessary to use heavy levers and bars to bring the rail off its bed, and when the joint is broken it will be found that in some portion of the length of the rail the pitch mixture parts from the rail surface while in others the mixture parts from the concrete and often brings away with it any weak portion of the concrete.

The reports upon this question are of exceptional interest and value. The live discussion of the problems of tramway rails on roads will recall the conference on paving held at the Engineers' Club in Philadelphia some few months ago.

A number of reports were received on the topic "Progress Made in Modern Mechanical Appliances Used in the Construction of Roads." Ten reports were received from the United States, one from France and one from Great Britain.

Question 4. The Development of Motor Transport—The fourth question was the development of motor transport, upon which reports were received from Spain, United States, France, Great Britain, Italy, Netherlands, Switzerland and Czechoslovakia.

In France the number of automobiles in 1920 was 231,074, as follows:

Passenger vehicles	public	20,812	
	private	132,759	
	Total		153,571
Lorries	public	6,364	
	private	71,139	
	Total		77,503
	Grand total		231,074

There were five times as many motor buses in 1920 as in 1913. In 1921 the number of motor vehicles which paid taxes, outside of the three departments, was 287,182, of which 92,730 were heavy vehicles. France has one motor vehicle for each 160 inhabitants; Switzerland one for every 151 inhabitants; and Great Britain one for each 110 inhabitants. France subsidizes motor transport lines capable of transporting at least 20 passengers each way per day, 500 kilos of luggage and 2,000 kilos of goods.

It is considered in France, as in Italy, that the economic conditions will prevent the creation of new railway lines, and that automobile transport, which can be rapidly installed and at a still approachable outlay, must supply the needs for increased transport. There were 164 subsidized motor transport lines in 1921. Many lines have been abandoned by the first contractors, concerning which the French reporters remark that:

> The cause lies more often in that, tempted by the bait of promised subventions, and knowing little about the limitations, maintenance and renewing expenses required for a well established automobile business, having underestimated, if not completely omitted these items, amortization charges on the capital, contractors badly advised undertake engagements which are too onerous and which they very soon find themselves unable to keep. May we express the wish that the Public Authorities warn them against their own impulse and only grant subventions to these contractors or companies having sufficient technical and financial capacities to carry out satisfactorily the services they offer to ensure.

The French reporter gives relative costs of motor transport in 1910 and 1922, and remarks that the whole business of the motor transport situation is dominated by the question of fuel. He discusses the use of the mixed carburant, a mixture of equal parts of alcohol and benzol.

The English reporter speaks of the decay of road transportation after 1850, consequent upon the building of railroads. By 1906 the traffic of the country had

commenced to flow once more over the roads. In 1914 the advance of motor transport was steady until the war, when road transport increased rapidly because of the limitation of the capacity of the railroads. The freeing of motor vehicles from war service attracted a number of drivers to this work, who, being untrained in careful business methods, undertook rates which, while meeting the actual cost incurred and providing a living wage, were insufficient to assure the upkeep of the vehicle and equipment over a long series of years. Meanwhile the railways had been allowed to fall into poor condition. According to the English reporter, the deficiency of the railway rather than the merit of motor transport was the cause of the rapid growth of road traffic, and not until there is free play allowed to economic operating conditions will the question of the advantage or disadvantage of the two forms of conveyance for the two classes of traffic be determined.

A number of instances are quoted of the experience of merchants in hauling various commodities to London by motor trucks, to an economic advantage. The reporter remarks that there are always reasons for the use of the roads other than that of comparative costs. The average haul on the railroads in Great Britain was 50 miles against 186 miles in the United States, in the year 1920.

As in certain portions of the United States, unrestricted competition between motor bus lines has led to unfortunate results, recognized by the motor truck operators themselves who are now desirous of control by public service corporations. The English reporter speaks of the influence of roads in changing the location of cities and the drifting of factories to the surrounding rural areas, which brings forward problems in country planning.

In Italy there is a scarcity of railroads, and automobiles have become a necessary auxiliary of service, with fixed rates and time-tables, in bringing movement and life to the most distant and inaccessible inhabited places, delivering entire regions from their isolation. Motor bus lines are subsidized by the government. In 1905 there was a single subsidized automobile line; in 1921, 631 lines, with a total length of 23,910 kilometers. A number of lines covering 25,000 kilometers are not subsidized, but are under the control of the state, which settles questions of competition and regulates their operation relative to the subsidized lines. Lines destined exclusively for the transportation of goods are run without financial assistance from the state. The reporter concludes that rules serving as a basis of subsidized passenger service could not be applied to goods service, since motor vehicles should never travel empty, which would be the case if fixed time-tables and hours were imposed upon these freight carriers. It is hoped in Italy that better co-ordination between these goods carriers and railway services may be established, so that there will be a single movement from distant points to house-door in an interior town. In 1901 the state imposed heavy burdens on such motor transport companies. In 1904 the principle of subsidizing such roads was established. The motor service suffered so heavily during the war that special efforts were made by the state to encourage the resumption of the highway motor bus traffic by increased subsidies, increased payment for postal service, and in supplying petrol at a special price.

Up to 1914 very few attempts were made to use the motor truck for the transportation of goods, but after the war and the freeing of the immense stock of motor trucks, the road transport of goods increased. The number of motor vehicles in Italy in 1921 was estimated as 100,000, one for every 350 inhabitants. Costs of motor car service are extensively quoted in the report.

The Italian government grants a reduction in traffic tax for automobiles furnished with pneumatic tires. A test is reported at Milan of a good tarred road showing a unit consumption of petrol to be 26.7 grams per ton-kilometer total weight, and 42 grams per ton-kilometer of useful capacity. On an ordinary macadam road in moderately good condition, the consumption was 76.5 grams per ton-kilometer total weight, and 146 grams per ton-kilometer of useful capacity, about three times excess.

It is to be noted that the Italian government has granted a concession for the construction of a highway exclusively for automobiles, from Milan to the Italian Lakes. Tolls are to be charged, based on weight and power of the vehicle.

In Switzerland there is an extensive use of motor buses. The passenger cars increased 560 per cent from 1910 to 1922, and the trucks 1676 per cent. Since the last year of the war, 1918, passenger cars have increased 1.3 times and trucks 2.5 times. In 1904 the postal administration added the first motor truck to its service, and a passenger bus line was installed the preceding year. In 1921 there were 51 licensed automobile services. The principle of subsidy obtains in Switzerland where 20 concerns receive assistance from the states or from municipalities. The private concerns carry passengers in large, open touring cars, running from the larger towns. They are considered to be competitors of the railroads. The reporter from Switzerland gives valuable data on the cost of passenger car and motor truck service.

One conclusion of the Congress with respect to the development of motor transport stated that, where railways and tramways cannot penetrate, traffic should proceed by the highways and be encouraged by the governments, if necessary, by granting subsidies sufficient to insure their existence and in proportion to the service they are called upon to render. Research was recommended into the economical sources of energy. The motor vehicles must be adapted to the roads, so as to diminish the effect of rapid running or heavy traffic; as for instance, including tires, method of suspension and braking.

Question 5. General Traffic Regulations—General traffic regulations have received considerable attention in Europe, and formed the subject of an International Congress in Paris in October, 1921. Exceptions were made for farm vehicles traveling for short distances on the road. The continental regulations are based on the principle that the heavier the car the less the speed. No limits of speed are fixed for cars of a weight less than 3,000 kg. The width of tires was fixed by the specifications that the weight shall not exceed 150 kg. per centimeter of width. Automatic speed regulating devices are recommended for freight vehicles in excess of 3,000 kg. Provision was recommended for an international certificate for drivers and for cars.

The French recognize a distinction between vehicles with solid and with pneumatic rubber tires, and M. Chaix quotes an experiment on a newly built macadam

road, on one side of which trucks weighing 6,500 kg. loaded ran at 22 km. per hour for 2,000 passages. Under pneumatic tires the surfaces were slightly cut up; the wear of material was 0.33 cubic meters. Under solid tires the surface was destroyed; the wear was 5.3 cubic meters. On a tar-macadam surface, the solid tires removed only one-quarter as much material as on the macadam surface.

M. Chaix recommends control of the speed on roads of different classes. Concerning the load per width of tire, he remarks that if the loads are unduly limited, then the number of vehicles must be increased to the detriment of road surfaces. He mentions the placing of brakes on all four wheels as is found on some cars in Europe at the present time. He remarks on the difficulty of applying the force equally to all four wheels and also leaving freedom to the guide wheels. For heavy freight trucks the continental countries provide an apparatus independent of brakes and motor, to prevent the vehicle from running back down the hill when starting.

In England and the continent, steel tires are still found on motor vehicles, especially those propelled by steam. The speed of these is especially limited. In France the law provides that within a term of six years all motor vehicles must be supplied with rubber tires.

Czechoslovakia reports the formation of road regulations as based on the French code of May, 1921.

A table of suggested weights and maximum speeds was introduced in the conclusions, against the protest of some of the delegates who considered that the information justifying such a table was not yet available.

Question 6. Traffic on Congested Streets—Probably the reports on this section will be of most value to readers in the United States, as an exposition of the elements entering into this problem, and the new ideas. The reports on this question by the French and English reporters are of especial excellence. The English are introducing safety first competitions among the school children similar to those conducted by the Highway Education Board in the United States. An observer of continental traffic, especially in Italy, is somewhat surprised to notice that the automobile dominates the situation and that the foot passenger is apologetic.

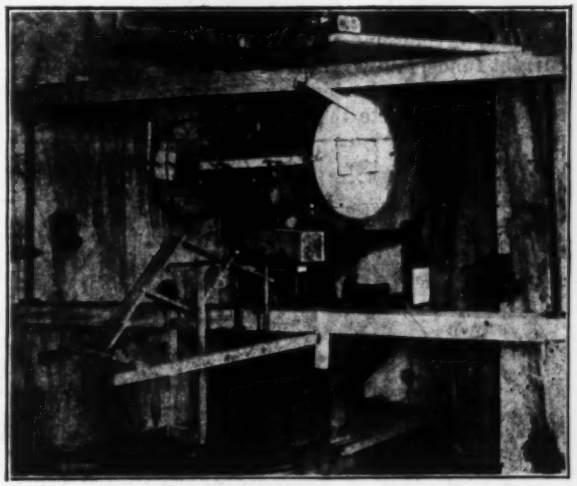
Congressional Committee on Reforestation

Before closing its season's work the U. S. Senate Select Committee on Reforestation made a trip to the Great Lake states to hold public hearings at various cities in those states and to see some of the work now going on. They found that Michigan plans to segregate all lands that are to be used for reforestation and to reduce the taxes on such land to the rate of five cents an acre for a period of twenty-five years. After that time the owners will pay back to the state twenty-five per cent of the value of all products taken. John W. Blodgett, President of the National Lumber Manufacturers Association, recommended that the federal government issue bonds for the purchase and reforestation of at least 3,000,000 acres of land in Michigan, Wisconsin and Minnesota. Filbert Roth, Dean of the Forestry School of the University of Michigan, stated that in his opinion at least 10,000,000 acres should be reforested in Michigan.

Torsion Test Rig for Testing Machine

IN ORDER to secure information for use in the design of rudder posts, elevator spars and aileron beams for aircraft, torsion tests of such members are necessary. No torsion testing machine readily adaptable to large specimens in a variety of shapes being available, engineers at the Forest Products Laboratory, Madison, Wis., built the apparatus which is here shown.

A specimen for test is secured in the two large disks which hold its ends, the motor is started and the motion of the descending crosshead of the machine is transmitted to the disks by the straps attached to the short



TORSION TEST IN UNIVERSAL TESTING MACHINE

beam (shown end foremost) bolted to this head. As this movement is received by the disks it is resolved into a rotation (counter-clockwise for the nearer disk and clockwise for the farther one) and a downward motion of both disks with the specimen. This downward motion, measured at the center of the specimen, proceeds at half the speed of the crosshead of the machine. By means of the supporting framework, the pull on the disks is communicated to the weighing platform on which the lower horizontal beam rests and is registered on the weighing dial of the machine.

The amount of distortion in the specimen, caused by the opposite turning of the disks, is measured by the relative rotation of the arcs fastened to it. As the specimen twists, the light cord on the farther arc is slowly wound onto it while the cord on the nearer arc unwinds. The lower ends of these cords are fastened to a lever system which transmits the average rotation of the arcs to a fine wire passing around a small shaft carrying the pointer of the graduated dial seen in the left foreground. The distortion thus registered in inches may be converted to degrees of arc by the use of a suitable factor. The downward motion of the specimen is eliminated from the dial readings by causing the dial-and-lever system to move downward at the same rate. This correction is effected by supporting the dial on a pantograph arrangement fastened to the crosshead and adjusted to halve the crosshead motion.

The large weights on each side serve merely to counterbalance the weight of the disks on the sides not pendant from the frame. Coil springs inserted in the light chains just above these weights relieve the jar of sudden failure and protect the chains from breakage.

St. Louis Plans Wider Streets To Relieve Traffic Congestion

Major Street Plan Provides Continuous and Wider Traffic Routes to Business District From All Sections of the City

A PROGRESSIVE and well considered plan for the relief of traffic congestion in St. Louis is embodied in the Major Street Plan, funds for which were provided in the bond issue of $67,000,000 voted last fall. An item of $8,650,000 was included in this bond issue for "establishing, opening, and widening streets." With the widening of Washington Ave., and the opening of South 12th St., already undertaken according to the plan from current funds, and with the benefit assessments on property provided by charter, this bond money, as the city's share, will complete the major street plan as now laid down. It is not contemplated that the plan will definitely solve the city's traffic problem. Indeed traffic increases so rapidly that while the proposed street widening and extension will multiply the number of vehicles that can use the streets, it may be that the growth of traffic will surpass the new accommodations and when the plan is completed congestion will still exist. Then, or before then, other means of relief will be required. Estimated at its least, however, the present undertaking is a long step toward improved traffic conditions.

Major Street Plan—Developing westward from the old settlement on the river front, St. Louis grew large without much thought given to planning streets with an outlook beyond the exigencies of the immediate requirements. In general the checkerboard arrangement adopted for the old town was continued. Radial streets as a planned means of direct access to the business center were not considered. The streets shown on the map, Fig. 1, as having a somewhat radial location—Broadway nearest the river and the route made up of Gravois and Florissant Aves. linked in the business section by 12th, High and 15th Sts.—were so located to conform to the curve of the river and not as planned radial arteries for traffic. Moreover, the link through the business section formed by S. 12th, High and 15th Sts. was broken at *A* and at *B*. All these streets, like most of the rectangular streets in the business section, were narrow.

With the street situation as briefly outlined and as indicated by Fig. 1, the City Plan Commission, Harland Bartholomew, engineer, after a careful study, reported a Major Street Plan to meet the arising traffic conditions. The nature of this improvement is indicated by the map. It is chiefly a task of street widening and in a few cases of opening new link streets. Incidentally on these streets new paving is called for and it will be designed for heavy traffic. The traffic situation that the plan is designed to improve has grown almost beyond control.

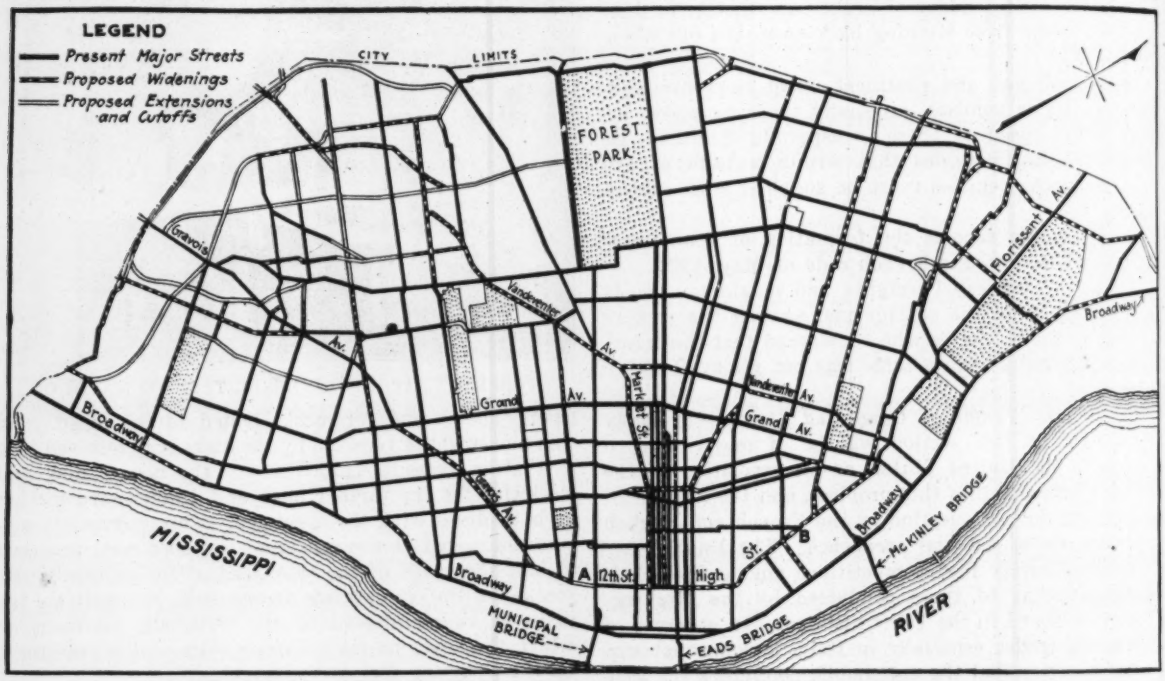


FIG. 1—MAJOR STREET PLAN TO RELIEVE TRAFFIC CONGESTION IN ST. LOUIS, MO.

Traffic Development—In 1914 in St. Louis there were 9869 licensed motor vehicles; in 1921 there were 60,473. It is predicted that in 1926 there will be 200,000 licensed vehicles. This is not considered an illogical assumption. Los Angeles, Calif., for example now has over 200,000 motor vehicles and it is a smaller city than St. Louis. With the completion of the vast improved road programs of Illinois and of Missouri, a constantly increasing number of outside vehicles will come to the city. A large portion of this traffic comes to the business section of the city, which is approximately the area lying between 12th and 4th Sts. and Washington Ave. and Market St. This traffic at present is compelled to follow a few parallel east and west streets.

Concentration of traffic to and from the business district on a few east and west streets would be presumed from a study of the map, without further evidence.

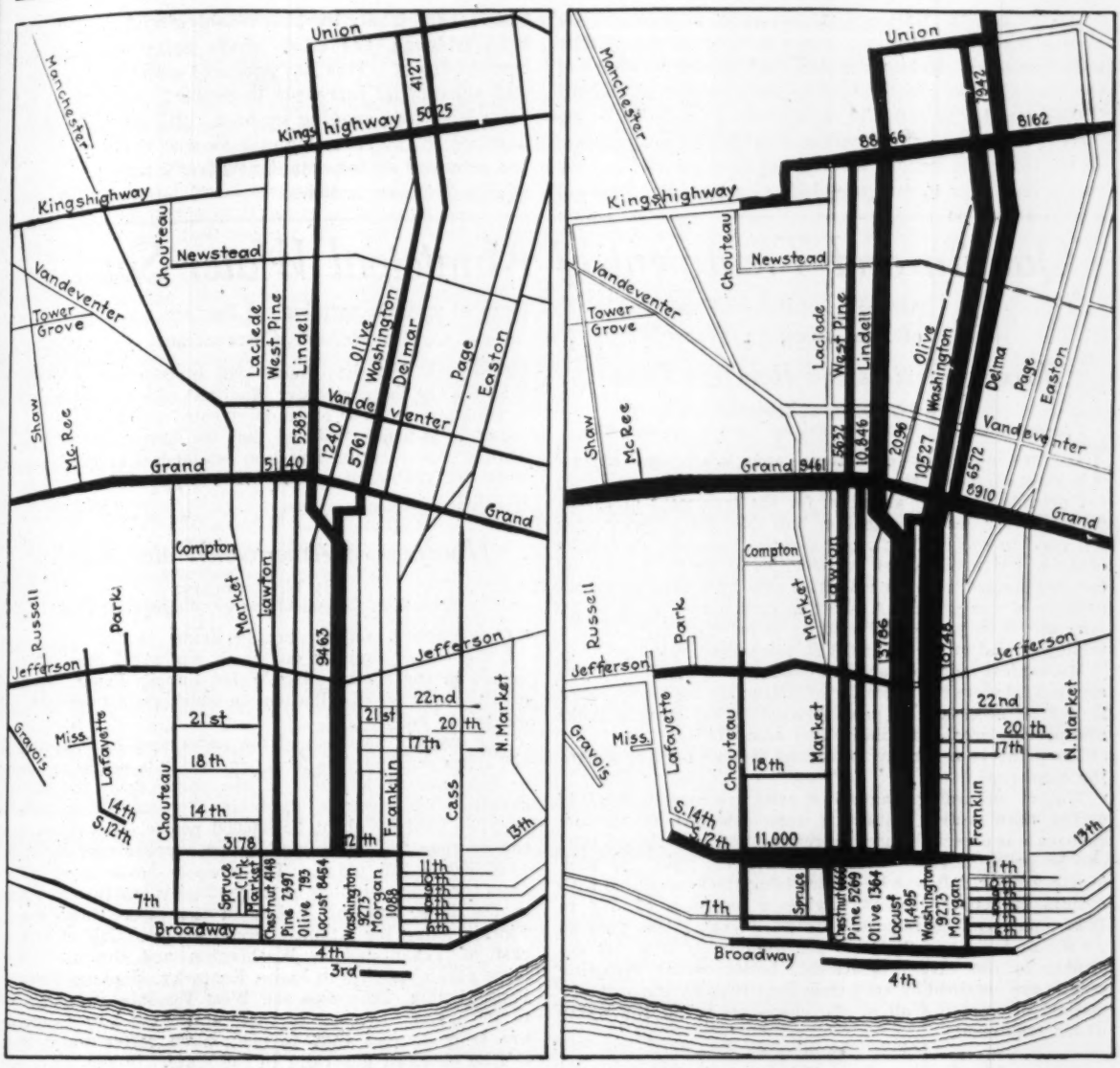


FIG. 2—CENSUS CHARTS OF TRAFFIC GROWTH IN ST. LOUIS

These streets are the direct travel routes from the west. Travel from the northwest and the southwest naturally swings into Grand Ave. and turns east on Chestnut, Pine, Locust, and Washington Sts. In fact, there are no other available routes, the partially diagonal routes are disconnected and inadequate in width and character of paving. As a matter of fact, traffic counts admit no doubt of exactly the situation described.

Since 1916 a traffic census has been kept for the group of streets mentioned. The diagram, Fig. 2, shows the results for 1916, and five years later for 1921. First, both diagrams indicate the concentration of travel on the few east and west streets which penetrate the business section. Second, it is made clear that this traffic in five years has increased to several times its volume in 1916. Incidentally the figures for 1922, which have not been charted, indicate a continuing increase. It is this enormous growth which raises the question, as has already been noted, whether congestion will not be a problem still pressing for solution when the present Major Street Plan is completed.

This plan will relieve congestion, as of present traffic, in two ways: (1) The two radial routes (a) Broadway and (b) the Gravois Ave.-12th St.-Florissant Ave. route, will be made continuous and widened and paved to offer desirable direct routes to the business district from both northwest and southwest; (2) the present narrower east and west streets will be widened and paved to accommodate more vehicles.

Financing the Improvement—The bond issue before mentioned provides the means for carrying out the Major Street Plan. In St. Louis, by charter, costs of street widening are distributed for every project in three ways: (1) Upon the frontage opened or widened, (2) upon a district deemed to be benefited by the improvement, and (3) upon the city at large. The actual distribution of cost varies in every project, and is determined by a special commission of three appointed by the Circuit Court. In every case there is a certain percentage of the cost assessed against the city as payment for a city-wide benefit. The bond money will provide the city general fund for the work proposed by the Major Street Plan.

At the present time ordinances have been passed for approximately 75 openings and widenings in accordance with the plan. It is estimated that the city's share of the cost of these projects will be somewhat over $6,000,000. In order to expedite acquisition of title and completion of improvements, where legal delays are involved in realizing the benefit assessment portion of the cost, there has also been provided a revolving fund of $2,500,000. Under the plan Washington Ave. has already been widened, the city's share being provided from current funds. This has produced great relief to traffic and substantial increases in property value have been recorded. The opening up of S. 12th St. to Lafayette, financed in the same manner as was Washington Ave., has provided an important new traffic way as the charts of Fig. 2 clearly indicate.

Quality and Treatment of Municipal Water Supplies

Abstracts of Papers Presented to the Chemical and Bacteriological Section of the American Water-Works Association at Its Recent Convention

Mixing Devices and Reaction Time

By Charles P. Hoover
Chemist-in-Charge, Water Purification Plant, Columbus, Ohio

Results of plant operations and laboratory experiments indicate that velocities of 0.3 ft. per second do not provide sufficient agitation for the treatment of turbid water or for water softening, but that the velocity does not need to exceed 0.6 ft. per second. Coagulation results obtained on turbid water at velocities of 0.6 ft. per second can be obtained at lower velocities only by adding an excess amount of coagulant. A short mixing period of 20 or 30 min. at 0.6 ft. per second velocity is more effective than a mixing period of 1½ hr. at 0.3 ft. per second velocity.

Mechanical agitators are less expensive to build, are more compact, obviate the necessity of lifting the water the extra 2 or 3 ft. necessary to pass through baffled maxing tanks and provide greater flexibility and accessibility.

Temperature is a more important factor in water softening than time.

Waters containing magnesium salts are more difficult to soften than water containing only calcium; magnesium carbonate is especially hard to remove, but magnesium salts can be precipitated by overtreatment with lime. By such overtreatment, followed by neutralizing the excess lime with sodium carbonate, waters having a hardness of 572 to 1044 p.p.m. can be reduced to a hardness of less than 30 p.p.m., or less than 2 grains per gallon. If it is not desirable to use excess treatment, better water softening results are obtained by split treatment than by the ordinary method of applying all of the chemicals to all the water under treatment.

* * *

Hydrogen-Ion Concentration and Alum in Filter Effluents

By William D. Hatfield
Superintendent of Filtration, Highland Park, Mich.

Results of numerous tests on the water of Lake St. Clair before and after filtration through the purification plant at Highland Park, Mich., have been analyzed for alum content. The following is a summary of the conclusions reached:

(1) Curves plotted according to the Clark's pH-time method from data obtained by treating Lake St. Clair water with alum show an apparent iso-electric point for aluminum hydroxide under these conditions at 6.1 or 6.3 pH units.

(2) Curves are given in the paper which show that in filtration the effluents from alum-treated waters are practically free from all the aluminum added as alum when the pH value of the treated water lies in the zone between 5.9 and 7.5 pH units. Mechanical filtration plants operating within this zone will probably not only remove all the added aluminum but also some of the aluminum naturally dissolved in the raw water.

(3) A water which has been under-treated with alum and has a pH value of more than 7.5 may have a solvent action on the floc in the sedimentation basin and on the filters such that the effluent will contain more aluminum than that in the raw water plus that added as alum. This is probably also true of an overtreated water.

(4) It is firmly believed that the importance of hydrogen-ion concentration has been established in water-supply work and that each year it will be applied more and more to practice.

* * *

Hardness of American Water Supplies

By W. D. Collins
With U. S. Geological Survey, Washington, D. C.

Thirty-nine million people living in 307 cities use the water supplies on which analytical data are reported in the forthcoming Water Supply Paper 496 now nearly ready for distribution, on which the following statements are based.

The average hardness of the water used by those in the 307 cities considered is 99 p.p.m. which is nearly the same as the average hardness of the water from the Detroit supply. The average hardness of water from surface supplies used by about 35,000,000 people is 85 p.p.m. and the average for the ground water supplies used by about 4,000,000 is 225 p.p.m. The average hardness of water from the public supplies of large cities is less than 55 p.p.m. in the New England states, in the other states except Florida along the Atlantic Ocean and the Gulf of Mexico east of Texas and in Washington and Oregon. From large public supplies in Idaho, Kentucky, Montana, Nevada, Pennsylvania, Tennessee and West Virginia, it is from 56 to 100 p.p.m. In some of these states the larger supplies are from sources that furnish much softer water than can be obtained generally in the state. In the states not named above the average hardness is from 100 to 500 p.p.m. About 3,500,000 people use water from Lake Michigan which has a hardness of about 130 p.p.m. The water is softened at several cities in the Mississippi drainage basin. Throughout this area and in the Southwest the hardness of the water of public supplies is generally between 250 and 350 p.p.m. except in the cities using water from the Great Lakes or from mountain streams, and in the cities where the public supply is softened.

* * *

The Pharmacology of Drinking Water

By Herbert C. Hamilton
Pharmacologist with Parke Davis Co., Detroit, Mich.

The most important feature in connection with mineral waters is that for one reason or another larger quantities are imbibed than of ordinary water. This is due partly to the pleasant or characteristic taste, partly to the routine prescribed by the physician and partly to the users giving themselves up to the course of treatment and making the most of it. Probably all the good of mineral waters would result equally from the similar use of any water but this should not detract from the use and exploitation of the mineral water for those who can afford it. The psychology of the treatment really requires a mineral water. The ascribing of mysterious virtues to

mineral water is without basis, neither is the use of it at the springs instead of at home essential for developing its medicinal value. But scarcely indeed will the use be continued under the best conditions unless under the direct control of the attendants. Often, too, climatic and hygienic conditions are more nearly ideal at the springs and of no less importance than the water itself.

Broadly, to make water satisfactory for drinking requires only bacterial purification unless some absorbable poison is present, and most forms of purification are aimed at reduction of bacterial content. But hard water makes soap so insoluble that in some localities hardness is no less important than the bacterial content.

We may conclude that any adventitious circumstance under which water is used or any peculiar property actual or imaginary which will encourage a greater use of water, either internally or externally, is not to be underestimated in its bearing on health and, further, that few substances occurring in a natural water render it unfit for drinking purposes except the presence of pathogenic organisms responsible for intestinal diseases such as typhoid or dysentery.

* * *

Chlorine to Assist Coagulation

By Robert Spurr Weston
Consulting Engineer, Boston, Mass.

Owing to difficulties in operating the water purification plant at Exter, N. H., namely the choice between the evils of under-coagulation with inadequate purification or over-coagulation with corrosion, the accumulations of slimy coatings and mud balls in the filter sand, the high precentage of wash water and the at-times unpleasant vegetable taste of the filtered water, various expedients were tried. Prechlorination to assist coagulation seems to have given the best results.

The water is of the peaty type, soft, colored, sometimes turbid and always difficult to treat even with good mixing and an unusually long period of coagulation. The difficulties were increased following the raising of the reservoir dam in 1909 and again in 1916, thereby flooding additional unstripped areas. The average analytical results during 1913, when the water was treated with an average of 32.6 p.p.m. of sulphate of alumina, or nearly 2 grains per gallon, indicate a reduction in parts per million in color from 80 to 27, of iron from 0.84 to 0.30, turbidity from 16 to 3 and bacteria at 20 deg. C. from 408 to 39 per cubic centimeter.

At first, the bleach, mixed with alum solution, was applied in amounts equivalent to 1 p.p.m. of available chlorine. Later the dose was reduced to less than 0.6 p.p.m. It was found that the addition of 0.7 p.p.m. of chlorine effected the following change in the character of the effluent:

TABLE I—SIGNIFICANT RESULTS OF ANALYSES OF FILTER EFFLUENT WITH AND WITHOUT THE CHLORINE

	P.P.M.	
	Dec. 30, 1913	Feb. 3, 1914
Chlorine added	None	9.7
Turbidity	2.0	1.0
Color	15.0	1.0
Oxygen consumed	3.68	1.38
Nitrogen as albuminoid ammonia	0.170	0.034
Nitrogen as nitrites	None	None
Iron	0.22	0.10
Increase in chlorine	None	0.28
Bacteria per c.c. at 20 deg. C.	45	6
Bacteria per c.c. at 37.5 deg. C.	6	1

Subsequently chlorine gas was substituted for bleach, and the average dose decreased to 0.6 p.p.m. or less. This has been the only modification in eight years. However, the better purification decreased the amount of organic matter in the effluent and consequently the amount of water accumulating on the insides of the services. To reduce the increasing corrosive effect, soda was added whenever the alkalinity was low, thereby decreasing the pH concentration. Soda was first added to the reservoir water, but, with the realization of the fact that the best condition for the coagulation of color is one of low pH value, and for the prevention of corrosion one of high pH value, the treatments were separated. Alum and chlorine are now added to the raw water, and soda, when it is necessary, is added to the effluent.

Subsequently, Arthur L. Gammage made the experiments at Belfast, the results of which were published in *Engineering News-Record*, Sept. 7, 1922, p. 391, and the process has been applied by our firm at the Acadia Mills and elsewhere. Recently N. J. Howard has published the results of similar work at Toronto.

There are many plants where this process might be used with advantage, especially those which treat waters of high vegetable and color contents. Chlorine treatment of these waters before coagulation would reduce the amounts of unsaturated organic compounds in the effluent, thereby reducing the liability to the formation of odors and tastes due to compounds between organic matter in the effluent and the chlorine used to disinfect it after filtration.

* * *

The Degasification of Water

By J. R. McDermet
Research Engineer, Elliott Co., Jeannette, Pa.

The material for this paper is based upon the experience obtained in the development of a successful apparatus for the degasification of water. Part of it rests on work in the research laboratory, and part upon results gained in the application of these degasification units located variously over the entire United States, and ranging in capacity from 4,000 to 1,100,000 lb. per hour. Primarily, the apparatus derives its commercial merits from the fact that it is able to prevent corrosion in piping. [Various methods of degasification are next described and commented on.—Editor.]

The Elliott process is one of deaeration rather than degasification since the gases which are to be removed are normally the gases of the air. The apparatus operates through heat interchange, and at the same time is 100 per cent thermally efficient. In its operation the water is first heated to some 25 deg. above the temperature at which it is desired to use it, and then injected suddenly into a region of vacuum, in which the pressure is maintained at a value corresponding to the vapor pressure of the water at the temperature of use. The 25 deg. excess temperature is available as superheat in the liquid to the temperature of the vacuum, and when the water is injected, the heat immediately flashes some portion of the water into steam, evaporating it and disintegrating the rest completely. After disintegration, the water is collected and further passed back and forth over agitating spray pans for contact with the air inside the chamber. The vacuum in the separator chamber is maintained by some form of air-exhausting equipment in series with a condenser, the function of which is to condense and return to the system the vapors and the heat evolved in the boiling process. The cooling water for this condenser is supplied by the water entering the heater on its way to the heater, and the heat, therefore, interchanged by the condenser is returned to the heater.

The research laboratory has just completed an investigation on the behavior of the Elliott process upon dissolved carbon dioxide. The results will be forthcoming in a paper before the American Chemical Society, by D. H. Jackson, in collaboration with the present writer. It is possible, however, to summarize the results of this paper in advance by saying that the deaerator, so-called, and as previously described, removes all free carbon dioxide and decomposes approximately 25 per cent of the bicarbonate present, most of which is precipitated, and a small part, approximately 16 p.p.m., remains in solution as calcium carbonate. This percentage value increases slightly with concentration of bi-carbonate. The pH values are changed by deaeration from slightly acid to a decidedly alkaline, the change averaging 2.5 pH. The results were obtained upon water from two surface streams, one in the vicinity of Jeannette, Pa., and the other from Pickering Creek, which supplies a suburb of the City of Philadelphia. The pH values on the raw water for the series of determinations average around 6.7 and the pH on the deaerated samples 9.25.

From Job and Office

Hints That Cut Cost and Time *For the Contractor and the Engineer*

Tractor-Operated Dredge Pump Cleans Drainage Ditch

By Frank D. Danielson
Village Manager, Hinsdale, Ill.

With a Fordson tractor and 6-in. centrifugal dredge pump, the main drainage and sewer outlet of Hinsdale, Ill., has been cleaned out with a saving of $10,000 to the village over other proposed methods. The main feature is the mounting of the pump on skids on the bank and not on a float in the stream as is usually done.

The outlet ditch runs some seven miles down through the valley known as Flag Creek and empties into the Desplaines River. The part of the stream opposite Hinsdale and for a distance of two miles south had filled

CLEANING SEWER OUTLET WITH DREDGE PUMP
Tractor (at left not shown) is belt-connected to pump mounted on skids and can be reset in 25 minutes.

up with sediment which threatened the proper functioning of the entire drainage system. The village of Western Springs also uses this stream for part of its sewage. Relief was necessary at once and there was no time to spread a special assessment in payment for the work, which was estimated at about $15,000. An experiment was made in which dredging was done by the hydraulic method applied from one side because there was insufficient water to permit mounting the pump on a scow. However, an auxiliary float was used for handling the suction hose. A 6-in. spiral pipe was used for the discharge which was directed for the greater part of the time to the opposite side of the stream. The pump was mounted on skids made from 6 x 8-in. timbers 12 ft. long, with 4 x 6-in. cross supports bolted to the skids.

Sand, mud, silt and stones were readily picked up by the suction force. No agitating device was required; instead, two men, as shown in the cut, used long pole shovels. A third shaped up the sides and a fourth, acting as foreman, operated the tractor and watched the performance of the pump.

This method of dredging from the side of the stream was made possible by the use of flexible suction hose which could be moved along from point to point as the work progressed. A part of the hose rested on a float with the suction end projecting over the front. A 45-deg. elbow was used at the hose end under water. The discharge end had a flap valve, closed when priming, an operation accomplished by means of a threshers' pump. Power, speed, and size of pulleys to be used were matters of study to fit actual conditions.

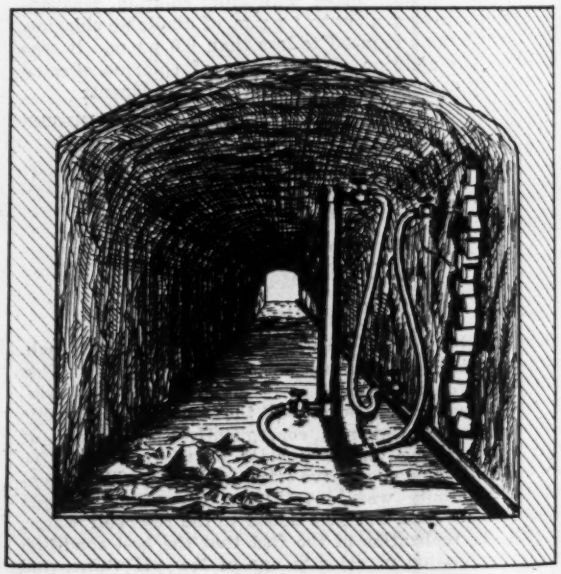
The amount of solid material pumped ranged from 15 to 30 per cent. A stretch of 20 to 25 ft. was cleaned to a depth of 5 ft. below the old stream bottom during each setting of tractor and pump. The time required for a re-setting did not exceed twenty-five minutes. About 2 cu.yd. of material were removed per lineal foot dredged, and a section from 50 to 90 ft. long was completed each day, which made the total cost of removal between 14 and 21c. per cubic foot.

Home-Made Grout Gun Stops Water Flow Into Tunnel

By John L. Digby
Big Creek, Calif.

A troublesome water-bearing seam encountered in heading No. 5 of tunnel No. 3 being driven by the Southern California Edison Co. on the Big Creek hydroelectric project was stopped by grouting with the aid of a simple device made up on the job.

This tunnel is 21 x 21 ft. in section and when the seam was encountered water flowed from it for the full 21-ft. height of the tunnel. The flow was stopped temporarily by calking it with oakum and holding the oakum with wooden wedges driven tightly for the full length of the seam exposed. This emergency method was not expected to be permanent in view of the heavy shooting at the heading a few feet away. To effect a permanent stoppage, therefore, a 1½-in. hole was drilled at an angle to the crack beginning about 2 ft. to one side of it and



APPARATUS FOR GROUTING SEAM IN TUNNEL

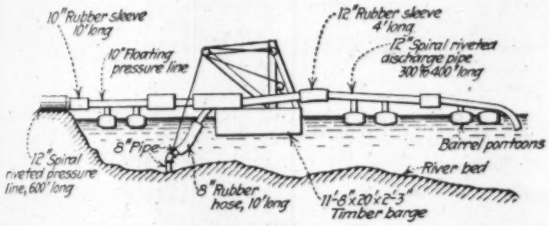
2 ft. below the roof of the tunnel. After drilling 4 ft. this hole struck the water-bearing seam. A 1½-in. pipe threaded on one end was inserted in the hole and calked, leaving the threaded end protruding about 2 ft. Flow through this pipe was stopped by fitting a valve to the threaded end.

In the meantime a 20-ft. length of 6-in. pipe capped and fitted with 2-in. valves was filled with grout and brought into the tunnel. This pipe container was set up vertically near the seam; the lower end was connected by a 2-in. rubber hose with the pipe leading into the seam and the upper end was connected by a similar hose to the main compressed air line supplying the drills and carrying a pressure of 125 lb. per sq.in. When the valves were opened in a very few minutes the 20-ft. length of pipe was emptied of cement—this being determined by tapping on the pipe. The valves were then closed and the pipe removed. Within 24 hours the seam was quite dry and in spite of heavy shots in the heading nearby, some of which used as much as 40 boxes of powder at one time, the seam gave no further trouble.

Moving River Sand by Hydraulic Elevator

By R. Franklin Mundorff
Kansas City, Missouri

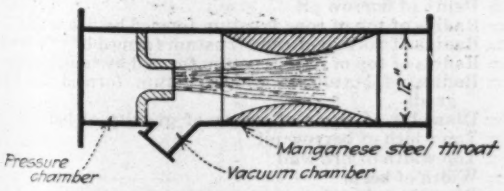
FOLLOWING the construction of a concrete dam at Decatur, Ill., it was desired to pack sand under the edge of a horizontal concrete apron. The particular job presented the problem of moving 18,000 cu.yd. of sand in a river to a new location 400 ft. away in a deep hole in the river bed. Many methods were considered,



HYDRAULIC ELEVATOR MOVES RIVER SAND

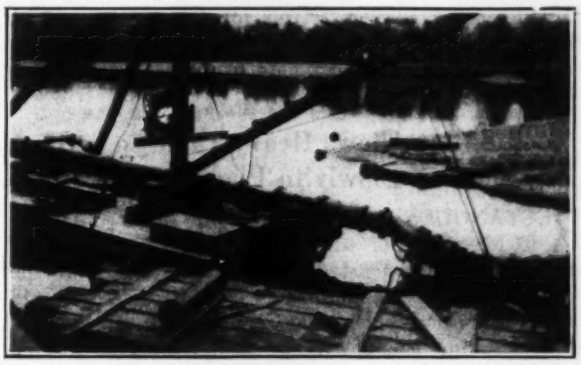
but due to excessive expense and lack of adaptation and flexibility of equipment, were discarded and the hydraulic elevator, pictured herein, finally decided upon. The equipment designed was found to be particularly adaptable inasmuch as there was available sufficient high-pressure water and because a small, inexpensive barge would accommodate necessary equipment and the pumping unit could be mounted on the shore.

The elevator was placed on a small barge and the water pressure line brought aboard on barrel pontoons. This pressure line was fitted with 10-in. by 10-ft. rubber sleeves at both the shore and barge ends. The suction consisted of a 10-ft. length of 8-in. rubber hose and two lengths of 8-in. pipe. This was supported by



SECTION THROUGH ELEVATOR THROAT
All the wear was centered on the manganese-steel throat.

a block-and-tackle extending from a small stiff-leg derrick and was raised and lowered by a hand winch. The discharge line, varying from 350 to 400 ft., was supported also by barrel pontoons. The discharge end of



MECHANICAL ARRANGEMENT OF ELEVATOR
The three flanged sections in front of the derrick constitute the elevator. The nozzle is in the near end of the Y. The suction pipe is operated by the derrick.

the line was submerged in order to eliminate a static head against the elevator.

A large reciprocating pump with valve gear was used to supply the pressure water. Actual results obtained were from 50 to 60 cu.yd. of sand per hour, exclusive of the time used for changing location. The pressure used was 1,670 gal. per minute with a pressure at the pump of 80 lb. per square inch. The pressure at the elevator nozzle was 70 lb. per square inch. The elevator began to pick up sand at 25-lb. nozzle pressure and worked well at 40-lb. pressure, showing no improvement above a 70-lb. pressure.

The installation was made by George B. Massey of the Randolph-Perkins Co., Chicago, Ill., for the city of Decatur.

Concreting Leakage Seams in Small Dam

INGENIOUS handling of difficult problems was involved in the repairs to the Ephratah dam of the Fulton County (N. Y.) Gas & Electric Co., recently undertaken. The repairs were necessitated by leakage through seams in which the bond was weak, and through expansion cracks. The difficulty was increased by the decision to make the repairs from the upper side of the dam.

For the purpose of this undertaking a semicircular caisson 5 ft. across and 20 ft. deep was fashioned out of ¼-in. boiler plate with reinforcement ribs of angle iron bent to fit the caisson, and with a bulkhead at the lower end. To float the caisson from one position to another oil drums were fastened at the top. When the caisson was floated into position against the face of the dam, a 4-in. siphon with 30 ft. of suction head drew the water from the interior. As the water level was lowered the leakage through the sides decreased because of the increased pressure and the resultant closer adherence of the caisson to the face of the dam. A 2-in. siphon took care of the leakage after the water had been practically all drawn off, until this leakage could be prevented by calking the space where the caisson faced the dam.

The leaks in the dam were repaired by cleaning the cracks or seams, building a protecting form over them and pouring concrete into the cracks. The concrete was

allowed to set before the caisson was moved to its next position. Some of the patches were more than 12 ft. in length.

Planking and bolt stubs left in the face of the dam by the builders complicated the work, by making it difficult to seal the caisson. After some experience a 2-in. thickness of felt was applied to the edges of the caisson, replacing strips of rubber hose originally used to prevent seepage.

Melting Ice Allows Heavy Tank To Settle Slowly to Place

RECTANGULAR steel tanks used as brine containers in ice plants of the Union Ice Co. of California are lowered from construction position just above the foundation onto the permanent support with the aid of blocks of ice which carry the weight of the tank while blocking is being removed and then, as the ice

ICE CAKES LOWERING 22½-TON TANK TO FOUNDATION

melts, allow the tank to settle to its foundation. The buildings in which these tanks are installed are not designed with a frame from which the tank could be suspended and the melting ice method has been found cheaper and more satisfactory than erecting temporary means of supporting the tank while lowering it to position.

The foundation prepared before work starts on the tank consists of a concrete slab covered by several inches of cork and surfaced with asphalt. The tank is riveted up on blocking 3 to 4 ft. above this foundation in order that workmen may have access to the under side of the tank during the process of riveting, calking and painting. When the tank is finished the blocks of ice are placed and the tank is lowered on jacks until the ice carries the weight, after which all jacks and blocking are removed and the melting ice allows the tank to settle to final position.

The tank shown in the accompanying photograph has plan dimensions of 33 x 84 ft., is 4 ft. deep and weighs about 22½ tons. Two rows of ice blocks were placed under it on 12-ft. centers and to hasten the melting process small wood fires were built inside the tank, one over each supporting cake of ice.

In the case illustrated, 300-lb. ice cakes whose dimensions were 11½ x 22½ x 42 in. were set on end. More frequently the cakes are set on edge, the 22-in. dimension. The tank can be quickly "jacked down" to this 22½-in. height, which is sufficient clearance for the removal of all blocking. When the ice cakes are on edge there is less danger of slipping or uneven settlement. With the aid of small fires in the tank the 22½-in. thickness of ice is ordinarily melted away in twelve hours.

Data from which the foregoing was prepared were supplied by H. L. Lincoln, superintendent of factories, the Union Ice Co.

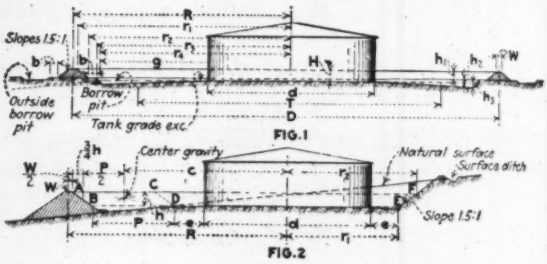
From Job and Office

Hints that Cut Cost and Time

Design of Oil Tank Fire Walls

By F. W. Babbitt
American Petroleum Co., Houston, Texas

IN ORDER that a reasonable insurance rate may be secured on oil property, state fire insurance commissioners have laid down certain rules and specifications concerning the construction of tank farms. One of these specifications in Texas and Arkansas is that the cubic capacity inside the fire wall shall be one and one-half times the cubic capacity of the oil tank. Fire walls of course are a necessity, for with them fires, which may break out, can then be more easily controlled locally. As fire-wall design, to meet these conditions, is tedious, the writer has prepared two sets of formulas, given herewith, the first dealing with estimation of



quantities where a tank is located on level ground, and the second a case in which the tank is on a side-hill location.

For location of a tank on level ground (see Fig. 1) the following elements are involved in the fire-wall design:

Q = Cu. ft. inside of fire wall = contents of tank + 50%
Q_1 = Cu. ft. in cone frustum formed by fire wall
Q_2 = Cu. ft. in cone frustum formed by tank grade
Q_3 = Cu. ft. in borrow pit to complete fire wall
G = Cu. ft. in fire wall
D = Diameter of center line of fire wall
R = Radius of fire wall
H = Height of top of fire wall above tank grade
h_1 = Height of top of fire wall above ground line
h_2 = Depth of tank grade below ground line
h_3 = Depth of borrow pit
r_1 = Radius of top of cone frustum formed by fire wall
r_2 = Radius of bottom of cone frustum formed by fire wall
r_3 = Radius of top of cone frustum formed by tank grade
r_4 = Radius of bottom of cone frustum formed by tank grade
T = Diameter of circle of center of gravity of borrow pit
g = Top width of borrow pit
w = Top width of fire wall
b = Width of berm
d = Diameter of tank
π = Pi = 3.1416

From Job and Office

For Contractor and Engineer

The formulas which have been derived to establish the values of the foregoing elements are:

$$Q = Q_1 + Q_2 + Q_3$$

$$G = Q_3 + Q_3 = D\pi[h_1(1.5h_1 + w)]$$

$$Q_1 = \frac{h_1}{3}\pi(r_1^2 + r_2^2 + r_1r_2)$$

$$Q_2 = \frac{h_2}{3}\pi(r_3^2 + r_4^2 + r_3r_4)$$

$$Q_3 = T\pi h_3 \times \frac{g}{2}$$

$$h_1 = \frac{3(Q - G)}{\pi(r_1^2 + r_2^2 + r_1r_2}$$

$$h_2 = \frac{2Q_3}{\pi g T}$$

$$r_1 = R - \frac{w}{2}$$

$$r_2 = R - \left(1.5h_1 + \frac{w}{2}\right)$$

$$r_3 = r_2 - b$$

$$r_4 = r_3 - h_2$$

$$g = r_4 - \frac{d}{2}$$

$$T = \frac{4}{3}(g - 0.5h_3) + d$$

For locations of tanks on side hills, design is based on the following quantities:

Q = Cu. ft. inside fire wall = Tank contents + 50%
R = Radius of fire wall
d = Diameter of tank
h = Height of top of fire wall above tank grade
e = Distance from edge of tank to toe of slope in cut
r_1 = Radius of bottom of cone frustum *CDEF* (Fig. 2)
r_2 = Radius of top cone frustum *CDEF*
P = Long side of parallelogram *ABCD*
C = Radius of half circle made by center of gravity of parallelogram
w = Top width of fire wall
π = 3.1416 = Pi

Formulas to determine the values of the foregoing quantities are:

$$Q = \frac{h}{3}\pi(r_1^2 + r_2^2 + r_1r_2) + \pi PhC$$

$$h = \frac{3(Q - \pi PhC)}{\pi(r_1^2 + r_2^2 + r_1r_2)}$$

$$r_1 = \frac{d}{2} + e$$

$$r_2 = r_1 + 1.5h$$

$$P = R - \left(\frac{d}{2} + e + 1.5h + \frac{w}{2}\right) = R - \left(r_2 + \frac{w}{2}\right)$$

$$C = R - \left(\frac{P}{2} + \frac{3}{4}h + \frac{w}{2}\right)$$

SHORT CUTTING FIRE WALL DESIGN
DIMENSION TABLE — LEVEL LOCATION

	Dimensions	55,000 Bbl. d = 114.6 Fire Wall Diameter 310 ft.	300 ft.	290 ft.	280 ft.	37,500 Bbl. d = 95.5 Fire Wall Diameter 270 ft.	260 ft.	250 ft.	240 ft.
Case 1	G, cu. yd.	2,503	2,723	2,947	3,147	1,928	1,977	2,143	2,303
	h_1, ft.	5.7	6.0	6.4	6.8	5.1	5.5	5.8	6.2
	h_2, ft.	0.8	1.0	1.0	1.2	0.8	0.8	1.0	1.0
	h_3, ft.	1.2	0.7	1.2	1.4	0.8	1.1	1.2	2.0
	H, ft.	6.5	7.0	7.4	8.0	5.9	6.3	6.8	7.2
	W, ft.	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
	b, ft.	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Case 2	G, cu. yd.	2,893	3,371	3,461	4,079	2,118	2,427	2,737	3,119
	h_1, ft.	6.1	6.8	7.2	7.9	5.5	6.1	6.7	7.4
	h_2, ft.	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4
	h_3, ft.	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
	H, ft.	6.6	7.3	7.7	8.4	5.9	6.5	7.1	7.8

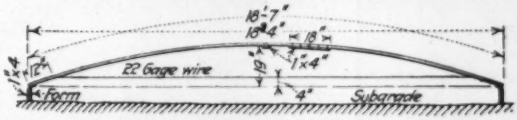
A dimension table reproduced herewith has been computed on the basis of the fire wall containing contents of the tank plus 50 per cent. This table gives fire-wall diameters and other dimensions for tanks on level ground. The table is worked out for tanks containing 55,000 bbl. (42 gal. each) and for 37,500 bbl. and for two cases, one wherein ample drainage is presupposed and all material for the fire wall is taken from within the wall. The second case is one wherein poor drainage is present and the least amount of excavation possible is performed to provide a tank grade and drainage for the tank. The material necessary to finish the fire wall in case two is taken from the borrow pit outside.

In using formulas given herewith there will be too many unknown quantities to arrive at definite results at the first computation. The second or third trial should balance the contents of the tank plus 50 per cent and the fire wall within a few hundred barrels, which will be close enough.

Sunshade for Protecting Freshly Laid Concrete Paving

By F. M. Bailey
Engineer-Inspector, Wisconsin Highway Commission

A LIGHT, inexpensive sunshade for protecting freshly-laid concrete has been designed by the Wisconsin Highway Commission. The 1923 specifications included the use of frames to cover at least one-half day's run as fast as the surface is finished. The framework is constructed from 1 x 4-in. and 1 x 3-in. strips, ¾ in. thick. The 1 x 3-in. strips are used for the ribs, five ribs spaced on 3-ft. centers making a frame to cover



SUNSHADE FRAME FOR CONCRETE PAVEMENT

12 ft. of road. The splice is made from the piece cut off from the end of one 10-ft. strip and is nailed to the underside of the ribs, the nails being clinched. The longitudinal strips to which the ribs are nailed with four nails clinched are 1 x 4 in., 12 ft. long. The framework can be nailed together on any flat surface and the sheeting tacked to the surface before the ribs are sprung. Holes ¼ in. in diameter are drilled through the ribs 1 ft. from the outer edge of the 1 x 4-in. strip, through which the wires are passed to form the lower chord and sustain the arc in the ribs.

These frames can be made up at any convenient point and transported to the job flat. When ready to use, the wires are threaded through the holes, the arc in the ribs sprung and the wires twisted up. When necessity requires the transportation of the covers from one job to another, the wires are untwisted which allows the frame to flatten.

Material for a frame consists of 37 ft. b.m. (about $3) of lumber; 25 yd. of unbleached muslin at $4.50; and 10 cents worth of wire.

As these frames are light two men can move them along as the paving proceeds. Where strong winds prevail, it may be necessary to use screw-hooks at the edges to fasten them to the forms so that they will not be blown out of place.

Current Concrete Costs on Concrete of Reclamation Service

COSTS of concrete per cubic yard on work under way this last summer season on some of the U. S. Reclamation Service projects as taken from current cost reports are as follows:

Project	Feature	Cu. Yd.	Unit Cost Field	Unit Cost Total	Class of Concrete
Blackfeet	Drop Four Horns Reservation	565	$23.10	$30.00	Reinforced
King Hill	Relief drainage structure	89	22.62	26.60	Reinforced
No. Platte	Checks, North Port	82	21.40	25.00	Reinforced
Rio Grande	Checks and wasteway	125	19.53	23.75	Reinforced
Tieton Dam	Corewall	4,992	17.97	22.10	Reinforced
Riverton	Diversion dam	2,007	24.40	29.30	Reinforced
Riverton	Diversion dam	4,046	10.38	12.50	Plain
Yakima	Corewall	7,785	12.60	15.50	Plain

Two Types of Portable Grandstands

A NEW portable grandstand has recently been developed by the Department of Plants and Structures of New York City. The framework of the stand is built

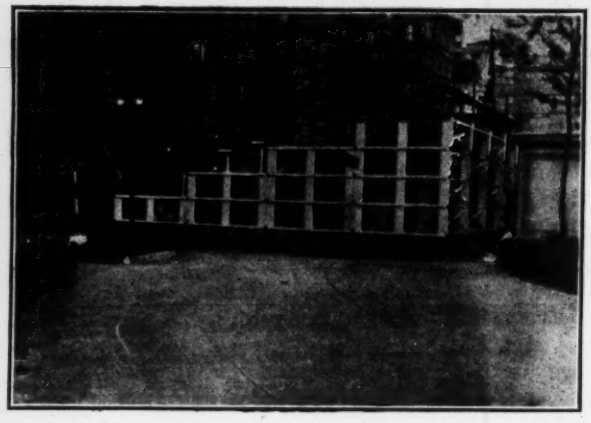


FIG. 1—PORTABLE GRANDSTAND OF DEPARTMENT OF PLANTS AND STRUCTURES, NEW YORK CITY

of structural steel units 5 ft. long and 1 ft. 5 in. high. Fig. 2 illustrates the method of assembling the units to form the risers of the stand. Car bolts are used to fasten the sections together. Longitudinal sway braces

FIG. 2—DETAILS OF NEW YORK STAND

Two of the intermediate platform steps are in the foreground. The position of one of these steps can be seen between the bench supports just at the left of the tree.

From Job and Office

Hints that Cut Cost and Time

of 1¼ x 1¼ x 1¼-in. angle iron are bolted in between opposite panels of adjoining risers as the stand is erected. The risers are spaced 5 ft. apart. The flooring of the stand is made up in sections 1 ft. 8 in. wide and 10 ft. long, secured to the risers by clips which extend

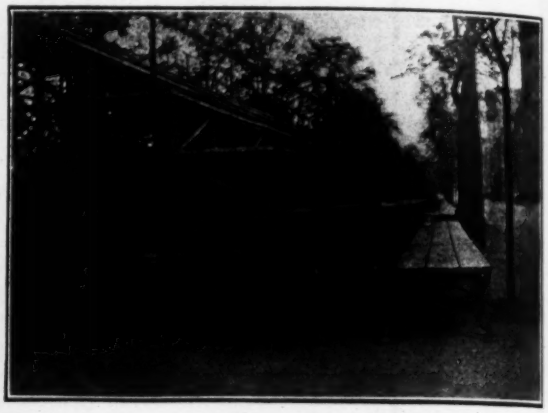


FIG. 3—PORTABLE GRANDSTAND OF WAYNE IRON WORKS

under the flange of the top angles of the riser frames. The seats are supported on pipe pedestals bolted to the floor sections.

Fig. 3 shows a section of a patented portable stand built by the Wayne Iron Works. The units of this stand are horizontal sections of the square tower, each section being interlocked with the one below it. Special sections with an extension arm spanning the space to the tower in front of it carry the alternate levels of the platform. Each section is hinged at the corners in such a way that it can be folded up for storage.

A comparison of the two types of stand seems to favor the new stand of the Department of Plants and Structures, in so far as its usefulness as a stand goes. It is much less liable to collapse, and provides clean seats separate from the platform. The Wayne Iron Works stand is more economical of steel and as almost no bolting is necessary it can be erected and taken down with much greater ease.

Mess Costs per Man per Day on Reclamation Projects

THE following tabulation shows the cost of operating messes during the summer of 1922 on projects of the U. S. Reclamation Service:

Project	Location	Haul Miles	Man-Days	Cost per Man-Day
Flathead	Hubbard Dam	16	1,657	$1.04
Grand Valley	Camp 5	12	141	.86
King Hill	Camps B, C, and D	10	746	1.18
Klamath	Langell Valley	45	3,363	1.32
No. Platte	Interstate & No. Port	6	1,454	1.20
No. Platte	Fort Laramie	13	1,461	1.19
Riverton	Diversion Dam	38	1,048	1.16
Shoshone	Willwood and Shoshone Dams	13	1,448	1.47
Yakima	Tieton Dam	26	8,787	1.17

From Job and Office

For Contractor and Engineer

Ice Action and Corrosion Destroy Old Standpipe

ON APRIL 9 the water-works standpipe at Black River Falls, Wis., failed by breaking off at a point about 25 ft. above ground. This standpipe was 16 ft. in diameter and 100 ft. high. The plates, as near as one could judge, were from ¼ in. to $\frac{5}{16}$ in. thick. This standpipe was erected in 1886.

The direct failure of the standpipe was probably due to ice formation. On Saturday, two days before the failure, the superintendent reports that the cake of ice rose 8 to 10 ft. above the top of the standpipe and remained there most of the time while he was pumping. Saturday night the temperature got somewhat colder, and after the water receded in the standpipe the ice also receded from view. On Sunday, when the standpipe was again filled, the superintendent was unable to make the ice float and show up above the top of the standpipe, although he overflowed the standpipe for a considerable time. Sunday night the temperature became warm again, and on Monday morning, when it was still quite warm, pumping began at about 6.45 a.m. The warm water thawed loose the enormous cake of ice, which must have been in the neighborhood of 90 ft. in height and 3 to 4 ft. in thickness all around the periphery of the standpipe. At 7.30 the standpipe failed.

At just what point this ice cake happened to be frozen to the standpipe is not known, so that it is impossible to say whether the cake first sank or whether it rose when it became loosened from the standpipe, but it must have moved in one direction or the other, and the impact was enough to start the failure. Persons who saw it said the standpipe swayed back and forth for a considerable time before it finally collapsed.

The standpipe fell to the south. The particular reason for its breaking off 25 ft. above the ground may lie partly in the fact that the bottom four rows of plates were thicker metal and had a greater resistance to the stresses produced by the ice.

There is another feature of this failure that is extremely interesting. This standpipe was painted but once, and that was when it was first put up, so that corrosion has taken place on the inside for 37 years. The water used in this system is a creek water, and is very soft and contains much organic matter.

INTERIOR OF CORRODED SHELL, GROOVED VERTICALLY

A careful examination of the inside of the standpipe revealed the fact that the plates near the top were little damaged by pitting or other corrosion, but nearer the base more and more pitting appeared until finally the pits seemed to follow in channels, so that at the point of rupture the plates were furrowed as by a planer. Undoubtedly, when the water receded between pumpings drops of water collected and slid down the plates, the carbon dioxide in the water combining with the iron, continuation of this process picking up more iron and furrowing deeper and deeper into the plates. At some places the remaining metal of the standpipe was less than ¼ in. thick and appeared to be greatly laminated.

In the views of the standpipe are shown some very large wooden blocks attached to its upper portion. These blocks originally supported a wooden balcony.

The city is now using the 25 ft. of standpipe for storage and pressure. A new elevated tank or standpipe is to be erected. W. G. Kirchoffer, of Madison, Wis., consulting engineer to the city on this and other water-works improvements, furnished the above information on the failure.

BLACK RIVER FALLS STANDPIPE AND FRAGMENTS OF THE ICE CAKE WHICH CAUSED ITS FAILURE

Letters to the Editor

This department aims to be a forum for the discussion of the views of engineers and contractors. The range of interest should be as wide as possible. Contributors are, therefore, asked to make their letters short.

Constructive Criticism Needed

Sir—I am pleased to endorse your editorial on page 1029 of *Engineering News-Record* of June 14, 1923, which takes the position that a constructive criticism of the plan of railroad consolidation is much to be desired. It was my pleasure to attend the general hearings in Washington during which the tentative plan of the commission was discussed, and I am satisfied of the correctness of your position that this subject needs much study and discussion. A complete scientific investigation of this problem will require much additional time.

Washington, D. C. EDWIN F. WENDT,
June 19, 1923. Consulting Engineer.

Louisville Sewer Contracts and Arbitration

Sir—Referring to the editorial in *Engineering News-Record*, June 14, 1923, p. 1030, it seems that some explanation should be made.

Six contractors have signed written assertions about the methods our engineers employ. Of these six only three have ever done work for us, one has never submitted a bid. One of the original objectors after reading a reply to his assertions has recognized the justice of our position by recently making bids, one of which was under our engineers' estimate of cost.

The Commissioners of Sewerage of Louisville are four of the leading business men of the city, two of whom are Democrats, and two Republicans, the mayor being an additional ex-officio member. Not one of them can made or lose a penny regardless of the cost of building the sewers.

These five men have agreed to sit as a board of arbitration and hear any claim which any contractor may present as to losses due to arbitrary rulings of the engineer or a claim in equity due to unforeseen conditions and additional work. It is significant that in spite of general statements made by two contractors not a single claim for compensation has been presented to the commission for adjudication.

They have not tested out the arbitration clause which they now have. Further, the commission has not said that it will not arbitrate any specific matter which seems to warrant it, but it has refused to delegate to outside parties the responsibility placed upon it by the city of Louisville.

The commission does demand and expects to continue to demand that sewers be laid to line and grade and that they be of the material and of the quality set forth in the specifications. No claim has been made that it has ever demanded anything not set forth in the contract drawings and specifications placed in the hands of the contractors before they made their proposals.

Losses have been claimed by contractors. Our cost figures show on two contracts that the excavation did cost more than the prices bid. No claim that our inspectors have been arbitrary in their rulings can be substantiated regarding these losses.

Another loss is claimed because selected earth was required to be put immediately over the masonry in accordance with the specifications. This contractor was urged to put his rock on one side of the trench and his earth on the other in order that the selected earth would be available to place over the sewer barrel. No attention was paid to this suggestion and when backfilling was commenced the earth which under the specifications must go in first, was covered with rock and some difficulty was experienced in getting to the earth. The engineer was as liberal in this matter as the specifications permitted.

Another claim was that an underdrain was not continued throughout the entire length of the trench and that this cost the contractor money. We are ready to adjudicate this claim, whenever the contractor sees fit to present it, on the basis of equity in spite of the fact that the engineer's estimate of quantity clearly indicated that only one-half the length of the sewer would have an underdrain.

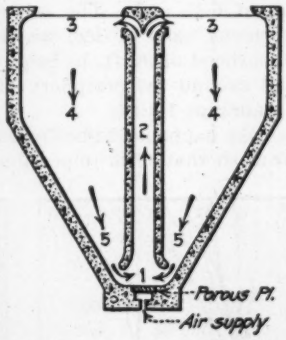
It is our intention to build the best sewers that can be built. Contractors know that we insist on high class workmanship and should take this into consideration in making their proposals.

P. H. HOGE, JR.,
Louisville, Ky. Secretary and Treasurer, Com-
June 20, 1923. sioners of Sewerage of Louisville.

A Proposed Variation of Activated Sludge

Sir—Dr. Buswell's article in *Engineering News-Record*, May 10, 1923, on the "Importance of Oxygen and Stirring for Activated-Sludge Growth" is very interesting and suggestive. This article and your editorial upon it remind us of the wastefulness of present activated-sludge methods in the use of compressed air, and re-open the subject of what can be done to eliminate this waste.

Some very convincing evidence is brought forward by Dr. Buswell in support of his conclusion that activated sludge will grow at low oxygen levels, and that the principal useful result we accomplish by the liberal use of air in the activated-sludge process is the stirring of the sewage and the holding of the sludge in suspension. Assuming that this conclusion is correct, and granting that compressed air is a convenient agent for stirring the sewage and elevating the floc, the question arises as to whether our present method of utilizing air for these purposes is the most efficient that can be devised. When air is forced in quantity through a porous plate at the bottom of an ordinary tank of sewage, it generates in the sewage strong upward currents which are opposed and deflected by return currents from the surface, causing the contents of the entire tank to be thrown into commotion. In watching the whirling and eddying of the liquid in a typical activating tank, one is led to the thought that this process is destructive of energy, and that efficiency in the use of air would be promoted by controlling the currents which are generated.



While studying over this subject, the following ideas have presented themselves to the writer: (1) If a portion of our object is to elevate the floc to counteract its tendency to sink through the sewage to the bottom of the tank, would it not be advantageous to do this by continually gathering the sewage rich in floc from the lower part of the tank and raising it quietly and efficiently to the upper part of the tank by means of an air-lift? Reason tells us that this would require less air than the agitation process with its conflicting and opposing currents. (2) If the remainder of our object is to bring each particle of the floc into intimate contact with successsive portions of the surrounding aerated sewage, could we not accomplish this by other means than violent stirring? Would not the same result be secured by allowing a continual supply of floc particles to settle under their own weight through a region of quiescent aerated sewage?

For carrying out these ideas, the arrangement of tank and air-lift shown in the figure has suggested itself. This arrangement provides for the circulation of the sewage through a series of zones, the action proposed for each zone being as follows:

(1) Zone of Aeration: Here the sewage is intimately mixed with finely divided air rising from the porous plate. Each particle of floc is surrounded by tiny eddies generated by the rising bubbles. These eddies sweep away the by-

products of biologic growth, diffuse the oxygen absorbed, and bring the dissolved, colloidal, and suspended organic matter into close contact with the floc particles.

(2) Air-Lift Zone: Aerating effects are continued. Mixture of air, sewage, and floc rises at velocity of greatest air-lift efficiency. Large eddy-currents, impacts, and short circuiting of flow cannot occur.

(3) Air-Releasing Zone: Mixture of air bubbles, sewage, and floc spreads out on surface of tank while air is being released.

(4) Settling Zone: Floc particles settle downward through quiescent sewage, growing in size and firmness, and sweeping from the sewage its dissolved, colloidal, and suspended organic matter.

(5) Collecting Zone: Settling sludge is here collected and directed toward the entrance of the riser. Concentration of sludge particles to the exclusion of oxygen-bearing water is prevented by constant withdrawal from below.

The above proposals for securing economy of air in the activated-sludge process seem to offer an interesting field for study and experiment. As a help in planning such experiments, any suggestions or criticisms by others who have been working along similar lines would be appreciated by the writer.

HAROLD A. THOMAS,
Professor of Hydraulic Engineering,
Rose Polytechnic Institute.

Terre Haute, Ind.,
May 14, 1923.

Clay Brick Interests Criticise Tests

Sir—Because the comparative tests of clay and concrete brick piers made recently by Columbia University were conducted under conditions which differ widely from current practice in the field, the Board of Directors of The Common Brick Manufacturers' Association of America, on June 12, unanimously rejected the test results as recently published by Columbia University (*Engineering News-Record*, May 31, 1923). The United States Bureau of Standards was also asked to conduct at the earliest possible moment comparative tests on clay and concrete brickwork so that the construction industry might have the truth as to the real properties of each kind of material.

Taking up the report in detail, in the first place mortar was used which is not comparable to that employed in ordinary construction. Although the tests were made upon brickwork supposed to represent New York City practice, the mortar was 1:3 portland cement mortar. The report does not state that any lime whatever was used in this mortar, and presumably there was none. The New York Building Code, however, specifically permits a certain percentage of the cement in cement mortar to be replaced by lime and this is typical of building codes throughout the land. This provision is intended to allow the use of a much more practical mortar than 1:3 cement mortar could possibly be. I doubt whether any reader of *Engineering News-Record* has ever put through a complete job using pure cement mortar without any lime in it. Such mortar works "short," and requires much greater time for the laying of a piece of brickwork than where the usual percentage of lime is used. It would be an extremely difficult, if not impossible, matter to get such mortar employed. The saving to the contractor in material and in bricklayers' time and the better grade of work resulting from the addition of lime to cement mortar presents such a powerful combination of reasons for the contractor to use it that only the most vigilant and constant inspection could insure the type of mortar used in this series of tests. Why was not mortar used comparable to that employed in actual construction?

Again, I would draw the attention of those of your readers who are practical masons or who are familiar with practical work to the illustrations of the typical fractures of test specimens shown on pp. 960-961 of the article of *Engineering News-Record*. Again, I would be content to leave it to the good judgment of these men as to whether, with a pure cement mortar mixed in the proportion of one part of portland cement to three parts sand, they ever, in the whole course of their experience, saw brickwork laid up with such full and perfect joints as those shown in the illustration. You will note that every joint is absolutely full of mortar, in spite of the fact that cement mortar works "short." The following, however, is quoted from the report: "The joints were struck off flush, and no special care was taken to produce other than a good grade of common brick masonry."

Your readers will also recall that it is much simpler to apply plaster or stucco to a brick wall than to concrete and that the bond between brick and the plaster or stucco is almost always good. We are invited to believe, however, that, where the concrete surface is a brick and the mortar is in the form of a mortar joint, by some mysterious means a better bond is secured than with a real brick. Possibly the following extract from the report may have some bearing upon this very extraordinary conclusion: "After construction they (the piers) were sprinkled daily with water for about one week." Has any mason contractor reader of this paper ever sprinkled a wall daily for one week after he has built it?

It is a fact also that concrete brick are much harder to lay than real brick, owing to the thin film of cement which forms their outside surface and which causes them to slide on the mortar bed. The bricklayer has to spend considerable time keeping the wall in line and nursing it along and this condition is aggravated in cold weather. This may be the reason why these brick, according to the report, were laid dry and may also have some bearing on the fact that the piers were afterward sprinkled daily.

The common brick industry now submits that in all fairness a series of tests be conducted under conditions comparable to those found in actual construction upon piers of the same size as those recently tested in Columbia University, to be made by an impartial and competent laboratory, preferably that of the United States Bureau of Standards; that the selection of the material and building of the piers be done under the supervision of competent engineers, so that the construction industry may have the truth regarding the comparative merits of clay and concrete brick.

WILLIAM CARVER,
Architect, Common Brick Manufacturers' Association of America.

Cleveland, Ohio, June 18.

Where Home-Use-Only Products Control Would Lead

Sir—Your editorial in the June 21 issue, entitled "Interstate Power Transmission," in which you comment on the West Virginia natural gas ruling of the United States Supreme Court, is both timely and interesting. The Maine idea of confining within the state the use of its natural resources is too selfish and misguided to find wide acceptance. If Maine should carry this principle to its logical conclusion and prohibit the export of that other great natural resource of hers, the potato, to say nothing of her timber, fish, etc., she would soon be in a bad way! In the case of New York State, it is significant that Governor Smith reverses his position on the question of the export of electric energy.

The United States Supreme Court in this ruling in the West Virginia case merely confirms a prior ruling in the West *v.* Kansas Natural Gas Co. (221 U. S. 229,255) case of a few years ago. The State of Oklahoma undertook by statute to prevent the piping of natural gas out of the state. The Supreme Court decided that no state has the power to prohibit the sale or shipment of its products to other states. Justice McKenna said in part as follows: "If the states have such power a singular situation might result. Pennsylvania might keep its coal, the Northwest its timber, the mining states their minerals. And why may not the products of the field be brought within the principles? To what consequences does such power tend? If one state has it, all states have it; embargo may be retaliated by embargo; commerce halted at state lines."

So long as our Supreme Court has the clarity of thought and breadth of vision indicated in these two decisions, the country has little to fear from the thoughtless and the radical.

E. A. VAN DUSEN.

Poughkeepsie, N. Y., June 22.

News of the Week

CURRENT EVENTS IN THE CIVIL ENGINEERING AND CONTRACTING FIELDS

Shandaken Tunnel to Be Put in Operation Jan. 1

Preparatory to putting into use January 1, 1924, the Shandaken Tunnel, the Board of Water Supply of the City of New York will soon advertise a contract for clearing of the Schoharie Reservoir which contract also includes construction of a rock-filed timber crib dam which will serve to divert water into the tunnel. Most of the clearing will be done during the season of 1924. Contractors who are interested in the work may obtain preliminary information at the office of the Board of Water Supply, Municipal Building, New York City.

Feiker Enters Consulting Field

F. M. Feiker, formerly vice-president of the McGraw-Hill Company, Inc., and more recently on leave of absence as special agent to the Department of Commerce at Washington, will after his return from Washington, be associated with the staff of the Society for Electrical Development, 522 Fifth Ave., New York City. Mr. Feiker will be available to act as a special counselor to engineers, manufacturers, central stations, jobbers, contractor-dealers and publishers, for which his special training and wide knowledge in the engineering publishing and public relations fields of many industries well qualify him. Mr. Feiker will retain a consulting relation to the McGraw-Hill Co., Inc., and he will continue in a similar capacity his relations to the problems of personnel and organization of the Department of Commerce at Washington.

Howard B. Gill Leaves A.G.C.

Howard B. Gill, who for the past four years has been connected with the Associated General Contractors of America, first as assistant secretary and then for three years as publication manager, is soon to leave the Association and become publicity and financial secretary of the National Council for Prevention of War. Mr. Gill became assistant secretary in May, 1918, having been first secured to take charge of and publish the proceedings of the organization meeting of the A.G.C. in Chicago in November of 1918. Mr. Gill organized the committee in research work of the association and established the monthly magazine now known as the *Constructor*. He also established the statistical service published in *Index*.

The National Council for Prevention of War, with which Mr. Gill becomes associated, is a federation of thirty-six national organizations, including the National Board of Farm Organizations, National Education Association, National Consumers' League, etc. Its officers and executive board include President Lowell, of Harvard, Jane Addams, Will Irwin, William Allen White, President Hibben, of Princeton, and other publicists and leaders in national life.

Two-Car Elevated Train Plunges 30 Ft. to Street in Brooklyn; Seven Persons Killed

Rear Truck on Second Car Becomes Derailed on Tangent Track; Two Score Injured; Wooden Car Bodies Built in 1898

Seven persons were killed and more than two-score injured, some of them seriously, when a two-car train of the Brooklyn-Manhattan Transit Co., on its way from Bay Ridge to Manhattan, became derailed near the Atlantic Ave. station in Brooklyn, New York, and fell from the elevated structure to the pavement about 30 ft. below. Just what caused the derailment is now the subject of a series of investigations being undertaken by the transit company and the Department of Plants and Structures, of this city. The accident occurred about two o'clock the afternoon of June 25, and about 60 to 70 passengers occupied the two cars.

An examination of the track where the accident occurred seemed to indicate that the rear truck of the rear car was the first to derail, an assumption borne out by a statement issued late on the day of the accident by W. S. Menden, president of the newly reorganized company, which changed its corporate name but a few weeks ago from the Brooklyn Rapid Transit Co. The first indications of derailment were noticeable at the heel of the frog. The train was trailing a cross-over switch located about half way between a curve and the Atlantic Ave. station, on a stretch of tangent track roughly estimated as 500 ft. long.

Condition of Frog

The heel of the frog showed slight abrasions. The fishplate which connected the wing guard rail to the frog casting was loose, there being a play of about an inch in this wing across the ties. The first indications of cutting by the wheel flange on the ties was immediately in front of the frog. This cutting of the ties continued up and across the ties until, at a distance about 10 ft. beyond the point of switch, the rear truck apparently became detached from the body of the car. This rear truck, according to the statement of Mr. Menden, was the one that remained on the elevated structure, all the others being carried to the street below. A thorough examination is to be made of this truck to determine if there was any structural weakness that might have contributed to the derailment.

The cars, when they fell, were badly splintered, and considering the age of the rolling stock, it is remarkable that there was not greater loss of life. The cars were built by the Pullman Co. in 1898, and were first used when the elevated line was a steam road. When the line was electrified (the electrification beginning in 1898) new trucks replaced the old ones.

A number of investigations into the cause of the accident are being carried

(*Continued on p.* 1141)

Menden Issues Statement

A statement was issued by W. S. Menden, president of the Brooklyn-Manhattan Transit Co. several hours after the accident, and after he had personally looked over the track and wreckage. This statement follows:

Mr. Menden, president, stated late this evening (June 25) that the investigation of cause of the accident this afternoon, while not complete, indicates that the rear truck of the rear car of the two-car train was derailed, for some cause not yet ascertained, at the frog of the switch just east of the Atlantic Ave. station, causing the rear car to be precipitated into the street, dragging the forward truck of the rear car and the entire forward car, with its trucks, into the street, leaving the truck which was first derailed on the structure practically at right angles to the running rail.

"The track and switches at the location in question had been inspected in the morning and found in good condition. Both cars of the train had been inspected June 15, 1923, in accordance with the established practice and found O.K. The two cars in the train had been operated on the same line over the same switch and frog for nine trips on the same day without any difficulty of any kind. The train was in charge of an experienced motorman with a good record.

"The investigation is being continued in co-operation with public authorities to ascertain more definitely the cause of the derailment."

Am. Soc. C. E. Takes Prompt Action on Ousting of Arthur P. Davis

Steps to investigate the ousting of Arthur P. Davis from the position of director of the U. S. Reclamation Service were taken by the Executive Committee of the American Society of Civil Engineers on June 25. A special investigating committee is being formed. Meanwhile data for the committee is being gathered. Ex-director Davis and Secretary Work have been requested to submit statements of their respective sides of the case and telegrams have been sent to engineers in the West asking for facts and opinions on the subject. It is hoped that the investigating committee will be able to report to the Board of Direction July 9, at the summer meeting of the society at Chicago.

Davis Removal Part of General Upheaval

Reported in Washington that Engineers Will Be Replaced in all Projects By Business Men

Following the removal of Arthur P. Davis as director of the United States Reclamation Service last week, there have been a number of reports in Washington regarding the future policy of the Interior Department in the conduct of the Reclamation Service. Secretary Work, of the Department of Interior, is in the West at the present time and has refused to give out any definite interview. However, other officials of the department, who may not be quoted, are responsible for statements of the intentions in the department.

In the first place, it may be said that Director Davis resigned at the request of the secretary, who gave no other reason than that he proposed to put this branch of the Interior Department on a business basis. Mr. Davis thereupon demanded a hearing under the civil service regulations, but he was informed by the secretary that such a hearing was not necessary because he had not been removed from office, but rather the office had been abolished. By abolishing the old title of director and giving the incoming head of the service the name of Commissioner of Reclamation, it becomes unnecessary for the secretary to give a statement in writing to the dismissed director as to why he was discharged from the service.

Other Substitutions Possible

It is understood further that Secretary Work plans to carry his reorganization of the service to the point where he will substitute business men for the technically trained project managers on the irrigation works in the West. The reason for this move, together with the inside explanation of why Mr. Davis was removed, is not officially available. The following statement, however, may be accepted as a fair picture of the views of Dr. Work, the Secretary of the Interior:

"In the natural evolution of the Reclamation Service, the engineering problems are being subordinated to the business policy of making a commercial success of the farms embraced in reclaimed areas. The engineering problems now are such that they can be handled by the chief engineer of the service. The crying need of reclamation is to devise means whereby the individual farmers can make reasonable profits. Under present conditions, their earnings are inadequate. They cannot pay even the water charges. Drastic steps must be taken if the overhead is to be cut down and the great commercial problem of making their farms pay solved. The West believes the farming of these reclaimed lands is economically sound. Under proper direction, the farmers' deficits can be changed into profits.

"Governor Davis, the new commissioner, is believed to be the type of man who can accomplish that purpose. His long association with the farmers' problems on reclamation projects and the fact that he has been the president for several years of the Western States Reclamation Association, fit him for the task of solving the business problems of the reclamation farmer. In that connection it was pointed out that Governor Davis would delegate all engineering matters to W. E. Weymouth, the chief engineer of the service, who has the confidence of all water-users. Secretary Work, however, recognized the value to the service of the dismissed director and tendered him employment at $20 a day to act as consulting engineer of the service. This Mr. Davis declined.

"In addition to the principle involved in making the change, there also was the matter of Mr. Davis' personality. He had served under several secretaries and had come to regard the job as his own. He was in many cases arbitrary and frequently insisted on having his own way. At times he insisted on following his judgment rather than that of the Secretary of the Interior. This led to serious trouble between him and Secretaries Lane and Fall. He is that type of capable man who refuses to play the game and who makes team work impossible."

It may be further stated that Retiring Director Davis did not feel at liberty to leave the Reclamation Service of his own motion. He frequently has declined offers which carried with them much higher salaries. With legislation finally on the statute books, which if carried into effect carefully, would mean the full reclamation of the West, it has been his avowed purpose to stay in the path of those who would repudiate reclamation obligations and of those who would dilute the fund by overloading it with new projects. In both of these stands, he has had the consistent support of the conservative business element in the West. The fact that Mr. Davis has been dismissed does not remove him entirely from that path. He expects to find means whereby he can continue to be a thorn in the side of those who threaten the ultimate success of the whole conception by catering to the selfish desires of those who would attach more importance to immediate personal advantages than to the future of reclamation as a whole.

Col. Sawyer New A.G.C. Secretary

Col. D. H. Sawyer has been appointed secretary of the Associated General Contractors of America effective July 1, according to announcement by Gen. R. C. Marshall, Jr., manager of the Association. He will succeed Eugene Young, who recently resigned the office to enter private business in Minneapolis. While the appointment is not formally effective until July 1, Col. Sawyer is already at the Washington headquarters of the A.G.C. familiarizing himself with the details of the office.

Col. Sawyer is a native of Illinois and a graduate of the engineering college of the University of Illinois. He has had wide experience as a constructor and as an engineer. For several years he was chief engineer of the Illinois Traction System. Later, he became a member of Sawyer Bros., consulting engineers, with offices in Seattle and Spokane.

When the United States entered the World War, Col. Sawyer joined the Construction Division of the War Department, being commissioned a colonel. Camp Brant and Camp Bragg were constructed under his direction, as was the nitrate plant at Cincinnati.

Western Society Holds Annual Meeting

Engineers Seen as Treasury Watchdogs, Public Protectors, Financiers and Practical Men—Society's Work

The engineer's relations to financial affairs were presented in two different aspects by two addresses at the fifty-third annual meeting and dinner of the Western Society of Engineers, held at Chicago on June 18. His relation to authorizations for and construction and maintenance of public improvement work was the main feature of the address of the incoming president, Charles A. Morse. He urged that the Society take an active part in public affairs not merely to inform the membership, but more especially to keep the general public informed before it authorizes expenditures on improvements, and to support the public official who is trying to run his department economically.

Closer understanding between the engineer and the banker in regard to private investments were advocated by E. Hill Leith, of Halsey, Stuart & Co., who emphasized the fact that the engineer must rely on the banker to handle securities which provide funds for his enterprises, and the banker must rely upon the engineer to safeguard his construction investments.

Opportunities and responsibilities of the engineer in the development of the future "greater Chicago" were visualized in the address of J. L. Hecht, retiring president, who stressed the point that in the development of a great and connected residential and industrial district, composed of many separate communities whose public work and services are, however, part of a comprehensive plan, the problems are those which must be prosecuted under the direction of competent engineers.

Washington Award Made

Presentation of the Washington Award to Captain Robert W. Hunt was the prominent feature of the meeting. This presentation was made by W. L. Abbott, who reviewed Captain Hunt's close connection with the development of the iron and steel industry of the United States since, at the age of 21, he threw in his fortune with the old Cambria Iron Works. His life's work in this direction, his liberal assistance in establishing and aiding the work of engineering societies, the efficiency and engineering skill of the business enterprise which he established, as well as his personal attainments and character were all considered in selecting him as the recipient of the award for 1922.

In reviewing the year's work, Mr. Hecht pointed out that there was a balance of $828 instead of last year's deficit of $1,574. Nine members have been lost by death and there is a net membership of 1,997, not including a number who are expected to be reinstated on payment of back dues. During the year thirty-seven meetings were held, with an average attendance of 172. Among the committees, notable work has been done by the committee on public affairs.

Officers for the year were announced as follows: President, Charles A. Morse, chief engineer of the Chicago, Rock Island & Pacific Ry.; vice-presidents, E. T. Howson, Horace Carpenter, H. H. Clark; treasurer, Geo. W. Hand; secretary, Edgar S. Nethercut.

Engineering Educators Meet at Ithaca

"Training for Leadership" Keynote of Papers—Comprehensive Survey Probable

One of the most successful meetings of the Society for the Promotion of Engineering Education was held at the College of Engineering of Cornell University, in Ithaca, N. Y., from June 20 to 23. Nearly 300 members and guests were in attendance, fully two-thirds of whom came from out of town. The outstanding feature of the meeting was a series of papers all grouped under the general head, "Training for Leadership." In addition, there were the usual committee reports, special conferences of the deans, the teachers of English, the drawing teachers, etc., and a thought-provoking suggestion as to improvement in the theory of engineering courses by Prof. Edwin Bennett, of the University of Wisconsin.

Progress was reported in the work of the so-called development committee appointed last year to formulate an answer to the question, "What can the society do in a comprehensive way to develop, broaden and enrich engineering education?" It has had a number of meetings and has succeeded in interesting several of the large foundations, notably the Carnegie Corporation, in a comprehensive study of engineering education. The Carnegie Corporation board is yet to meet, but Dr. Pritchett, its head, thinks the prospect of some funds being awarded the study distinctly favorable. This study is to be carried on under the direction of the society with a paid director and is to be distinct from some previous studies in that each one of the engineering schools is expected to make an exhaustive investigation of its own curriculum and administration as a preliminary to the work of the general inquiry. In a letter to Dr. Pritchett, it is stated that "It is proposed that the investigations of the society be directed to a study of the objects of engineering education and the fitness of the present-day curriculum for preparing a study for his profession. It will study the process by which the curriculum of fifty years ago has come to its present form; it will seek to set forth the nature and the weakness of the curriculum as at present administered; and it will indicate such modifications or developments as would seem to make for a sound, well balanced and fruitful course of study for engineering students."

Kimball Opens Discussion

Dean D. S. Kimball, of Cornell University, opened the discussion on "Training for Leadership." He outlined the development of the industrial control of the world and said that the engineer unquestionably is soon to be in command of industry, and therefore promises to be in control of the world. Certainly, the problem of leadership is now up to him. The engineer has the scientific method common to all science, but adds to it its application to human problems. It is, therefore, first necessary in engineering education not to weaken the curriculum in its instruction in the scientific methods of approach, for it is on that basis the engineer must take his lead. He would substitute for the word "engineer" possibly the term "industrially intelligent group" in any discussion of the engineer's prospective leadership. He said that the future lies either in the hands of the engineer or the business man, but the business man will have to know more about industry and have a broader vision toward the universal wellbeing if he hopes to become the future leader, taking the place of the present lawyer as the leader. He said that while the engineer has many virtues, he has the weaknesses of not being sufficiently broadly trained, that he is a cave dweller, not interested in people or things, that he lacks economic knowledge. When the engineer learns who he is, where he came from, and what his civilization stands for, he will be better trained.

Dean Kimball was followed at subsequent meetings by T. H. MacDonald, of the Bureau of Public Roads, who discussed "The Engineer as a Leader in Public Service," E. H. Lee, of the Chicago & Northern Indiana Railroad Co., on "The Engineer as a Leader in Transportation," Oliver S. Lyford, of the National Industrial Conference Board, on "The Engineer as a Leader in Industry," and W. E. Wickenden, assistant vice-president of the American Telephone & Telegraph Co., on "The Engineer as a Leader in Business." All of these speakers emphasized again and again the necessity of teaching fundamentals in engineering education, but this became so frequent in all of the discussions through the sessions that its force was somewhat weakened because there seemed to be no possibility of uniting on what fundamentals were, although the National Industrial Conference Board has defined them in some detail.

So far as the engineer's leadership in business is concerned, Mr. Wickenden did not speak very hopefully. He said that business was distinct from industry in that industry was productive and business distributive and commercial, and that the principles underlying business are not necessarily those underlying industry, involving as they do very much more of the element of risk, which is not common to the engineering type of mind. He felt, however, there was no reason why engineering instruction should be modified to fit business, and that there was no advantage either to the business man or to the engineer in insisting on such a joining together.

The paper by Professor Bennett of Wisconsin, entitled "Engineering Courses for the Functional rather than the Industrial Divisions of Engineering," pointed out that the functional divisions of engineering might be set up as research, design, supervision, management, and sale, whereas the industrial divisions as now established are roughly civil, mining and metallurgical, mechanical, electrical, chemical, and administrative. It is on the basis of these industrial divisions that engineering courses are now divided. He feels that a better division would be along the lines of functional divisions, especially as it may be possible in time to discover early in the student's career his special aptitudes toward the functional branches, a thing that cannot be discovered early as regards the industrial branches. Professor Bennett's suggestion, therefore, for an improved course involves not only the division along functional lines but a more intensive study of the student's early aptitudes with faculty counsel to direct the students into the line toward which his aptitude points.

His suggestion was not received with any tremendous enthusiasm by the professors present, though Prof. D. C. Jackson, of the Massachusetts Institute of Technology, said that in a way the scheme had been applied in the institution in the last two years, particularly in the increased choice of electives in those years. Dean O. M. Leland, of the University of Minnesota, contended that the interest of the boy himself in picking his course is one of the most important elements in his training and that the functional division is not so important to the student. He does not ask himself whether he is going to be a salesman or a manager or a research man, but he does say am I going to be an electrical engineer, a civil engineer, etc.? His functional choice comes later. Dean Leland, therefore, contended that it is very much more difficult to set up the functional division than the industrial one.

Five-Year Course

In the conference of the deans there was considerable discussion of the five-year prescribed course in engineering, but no conclusion was reached. Dean W. G. Raymond, of the University of Iowa, submitted a diagram of the five-year course which had been developed in his institution and which had been adopted by the faculty and has been referred to the president and governing board. It permits the degree of B.S. at the end of four years and of a professional degree in engineering at the end of five years, but most of the specialized engineering comes in the fifth year. A somewhat similar course was shown by Dean Cooley, of the University of Michigan. His course had been prepared by a committee and had been laid on the table by the faculty so that it is not in prospect of early adoption.

P. F. Walker, dean of the College of Engineering, University of Kansas, was elected president for the ensuing year, and F. L. Bishop, dean of the College of Engineering, University of Pittsburgh, secretary.

Harding Succeeds Isaacs as S. P. Consultant

Carroll R. Harding, who since 1916 has been assistant consulting engineer of the Southern Pacific Ry., on June 1, 1923, upon the retirement of John D. Isaacs, was appointed to succeed Mr. Isaacs as consulting engineer of the southern Pacific Ry. Mr. Harding was born at Hallowell, Maine, in 1888, and graduated from Cornell University with the degree of civil engineer in 1910. For three years he was employed by the American Bridge Co. and on surveys in Alaska, Michigan, and Costa Rica. He entered service with the Southern Pacific Ry. in 1913, and has been successively draftsman in the office of John D. Isaacs, chief draftsman in the same office, and assistant consulting engineer. He is president of the Cornell Society of Engineers, and is a member of the American Society of Civil Engineers and of the American Railway Engineering Association.

Elevated Train Plunges 30 Ft., Killing Seven

(*Concluded from p. 1138*)

on by the Brooklyn Manhattan Transit Co. by the city and by the Transit Commission.

Edwin P. Parcell, the motorman of the train, who escaped with minor face lacerations, was arrested immediately after the accident and released later on bail of $1,000. He was held pending an investigation into the condition of the switch, which, it was first said, might have been tampered with. But as the train was trailing rather than facing the switch, the switch, except at the frog, seems to have had little to do with the accident.

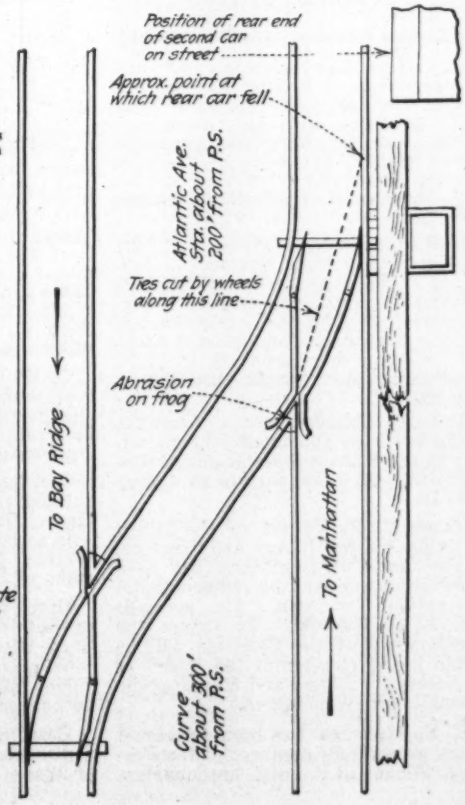
As the train fell from the elevated structure, one of the cars hit the front of a light delivery truck, but the driver jumped and thereby escaped injury. No other automobiles were struck, although Times Plaza, where the accident occurred, is one of the busiest of Brooklyn's centers of traffic. Traffic had been stopped in a direction oblique to the elevated structure axis.

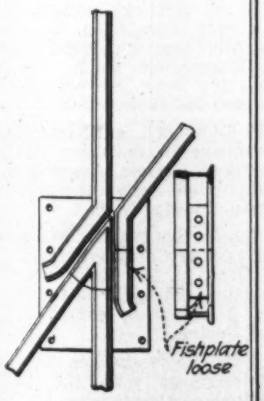
TYPE OF ELEVATED STRUCTURE FROM WHICH TRAIN FELL

Immediately after the accident, when ambulances from almost a score of hospitals had cared for the injured, wrecking crews were put to work to clear the debris. Half a dozen oxyacetylene torches were operated most of the afternoon to burn the structural parts of the cars to sufficient size so that the wreckage could be handled.

RIGHT—SKETCH OF ACCIDENT AREA

Plan is not to scale; gives approximate line along which inside wheels crossed ties.





DETAIL OF FROG SHOWING PLAN AND ELEVATION OF LOOSENED CONNECTION

Random Lines

Still Another Brand

A new novel, a newspaper blurb says, is "one of the finest pieces of imaginative engineering in many, many moons."

* * *

Down in North Carolina there is a city engineer who says that there's not a lot or block corner stake in town. "The only monuments are those at the town limits and in the cemetery."

* * *

Why Rail Transportation Lags

Kansas has, or had, a law which ordered that "when two trains approach each other at a crossing they shall both come to a full stop, and neither shall start up again until the other has gone."

* * *

Out West the other day the President said he would rather be an engineer than anything else in the world. He has ample precedent. Most public men would rather be than see one—especially in any kind of authority.

* * *

Publicity has at last got the better of Tom Edison. The newspapers have found out that one of his sons has just graduated from Boston Tech, and they are trying to get him to reconcile his practice with his press-agent's stories about the worthlessness of college men. This isn't the first of the Edison boys to get an engineering degree, but the Old Man has hitherto managed to keep it out of the papers.

* * *

Hot Weather Note

"It is reported," translated Florio from old Michel, Lord of Montaigne, "that in ancient times they made no fire in their houses, but without and at the foote of them: Whence by tonnels, which were convaide through their thickest wals, and contrived neere and about all such places as they would have warmed; so that the heat was convaied into every part of the house." But he does not report the price of coal or whether father did the stoking.

* * *

A South African dispatch reports the discovery of a fossil human skull that competes in age with the Neuderthal and Piltdown relics of prehistoric man. We may well wonder what concerns occupied the contents of that cranium some 100,000 years ago. But it's a safe bet that one of them was "the effect of sea-water on concrete."

* * *

It's fine, of course, that inventive genius has found means to strengthen and amplify the voices of public speakers. Pity 'tis that no one has yet devised some contraption that will proportionately strengthen and amplify the thinking behind the voices.

Connecticut Water Pollution Bill Vetoed by Governor

A bill creating a commission to control water pollution in Connecticut was vetoed on June 21 by Charles A. Templeton, governor of that state. In its original form the bill was submitted to the Legislature by a stream pollution commission created by the Legislature of 1921. This commission was headed by C. M. Saville, chief engineer and manager, Hartford water-works, and had two other engineer-members, besides representatives of the manufacturing and oyster industries of the state. The original bill was supported by the State Chamber of Commerce and the State Manufacturers' Association and by individual manufacturers also. It is characterized by the governor as "a reasonable compromise between all interests" but it is reported that it was opposed by some manufacturers.

The governor states that the bill was put aside in the last days of the Legislature and in its place an unsatisfactory substitute was passed. The original bill distinctly mentioned public health and covered the discharges from municipal sewers as well as from individual manufacturing plants. The substitute omits all reference to public health and covers nothing but the discharge of wastes from manufacturing plants. The governor urges that although the state health laws fully protect waters used for drinking purposes, there is still need for legislation to protect the public health from sewage for other reasons, mentioning shell fish. He declares that "it is fully as important to purify the streams from sewage as to purify them from factory wastes."

A marked inequality in the application of the substitute bill to mill and factory owners is pointed out by the governor, who states that trade wastes discharged into the streams through city sewers would not be covered by the substitute bill, but that the proposed water commission would have full jurisdiction over trade wastes from all manufacturing plants having their own outlets direct into streams and that this would be a particular hardship upon manufacturing plants outside the cities, since such plants within cities generally discharge their wastes through the city sewerage systems. Another objection made by the governor to the substitute bill is that it eliminates the provision of the original bill for directing first operations against new manufacturing plants.

Two years ago the Connecticut Legislature failed to give support to an earlier commission on stream pollution, that had conducted some quite extensive investigations of the subject, and created the commission whose bill was emasculated by the 1923 Legislature and has just been vetoed by the governor. (See *Engineering News-Record*, Nov. 3 and 10, 1921, pp. 745 and 757.)

Civic Center Plan Approved for Pasadena

Voters of Pasadena, Calif. on June 7, by a plurality of more than 3 to 1, approved a $3,500,000 bond issue for acquiring land and constructing a city hall, a library and an auditorium. These buildings are to be arranged in a group as a civic center in accord with a plan proposed by the city planning commission.

Engineering Societies

Calendar

Annual Meetings

AMERICAN SOCIETY OF CIVIL ENGINEERS, New York, Annual Convention, Chicago, July 11-13.

NEW ENGLAND WATER WORKS ASSOCIATION, Boston, Mass.; Annual Convention, Burlington, Vt., Sept. 18-21, 1923.

AMERICAN PUBLIC HEALTH ASSOCIATION, New York; Annual Meeting, Boston, Oct. 8-11.

The St. John, N. B., Branch of the Engineering Institute of Canada recently gave a banquet in honor of W. J. Francis, the newly elected president of the Engineering Institute of Canada, this being the first stop in the tour arranged for the new head of the society.

The New England Water Works Association's Nominating Committee announce nominations as follows for the year ending September, 1924, for president, David A. Heffernan, Milton, Mass.; for vice-presidents, Theodore L. Bristol, Ansonia, Conn., and Stephen M. Taylor, New Bedford, Mass.; and treasurer, Frederic I. Winslow, Framingham, Mass.

The Detroit Engineering Society at its meeting June 22 was addressed by the mayor of Detroit, Frank E. Doremus, on the engineer's duties and opportunities as citizens.

Personal Notes

W. J. KING has been appointed resident engineer of Kansas Federal Aid Project No. 149, under the state highway commission, with headquarters at Holton, Kan. Mr. King was for many years county engineer of Labette County, Kan., and later was Kansas representative of the Portland Cement Association.

G. F. NICHOLSON, chief engineer, Port of Seattle, has been retained as consulting engineer by the Port of Olympia (Wash.) Commission to prepare a comprehensive plan for the development of Olympia harbor. A bond issue of $450,000 for these improvements is to be voted on by the Olympia port district July 10.

AUBREY RIEBENNACHT, Lowville, N. Y., has been appointed junior engineer in the Illinois State Highway Department with headquarters at Effingham, Ill.

MAJOR G. R. YOUNG, of the Board of Engineers for Rivers and Harbors, of the Corps of Engineers, has been made secretary of the International Navigation Congress. He succeeds COL. J. C. SANFORD. In future the secretaryship of the Congress will be vested in the member of the Board of Engineers for Rivers and Harbors who is resident in Washington.

E. K. MENTZER has been appointed principal assistant engineer of the Boston & Albany R.R., with headquarters in South Station, Boston, succeeding G. W. Abbott, who is taking up private practice. W. A. BUMP is appointed division engineer of the Albany division with headquarters in Springfield, succeeding Mr. Mentzer in that position.

E. G. RAYNOR has been appointed highway engineer in the Bureau of Public Roads with headquarters at Pierre, S. D. Mr. Raynor has worked in the state highway departments of New York and Iowa and recently was assistant division engineer of the Nebraska State Department of Public Works. He served in France as captain of engineers.

GABRIEL HENRY, who has been consulting engineer of the department of roads of the province of Quebec, has been appointed chief engineer of the department, succeeding H. N. NECKER, who is to be connected with a road contracting firm at Sherbrooke.

C. C. CONGDON has been appointed city engineer for the city of LaCrosse, Wis., to succeed E. C. BLAKE, resigned.

DR. RICHARD BISHOP MOORE, chief chemist and mineral technologist of the U. S. Bureau of Mines, has resigned and has taken charge of the development department of the Dorr Co., engineers, with headquarters in their New York office. Dr. Moore's work at Washington has included general supervision of the chemistry research of the Bureau of Mines, and charge of the work in non-metallics, ceramics, rare metals, helium, and alloys. He built and operated the government radium plant at Denver and directed the construction and operation of three government helium plants during the World War. With the Dorr Co. Dr. Moore will have charge of research in the development of new processes in metallurgy and chemistry.

BRILLHART-BROTHERS CO. and F. H. CLEMENT CO. have been merged into a new corporation, F. H. CLEMENT & CO., with offices in Bethlehem and Philadelphia, Pa., and equipment yard at Bingen, Pa. The organization and operating personnel of the former companies will be retained, and the new company will solicit railroad and general building construction.

O. B. KERCHER has succeeded W. T. HORN, resigned, as engineer of the Fort Wayne district, Indiana, for the state highway commission. Mr. Kercher has recently been employed with the U. S. Bureau of Public Roads at Fort Worth, Tex. He will have 700 miles under his jurisdiction.

C. W. CAMPBELL, until recently field representative in Southern states for the Portland Cement Association, has been appointed assistant engineer of Buncombe County, N. C.

SAMUEL M. ELLSWORTH has been appointed sanitary engineer for the Village of Rye, N. Y. Until recently he was assistant engineer in the office of Weston & Sampson, consulting engineers of Boston.

OTTO W. KNUTSON has been made project engineer with the Missouri State Highway Commission, having entered that work from the office of R. E. Tilden, of Winnemucca, Nevada, where he was employed as assistant engineer.

EDMUND I. MITCHELL, until recently a draftsman in the office of the Board of Water Supply, New York City, has

joined the consulting engineering firm of Waldo S. Coulter, New York City. Mr. Mitchell is the engineer in charge of sewer construction at Spring Valley, N. Y.

WILLIAM J. KNAUER, former county engineer of Chautauqua County, New York, has become superintendent and junior partner of the general contracting firm of Hitchcock & Knauer, of Olcott, N. Y.

DANIEL C. COOPER has left the U. S. Gypsum Co., with which firm he was employed as superintendent of construction at Oakfield, N. Y., and has gone to Los Angeles, where he now becomes assistant engineer on harbor improvements with the harbor commission of that city.

ELIJAH H. OWEN, of Owen & Seabrook, Detroit, Mich., states that since the death of his associate Charles R. Seabrook, the firm has been dissolved and he has become associated with ALVA M. HULL in a new firm, Hull & Owen, architects and engineers, Detroit.

ALFRED L. VEZINA, recently associated with Matthew O'Brien, San Francisco architect, and formerly with the California state department of engineering and the Thompson-Starrett Co., has, with John Diestel, entered the contracting business in San Francisco with an office in the Russ Bldg.

L. B. REYNOLDS has been appointed professor in civil engineering at Stanford University, Palo Alto, succeeding Prof. C. D. Marx, who becomes emeritus professor.

D. B. STEINMAN has been retained as designing engineer for the Carquinez highway bridge across Carquinez Strait, Calif. CHARLES DERLETH, JR., of Berkeley, Calif., is chief engineer; and WILLIAM H. BURR, of New York, is consulting engineer. The main structure is to be 3,350 ft. long, including two cantilever spans of 1,100 ft. In addition there will be about 1,400 ft. of steel viaduct construction, making the total length of structure nearly one mile. The estimated cost is about $5,000,000. The plans and specifications will be prepared in Dr. Steinman's office in New York City. The bridge is being built by the Rodeo-Vallejo Ferry Co.

W. J. FORBES, director of Concrete Constructions, Ltd., designing and contracting engineer of Sydney, N.S.W., is in the United States studying highway design and construction and the erection of large buildings. After spending some time on the Pacific Coast and in the Middle West, he is now in New York.

R. K. WEST, chief engineer of the Central Board of Roads, Republic of Panama, is in the United States and has been spending time in New York and Washington on various business matters.

WILL P. BLAIR, vice-president, National Paving Brick Manufacturers Association, has returned from the International Road Congress at Seville, Spain. While abroad, he spent some time in detailed study of the highways of England and Scotland.

GEORGE MATTIS, former city engineer of Oakland, has become associated with the F. F. Porter Company of Oakland, Calif., real estate operators, as an industrial and consulting engineer.

E. E. CARPENTER, member of the firm of Baker & Carpenter, consulting and construction engineers of San Francisco, has been appointed chief engineer of the British Columbia Electric Ry. Co., Vancouver, B. C. The appointment was made effective immediately and Mr. Carpenter is already in Vancouver engaged in his new work.

LAZARUS WHITE, member of the firm of Spencer, White & Prentis, New York, foundation specialists, and for a number of years division and department engineer on the Catskill aqueduct, sailed from New York last week for a trip abroad. He will first visit London and then proceed to the continent returning some time in September.

CHARLES SHALTER KRICK, St. Davids, Pa., was given the degree of Doctor of Engineering at Lafayette College, June 11. Mr. Krick is general manager of the Eastern region of the Pennsylvania R.R.

F. G. SOMNER, for several years division engineer of the California State Highway Commission at Willits, Calif., has resigned and will be succeeded by THOMAS A. BEDFORD, who has been division engineer at Dunsmuir, Calif., and who will be succeeded in the Dunsmuir office by H. S. COMLY, previously assistant division engineer at that point.

T. HEES has been appointed district engineer, Canadian Pacific R.R., and is stationed at Calgary, Alberta.

C. F. PRICE, formerly of the engineering department of the California State Highway Commission, has been appointed city manager of San Mateo, Calif.

STEWART PURCELL has been appointed chief engineer of Baltimore, Md., succeeding August E. Christhilf, the appointment being effective July 1. Mr. Purcell was born in Ireland and is a civil engineering graduate of Cornell University. He was employed by the Pennsylvania R.R. for seven years and entered the employ of the city of Baltimore in 1901, where he has been structural engineer in the building inspector's department, assistant division engineer in the filtration division in charge of the construction of the Montebello filtration plant under the direction of J. W. Armstrong, designing engineer, and, more recently, connected with the city highway department.

JULIUS R. HALL, formerly principal assistant engineer of the Sanitary District of Chicago, has resumed practice as designing and consulting engineer at 115 So. Dearborn St., Chicago, and will specialize in the reports and estimates for public and industrial work.

WILLIAM HOOD, formerly chief engineer of the Southern Pacific Co., who retired two years ago after fifty-four years of service, received the degree of doctor of science June 18 from Dartmouth College, of which he was a graduate in 1867. Mr. Hood's part in the history of railroad construction is connected with scaling the Sierra Mountains, the Tehachapi Loop, lines across the Siskiyous, the Lucien Cutoff, and the line through the Carriso Gorge in Southern California which pierces solid granite seventeen times in 11 miles.

DR. EDWARD BARTOW, head of the Department of Chemistry, University of Iowa, was given the honorary degree of master of science at the commencement of Williams College, Williamstown, Mass., June 25. Dr. Bartow is a Williams man.

Obituary

J. A. MCCAMPBELL, of Philadelphia, died recently from heart trouble. Mr. McCampbell had been for seventeen years associated with Stone & Webster, Inc., and at the time of his death was superintendent of construction on the 90,000-kw. power house extension for the Philadelphia Electric Co. He had had charge of construction of many power plants for the company, including the 95,000-kw. steam station for the Buffalo General Electric Co.

W. A. DUCKER, for some years past connected with the Manitoba department of public works, died recently in Winnipeg at the age of 71 years. He was at one time in the service of the Canadian Pacific Ry. and was later appointed by the Dominion Government as swamp lands commissioner.

JOHN T. CHILD died recently at Albemarle, N. C., where he was resident engineer on a sewer and pavement project for the Gilbert C. White Co. of Durham, N. C. Mr. White was a graduate of Cornell University, had been assistant engineer on pavement and sewer construction in Illinois and Texas, was 35 years old, and had served seven years as engineer of the Rochester, N. Y., Bureau of Municipal Research.

E. C. STRACHAEUR, division construction superintendent of the California State Highway Commission, died at his office in Norman, Calif., June 9, aged 48 years.

PHILIP KIRSCHNER, contractor, Cleveland, Ohio, died recently at Johns Hopkins Hospital, Baltimore. Mr. Kirschner, who was 63 years old, had in twenty-five years of contracting in Cleveland built as many as two hundred of the city's schools.

WILLIAM G. ARMSTRONG, chief engineer of the St. Paul Union Depot, died June 12 in St. Paul, Minn. Mr. Armstrong went to St. Paul in 1915 to work on plans for the Union Depot. Those plans were adopted in 1917 and Mr. Armstrong has since then been in charge of construction of the Union Depot and the elevation of the tracks approaching it. The head-house is finished and the general project is about half completed. Before his death Mr. Armstrong gave to his assistant full details for the completion of the work. Mr. Armstrong was born in Iowa in 1859 and was a civil engineering graduate of Iowa State College. Two other outstanding works of his are the Boone viaduct across the Des Moines River on the Chicago & Northwestern R.R., one of the longest double-track structures of its kind when built, and the terminal of the Chicago & Northwestern R.R. in Chicago. He was a member of the American Society of Civil Engineers and of the Western Society of Engineers and had always taken an active part in society affairs.

From the Manufacturer's Point of View

A Point of Contact
Between Maker and User of
Construction Equipment and Materials

The Lubrication of Construction Equipment

Hints for the Contractor for Lengthening the Life and Improving the Operation of Excavating Machinery and Concrete Mixers

(From Information Supplied by The Texas Co., New York.)

IN the operation and maintenance of construction equipment proper lubrication offers to the contractor a means of counteracting the injurious effects of severe service and exposure of his machinery to all kinds of weather. If cylinders and bearings are to resist scoring, due to the entry of abrasive particles of foreign matter; if gears are to operate without abnormal wear in the presence of dust; and if wire rope and chains are to function safely, day after day, without broken or rusted strands or links, continued vigilance must be practiced in the selection and the regular application of lubricants.

Excavating Machinery

Steam Cylinders—Under the general classification of excavating machinery are normally included power shovels, ditching machines, dragline excavators, trenching and backfilling equipment and dredges of various types. The digging, handling and disposal of earth, gravel, sand, ore and other solid and semi-solid materials preparatory to construction work are among the most important operations which the contractor has to perform. In order to keep power shovels, dredges, trenching and back filling machines in continuous operation, it is essential to give careful attention to their lubrication at all times. Perhaps the most important detail is the lubrication of steam cylinders. In any of the above machines which are steam driven the existing conditions and methods of operation will be such that if any but a high-grade, properly compounded lubricant is used the cylinders will suffer accordingly.

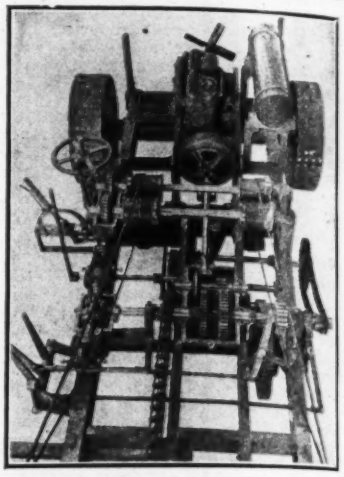
Steam used on such machines will, in general, be of comparatively low pressure (100 to 150 lb.) and will have quite a large moisture content. Although steam is taken from the highest part of the boiler it will frequently be relatively wet when it enters the header. Furthermore, line condensation and moisture content will be high between the boiler and engines, with a corresponding decrease in pressure, due to the fact that steam pipes are often not covered to any great extent, and the engines are frequently subject to intermittent operation. As a result there will almost always be an accumulation of water above the throttle valves, prior to starting the engines, depending in amount upon the length of time they have been stopped. If the cylinders are not covered with a tenacious film of properly compounded lubricant the admission of these slugs of water will tend to wash the lubricant from the wearing surfaces, and for the next few strokes insufficient lubrication will be possible and scoring and abnormal wear may occur. The constant repetition of this action produces compression losses and inefficient operation of the entire machine due to steam leakage past the piston rings. Groaning of the engines or rattling of the valves on their seats may also occur in extreme cases.

The problem, therefore, is to select and use a grade of cylinder oil which contains a sufficient amount of high-grade animal or fixed oil to promote the formation of an extremely tenacious film of emulsified lubricant, which will adequately resist the washing action of any water that may be present. The base of this lubricant should be a medium viscosity, highly adhesive, steam refined cylinder stock. For this purpose a comparatively high compound cylinder oil of about 130″ Saybolt viscosity at 210° F. has proved to be most satisfactory.

This article gives practical suggestions for the lubrication of:

Steam Cylinders
Crawler Traction
Journal Boxes
Engine Bearings
Gasoline Engines
Electric Motors
Gears
Chains and Wire Rope
Concrete Mixers
Roller Bearings

In order efficiently to lubricate such steam cylinders the oil should be delivered by a positive feed lubricator, preferably of the force feed type, via suitable atomizers. Hydrostatic lubricators could be used, were the engines to operate continually, but the usual intermittent service involved would either require constant closing and opening by the fireman or else a waste of oil would follow if the lubricator were left in service while the engines were stopped. The location of the oil pipes and atomizers in the steam lines is also important. These points should be approximately 6 ft. back from the throttle valves. In cases where a steam thrusting engine is located on the boom in certain types of these machines, the oil line often enters the steam pipe much further back from the throttle, with the result that in the event of steam leaks at the ball or swing joint there will be considerable loss of oil as well, with subsequent insufficient lubrication unless the leak is stopped.



MODERN CONSTRUCTION MACHINERY REQUIRES LUBRICATION OF MANY PARTS

General Lubrication—Where excavating machines are equipped with caterpillar tractors the lubrication of link-pins and rollers is important to insure against excessive friction losses and power consumption. Automatic lubrication is generally regarded as the most satisfactory, the lubricant being furnished from internal reservoirs located in the treads and rollers. For this service a relatively heavy pure mineral lubricant having a viscosity of about 200″ Saybolt at 210° F. will be most suitable.

On certain types of railroad shovels and other excavating machinery, journal boxes similar to those used in railway service will be installed on traction wheel journals. As a general rule these journals, although they are not subjected to the same high speeds and lengthy periods of operation as railroad journals, are lubricated in a similar manner, i.e., by packing the journal box with wool waste which has been saturated in mineral oil. For this purpose a 300″ to 500″ Saybolt viscosity (at 100° F.) pure mineral oil, as recommended for general bearing service hereafter, will be suitable.

The lubrication of other wearing parts on the average excavating machine can be well taken care of by means of a medium viscosity straight mineral oil or a high-grade compression cup grease. Many builders recommend grease lubrication and accordingly equip their machines with compression grease cups. Grease for this purpose should be free of acid or alkali and should contain no filler such as talc or asbestos, which tends to clog the oil grooves. External lubrication on excavating machinery, whatever its nature, is necessarily a difficult proposition, and enough dirt, dust and abrasive matter will work its way into the bearings, without the addition of any more in the form of improperly compounded greases.

When engine bearings, etc., are lubricated with oil, the viscosity of the latter should be in the neighborhood of 300 to 500″ Saybolt at 100° F. For electric motor bearings, however, in-

To Train Oxy-Acetylene Welders

The American Welding Society has just issued an outline of a course for the training of oxy-acetylene welders. This report was prepared by a committee and combines the experience of experts of the Federal Board of Vocational Education, the American Welding Society and the National Research Council. For the information of the person who is selecting candidates, the text includes a discussion of the qualifications which the candidates for training should possess. For the information of the instructor, the text includes the fundamentals in gas welding, together with a detailed statement of content, classified under type welding jobs arranged in the order of difficulty. Copies may be secured from the American Welding Society, 29 West 39th Street, New York City.

Construction Equipment Exported

Figures from the Department of Commerce indicate the following exports of construction equipment during April, 1923:

Ten steam and power shovels valued at $89,474 were shipped, five of them going to Canada and two to Australia. Eleven cranes, costing $101,494, were exported, Canada, with seven, again being the largest consumer. In the concrete mixer field 64 machines were sold for $66,951; 26 of these units went to Canada and 14 to Japan. During the month miscellaneous construction equipment not specifically classified totaled 462,831 lb., costing $88,760.

(*Continued from Page* 1144)

volving ring oiling systems, a lighter oil will be best, ranging from 180 to 200" viscosity. The method of applying engine oils is worthy of comment.

Hand oiling is frequently customary, but is not recommended due to the possibility of oil holes becoming clogged with dust and dirt, and the bearings suffering accordingly. It has been proved that sight-feed oil cups are probably the best equipment to use. They should at all times be so covered that the contents are kept free from contamination.

Internal Combustion Engines

Where excavating machinery, such as power shovels and trench machines, etc., is driven by kerosene or gasoline engines instead of steam, lubrication develops into a problem similar to that involved in the modern tractor or automobile. For such service the motor lubricant is of chief importance and should be given careful consideration. Usually some form of force feed lubricating system is involved which passes the oil through a hollow drilled crankshaft under sufficient pressure to reach all wearing parts. On gasoline engines a straight mineral motor oil of from 500 to 750" Saybolt viscosity at 100° F. will be suitable, the grade selected being dependent upon the weather and operating temperatures. For tractor type engines a somewhat heavier lubricant should be used, the viscosity of which varies from 70 to 110" Saybolt at 210° F.

(To Be Continued Next Week. Subjects: Lubrication of Gears, Wire Rope Chains and Concrete Mixers.)

Recommend Fewer Varieties of Hollow Building Tile

At a meeting held June 19, at the Department of Commerce, the Standards Committee of the Hollow Building Tile Association reported to the Department's Division of Simplified Practice, the results of a survey which the association had made of existing varieties in types, sizes, and weights of hollow building tile. The survey showed 36 different sizes—each made in a wide variety of weights. The committee recommended the elimination of 23 of the 36 sizes, and the retention of 13 as "standards" for the industry. A standard weight, with a permissible variation of 5 per cent over or under the standard weight, was also recommended for each of the 13 sizes retained.

The committee requested the Department of Commerce, through its Division of Simplified Practice, to call a general conference next October of manufacturers, architects, engineers, contractors, and builders to discuss the general adoption and use of the recommended standard sizes and weights.

Cargo Beam Patent Valid

The validity of the Lenke patent (No. 1,228,120) for cargo beams used in unloading material from the holds of vessels to wharves has been upheld by the United States Court of Claims in a decision rendered June 4 by Judge Booth in the case of the Richmond Screw Anchor Co., Inc., against the United States. Instead of being rigid, like previous types of construction, the Lenke cargo beam is so mounted as to "swing in response to the application of the load wherever it may be situated and presents its full inherent strength by adapting its position to the angle of the hoist without more than normal strain under any circumstances." The beam consists essentially of a pivoted I-beam weighing about 1,300 lb. as compared with the heavier channel and cover-plate type of construction weighing 3,300 lb. formerly used. The suit was based on the use of the Lenke cargo beam by the Quartermaster Corps at the army supply base in Brooklyn in 1918.

Cement Making Pictured in New Film

Much of the equipment involved in making cement is illustrated in a two-reel moving picture called "The Story of the Manufacture of Portland Cement," just released for general showing. Starting with views of one of the large cement plants, the film pictures in a non-technical way the essential steps in transforming raw materials into portland cement. From the moment that a blast breaks loose a cliff of limestone in the quarry to the time when the finished cement goes into storage in big concrete bins the process of manufacture is almost entirely mechanical.

In addition to straight photography, animated drawings have been inserted to make clear what occurs inside the grinding mills, what goes on within the white-hot interior of the huge kilns, and how the cement sacks, suspended upside down, are filled after they have been tied. This film can now be secured without charge by interested organizations through any office of the Portland Cement Association, or from association headquarters at 111 W. Washington St., Chicago.

Business Notes

Bond Co., Boston, has been appointed representative for the New England territory by the T. L. Smith Co., Milwaukee, to handle sales of concrete mixers, excavators and loaders.

Hunkins-Willis Lime & Cement Co., St. Louis, has opened a new yard and warehouse on Forsythe Boulevard, west of the Rock Island tracks.

Thomas O'Brien, who has been connected with John F. Allen Co., New York, as engineer and sales manager for the past twelve years has been made general manager. The company manufactures a line of portable pneumatic compression and hammer riveters.

Nugent Steel Castings Co., Chicago, is the new name adopted at a meeting of stockholders May 28 to supersede the Electric Steel Co. The officers of the organization include Charles Piez, president; W. J. Nugent, vice-president and general manager; Prentiss L. Coonley, treasurer; and C. A. MacDonald, secretary. The company began operations in its present plant in 1915 and is claimed to be one of the first foundries to use electric furnaces on a large scale in the production of steel castings.

Charles F. Hall has resigned his position with the Equipment Corp. of America and has organized the Acme Equipment Co., dealers in construction equipment, with headquarters in Pittsburgh.

A. O. Beauchemin, formerly consulting hydraulic engineer of Montreal, is now vice-president of the Layne-New York Co., a subsidiary of the Layne & Bowler Co., water supply contractors, Memphis, Tenn., located in New York City. Mr. Beauchemin is a graduate of McGill University, and was in business for himself for several years in Montreal. Later he entered the employ of Layne & Bowler Co. and was a sales engineer for this company approximately five years.

Standard Scale & Supply Corp., Pittsburgh, has purchased and is now operating under new management the business formerly conducted by the Standard Scale & Supply Co. The new corporation manufactures scales, concrete mixers, and contractors' equipment. It has branch offices in New York, Philadelphia, Cleveland and Chicago.

McWane Cast Iron Pipe Co., Birmingham, Ala., announces the opening of its southwestern sales offices in the Magnolia Building, Dallas, Texas. J. L. Hill, formerly of Birmingham, has been appointed southwestern district sales manager, and will have charge of sales of the company's McWane precalked-joint cast-iron pipe, in the very small sizes, in the states of Arkansas, Louisiana, Oklahoma, Texas, New Mexico and in Mexico.

Stanley P. Seward has been appointed advertising manager, the White Co., Cleveland, to succeed M. H. Newton.

ATLAS PORTLAND CEMENT CO. (of Kansas) has been incorporated to acquire the property of the Western States Portland Cement Co. at Independence, Kansas, which manufactured the Cowboy brand of cement.

Equipment and Materials

For Patching Concrete Floors

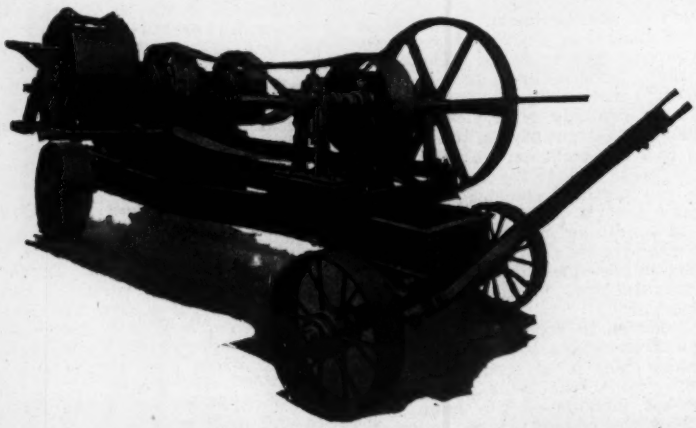
"Quickfix," a new compound for repairing concrete floors by producing a hard patch in 48 hours has recently been developed by the Master Builders Co., Cleveland. The installation of patches with this product, the company claims, can be made by any handy man, not necessarily skilled in the handling of concrete, by following directions furnished with the material. Interference with traffic is largely eliminated. Patches can be laid Saturday noon and put into use Monday morning. The cost of using the material for floor repair, according to the manufacturer's estimates, is less than 2c. a square foot.

Mounted Disc Crusher

To produce a well graded product for repairing macadam roads the Symons mounted disc crusher, illustrated herewith, was designed by Chalmers & Williams, Inc., Chicago Heights, Ill., to recrush 2½-in. gravel or stone to a size of from ½ to ¾ in., with a certain percentage of fine crushed rock and a small percentage of dust. One of the features of the equipment is its portability. It is mounted on a substantially built steel truck carrying countershaft, bearings and pulleys for driving the crusher mechanism.

It has been found in practice, the manufacturers report, that when the crusher is adjusted so that all of the product is reduced to pass a slot ½ in. in width, the capacity ranges from 10 to 15 tons per hour, depending upon the character of material being crushed and the method of feeding. Fifteen tons can be secured, crushing gravel or limestone, provided the feed does not contain any pieces over 2½ in. in diameter.

A 25-hp. motor is ample for driving crusher and countershaft, the actual power requirements being from 18 to 20 hp., when under full load. The crushing faces are manganese steel and as they wear uniformly the same character of product is produced throughout the life of the crushing members.



Asphalt Heater for Mounting on Army Trailer

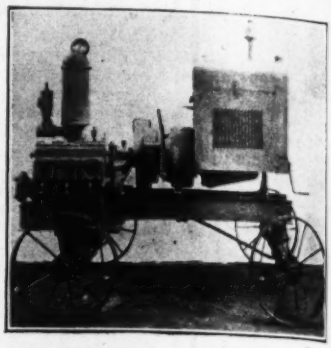
To utilize the supply of army trailers in the storage yards of state, county and city highway departments, Littleford Bros., Cincinnati, have designed a tar and asphalt heater expressly made for mounting on the Army spring-suspended chassis trailer and rubber-tired wheels. With this running gear a tar and asphalt heater can be trailed behind rapidly moving vehicles, enabling the highway department to cover more mileage. The equipment is known as the Trail-o-Heater.

The kettle of the heater has a capacity of 300 gal. All seams are

electric-welded. A 2-in. draw-off valve is provided on each side. The cover is arranged with a warming hood under which a barrel of tar or asphalt may be placed for draining. The furnace shell completely surrounds the kettle; it is supported on each side and is bolted to the chassis frame. It has a large fire-box with an improved type fire door, renewable grate bars, a large ash pit and draft control door.

Portable Triplex Pump for Road Builders

Designed especially for road builders' use to deliver water through long lines of small pipe a new triplex portable pump, powered by a four-cylinder, 15-hp. LeRoi gasoline engine, has been added to the line of contractors' equipment manufactured by the Domestic Engine & Pump Co., Shippensburg, Pa. The pump will deliver from 46 to 60 gal. per minute against a gage pressure of 300 lb. per square inch. The complete unit is mounted on a steel-wheel



truck and is equipped with pole trees and neck yoke or tractor hitch.

The engine is equipped with radiator, cooling fan, magneto, governor, air filter, and is completely inclosed in metal housing. An air-circulating fan insures engine cooling. A friction clutch is provided between engine and pump, and a uniform speed is secured by a fly-ball governor.

Traction Wheel Mounting for 6-Yd. Railroad Shovel

Traction wheel mountings for its heaviest type of railroad steam shovel with 6-cu.yd. dipper, have been built and tested recently by the Osgood Co., Marion, Ohio. Previously this model of shovel had been mounted on standard railroad trucks for use in quarries and open mines where a considerable amount of blasting had to be done. The necessity of laying track and moving the shovel back and forth between blasts slowed down operations and decreased output.

To eliminate the track-laying opera-

tion giant traction wheels, 6 ft. in diameter and with faces of 36 in. on the front and 30 in. on the rear wheels, were designed. The front wheels are used as drivers and power is delivered through a series of gears from the hoisting engines on the shovel. Steering is accomplished from the cab by turning the rear wheels by means of a screw shaft and traveling nut.

In recent tests made in a large Pennsylvania stone quarry, the manufacturer reports, the shovel was moved a distance in one day that under old track-laying methods would have required at least ten days. The traction mountings are designed to facilitate the use of large railroad type steam shovels in solid-bottom quarries and mines by increasing mobility and eliminating the necessity of pit men and jack arms.

The advantage of traction wheels

over railroad trucks for large railroad type steam shovels, are thus summarized by the Osgood Co. Greater mobility of machine, elimination of pit crew, easier accessibility to face of excavation, elimination of tracks and reduction of side strains and racking to the machine in general. Traction wheels, it is claimed, are also much less complicated, simpler to operate and have a low upkeep cost.

The 6-yd. shovel on which the traction wheels are used has an overall length of 85 ft., a width of 20 ft. and a maximum height over the cab of 15 ft., while the boom extends to a height of 32 ft. This type of mounting also is available for the 5, 3½, 3, 2½ and 1½-yd. shovels.

Publications from the Construction Industry

Steel Gratings and Stair Treads—MITCHELL-TAPPEN CO., New York, devotes a new 24-p. illustrated catalog to its Mitco interlocked steel grating and stair treads. The interlocking feature involves a series of dovetailed slots on fixed centers in the bearing bars into which the lateral or transverse bars are forced under heavy pressure. The gratings are designed particularly for use in connection with subways and as flooring in industrial and power plants where ventilating openings must be provided. A slightly different design of grating is employed for a coal grizzly.

Rolling Doors—J. G. WILSON CORP., New York, illustrates and describes in detail, in a newly published 16-p. catalog, its vertical rolling doors of steel and wood and its new horizontal folding door adapted for use in piers, freight sheds, warehouses and factories. The latter type is spring counterbalanced and may be folded up overhead out of the way.

Sewer Construction Equipment—W. H. ANDERSON TOOL & SUPPLY CO., Detroit, lists and describes its line of sewer builders' tools and equipment in a recent 16-p. bulletin. The equipment includes trench braces, manhole steps, winches, clay cutting knives, mud boxes, sewer cars, plank pullers, and ground augers.

Excavating Equipment—PAWLING & HARNISCHFEGER CO., Milwaukee, has issued three new bulletins featuring trenching machinery and convertible crane and power shovel rigs.

Tractor Sub-Soiling—C. L. BEST TRACTOR CO. is distributing a 40-p. illustrated booklet entitled "Subbing the Soil," which explains the use of tractor-operated sub-soil plows and chisels. While intended primarily for the agricultural field, the method has an application in construction work as is exemplified by the use of five standard tractor-operated chisel plows in building the stadium for the University of California where the broken ground was later handled by wheel-scrapers. Also, on the Merced irrigation project, a multiple standard subsoil plow hauled by a Best tractor loosened material in the bottom of the canal so that it could be removed by four-horse scrapers.

Business Side of Construction

FACTS AND EVENTS THAT AFFECT COST AND VOLUME

N. Y. Bricklayers Win Strike for $12 Daily Wage

Bricklayers in New York City won their strike, which has been in progress since May 21, when the Mason Builders' Association last week agreed to demands for a basic wage of $1.50 an hour, or $12 a day for a period of two years. This represents an increase of $2 a day over the basic daily rate of $10, which has been in effect since 1920. During the strike it was estimated that from $150,000,000 to $200,000,000 worth of work was being held up.

The construction concerns hit by the strike were among the largest in the United States. They included the George A. Fuller Co., the Thompson-Starrett Co., Cauldwell and Wingate, Marc M. Eidlitz & Son, William Crawford, Hegeman-Harris Co., John Lowry, Jr., G. Richard Davis, James Stewart Co., Starrett & Co., Charles T. Willis, Inc., and Cunningham & Foley.

Among the large operations affected by the strike were the Federal Reserve Bank, Nassau and Liberty Sts., the new store of Saks & Co., Fifth Avenue and Fiftieth St.; the Cotton Exchange, the Home Insurance Co., Maiden Lane and William St.; the Standard Oil Building, and the Pershing Square Building.

Structural Steel Sales in May

The Department of Commerce announces May sales of fabricated structural steel, based on figures received by the Bureau of the Census in cooperation with the Structural Steel Society. Total sales of 130,929 tons were reported for May by firms with a capacity of 225,790 tons per month.

Tonnage booked each month by 175 identical firms, with a capacity of 229,575 tons per month, is shown below, together with the per cent of shop capacity represented by these bookings. For comparative purposes, the figures are also prorated to obtain an estimated total for the United States on a capacity of 250,000 tons per month.

1922	Actual Tonnage Booked	Per Cent of Capacity	Estimated Total Bookings
April	200,588	87	217,500
May	184,638	81	202,500
June	168,498	73	182,500
July	157,631	69	172,500
Aug.	156,011	68	170,000
Sept.	146,146	64	160,000
Oct.	132,450	58	145,000
Nov.	111,794	49	122,500
Dec.	138,024	60	150,000
1923			
Jan.	172,415	75	187,500
Feb.	183,938	80	200,000
March	218,997	95	237,500
April	184,884*	81	202,500
May	130,929**	58	145,000

* Reported by 166 firms with a capacity of 228,455 tons.

** Reported by 157 firms with a capacity of 225,790 tons.

Cement Production Gains

Statistics issued by the Department of the Interior and prepared under the direction of Ernest F. Burchard, of the U. S. Geological Survey, from reports received from producers, show the production of portland cement in the United States for May, 1923, to be 12,910,000 bbl., as compared with 11,359,000 bbl. for April of this year and 11,176,000 bbl. for May, 1922.

For the first quarter of this year production exceeded that for the same period in 1922 by 10,415 bbl., the figures being, respectively, 25,669,000 and 15,254,000 bbl. A steady gain in production is also indicated by the statistics for the first five months of this year when the output was 75,607,000 bbl. as compared with 50,927,000 bbl. for the same period of 1922.

May (1923) shipments were 14,257,000 bbl., an increase of 1,508,000 bbl. over shipments for the same month a year ago.

The accompanying table contains the figures in detail.

PRODUCTION, SHIPMENTS, AND STOCKS OF FINISHED PORTLAND CEMENT, 1922 AND 1923, IN BARRELS

Month	Production 1922	Production 1923	Shipments 1922	Shipments 1923	Stocks at end of Month 1922a	Stocks at end of Month 1923
January	(a)4,291,000	7,704,000	(a)2,931,000	5,419,000	13,316,000	(a)11,470,000
February	4,278,000	8,085,000	3,285,000	5,963,000	14,142,000	(a)13,502,000
March	6,685,000	9,880,000	7,002,000	10,326,000	13,848,000	(a)13,045,000
First quarter	15,254,000	25,669,000	13,218,000	21,708,000	.....	.....
April	9,243,000	11,359,000	8,592,000	12,954,000	14,470,000	(a)11,463,000
May	11,176,000	12,910,000	12,749,000	14,257,000	12,893,000	10,115,000

Weekly Freight Loadings Again Pass Million Mark

For the second time this year, according to the Car Service Division of the American Railway Association, loading of revenue freight exceeded the million mark during the week which ended on June 9, for which the total was 1,013,249 cars. The first time the million mark was exceeded was during the week of May 26 when the total was 1,014,029 cars.

Freight car loadings are the heaviest for this season of the year in the history of the railroads, and for the week of June 9 were only one-half of one per cent under the record week in history, which was that of Oct. 14, 1920, when the total was 1,018,539 cars.

Despite the record loadings car shortage which was reported at 12,978, had virtually disappeared for all classes of equipment. At the same time reports showed more than 41,000 surplus freight cars available for service whenever transportation conditions warranted.

From Jan. 1 to June 9, inclusive, 20,981,062 cars have been loaded with revenue freight, compared with 17,442,444 during the corresponding period last year, and 16,359,067 during the corresponding period in 1921.

The total for the week of June 9 exceeded the corresponding week last year by 177,041 cars, and the corresponding week in 1921 by 225,966 cars. It also exceeded by 81,208 cars the preceding week this year when freight loadings were curtailed by the observance of Memorial Day.

Large Contracts Let During Week

Among the week's announcements of contracts awarded in Construction News, pp. 379 to 393, are the following:

Telephone exchange, New York, N. Y., to Marc Eidlitz & Son, Inc., $11,250,000.

Office building, Chicago, Ill., to R. C. Wieboldt Co., $7,000,000.

Bank and office building, Chicago, Ill., to H. Erickson Co., $5,500,000.

Office building, New York, N. Y., to S. S. Roth & Bros., $5,000,000.

Turbo units for power plant, Detroit, Mich., to Westinghouse Electric & Mfg. Co., Pittsburgh, Pa., $1,254,000.

Grain elevator, Ft. Worth, Tex., to Southwestern Eng. Co., Springfield, Mo., $1,500,000.

Concrete arch, Detroit, Mich., to Lennane & McIlvenna, $663,285.

Bids Wanted on Big Jobs

Among the projects on which bids are either asked or will soon be called for, in Construction News, pp. 379 to 393, are the following:

Railways, Montreal, Que., Canada, for Canadian National R.R., $20,992,000.

Hospital, Nashville, Tenn., for Vanderbilt University, $2,000,000.

Industrial plant, Toledo, O., for Libby Owens Sheet Glass Co., $1,500,000.

Cement mill, Ft. Worth, Tex., for South West Portland Cement Co., El Paso, $1,500,000.

High School, Kansas City, Mo., for Board of Education, $1,400,000.

Factory and warehouse, Dallas, Tex., for Brown Cracker and Candy Co., $1,000,000.

Weekly Construction Market

THIS limited price list is published weekly for the purpose of giving current prices on the principal construction materials, and of noting important price changes on the less important materials. Moreover, only the chief cities are quoted.

Valuable suggestions on costs of work can be had by noting actual biddings as reported in our Construction News section.

The first issue of each month carries complete quotations for all construction materials and for the important cities. The last complete list will be found in the issue of June 7; the next, on July 5.

	New York	Atlanta	Dallas	Chicago	Minneapolis	Denver	San Francisco	Seattle	Montreal
Steel Products:									
Structural shapes, 100 lb.	$3.64	$4.30	$4.50	$3.40	$3.55	$4.20	$3.95	$4.10	$4.25
Structural rivets, 100 lb.	4.40	5.00	4.95	3.75	4.25	5.40	5.00	4.75	6.00
Reinforcing bars, ¾ in. up, 100 lb.	3.54	4.25	+3.80	3.32½	3.45	3.85	3.65	4.10	4.00
Steel pipe, black, 2½ to 6 in. lap, discount	44%	52%	45%	47%	53-5%	36%	35.2@47.6%	40%	32.76
Cast-iron pipe, 6 in. and over, ton	62.50@63.50	—53.00	63.00	60.20	60.50	69.00	+62.00	70.00	60.00
Concreting Material:									
Cement without bags, bbl	2.70@2.80	2.85	2.25	2.20	2.39	2.84	2.71	2.90	2.25
Gravel, ¾ in., cu.yd	2.25	1.90	2.25	2.00	1.85	1.90	2.15	1.25	1.50
Sand, cu.yd	1.25	1.24	1.95	2.00	1.25	1.00	1.50	1.25	1.25
Crushed stone, ¾ in., cu.yd	1.75	2.00	2.50	2.00	2.25	3.50	2.15	3.00	1.90
Miscellaneous:									
Pine, 3x12 to 12x12, 20 ft. and under, M.ft.	64.00	42.00	+55.00	58.50	43.25	60.00	41.00	—31.00	90.00
Lime, finishing, hydrated, ton	18.20	23.50	—22.00	20.00	25.50	24.00	22.00	24.00	21.00
Lime common, lump, per bbl.	3.00@3.25	1.50	—2.35	1.50	1.50	2.70	1.75	2.80	10.00
Common brick, delivered, 1,000	23.50	14.00	+13.10	11.00	17@19	12.00	15.00	13.00	16.50
Hollow building tile, 4x12x12, per block	Not used	.109	.115	.1032	.0836	.065	....	.11	.115
Hollow partition tile 4x12x12, per block	.1573	.109	.115	.0825	....	.065	.108	.11	....
Linseed oil, raw, 5 bbl. lots, gal.	—1.13	—1.20	—1.35	1.29	1.29	1.39	1.24	.86	1.38
Common Labor:									
Common labor, union, hour	.75	.35	.....	.....	.....	.50@.55	.55	....	.....
Common labor, non-union, hour	.....	.30	.30@.50	.85	.55	.35@.50	.50	.50@.62½	.30@.35

Explanation of Prices—Prices are to contractors in carload lots unless other quantities are specified. Increases or decreases from previous quotations are indicated by + or — signs. For steel pipe, the prevailing discount from list price is given: 45-5% means a discount of 45 and 5 per cent. Charge is 15c. per 100 lb. for cutting reinforced steel into 2-ft. lengths or over.

New York quotations delivered, except sand, gravel and crushed stone, alongside dock; common lump lime, in 280-lb. bbl. net, and hydrated lime f.o.b. cars; tile "on trucks"; linseed oil and cast-iron pipe f.o.b.

Labor—Concrete laborers' rate, 90c.; building laborers (pick and shovel men) 75c. per hr.

Chicago quotes hydrated lime in 50-lb. bags; common lump lime per 180-lb. net. Lumber delivered on job.

Minneapolis quotes on fir instead of pine. Brick, sand and hollow tile delivered. Cement on cars. Gravel and crushed stone quoted at pit. We quote on brown lime per 180-lb. net; white is $1.80 for Kelly Island and $1.70 for Sheboygan. Common labor not organized.

Denver quotes on fir instead of pine. Cement "on tracks"; gravel and sand at pit; stone on cars; lime, brick, hollow tile and lumber on job. Tile price is at warehouse. Linseed oil, delivered, in iron bbl. Common lump lime per 180-lb. net.

Atlanta quotes sand, stone and gravel per ton instead of cu.yd. Common lump lime per 180-lb. net.

Dallas quotes lime per 180-lb. bbl. Steel, cement, cast-iron pipe and crushed stone f.o.b. cars, other materials delivered.

San Francisco quotes on Heath tile, size 5½ x 8 x 11½. Prices are all f.o.b. warehouses except C. I. pipe, which is mill price plus freight to railway depot at any terminal. Common lump lime per 180-lb. net. Lumber prices are to dealers in yards at San Francisco, for No. 1 fir common.

Seattle quotes on Douglas fir (delivered) instead of pine. Lump finishing lime per 180-lb. net. Hollow building tile delivered. Hydrated lime in paper sacks. Sand and gravel at bunkers.

Montreal quotes on pine lumber. Sand, stone, gravel and lump lime per ton. Cement, lime and tile are delivered; sand, gravel and stone on siding; brick f.o.b. plant; steel and pipe at warehouse. Hollow tile per ft. Cement price is in Canadian funds (the Canadian dollar stands at 97.62). Bag charge is 80c. per bbl. Discount of 10c. per bbl. for payment within 20 days from date of shipment. Steel pipe per 100 ft. net; 2½-in., $32.76; 6-in., $108.

Changes Since Last Week

Prices of finished steel products have continued fairly stable during the last two months. Reinforcing bars are still quoted at $2.40, with plates and shapes at $2.50 per 100 lb., f.o.b. mill. Heavy oil production is creating an increased demand for storage-tank plates. Considerable new business in plates and structurals developed during the last week despite the recent quiet tone to the structural market, brought about by the suspension of many projects.

Douglas fir lumber market shows a slight tendency to soften. Seattle reports a decline of $1 per M. ft. in structural sizes. Yellow pine, however, advanced $2 per M. ft. in Dallas, due to unusually heavy local demand.

Slight fluctuations appear in cast-iron pipe prices throughout the South and West. Seattle reports steel and cast-iron pipe holding at levels quoted but with continuing shortage, and shipments practically impossible to obtain.

Raw linseed oil declined 1c. in Dallas; 3c. in New York and 4c. per gal. in Atlanta, during week.

A formal agreement between the New York Mason Builders' Association and the bricklayers was signed Monday, May 25. The contract calls for a basic wage of $12 per day for two years. Hod carriers are also to receive $8 per day during the same period. Iron workers and cement and concrete laborers are on strike. The former for the forty-four-hour week and abolition of the open shop, and the latter for a wage advance of $1 per day.

CONSTRUCTION NEWS

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Jan. 8	St. Paul, Minn.	Jan. 4
Jan. 11	White Lake, S. D.	Jan. 4
Jan. 11	Albemarle, N. C.	Dec. 21
Jan. 12	Cleveland, O.	Dec. 21
Jan. 15	Cyril, Okla.	Dec. 14
Jan. 15	Burbank, Okla.	Jan. 4
Jan. 15	Scarboro, Ont.	Jan. 4
Jan. 22	Hinsdale, Ill.	Dec. 21
Feb. 1	Spokane, Wash.	Nov. 16

SEWERS

Jan. 9	Newark, N. J.	Dec. 21
Jan. 11	Muscatine, Ia. Adv. Jan. 4.	Jan. 4
Jan. 11	Jacksonville, Fla.	Jan. 4
Jan. 11	White Lake, S. D.	Jan. 4
Jan. 15	Buffalo, N. Y.	Jan. 4
Jan. 15	St. Petersburg, Fla. Adv. Dec. 28 and Jan. 4.	Dec. 28
Jan. 15	Wash., D. C.	Dec. 23
Jan. 16	Richmond, Va.	Dec. 21
Jan. 18	Lodi, Calif.	Jan. 4
Jan. 23	Toledo, O. Adv. Dec. 28 and Jan. 4.	Jan. 4
Jan. 24	San Francisco, Calif.	Jan. 4

WASTE DISPOSAL

Jan. 24	Fargo, N. D.	Dec. 7

BRIDGES

Jan. 9	Ft. Wayne, Ind.	Dec. 28
Jan. 13	Cambridge, Mass.	Dec 28
Jan. 23	Spokane, Wash.	Sept. 21
Jan. 23	Spartanburg, S. C.	Jan. 4
Apr. 1	Wilkes-Barre, Pa.	Dec. 14
Sept. 1, 1923,	Sydney, New South Wales, Australia	Aug. 3

DAMS

Jan. 5	Bluefield, W. Va.	Nov. 30

EXCAVATION, DRAINAGE, IRRIGATION

Jan. 9	Glencoe, Minn.	Dec. 14

STREETS AND ROADS

Jan. 5	Ohio	Jan. 4
Jan. 6	Albion, Ind.	Dec. 28
Jan. 6	Lafayette, Ind.	Dec. 28
Jan. 7	Duluth, Minn.	Sept. 28
Jan. 8	San Diego, Calif.	Dec. 28
Jan. 9	Modesto, Calif.	Dec. 28
Jan. 9	Kalamazoo, Mich.	Jan. 4
Jan. 10	La Grange, Tex.	Jan. 4
Jan. 10	Albemarle, N. C.	Dec. 21
Jan. 10	San Francisco, Calif.	Dec. 28
Jan. 10	Florida	Dec. 28
Jan. 10	Elkader, Ia.	Dec. 28
Jan. 11	Wichita, Kan.	Dec. 21
Jan. 11	Atlantic City, N. J.	Dec. 28
Jan. 11	Louisiana	Dec. 28
Jan. 11	Virginia	Dec. 28
Jan. 12	New York Adv. Jan. 4.	Jan. 4
Jan. 12	Wauwatosa, Wis.	Jan. 4
Jan. 12	Center, Tex.	Jan. 4
Jan. 15	Merced, Calif.	Jan. 4
Jan. 16	Bluffton, Ind.	Jan. 4
Jan. 16	Michigan	Dec. 28
Jan. 17	Camden, S. C.	Jan. 4
Jan. 23	Laredo, Tex. Adv. Dec. 28 and Jan. 4.	Jan. 4
Jan. 23	Spokane, Wash.	Dec. 21
Jan. 24	Faribault, Minn.	Dec. 14
Jan. 25	Ft. Smith, Ark.	Dec. 28
Jan. 28	Cisco, Tex.	Jan. 4
Jan. 30	Quebec	Dec. 28

INDUSTRIAL WORK

Jan. 8	Bridgeport, Conn.	Jan. 4
Jan. 10	Waco, Tex.	Dec. 28
Jan. 15	Great Falls, S. C.	Dec. 28

BUILDINGS

Jan. 5	Bath, N. Y.	Dec. 14
Jan. 6	Newark, N. J.	Dec. 21
Jan. 10	Nashville, Tenn.	Dec. 7
Jan. 10	Grand Rapids, Mich.	Dec. 21
Jan. 10	Baltimore, Md.	Dec. 28
Jan. 10	Baton Rouge, La.	Jan. 4
Jan. 11	Elizabeth, N. J.	Dec. 14
Jan. 15	Oxford, O.	Jan. 4
Jan. 15	Collingswood, N. J.	Jan. 4
Jan. 15	Dallas, Tex.	Dec. 21
Jan. 15	Sacramento, Calif.	Jan. 4
Jan. 15	Vancouver, B. C.	Jan. 4
Jan. 17	Baltimore, Md.	Jan. 4
Jan. 19	Monticello, Ia.	Dec. 21
Jan. 26	Omaha, Neb.	Jan. 4
Feb. 1	St. Thomas, N. D.	Jan. 4
Feb. 1	Chicago, Ill.	Dec. 21
Feb. 10	Kenosha, Wis.	Jan. 4
Mar. 23	Shreveport, La.	Nov. 9

FEDERAL GOVERNMENT WORK

Jan. 5	Dredge—Cincinnati, O.	Dec. 7
Jan. 9	Fuel Oil—Wash., D. C.	Dec. 21
Jan. 9	Extension — St. Cloud, Minn.	Dec. 21
Jan. 10	Extension—Elmira, N. Y.	Dec. 21
Jan. 12	Remodeling—Boston, Mass.	Dec. 21
Jan. 15	Metal Work — Key West, Fla.	Dec. 21
Jan. 15	Pipe Line Dredge—Cincinnati, O.	Dec. 14
Jan. 15	Dredging—Virginia	Dec. 28
Jan. 15	Scows—Wilmington, Del. Adv. Dec. 28 and Jan. 4.	Dec. 28
Jan. 15	Scows—Phila., Pa.	Dec. 28
Jan. 16	Hospital—Tacoma, Wash. Adv. Dec. 14 to Jan. 4.	Dec. 14
Jan. 16	Hull—Nashville, Tenn. Adv. Dec. 21 to Jan. 4.	Dec. 21
Jan. 17	Dredging—Phila., Pa.	Dec. 28
Jan. 17	Piers—Astoria, Ore.	Dec. 28
Jan. 18	Remodeling—Boston, Mass.	Dec. 28.
Jan. 18	Furnishing and Placing Rock—New Orleans, La.	Dec. 21
Jan. 22	Bridges—Alaska	Dec. 28
Jan. 23	Lock Operating Machinery, etc.—Huntington, W. Va. Adv. Dec. 28 and Jan. 4.	Dec. 28
Jan. 24	Levee Work—St. Louis, Mo. Adv. Dec. 28 and Jan. 4.	Dec. 28
Jan. 24	Refrigerating and Ice-Making Plant—Pearl Harbor, H. T.	Dec. 14
Jan. 26	Tower—New York, N. Y. Adv. Jan. 4.	Jan. 4
Jan. 27	Barges—Florence, Ala. Adv. Jan. 4.	Jan. 4
Jan. 29	Ward Building, etc.—Savannah, Ga.	Jan. 4
Jan. 30	Dredging Ladder — Cincinnati, O. Adv. Jan. 4.	Jan. 4
Jan. 30	Barges—Nashville, Tenn. Adv. Jan. 4.	Jan. 4
Jan. 31	Houses—Pittsburgh, Pa. Adv. Jan. 4.	Jan. 4
Feb. 1	Dredging—Galveston, Tex. Adv. Jan. 4.	Jan. 4
Feb. 14	Sluice Gates — Boise, Idaho Adv. Jan. 4.	Jan. 4
Feb. 15	Furnishing Stone, etc.—Crescent City, Calif.	Dec. 28
Feb. 15	Valves—Boise, Idaho Adv. Jan. 4.	Jan. 4

MISCELLANEOUS

Jan. 8	Rock Crusher and Grader — Minneapolis, Minn.	Dec. 28
Jan. 8	Wharf—Detroit, Mich.	Dec. 28
Jan. 8	Raising Levee—White Hall, Ill.	Jan. 4
Jan. 8	Ball Globes, etc.—St. Paul, Minn.	Jan. 4
Jan. 9	Gravel—Louisiana	Dec. 28
Jan. 10	Transmission Line Conductors—San Francisco, Calif.	Jan. 4
Jan. 10	Steam Rollers — New York, N. Y.	Jan. 4
Jan. 10	Wood Paving Blocks—New York, N. Y.	Jan. 4
Jan. 11	Heating and Ventilating Apparatus, etc. — New York, N. Y.	Jan. 4
Jan. 11	Structural Steel—New Orleans, La.	Dec. 21
Jan. 12	Sewer Brick, Portland Cement, etc.—Richmond, Va. Adv. Jan. 4.	Jan. 4
Jan. 15	Bulkhead — Jersey City, N. J. Adv. Dec. 21 to Jan. 4.	Dec. 21
Jan. 15	Power Equipment — Lamar, Mo. Adv. Jan. 4.	Jan. 4
Jan. 19	Power Plant Equipment — Memphis, Tenn.	Jan. 4
Jan. 22	Turbines—Winnipeg, Man.	Jan. 4
Jan. 23	Crane—Aberdeen, Wash. Adv. Jan. 4.	Jan. 4
Feb. 15	Dry Dock Machinery—Esquimalt, B. C.	Jan. 4

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Conn., Wallingford — Plans extending water system. $150,000. Engineer not announced. Address Bd. Selectmen.

N. Y., Lyndonville—Plans election to vote on $90,000 bonds for water and sewer main construction.

Fla., Tampa—N. S. Hill, Jr., engr., 112 East 19th St., New York City, submitted report to city, for waterworks system to bring water to Tampa from best source, sources under consideration being 8 to 21 mi. from city; extending mains in city of Tampa; pumping equipment, etc. Will vote on $1,272,000 bonds for project.

Ia., Maurice—Making plans waterworks and sanitary sewerage systems. $55,000. W. E. Buell & Co., 205 Davidson Bldg., Sioux City, engrs.

Ia., Sac City—Plans deep well, approximately 1,300 ft. $15,000. W. Gilbert, clk.

Kan., Claflin—Having preliminary survey made for new water plant, extension to water mains and sewer laterals. $75,000. F. E. Devlin, Sedgwick Bldg., Wichita, engr.

Minn., Morris—City did not open bids Oct. 20 for pump station and crane, because of public protest against bond issue which was authorized at election, Dec. 5. Contract letting indefinite. C. F. Tweed, 531 Metropolitan Bank Bldg., Minneapolis, engr. Noted Oct. 12.

Minn., Westbrook—Rejected bids 11,375 ft. 4 in. c.i. pipe, 14 hydrants, 11 gate valves, 4,200 lb. special castings, pump unit, and building pump house. W. E. Buell & Co., 205 Davidson Bldg., Sioux City, Ia., engrs. Noted Dec. 7.

Tex., Amarillo—Wynkoop Kiersted, consult. engrs., Interstate Bldg., Kansas City, Mo., submitted report to city, recommending waterworks improvements incl. adequate water supply, reservoir, ground wells, etc. $921,000, exclusive of dam site and right of way for proposed 24 in. gravity concrete pipe line. L. D. Marrs, mayor.

Tex., Austin—Election soon to vote on $500,000 bonds for new filteration plant, extension of mains and laterals. $500,000. Burns & McDonnell, 402 Interstate Bldg., Kansas City, Mo., engrs.

Okla., Cushing—Plans election in January to vote on $500,000 bonds for waterworks, sewers and sewage disposal plant. Former election defeated. Benahm Eng. Co., 512 Gumbel Bldg., Kansas City, Mo., engrs.

Okla., Morris—Voted $67,000 bonds for filter plant, pumping machinery, 4 to 8 in. pipe line and concrete dam. H. G. Olmsted & Co., 415 Oil Exch. Bldg., Oklahoma City, engrs.

Ariz., Safford—Having preliminary plans prepared for supply mains, reservoir and distributing system, incl. 20 mi. wood, c.i. and steel pipe. $150,000. L. C. Kelsey, Nogales, and Portland, Ore., engr.

Calif., Williams—Defeated $60,000 bonds for water system. Noted Sept. 21.

Ont., Goderich — Plans to sink several wells and install electric centrifugal pump T R. Patterson, town engr.

B. C., Point Grey — See "Streets and Roads."

BIDS DESIRED

Pa., Allentown—Taking bids c.i. water pipe, hydrants, valves, etc. $6,000. M. W. Gross, 301 Central Fire Sta., mayor.

Minn., St. Paul—Jan. 8, by H. W. Austin, city purch. agt., six hundred and thirty-nine 12 ft. lengths Class C. and one thousand six hundred and twenty-six 12 ft. lengths Class B. c.i. pipe, and sixteen 12 ft. lengths Class A spigot pipe; 2,644 ton miscellaneous pipe; 3,177 lb. cast iron and 2,803 lb. miscellaneous steel; c.i. ladders, railing, posts, bases, fittings, flanges, iron ladders, channel stringers, for Water Dept. G. M. Shepard, city engr.

Okla., Burbank—Jan. 15, by City Clerk, constructing new waterworks and sewerage systems, 16,000 ft. 4 and 6 in. c.i. pipe. $88,000 bonds voted. J. M. Bukley, Pawhuska, engr.

Waterworks (Continued)

S. D., White Lake—Jan. 11, waterworks system incl. 12,510 lin.ft. 4-8 in. c.i. pipe, two 300 g.p.m. centrifugal pumps, or two 300 g.p.m. triplex plunger pump, one 50 g.p.m. deep well plunger pump, belt connected to gas engine with drop and discharge pipe, or one air lift well pump with compressor belt, 50,000 gal. elevated tank on 100 ft. tower, with riser pump, pumping station and 100,000 gal. rein.-con. surface reservoir. $30,000. Smith & Reeves, Mitchell, engrs.

Calif., Lodi—See "Sewers."

Ont., Kincardine—Taking bids auxilliary pump for waterworks. J. H. Scougall, Town Hall, engr.

Ont., Scarboro—Jan. 15, by W. D. Annis, secy. Utility Comn., laying 5,500 ft. 12 in., 12,000 ft. 8 in. and 14,000 ft. 6 in. pipe. James, Proctor & Redfern, 36 Toronto St., Toronto, consult. engrs.

BIDS RECEIVED

N. Y., Buffalo—A. W. Kreinheder, comr. Pub. Wks., Municipal Bldg., opened bids Dec. 27 (1) standard fittings Schedule "A" (2) special iron castings Schedule "B," from Bowler Fdry. Co., 1692 Columbus Rd., Cleveland, (1) $99 per ton (2) $189, J. B. Clow & Sons, 534 Franklin St., Chicago, (1) $57.80 (2) $190; U. S. Cast Iron Pipe & Fdry. Co., 957 East Ferry St., (1) pipe $53.90 specials $100 (2) $240; R. D. Wood & Co., 400 Chestnut St., Phila., 67 lengths 24 in. and 34 lengths 20 in. B and S Class A, $62.30 per net ton, one 24 in. plug, four 24 in. ½ bends B & S and four 15 x 24 in. sleeves, $0.07 per lb., two 20 x 24 in. flange side outlet tees, two 20 in. bell and flange tees, two 20 in. F & S ells, two 24 in. ells spigot ends and one 24 in. wall casting bell end, $0.09 per lb. Noted Dec. 21.

Pa., Phila.—Opened bids Dec. 29, (1) furnishing 6, 8 and 12 in. c.i. pipe (2) furnishing 6, 8 and 12 in. stop valves (3) fire hydrants, (4) sand machines, from R. D. Woods Co., 3rd and Chestnut Sts., (1) $26,480 (2) $8,573 (3) $17,220; U. S. Cast Iron Pipe & Fdry. Co., Morris Bldg., (1) $26,280; Donnelson Iron Wks., Baltimore, Md., (street address not available) (1) $27,562; A. B. Smith Mfg. Co., New York City, (street address not available) (2) $8,274 (3) $17,025; Choplin Valve Co., (2) $8,392; Kennedy Valve Co., 95 John St., New York City, (3) $17,198; E. M. Nichols & Co., Tacony, (Phila. P. O.) (4) $10,000.

Mich., Detroit—Bd. Water Comrs., 176 East Jefferson Ave., received bid pipe line across River Rouge at Fort St. W., incl. 1,300 lin.ft. piles, 325 cu.yd. gravel, 40 cu. yd. concrete, 430 ft. 24 in. c.i. or 430 ft. 26 in. steel pipe, from Greiling Bros. Co., 906 McDonald St., Green Bay, Wis., $34,380 for c.i. pipe, $34,583 for steel pipe.

Calif., Delhi—Delhi Land Settlement Colony, opened bids pumping plants, incl. installation, from United Iron Wks., 2308 Webster St., Oakland, $7,060; Byron Jackson Iron Wks., 55 New Montgomery St., San Francisco, $7,300; King Knight Co., 525 Market St., San Francisco, $10,541; pumping plants, not incl. installation, from Manistee Iron Wks., Rialto Bldg., San Francisco, $7,500.

CONTRACTS AWARDED

N. Y., Mayfield—Water system, to H. W. Golden & Son, Inc., Troy, $32,629; steel water tank to Pittsburgh-Des Moines Steel Co., 50 Church St., New York City, $11,000.

W. Va., Wheeling—Machinery for electrically driven pumping plant for new water and filtration system, to Worthington Pump & Mchy. Corp., 115 Bway., New York City, $76,345. Noted Dec. 14.

Ill., Mt. Prospect—Waterworks, to C. Porter Co., 111 West Washington St., Chicago, $57,000. Noted Nov. 23.

Mich., Detroit—Bd. Water Comrs. will lay 50 mi. 6-24 in. (mostly 6 and 8 in.) c.i. mains by day labor. T. A. Leisen, Waterworks Park, engr.

Minn., Minneapolis—Will install pumping unit and filter plant, 40,000,000 gal. daily capacity, by day labor. $2,673,360. Project will take 3 years to complete. N. W. Elsberg, city engr. Noted Jan. 26.

Minn., St. Paul—For 3,000 stop boxes and about 500 gate boxes, for Water Dept., to Cochran-Sargent Co., 5th and Sibley Sts., $12,374. Noted Nov. 23.

Minn., Westbrook—Well, to McCarthy Well Co., 670 Eustis Ave., St. Paul, $6,800. Noted Dec. 7.

Mo., Valley Park—Bd. Aldermen, 21,120 ft 4-8 in. c.i. distribution system, to Merkle Machine & Constr. Co., Walnut St., Kansas City, $31,103. Noted Dec. 7.

Calif., Merced—Merced Irrigation Dist., to Llewellyn Iron Wks., 1200 North Main St., Los Angeles, 2 pumps, capacities of 12 sec. ft. and 5 sec. ft. respectively against total head of 27 ft., for Booster Plant No. 2, $2,923; 2 pumps, capacities of 10½ sec. ft. and 4½ sec. ft. against total head of 20.3 ft., for Booster Plant No. 3, $2,747. Noted Nov. 30.

Sewers

PROPOSED WORK

Pa., Erie—Takes bids about April 1, completing intercepting sewerage system. $668,000. F. G. Lynch, city engr.

Pa., Phila.—Soon takes bids 2,000 ft. concrete sewer on piles in Delaware Ave. from Snyder to Bigler Sts., $60,000; covering tanks and walks with creosoted wood at Penny Pack sewage plant, $30,000; 1 mi. drainage ditch in 40th ward lowlands, $50,000. J. A. Vogelson, City Hall, engr.

Pa., Scranton—Plans relaying and repairing sewers. W. LaFontaine, dir. pub. wks.

Mich., Battle Creek—Plans to vote on $500,000 bonds for sewage disposal plant. Engineer not selected.

Mich., Springwells—Had plans prepared for 2,657 ft. of 48 in. diam., 2 ring brick, sanitary sewer, in also 3,015 ft., 24 and 60 in. circular sanitary sewer in Sect. 23. A. Roth, engr. and C. W. Hubbell, consult. engr., both at 2348 Penobscot Bldg., Detroit.

Ia., Maurice—See "Waterworks."

Mo., Neosho—Voted $50,000 bonds for sewers. Black & Veatch, 701 Mutual Bank Bldg., Kansas City, engrs. Noted Dec. 14.

Okla., Cushing—See "Waterworks."

Utah, Odgen—City Comrs. take bids early in spring 8 to 12 in. vtr. sanitary sewers in Dist. 147, $50,000; 8 to 14 in. vitr. pipe in Dist. 148, $50,000; 8 to 12 in. vitr. pipe in Dist. 149, $50,000. W. S. Graven, city engr.

Calif., Centerville—Union Sanitary Dist., for plans, to vote on bonds outfall sewers, involving 52,000 lin.ft. 6 to 14 in. vitr. pipe. G. A. Posey, Courthouse, Oakland, engr.

Calif., Corning—Having surveys made for sewage disposal line, to run to Sacramento River. W. F. Luning, Courthouse, Red Bluff, engr.

Calif., Williams—Defeated $45,000 bonds for sewerage system. Noted June 1.

B. C., Point Grey—Canadian Pacific Ry. Lands Dept., Seymour St., Vancouver, had plans prepared sewers in Shaughnessy Heights between 37th and 41st Aves, and Granville and Maple Sts. $57,000. J. N. Keer, c/o owners, engr.

BIDS DESIRED

N. Y., Buffalo—Jan. 15, by Commissioner Pub. Wks., 2,500 ft. of 5 and 4½ ft. sewer, in Starin Ave., brick, rein.-con. or vitr. segment block pipe. G. H. Norton, Municipal Bldg., engr.

Va. Richmond—See "Miscellaneous."

Fla., Jacksonville—Jan. 11, by City Comrs., laying sewers in Lydia, Cherry, Park, James, Davis, Myrtle and Clay Sts., 3,300 ft. 8 in. and 5,000 ft. 6 in. concrete or terra cotta pipe, 5,200 ft. subdrain, 1,175 ft. c.i. pipe, 500 ft. 24 in., 740 ft. 48 in., 1,630 ft. 36 in. and 1,175 ft. 30 in. rein.-con. pipe. W. E. Sheddan, city engr.

O., Toledo—Jan. 23, by W. T. Jackson, dir. Pub. Serv., constructing intercepting sewerage system, Contr. 5. Fuller & McClintock, 170 Bway., New York City, and 319 Summit-Cherry Bldg., Toledo, consult. engrs.; adv. this issue.

Ia., Muscatine—Jan. 11 by G. C. Parks, recdr., cement, concrete or vitr. clay pipe in Sub Sewerage Dist. 3 of Main Sewerage Dist. 4, also for lifting plant and discharge mains in above district. Central States Eng. Co., engrs.; adv. this issue.

S. D., White Lake—Jan. 11, sanitary sewerage system incl. 15,755 lin.ft. 8-12 in. vitr. pipe, disposal plant, Imhoff tank, etc. $30,000. Smith & Reeves, Mitchell, engrs.

Okla., Burbank—See "Waterworks."

Calif., Lodi—Jan. 18, by City Trustees, furnishing machinery for sewage disposal plant, incl. two 1,000 gal. per min. enclosed and one 800 gall per min. open runner type centrifugal pumps, 7 electric motors, one 1,400 cu.ft. air compressor with separator attached, three 450 cu.yd. air compressors, Kewanee pressure water system 2,100 gal. per hour, etc. Alternate bids for furnishing machinery only, furnishing and installing machinery or installing machinery only. Bids will be called soon for construction of activated sludge plant, pump house, concrete foundations. L. F. Barzellotti, city engr. C. F. Smith, 7 Nottingham Ave., Berkeley, consult. engr. Noted Dec. 7.

Calif., San Francisco—Jan. 24, by Bd. Pub. Wks., constructing Army St. sewer extension, 650 lin.ft. 8 x 10 ft. rein.-con. sewer, 746 lin.ft. 8 x 10 ft. rein.-con. sewer supported on piles, 890 lin.ft. 8 x 6 x 10½ ft. rein.-con. sewer, 10,700 lin.ft. piles, 230 lin.ft. 10 in., 465 lin.ft. 8 in. and 730 lin.ft. 6 in. vitr. salt glazed iron stone pipe underdrain, 400 linft. open ditch, etc., for city and San Francisco Co. $125,000. M. M. O'Shaughnessy, city engr. Noted Oct. 19.

Que., Greenfield Park—Taking bids until end of January, 13,820 ft. sewers in Edward Blvd., St. Charles Rd., St. Elizabeth St., Murray, 3rd, Springfield, Fairfield and Empire Aves., $78,102. A. Vincent, Longueill, engr.

BIDS RECEIVED

O., Cleveland—Cuyahoga Co. opened bids Dec. 23, 4,193 ft. 66 and 72 in. segmental block sewer in Sewer Dist. 1, Impvt. 26, Sect. A, from J. Winterbottom, 501 Bway., $148,937; Gallagher Burke Constr. Co., 1223 Bonnieview Ave., $160,138; Manson Co., Engineers Bldg., $166,007.

Mich., Springwells—Opened bids (1) 3,015 ft. sewer in Marconi, Springwells and Pompeii Aves., 788 ft. 60 in., 1,427 ft. 48 in., 500 ft. 36 in. 300 ft. 24 in. brick, concrete and vitr. pipe, (2) 2,657 ft. 2 ring brick sewer in Colson Ave., from W. Blanck Co., 823 Ford Bldg., Detroit, (1) $43,200 (2) $38,953; Hammen & Co., 4612 Woodward Ave., Detroit, (1) $44,277; C. R. Lennane Co., 2631 Woodward Ave., Detroit, (1) $45,533, (2) $39,652; A. Rossi Co., 5307 Pennsylvania Ave., Detroit, $34,006.

Wis., North Milwaukee—Metropolitan Sewerage Comn. of Milwaukee Co., 508 Market St., Milwaukee, main sewer in 3rd St. and Hampton Rd., to 48th St. and Roosevelt Dr., (a) 965 ft. 60 in. concrete sewer (b) 8,700 ft. 42 in. concrete sewer (c) 1,800 ft. 42 in. concrete sewer in rock excav. (d) manholes, from Balliet Constr. Co., 253 Walker St., Milwaukee, (a) $30 (b) $24 (c) $26.50 (d) $25; Wenzel & Henoch, 498 27th St., Milwaukee, (a) $31 (b) $25.49 (c) $34 (d) $29; G. E. Kahn, 114 Grand Ave., Milwaukee, (a) $36 (b) $31 (c) $42 (d) $28. Noted Dec. 21.

Calif., San Marino—City opened bids constructing outfall sewers involving 12 to 20 in. vitr. pipe and 14 to 20 in. c.i. pipe, etc., from D. Milosevich, Los Angeles, (street address not available), $28,890; C. H. Frisbie Co., Mason Bldg., Los Angeles, $29,935; Shephard & Weber, Los Angeles, (street address not available), $34,990.

Calif., Turlock—Opened bids 12,750 ft. 24 in. pipe, etc., (a) using tongue and groove cement pipe, (b) glazed cement pipe (c) vitr. pipe, from Frederickson & Shannon, Cory Bldg., Fresno, (a) $1.69 (b) $1.96 (c) $2.86; Oakland Sewer Constr. Co., 1003 85th Ave., Oakland, (a) $1.70, San Joaquin Valley Cement Pipe Co., Livingston, (a) $1.90; W. J. Tobin, 527 Santa Ray Ave., Berkeley, (b) $1.95; R. H. Downer, Richmond, (b) $2.18. Noted Oct. 19.

CONTRACTS AWARDED

O., Akron—W. F. Peters, dir. Pub. Serv., to W. P. Gibbons Constr. Co., 343 The Arcade, Cleveland, Little Cuyhoga River Interceptor Contr. 3, 5, 500 ft. 8 in. vitr. clay pipe at $0.60 per ft., 4,830 ft. 57 in. brick sewer open cut $28, 675 ft. 57 in. brick sewer in tunnel $56.20, total $200,801, engrs. est. $198,216. Noted Nov. 30.

Minn., South St. Paul—Sewer extensions, to Thornton Bros. Co., 306 Central Bank Bldg., St. Paul, $115,000. Noted Nov. 30.

Neb., Clay Center—Laying sewers, to Asplund Constr. Co., Tecumseh, $38,585; disposal plant, to W. B. Carter, Sioux City, Ia., (street address not available), $20,888. Noted Dec. 7.

Tex., Houston—To E. K. High, 2408 Fletcher St., sanitary sewers in Webster and Shepherd Sts., $27,432; to C. K. Horton, Box 1394, sanitary sewers Electric Park $9,716, Lubbock St. $6,673, Quitman and Davis Sts., etc. $8,983, West Webster St. $15,010.

Tex., Port Arthur—See "Streets and Roads."

Bridges

PROPOSESD WORK

Conn., Hartford—New York, New Haven & Hartford R.R., Yellow Bldg., New Haven, preparing plans 100 ft. steel plate girder bridge on Capital Ave., here. $30,000.

Conn., New Haven—Bridge Comn. having plans prepared steel and concrete bridge on Bridge and Water Sts., over Belle Dock tracks. $60,000. E. S. Nettleton, city engr.

N. Y., New York—Bd. Estimate, Municipal Bldg., plans 1,800 ft. steel and concrete bridge, 118 ft., over East River from 1st Ave. and 8th St., here to North 5th St. and Metropolitan Ave., Brooklyn. $27,000,000.

O., Akron—City having preliminary plans prepared 2,000 ft. concrete or steel bridge on North Arlington St., connecting East Akron and North Hill, extending over Cuyahoga River, and tracks of Pennsylvania, Baltimore & Ohio, Akron, Canton & Youngstown, and Erie Railroads. $1,000,000. E. A. Kemmler, Delaware Bldg., engr.

Kan., Winfield—Cowley Co. had plans prepared bridge with two 130 ft. steel spans. W. S. Ruggles, Jr., Winfield, engr.

Wash., Ridgefield—State Hy. Comn., Olympia, having plans prepared 1,000 ft. concrete viadu across Lewis River, near here. $100,000. J. Allen, state highway engr.

Bridges (Continued)

Oregon—State Hy. Comn., Salem, plans bridge over Lewis and Clark River, near Astoria, Clatsop Co. $65,000 H. Nunn, ch. highway engr.

BIDS DESIRED

S. C., Camden—See "Streets and Roads."

S. C., Spartanburg—Jan. 23, by Spartanburg Co. Hy. Comn., 424 rein.-con. bridge over Pacolet River on State Route 8, between Spartanburg and Gaffney, 800 cu.yd. dry earth, 300 cu.yd. wet earth and 190 cu.yd. wet and dry rock excav., 2,989 cu. yd. concrete, 153,000 lb. reinforcing, 1,175 sq.yd. water proofing, 345 sq.yd. bituminous surfacing.

Ohio—See "Streets and Roads."

BIDS RECEIVED

Ill., Burnham—Cook Co. Highway Dept., Chicago, opened bids Dec. 18, superstructure of bascule bridge over Little Calumet River, here, in line of Torrance Ave. extended Sect. 82-15d (Rall type) from Strobel Steel Constr. Co., 53 West Jackson Blvd., Chicago, $173,462. Morava Constr. Co., 122 South Michigan Ave., Chicago, $192,911; (Chicago type) from Ketler-Elliott Constr. Co., 155 North Clark St., Chicago, $178,138, Overland Constr. Co., 39 South La Salle St., Chicago, $192,951. Great Lakes Dredge & Dock Co., 104 South Michigan Ave., Chicago, $209,804.

Missouri—State Hy. Dept., at div. office Hermann, opened bids Dec. 9, 662 ft. bridge, 20 ft., on road from Jefferson City to St. Louis, Federal Aid Project 219, Gasconade Co., from Kansas City Bridge Co., 510 Orear-Leslie Bldg., Kansas City, $119,220; Illinois Steel Bridge Co., Laclede Gas Bldg., St. Louis, $124,421; General Constr. Co., Syndicate Trust Bldg., St. Louis, $125,708. Noted Nov. 30.

California—State Hy. Dept., Sacramento, constructing bridge across Stony Creek, four 100 ft. steel truss spans and twenty 30 ft. rein.-con. girder approach spans, Glenn Co., from A. W. Kitchen, 110 Market St., San Francisco, $88,238; W. L. Proctor, Rosenburg Bldg., Santa Rosa, $88,827; T. H. and M. C. Polk, Chico, $94,737. Noted Dec. 7.

CONTRACTS AWARDED

Pa., Pittsburgh—Allegheny Co. bridge over Allegheny River, 40th St., Sect. 2, copper bearing steel to McClintic-Marshall Co., Oliver Bldg., $728,678; Sect. 3, paving bridge, to J. H. McQuade Sons Co., Bakewell Bldg., $68,585; Sect. 4, relocation of Ohio St., to T. Cronin Co., Carson St., $197,205; Sect. 5, ornamental brick to All Steel Equipment Co., Union Arcade, $26,272. Noted Dec. 7.

Tennessee—See "Streets and Roads."

Tenn., Ardmore—State Hy. Dept., Nashville, bridge over Elk River, Giles Co., near here, to Montgomery & Parker, Rockport, Ind., $61,483.

O., Cleveland—City and Pennsylvania R.R., temporary trestle work for grade crossing elimination, 7,000 ft. long, 16 ft. high, Douglas fir on Raymond concrete piles, along tracks from Cedar to Holton Aves., to H. E. Culbertson Co., Hanna Bldg., $427,240. Owners will take bids later on steel superstructure, concrete retaining walls and paving of approaches. Total $3,500,000.

Ill., Sterling—Whiteside Co. Road and Bridge Comn., 1,000 ft. bridge, twelve 80 ft. 6 in. arch spans, concrete pier and abutments, on 1st Ave. over Rock River, to J. Moroff & Sons, Kankakee (street address not available) $169,177. Noted Dec. 7.

S. D., Woonsocket—Sanborn Co., 340 lin. ft bridge with 100 ft. center steel truss, 18 ft. roadway, over James River, on Federal Aid Project 50, Sect. C, to Pioneer Bridge Co., Mitchell, $23,815.

Supplies — Toronto, Ont. — Contracts let for yearly supplies as follows:—lead pipe to J. Robertson Co., Spadina Ave., $10.50 per 100 lb.; c.i. pipe to Natl. Iron Corp., Cherry St., 3 in. $7.60, 4 in. $9.60, 6 in. $16, 8 in. $21.60, 10 in. $30.40, 12 in. $41.20; liquid chlorine, to Grasselli Chemical Co. Ltd., Royal Bank Bldg.; hydrants to J. T. Hepburn, Van Horne St., also stop valves, 6 in. socket $27.39, 12 in. socket $64.29; to J. Robertson & Co. Ltd., Spadina Ave., 3 in. socket and 3 in. flange $23.10, 4 in. socket and 4 in. flange, $26.40, 8 in. socket and 8 in. flange, $55; crushed stone, to T. Langton, Coldwater; refined asphalt, to Imperial Oil Co., Imperial Oil Bldg.; trap rock to Ontario Rock Co., Crown Office Bldg.; sewer pipe to Dominion Sewer & Clay Industries, Swansea, bronze and brass castings, to Booth Coulter Copper & Brass Co., 115 Sumach St., $0.21 per lb., also to Canada Metal Co. Ltd., 39 Fraser St., phosphor bronze, $0.25 per lb., brass $0.22 per lb.; pipe, fittings and valves, to Empire Brass Mfg. Co., 110 Adelaide St. W.

Dams

PROPOSESD WORK

Tex., Amarillo—See "Waterworks."

Okla., Morris—See "Waterworks."

Railways

PROPOSED WORK

Ontario — Canadian National R.R., 407 Old Union Sta., Toronto, soon takes bids for Long Lac cut off which will link Canadian Northern line with National Transcontinental line, at point 200 mi. east of Port Arthur, and will be 29 mi. in length. W. H. Bevan, Toronto, dist. engr.

Ontario — Hamilton Harbor Bd., Hamilton, plans spur lines along waterfront from tracks of Canadian Natl. Ry. to warehouse sites on Wellington St., Hamilton. $25,000. W. Ainslie, c/o Harbor Bd., engr.

Excavation, Drainage, Irrigation

PROPOSED WORK

Calif., Dixon—East Dixon Irrigation Dist. had plans prepared irrigating 60,000 acres, involving 5 pumping plants, probably 30 in. and 40 in. sizes, with electric motors, 17 mi. main canal and 40 mi. laterals. F. C. Herrmann, Merchants Exch. Bldg., San Francisco, engr.

Calif., Magnalia—T. Pearson, c/o Transportation Club, Palace Hotel, San Francisco, plans to irrigate 4,300 acres, incl. dam, 85 ft. high, 620 ft. long on top and 100 ft. long on bottom, hydraulic fill type, 28,000 ft. ditches, 5½ ft. wide, here. $85,000.

BIDS DESIRED

Ill., White Hall—See "Miscellaneous."

CONTRACTS AWARDED

Calif., Los Angeles—Bd. Harbor Comrs., excavating and filling north section of Harbor Blvd., 138,940 cu.yd. excav. and 10,000 cu.yd. fill, to C. R. Butterfield, 212 6th St., San Pedro, $57,798.

Calif., Merced—Merced Irrigation Dist., constructing Div. 2 of North Side Canal, to Blumenkranz & Vernon, Farmers and Merchants Bank Bldg., Stockton, 223,978 yd. excav. at $0.29 per yd., 28,000 yd. overhaul at $0.03, total $65,793. Noted Oct. 19.

Streets and Roads

PROPOSED WORK

Massachusetts—Metropolitan Dist. Comn., Commonwealth of Massachusetts, 1 Ashburton Pl., Boston, soon takes bids paving 3 mi. road, 20 ft., bituminous macadam, Norfolk Co. $70,000. Engineer not announced.

Conn., Bridgeport — Plans permanent pavements, $400,000. J. A. McElroy, city engr.

Conn., New Britain — Plans permanent pavements, $200,000. J. D. Williams, City engr.

N. J., Trenton—Freeholders Mercer Co. plan to rebuild 9 mi. highway, 20 ft. $385,000. W. M. Pettit, dir. of roads. H. F. Harris, co. engr.

Pa., Edinboro—Washington Twp. plans concrete base road $40,000. G. Waite, Masonic Temple, Erie, secy.

Pa., Phila.—Soon takes bids grading and paving 8½ mi. various streets, $350,000. F. C. Dunlap, City Hall, engr.

Pa., Scranton—Plans regrading and repairing unpaved streets, $55,000; relaying asphalt pavement on several streets, $32,000. W. LaFontaine, dir. pub. wks.

Fla., Bartow — Plans paving various streets, asphalt on clay. $25,000. E. V. Camp, Bartow, engr.

Fla., Key West—Voted $25,000 bonds to pave various streets. B. C. Moreno, Key West, engr. Noted Dec. 7.

Fla., Wauchula—Comrs. Hardee Co. rejected bids opened Oct. 18, paving 8 mi. road from Ona east and west, $80,000; 4 mi. from Limestone to Lily, $75,000; 10 mi. from Wauchula to Apopka Creek, $140,000; 5 mi. from Buchanan to Sweetwater, $45,500; 10 mi. from Wauchula to Ft. Green Springs, $114,000; 8 mi. from Ona to Limestone, $90,000; road from Gardner to Buchanan, $39,000; 5 mi. from Wauchula to Bowling Green, $65,000; 7 mi. from Bowling Green to Ft. Green, $92,500; 3 mi. from Bowling Green east, $29,500; 6 mi. from Apopka Creek to Highland Co. line, $34,000; 5 mi. from Wauchula southwest, $80,000; 3 mi. from Zolfo east, $40,000; 4 mi. Zolfo-Altman Rd., $50,000; 10 mi. road near Tura from Limestone to Kinsay, Zolfo to Ona, joining Altma and Zolfo Rds., $28,000. H. S. Jaudon Eng. Co., Elberton, Ga., engrs. Noted Oct. 12.

Ohio—Dept. Highways and Pub. Wks., Columbus, cancelled bids which were opened Dec. 29, grading, bridging and paving Sect. "B" Petersburg-Unity Rd., Columbiana Co.; grading and paving Sect. "J" Elyria-Twinsburg Rd., I. C. H. 36, Cuyahoga Co. Noted Dec. 21.

Ohio—Dept. Highways and Pub. Wks., Columbus, received no bids Dec. 29, grading, bridging and paving 0.619 mi. Sect. "Wauseon" Bryan-Wauseon Rd., Fulton Co., rein.-con. Noted Dec. 21.

Ind., Evansville—Vanderburgh Co. plans improving 11,420 ft. J. W. Stratton Rd., 20 ft., 12 ft. in centre, broken stone and bituminous binder, 4 ft. gravel shoulders on each side. $27,200. A. Pfaffiin, Evansville, engr.

Ill., De Kalb—Making plans paving 8,000 yd. Normal Rd., $30,000; 20,000 yd. West Lincoln Highway, $80,000. Consoer Eng. Co., 140 South Dearborn St., Chicago, engrs.

Ill., West Hammond—Making plans paving 10,000 yd. Plummer Ave. $40,000. Consoer Eng. Co., 140 South Dearborn St., Chicago, engrs.

Wis., Wausau — Making plans paving 3rd, Clark and West Sts., 40 ft., various types of pavement, concrete curb and gutter. B. C. Gowen, City Hall, engr.

Ia., Merrill—Making plans paving about 30,000 sq.yd. various streets. $90,000. W. E. Buell & Co., 205 Davidson Bldg., Sioux City, engrs.

Ia., Sloan—Making plans paving about 30,000 sq.yd. various streets. $90,000. W. E. Buell & Co., 205 Davidson Bldg., Sioux City, engrs.

Minn., Lakeside (R. D. Buffalo Lake)—Plans paving 25,000 yd., various types. W. E. Buell & Co., 205 Davidson Bldg., Sioux City, Ia., engrs.

Minn., St. Paul—City and Ramsey Co. plan paving 142 mi. roads. $5,293,650. G. M. Shepard, city engr.

Kan., Columbus — Cherokee Co. rejected bids received Dec. 15, concrete paving 4.585 mi. Baxter Springs Rd. 142, Sects. A and B. Will not readvertise at present. L. Noftzer, co. engr. Noted Nov. 30.

Kan., Wichita — Plans to grade, pave, curb and gutter 1 block Minneapolis St. from Douglas to English Sts., 1 block River Blvd. from Buffam to Riverside Aves., asphalthic concrete; 1 block Douglas Ave. from Madison Ave. to Spruce St., 1 block Santa Fe Ave. from Zimmerly to Bayley Sts., concrete; 4 blocks Mosley Ave. from 13th to 17th Sts., vertical fibre brick. P. L. Brockway, city engr.

Neb., Tekamah—Takes bids in about 30 days, paving various streets. $50,000. W. E. Staudeven, 741 Peters Trust Bldg., Omaha, engr.

S. D., Elkpoint—Having plans prepared paving 25,000-40,000 sq.yd. various streets. $75,000 or more. W. E. Buell & Co., 205 Davidson Bldg., Sioux City, Ia., engrs.

Tex., Glen Rose—Somervell Co. election Jan. 16 to vote on $175,000 bond issue for road construction incl. State Highway 10-A. S. J. Cox, co. engr.

Tex., Palo Pinto—Palo Pinto Co. having plans prepared grading and bituminous macadam surfacing 10 mi. Bankhead Highway (north branch) from Metcalfe Gap to Stephens Co. line, 18 ft. $280,000. G. W. Courter, co. engr.

Calif., Daly City—Rejected bid grading 37,000 cu.yd. in Vista Grand Park. G. Kneese, Redwood City, engr. Noted Dec. 28.

Calif., Los Angeles—Plans paving Santa Barbara Ave. and Hill St., 8 in. concrete. $200,000.

Calif., Porterville—Rejected bids improving Oak St. Will revise plans for another type of pavement. Noted Dec. 21.

Calif., San Diego—Takes bids latter part of January, improving Ivanhoe Ave., Silverado St. and Torrey Rd., 192,016 sq.ft. 5 in. portland cement concrete pavement, 1,140 lin.ft. concrete curb, 5,746 sq.ft. concrete walks, 590 lin.ft. 6 in. sewer, etc. F. Rhodes, city engr. Noted Nov. 23.

Quebec—J. L. Boulanger, deputy minister of highways, Quebec, takes bids in Spring, graveling 21.4 mi. Levis-St. Lambert Highway, 22 ft., through St. Michel, St. Francois, St. Thomas and St. Antoine de la Baie Parishes also 25.5 mi. St. Bruno-Roberval Highway, 22 ft., through St. Methode, Normandin, Perlones, Delisle, St. Coeur de Marie, St. Joseph de Alma and St. Jerome Parishes, etc. M. Nectkar, ch. engr.

British Columbia — Provincial Highway Dept., Victoria, having surveys made and will take bids in February, grading and gravel surfacing 60 mi. Trans-Provincial Highway, east of Hope. P. Philip, c/o Dept. Pub. Wks., Victoria, engr.

B. C., Point Grey—Canadian Pacific Ry. Lands Dept., Seymour St., had plans prepared grading and clearing roads and complete waterworks system in Shaughnessy Heights between 37th and 41st Aves. and Granville and Maple Sts. $98,299. J. N. Ker, c/o owners engr.

Streets and Roads (Continued)

BIDS DESIRED

New York—Jan. 12, by H. S. Sisson, comr. State Hy. Dept., Albany, improving highways in Allegany, Cattaraugus, Cayuga and Tompkins, Oneida, Ontario, Rennsselaer, Rockland, Steuben and Ulster Counties; reconstruction highways in Fulton and Rensselaer Counties; adv. this issue.

S. C., Camden—Jan. 17, by Bd. Comrs. Kershaw Co., surfacing and bridging 1.8 mi. road between town limits of Kershaw and survey Sta. 97-00, 24,136 cu.yd. common excav., 4,462 cu.yd. sand clay surfacing, 267 lin.ft. rein.-con. pipe, 105 cu.yd. concrete and 8,483 lb. reinforcing, creosoted timber bridge of 9 x 14 ft. spans, incl. 254 sq.yd. bituminous paving, etc.

Ohio—Jan. 5, by Dept. Hys. and Pub. Wks., Columbus, grading bridging and paving roads in following counties:

Cuyahoga Co., Sect. "A" Solon-Willoughby Rd., and Sect. "B" Chagrin Falls-Cuyahoga Falls Rd., 2.52 mi. brick incl. brick $168,888, rein.con. $136,200, bituminous concrete and brick, $158,745, warrenite-bitulithic and brick, $164,525.

Summit Co., Sect. "I" Cleveland-Massillon Rd., 1.49 mi., rein.-con. and brick, $76,902, bituminous concrete and brick $77,352, brick $81,073; Sect. "J" Cleveland-Massillon Rd., 2.70 mi. rein.-con. $116,084, bituminous concrete $116,933, brick $124,667; Sect. "K" Cleveland-Massillon Rd., 3.44 mi. rein.-con. and brick $158,238, bituminous concrete and brick $159,170, brick $167,991; Sect. "L" Cleveland-Massillon Rd., 1.70 mi. rein.-con. $72,672, bituminous concrete $74,289, brick $78,174; Sect. "M" Cleveland-Massillon Rd., 1.39 mi. rein.-con. and brick $73,082, bituminous concrete and brick $73,435, brick $76,961. All proposals in Summit Co. will be awarded to one contractor as one contract.

Ind., Bluffton—Jan. 16, by Auditor Wells Co., grading and graveling 15,287 ft. Weaver-Byrd Rd., 16 ft. $25,199. A. Fry, Bluffton, engr.

Mich., Kalamazoo—Jan. 9, by Kalamazoo Co. Rd. Comn., grading and surfacing 1½ mi. road in Kalamazoo Twp., concrete or bituminous concrete; 3 mi. Assessment Dist. Rd. 10, waterbound macadam; 5 mi. Assessment Dist. Rd. 38, waterbound macadam.

Wis., Wauwatosa—Jan. 12, by Bd. Pub. Wks. grading 13,000 cu.yd. Wells St. from 54th St. to city limits, 7,500 sq.yd. 54th St. from Grand Ave. to city limits. $25,000. J. E. Lowther, City Hall, engr.

Tex., Center—Jan. 12, by D. R. Taylor, judge Shelby Co. grading and gravel surfacing, etc., 6 mi. State Highway 35, Federal Aid Project 280, 16 ft., 44,881 cu.yd. roadway and 36,630 cu.yd. borrow excav., 240 cu.yd. concrete, 12,088 cu.yd. gravel surfacing, 4,268 lin.ft. treated timber piling, 19,670 lb. reinforcing, etc. $84,346. I. R. Titus, Timpson, engr.

Tex., Cisco—Jan. 28, by City Com. brick paving, curbing, etc. ¾ mi. various streets, 40 ft. $30,000. Elrod Eng. Co., 3206 Elm St., Dallas, engrs. Noted Dec. 21.

Tex., La Grange — Jan. 10, by J. P. Ehlinger, judge, Fayette Co. grading and gravel surfacing 8.03 mi. State Highway 3-A.Federal Aid Project 319, 18 ft., 536 cu.yd. concrete, 54,283 cu.yd. roadway and 47,723 cu.yd. borrow excav., 23,739 cu.yd. gravel surfacing, 36,848 lb. reinforcing. $71,372. A. Schlafli, co. engr.

Tex., Laredo—Jan. 23, by City Council at office of L. Villegas, mayor, paving various streets, bitulithic, limestone rock asphalt, sheet asphalt, vitr. brick and 2 course concrete; adv. this issue.

Calif., Merced—Jan. 15, by Supervs. Merced Co., paving 13.4 mi. Dos Palos and Volta sections of Pacheco Pass Highway, 69,763 lin.ft. sub-grade, 29,900 cu.yd. grading, 1,130,553 sq.ft. 1½ in. warrenite bitulithic on 3½ in. asphaltic concrete, 240 lin. ft. 12 in., 332 lin.ft. 18 in., 404 lin.ft. 24 in. and 202 lin.ft. 30 in. corrugatead metal pipe, 193 cu.yd. concrete (culverts), 3,353 lb. reinforcing, 5,373 ft. wearing surface (bridges), etc. A. E. Cowell, Merced, engr. Noted Nov. 9.

BIDS RECEIVED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, opened bids Dec. 21, grading, curbing and flagging (1) East 15th St. (2) Skillman Ave., paving (3) East 15th St. (4) Skillman Ave. both permanent asphalt, from T. B. Scott, 671 Halsey St., (1) $4,361 (2) $3,369; Sininelli & Sons, (1) $4,574 (2) $3,840; L. Mangieri, 190 31st St., (1) $4,609; Cranford Co., 52 9th St., (3) $8,164 (4) $4,455; Borough Asphalt Co., 1301 Metropolitan Ave., (3) $8,751 (4) $4,359; Sicilian Asphalt Paving Co., 41 Park Row, New York, (4) $4,455. Noted Dec. 14.

N. Y., Brooklyn—Park Bd. at office Dept. Parks, Municipal Bldg., New York, opened bids Dec. 28, grading and paving, etc., Bay Parkway, here, from Cranford Co., 52 9th St., $79,201; Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., $81,786; Borough Asphalt Co., 1301 Metropolitan Ave., $82,080. Noted Dec. 21.

N. Y., Richmond Hill—Park Bd. at office Dept. Parks, Municipal Bldg., New York City, opened bids Dec. 28, improving main drive in Forest Park, etc., here, from Cleveland Trinidad Paving Co., Flushing, $93,095; W. P. McDonald Constr. Co., 17 West 42nd St., New York City, $93,750; Borough Asphalt Co., 1301 Metropolitan Ave., Brooklyn, $115,575. Noted Dec. 21.

Pa., Phila.—Opened bids Dec. 28, grading and paving (1) Roosevelt Blvd. from Welsh Rd. to Grant Ave. (2) Bingham St. from Devereaux Ave. to Robbins St. (3) Champlost Ave. from 19th to Ognotz Aves. (4) Blakemore St., from Lombardi & Yettman, Lincoln Bldg., (1) $153,278; Union Paving Co., 34th and Spruce Sts., (1) $158,676; Fish-Rutherford Co., Real Estate Trust Bldg., (1) $160,573; Terranti & Cellessia (street address not available) (2) $21,999; T. L. Flannigan, 1204 Montgomery Ave., (2) $22,232 (3) $52,628; Richards-Kelly Co., 349 North 57th St., (2) $25,673 (3) $47,037 (4) $29,563; R. B. Wenner, 3106 Midvale Ave., (3) $49,825 (4) $27,558; Commercial Constr. Co., 1220 Filbert St., (4) $21,540.

Ohio—Dept. Highways and Pub. Wks., Columbus, opened bids Dec. 29, grading, bridging and paving roads with (a) rein.-con. (b) brick (c) bituminous concrete (d) bitulithic (e) bitoslag (f) Kentucky rock asphalt (g) bituminous concrete, oil (h) bituminous concrete, lake in following counties: Cuyahoga Co., Sect. "A" Chagrin Falls-Cuyahoga Falls Rd., 2.75 mi., from Ohio Contg. Co., Elyria (street address not available), (a) $93,822 (b) $135,756 (c) $117,533 (f) $112,672; G. A. Stein, Niles, (a) $99,145; Turner Contg. Co., Park Theatre Bldg., Youngstown, (a) $97,014 (b) $139,072; McHugh Bros., Springfield (street address not available), (b) $140,804; Smith Constr. Co., Youngstown (street address not available), (c) $113,114 (e) $123,516; Highway Constr. Co., 903 Lorain Co. Bank Bldg., Elyria, (c) $121,253 (d) $133,425 (e) $133,425 (f) $117,963; Enterprise Paving & Constr. Co., 8436 Bway. Ave., Cleveland, (f) $116,991. Lorain Co., Sect. "R" 2.035 mi. Oberlin-Elyria Rd., from Ohio Contg. Co., Elyria (street address not available), (b) $93,009 (g) $76,955; Highway Constr. Co., 903 Lorain Co. Bank Bldg., Elyria, (b) $95,436 (g) $73,593 (h) $94,153; Hill & Hill, Elyria (street address not available), (b) $96,048; Franklin Asphalt Paving Co., 209 South High St., Columbus, (g) $70,435; A. G. Pugh, Columbus (street address not available), (h) $94,146; Cleveland Trinidad Paving Co., The Arcade, Cleveland, (h) $100,593. Montgomery Co. Sect. "R" Dayton-Greenville Rd., 3.965 mi., from E. R. Ongst, Dayton (street address not available), (a) $122,705 (f) $122,737; C. Hoolihan, 1406 Riverview St., Dayton, (a) $133,089 (f) $136,062; F. E. Milligan, Sidney, (a) $133,471; Eldorado Paving Co., Eldorado, (f) $138,419. Stark Co. Sects. "D-2 and E" Alliance-Minerva Rd., 3.98 mi., from G. W. Hadley, Goldberg Bldg., Canton, (b) $153,032; P. Christiansen, 1355 Yale Ave. N. W., Canton, (b) $154,177; Holmes Constr. Co., Millersburg, (b) $155,980. Columbiana Co., Sect. "R" Cleveland-East Liverpool Rd., 2.325 mi., from C. W. Milarr & Co., 305 Prof. Bldg., Youngstown, (b) $81,648; B. C. Stringer Co., Rayland, (b) $82,066; A. Collucci, 1109 Wilson Ave., Youngstown, (b) $82,176. Montgomery Co., Sect. "A" Germantown-Middletown Rd., 2.494 mi., grading and bridges only, from Putman & Sunday, Van Wert, $34,143; C. Crampton, Dayton (street address not available), $34,913; W. Huber, Eaton, $36,299. Noted Dec. 21.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, concrete paving (1) 5.66 mi. Route 1, Sect. 8, Edwards-Wabash Co. (2) 4.6 mi. Route 1, Sect. 9, Wabash Co. (3) 6.75 mi. Route 1, Sect. 10, Wabash Co. (4) 21.49 mi. Route 1, Combination A, Edwards-Wabash Co. (5) 3.25 mi. Route 1, Sect. 17, Lawrence Co. (6)

STRUCTURAL STEEL—FLUSHING, N. Y.

Following are lowest three bids opened by Transit Comn., 49 Lafayette St., New York City, Dec. 14, for furnishing and erecting structural steel for Route 52, Sect. 1, Flushing Route of Rapid Transit R.R., (A) Phoenix Bridge Co., Phoenixville, Pa., (awarded contract); (B) Jobson-Gifford Co., 30 East 42nd St., New York City; (C) C. Meads & Co., 217 West 14th St., New York City. The unit bids were as follows:

	A	B	C
100 cu.yd. concrete masonry	$30.00	$30.00	$22.00
7,050 tons riveted steel	84.40	89.50	91.25
200 tons steel beams and shapes	84.40	89.50	91.25
1 ton miscellaneous iron castings	120.00	200.00	150.00
1,500 lb. special wire forms	.06	.12	.10
160 lin.ft. street surface R.R., supported—(c) for electric (overhead trolley) R. R., single track	2.00	2.00	3.00
6 electric ground connections to the railroad structure	75.00	50.00	70.00
Extended totals	$615,880	$652,875	$664,963

CONDUIT—BROOKLYN, N. Y.

Following are lowest three bids opened by Bd. Water Supply, New York City, Dec. 19, for constructing Mt. Prospect Conduit of Catskill Water Supply, (A) A. Paino, 32 Court St., Brooklyn; (B) Beaver Eng. & Contg. Co., 51 Chambers St., New York City; (C) T. A. Gillespie Co., 7 Dey St., New York City. The unit bids were as follows:

	A	B	C
60,000 cu.yd. earth excavation and refilling not included in Item 2	$2.00	$4.50	$4.43
4,000 cu.yd. earth excavation and refilling under subway and bridge in Washington Avenue	2.00	7.00	14.15
4,000 cu.yd. rock excavation	1.50	2.80	5.75
100 M ft. b. m. timber and lumber under subway and bridge in Washington Avenue and that ordered left in place elsewhere	30.00	70.00	70.00
230 lin.ft. 72-in. steel pipe, ½-in. plate, lap-joints	60.00	29.70	30.97
10,300 lin.ft. 72-in. steel pipe, 7/16 in. plate, lap joints	43.25	27.55	27.97
6,270 lin.ft. 66-in. steel pipe, 7/16-in. plate, lap joints	38.00	25.45	26.47
175 ton cast-iron pipe, straight hub-and-spigot	60.00	60.00	86.40
150 ton cast-iron hub-and-spigot specials	100.00	150.00	156.50
35 ton cast-iron flanged pipe and specials	100.00	225.00	190.00
45 ton cast-iron valve-boxes, manhole heads and covers	50.00	110.00	107.00
20,000 lb. steel castings	.20	.23	.25
380,000 lb. caring for and setting metal-work furnished by the City	.01	.015	.0075
1 72 x 36-in. Venturi meter	20,000.00	26,000.00	7,460.00
60,000 lb. structural and reinforcing steel	.01	.05	.05
15,000 lb. miscellaneous cast iron, wrought iron and steel	.02	.10	.11
7,000 bbl. Portland cement	3.00	2.60	2.70
1,000 cu.yd. concrete masonry under subway and bridge in Washington Avenue	7.00	10.00	15.50
100 cu.yd. concrete masonry as cradles for sewers and drains	7.00	12.00	10.00
2,500 cu.yd. concrete masonry under pavements and curbs	3.50	6.00	5.50
850 cu.yd. brick and concrete masonry	7.00	15.00	15.00
8,000 sq.ft. mortar lining of steel pipes	.50	.30	.35
100 cu.yd. mixing and placing grout	7.00	5.00	6.50
250 changing water services 2-in. and smaller	1.00	5.00	14.50
136-in. wet connection to 48-in. cast-iron pipe	5,000.00	13,000.00	2,700.00
5 24-in. pressure-regulating valves	2,500.00	275.00	1,237.00
15 cu.yd. crushed stone and gravel for drains	3.00	5.00	4.00
6,000 lin.ft. vitrified pipe, 3 to 8 in. in diameter	.25	1.00	.65
3,000 lin.ft. vitrified pipe, 9 to 18 in. in diameter	.75	1.50	1.35
10,000 sq.yd. asphalt pavement	1.50	2.00	1.85
150 sq.yd. wood block pavement	2.00	5.00	2.75
3,200 sq.yd. granite block pavement	2.00	3.00	1.30
3,000 sq.yd. flag sidewalks and cross-walks	.20	1.35	2.50
450 sq.yd. sheet asphalt and asphalt block sidewalks	1.50	2.25	2.25
3,000 sq.yd. cement concrete sidewalks	1.00	1.50	2.50
600 lin.ft. curb	2.00	2.00	1.00
Restoration of Fort Greene park (lump sum)	4,000.00	15,000.00	4,500.00
Extended totals	$995,305	$995,355	$1,013,656

Streets and Roads (Continued)

5.55 mi. Route 1, Sect. 18, Lawrence-Crawford Co. (7) 8.8 mi. Route 1, Combination R, Lawrence-Crawford Co. (8) 6.2 mi. Route 3, Sect. 15, Whiteside Co. (9) 5.07 mi. Route 3, Sect. 38, McDonough Co. (10) 7.38 mi. Route 8, Sect. 7, Henderson Co. (11) 7.12 mi. Route 8, Sect. 33, Woodford Co. (12) 7.12 mi. Route 8, Combination C, Woodford Co. incl. 1 grading section (13) 7.06 mi. Route 13, Sect. 6, Williamson Co. (14) 5.56 mi. Route 14, Sect. 4, Franklin Co. (15) 4.48 mi. Route 15, Sect. 21, Edwards Co. (16) 6.18 mi. Route 16, Sect. 12 Shelby Co. (17) 5.82 mi. Route 26, Sect. 1, Ogle-Stephenson Co. (18) 5.82 mi. Route 26, Combination D, Ogle-Stephenson Co., incl. 1 bridge (19) 5.17 mi. Route 26, Sect. 9, Henry Co. (20) 4.15 mi. Route 26, Sect. 17-A, Will Co. (21) 0.89 mi. Project 9, Sect. C-1, Madison Co. (22) 0.84 mi. Project 9, Sect. 38, Madison Co. (23) 1.73 mi. Project 9, Combination E, Madison Co. (24) 3.22 mi. Project 9, Combination W-1, Fayette Co. (25) 0.68 mi. Project 26, Sect. 20, Logan Co. (26) 6.76 mi. Project 26, Sect. 23, Logan Co. (27) 6.5 mi. Project 26, Sect. 24, Logan Co. (28) 13.26 mi. Project 26, Combination F, Logan Co. (29) 5.28 mi. Project 27, Sect. 36, Tazewell Co. (30) 5.7 mi. Project 40, Sect. 28, Hancock Co. (31) 6.04 mi. Project 45, Sect. 23, Morgan Co. (32) 9.62 mi. Project 46, Sect. 4, Cass Co. (33) 6.06 mi. Project 47, Sect. 64, St. Clair Co. (34) 2.99 mi. Project 47, Sect. 65, Monroe Co. (35) 9.05 mi. Project 47, Combination 6, St. Clair-Monroe Co. (36) 1.76 mi. Project 48, Sect. 37, Tazewell Co. (37) 7.04 mi. Project 48, Combination H, Tazewell Co. (38) 3.08 mi. Project 48, Sect. 11, Peoria Co. (39) 1.87 mi. Project 48, Sect. 13, Peoria Co. (40) 4.95 mi. Project 48, Combination I, Peoria Co. (41) 2.97 mi. Project 48, Sect. 16, Peoria Co. (42) 3.85 mi. Project 48, Sect. 17, Peoria Co. (43) 6.82 mi. Project 48, Combination J, Peoria Co. (44) 18.81 mi. Projects 27 and 48, Combination K, Tazewell-Peoria Co. (45) 3.24 mi. Project 49, Sect. 13, Livingston Co. (46) 5.57 mi. Project 49, Sect. 14, Livingston Co. (47) 7.8 mi. Project 49, Sect. 15, Livingston Co. (48) 16.61 mi. Project 49, Combination L, Livingston Co. (49) 0.59 mi. Project 50, Sect. 19, Coles Co. (50) 7.42 mi. Project 50, Sect. 20, Coles-Douglas Co. (51) 14.01 mi. Project 50, Combination M, Coles-Douglas Co. (52) 4.68 mi. Project 51, Sect. 5, Woodford Co.; grading (53) 35,820 cu.yd. Route 1, Sect. 12-A, Wabash Co. (54) 57,830 cu.yd. Route 1, Sect. 13-A, Wabash-Lawrence Co. (55) 22,645 cu.yd. Route 1, Sect. 15-A, Lawrence Co. (56) 215,160 cu.yd. Route 1, Sect. 16-A, Lawrence Co. (57) 237,805 cu.yd. Route 1, Combination, Q, Lawrence Co. (58) 22,645 cu.yd. Route 1, Combination R, Lawrence Co. incl. 1 bridge (59) 215,160 cu.yd. Route 1, Combination S, Lawrence Co. incl. 1 bridge (60) 215,160 cu.yd. Route 1, Combination T, Lawrence Co. incl. 1 steel bridge (61) 237,805 cu.yd. Route 1, Combination U, Lawrence Co. incl. 2 bridges (62) 237,805 cu.yd. Route 1, Combination V, Lawrence Co. incl. 1 concrete and 1 steel bridge (63) 32,000 cu.yd. Route 8, Sect. 34-A, Woodford Co. (64) 331,455 cu.yd. Route 1, Combination X, Wabash-Lawrence Co. incl. 3 bridges (65) 331,455 cu.yd. Route 1, Combination Y, Wabash-Lawrence Co. incl. 2 concrete and 1 steel bridge, from:

French Constr. Co., Fairfield, (1) $101,068 (5) $69,033 (6) $96,473 (7) $163,800 (24) $68,068.

E. B. Phizenmayer, 710 South 4th St., Terre Haute, Ind., (1) $109,155 (2) $79,590 (3) $127,998 (4) $397,467 (7) $161,846 (15) $85,259.

E. Berns & Co., Indianapolis, Ind. (street address not available), (1) $122,546 (2) $85,919 (3) $138,443 (4) $424,582 (15) $97,697.

W. O'Neill & Sons Co., Faribault, Minn., (2) $96,967 (monolithic brick), (3) $155,737 (monolithic brick), (15) $97,122 (monolithic brick).

A. J. Parrish, Paris, (4) $443,754 (9) $105,801 (10) $138,820 (29) $119,593 (31) $144,567 (36) $41,860 (38) $83,454 (57) $122,535.

Stressenreuter Bros., 3020 South Halsted St., Chicago (5) $67,247 (6) $93,919 (7) $159,355.

J. W. Etchison, Casey, (5) $70,496 (6) $99,241 (24) $68,416.

R. F. Conway, 133 West Washington St., Chicago, (8) $117,900 (9) $97,937 (10) $130,510 (12) $158,000 (16) $110,773 (17) $127,505 (18) $130,800 (19) $107,795 (20) $87,948 (29) $97,848 (30) $115,884 (36) $35,441 (37) $126,450 (38) $71,617 (39) $51,691 (41) $71,491 (42) $100,277 (44) $398,800 (45) $87,087 (46) $146,674 (48) $341,700 (52) $83,214.

The Weber Co., Ionia, Mich., (8) $128,810 (27) $143,268.

N. B. Ridge, Sterling, (8) $141,452 monolithic brick.

Russell Condon Co., Omaha, Neb., (street address not available) (9) $109,152 (26) $143,743.

G. Sheldon, 312 Putnam Bldg., Davenport, Ia. (10) $148,040 (17) $132,697 (19) $124,474.

Hedges Constr. Co., 111 West Washington St., Chicago, (11) $143,590 (12) $154,026 (16) $115,119 (29) $108,204 (36) $37,658 (37) $133,000 (38 $77,828 (39) $51,588 (40) $116,500 (41) $73,031 (42) $100,171 (43) $155,882 (52) $83,250.

I. D. Lane, Bloomington, (11) $146,580 (12) $156,262.

Mitchell Constr. Co., Marion, (13) $162,130.

Keely Bros. Contg. Co., 2100 State St., East St. Louis, (13) $164,399 (14) $133,157 (33) $126,664 (34) $53,416 (35) $175,000.

H. H. Hall Constr. Co., Murphy Bldg., East St. Louis, (14) $141,106.

L. Klotfeltner, Hillsboro, (16) $107,175 (50) $142,609.

Graham Co., Freeport, (17) $130,498 (18) $144,780.

Milburn Bros., 18th and Charles Sts., Rockford, (18) $149,505.

J. R. Hays Co., Peoria, (20) $120,589 (39) $57,012 (40) $118,580 (41) $76,977 (43) $158,464.

Reith-Reilly Constr. Co., Goshen, Ind., (20) $89,702.

H. McMullen Co., Kankakee, (20) $98,797.

List & Gifford, 415 Railway Exch. Bldg., Kansas City, Mo., (21) $20,900.

Powell & Gaven, Collinsville, (21) $22,907.

W. C. Johnson, 512 South High St., Belleville, (24) $56,413 (56) $80,446 (58) $32,105 (59) $203,832 (60) $236,600 (61) $222,385 (62) $252,181 (64) $282,784 (65) $308,138.

H. K. Rhodes, Lincoln, (25) $16,891.

Cameron, Joyce & Co., Keokuk, Ia., (26) $134,555 (27) $136,065 (30) $133,496.

Wabash Constr. Co., Vincennes, Ind., (26) $140,730 (27) $143,061 (28) $269,602 (32) $186,342 (45) $82,326 (46) $138,090 (47) $160,747 (48) $362,104.

Chicago Heights Coal Co., Chicago Heights, (28) $265,300.

Jansen & Schaefer, Pekin, (28) $274,412 (42) $103,750.

Keokuk Quarry & Constr. Co., Keokuk, Ia., (30) $117,902.

W. C. Meneeley Co., Frankfort, Ind., (31) $140,582 (32) $176,964 (46) $139,972 (48) $361,000 (49) $125,491 (50) $141,020 (51) $245,500.

Eiff & Simons, Quincy, (31) $150,751.

C. E. Carson & Co., 601 St. Clair St., Chicago, (32) $178,688 (49) $133,739.

C. Degenhardt, Alton, (33) $124,050 (35) $179,000.

Hoeffken Bros., Belleville (33) $129,580 (34) $53,869.

F. L. Dieckman, 528 North 30th St., East St. Louis (34) $53,544 (35) $128,639.

L. S. Kuhn, Bloomington, (37) $169,000.

Verhey Constr. Co., Champaign (47) $150,470 (with felt joints $156,978) (49) $135,526.

Williams & Baldwin, Cleveland, O. (street address not available) (50) $146,750 (51) $254,512.

W. F. Smith & Co., Rensselaer, Ind. (51) $259,000.

D. A. Meyers, Peoria, (52) $86,207.

Townsend & Herman, Mt. Carmel (53) $20,550 (54) $25,250.

Morris & Barchny, St. Francisville, (53) $22,717 (54) $24,855.

Hazelton Gravel Co., (address not available) (53) $24,726.

D. C. Jordan & Sons, Reinhardt, (54) $26,715 (55) $8,600.

Dees Bros., Oblong (55) $9,669 (56) $70,597 (57) $79,519.

G. E. Daly, Lawrenceville (55) $10,834.

G. E. Hoffman, Lincoln (63) $8,926.

C. Schmacht, Rock Island (63) $8,940.

F. J. McCaughey, Chicago (street address not available) (56) $79,973.

New Era Constr. Co., 3735 North Halsted St., Chicago (63) $8,612. No bids received on items 22 and 23. Noted Dec. 14.

Ia., Des Moines—Polk Co., grading and concrete paving 9.062 mi. Ames-Des Moines Rd. from Ankeny north to Polk Co. line, 20 ft., (1) 106,326 sq.yd. concrete (2) 25,717 cu.yd. excav., from Koss Constr. Co., 2818 5th St. (1) $2.48 (2) $0.55; Wright Constr. Co., 211 Flynn Bldg. (1) $2.54 (2) $0.60; Empire Constr. Co., 308 Flynn Bldg., (1) $2.575 (2) $0.65.

Washington—State Hy. Dept., Olympia, opened bids Dec. 15, constructing 5.1 mi. earth road in Columbia Natl. Forest near Goldendale, (a) clearing 22 acres (b) grubbing 14 acres (c) 9,000 cu.yd. rock excav. (d) 26,000 cu.yd. common excav., etc. from K. Sauset, Grant and Carolina Sts., Bellingham, (a) $200 per acre (b) $200 per acre (c) $1.40 (d) $0.60, etc., total (with sawed guard fence) $47,419, (with rustic guard fence) $47,919, Siems & Carlson, Spokane (street address not available) (a) $200 (b) $300 (c) $1.60 (d) $0.70, etc., total (with sawed guard rail) $56,286, (with rustic gard rail) $56,086.

California—State Hy. Dept., Sacramento, grading 3.3 mi. highway between Donner Summit and Donner Lake, Nevada Co., from J. Wilmshurst & J. Manetas, 2860 Folsom St., San Francisco, $124,599, B. B. Boyd, 3796 Menlo Ave., East San Diego, $127,139, Nevada Constr. Co., Fallon, Nev., $142,534; grading and paving with asphaltic concrete 9.4 mi. highway between New County Well and Old County Well, Imperial Co., from G. H. Oswald, 366 East 58th St., Los Angeles, $135,000, G. R. Curtis, 2440 East 26th St., Los Angeles, $149,005. Noted Dec. 7.

Calif., El Centro—City opened bids improving (1) portions of Orange, Commercial, 3rd and 4th Sts., (a) 154,700 sq.ft. 2 in. asphaltic concrete on 5 in. concrete (b) 112,200 sq.ft. 5 in. asphaltic concrete (c) 9,300 lin.ft. curb (d) 3,800 sq.ft. 5 in. concrete gutter, etc., (2) portions of Neil, Holt, Hamilton, Vine, Wensley and 7th Sts., (e) 285,800 sq.ft. 5 in. asphaltic concrete pavement (f) 10,900 lin.ft. curb, etc., (3) portions of Olive and Brighton Aves., (g) 169,300 sq.ft. 5 in. asphaltic concrete pavement (h) 9,100 lin.ft. curb, (4) portion 2 main alleys (i) 73,100 sq.ft. 5 in. asphaltic concrete pavement, (j) 5,452 ft. 10 in. c.i. mains, (5) portions 5th, 6th, El Centro and Euclid Sts., (k) 128,600 sq.ft. 5 in. asphaltic concrete pavement, (l) 5,100 lin.ft. concrete curb (m) 618 ft. 4 in. c.i. mains, etc., from J. A. Costello, 1083 Shotwell St., San Francisco, (1a) $0.36 (1b) $0.26 (1c) $1 (1d) $0.25, etc., total $101,415, (2e) $0.26 (2f) $1, etc., total $94,993, (3g) $0.26 (3h) $1, etc., total $56,754, (4i) $0.28 (4j) $5.50, etc., total $59,334, (5k) $0.26 (5l) $1 (5m) $3, etc., total $41,482; G. Oswald, 366 East 58th St., Los Angeles, (1a) $0.38 (1b) $0.32 (1c) $0.90 (1d) $0.35, etc., total $110,803, (2e) $0.325 (2f) $0.90, etc., total $115,093, (3g) $0.325 (3h) $0.90, etc., total $68,140, (4i) $0.33 (4j) $6, etc., total $67,007, (5k) $0.33 (5l) $0.90 (5m) $3, etc., total $50,388; Warren Constr. Co., Bacon Bldg., Oakland, (1a) $0.38 (1b) $0.325 (1c) $0.90 (1d) $0.38, etc., total $112,175 (2e) $0.325 (2f) $0.90, etc., total $115,193, (3g) $0.325 (3h) $0.90, etc., total $67,852, (5k) $0.325 (5l) $0.90 (5m) $3, etc., total $49,793; G. R. Daley, 4430 Boundary St., San Diego, (4i) $0.335 (4j) $5, etc., total $62,124.

Calif., Fresno—Improving portion of M St., 100,375 sq.ft. grading, 92,840 ft. asphalt pavement, 6,920 ft. concrete gutter, 3,725 ft. concrete curb, 1,035 ft. walks, 100 ft. 12 in. culvert, from Thompson Bros., G and Divisadero Sts., $31,780; Federal Constr. Co., Griffith-McKenzie Bldg., $32,160; California Road & Street Impvt. Co., Bank of Italy Bldg., $32,288. Noted Nov. 23.

Calif., San Diego — Common Council opened bid improving Lincoln Ave. between Georgia and Boundary Sts., from G. R. Daley, 4430 Boundary St., 4,756 cu.yd. excav. $1.60 per cu.yd., 1,085 cu.yd. earth embankment $0.65, 145,700 sq.ft. 1½ in. bituminous macadam $0.125, 22,441 sq.ft. cement concrete sidewalks $0.26, 4,871 lin. ft. cement concrete curb $0.75.

Calif., Santa Rosa—Supervs. Sonoma Co., improving Jenner-Mendocino Co. line highway, from A. J. Richardson, Stewarts Point, $147,000. Noted Dec. 14.

CONTRACTS AWARDED

S. C., Aiken—Bd. Comrs. Aiken Co., constructing 14.7 mi. State Route 39, to C. E. Teague, Augusta, Ga., $32,000. Noted Nov. 23.

S. C., Camden—Bd. Comrs. Kershaw Co., constructing and bridging, 3.3 mi. State Route 26, to T. E. Hook, New Brookland, $15,000. Noted Nov. 23.

S. C., Greenville—Greenville Co. topsoiling 15 mi. Jones Gap Rd., to J. T. Blassingame, Greenville, $178,000. Noted Nov. 2.

S. C., Newberry — Newberry Co. constructing 12.5 mi. Newberry-Broad River Rd., to Beaver & Robinson, Carlisle, $56,000. Noted Dec. 14.

S. C., Ridgeland—Jasper Co. Hy. Comn., constructing 9.7 mi. road between Ridgeland and Gillisonville, to W. H. Taylor, Ridgeland, $37,000; 9.1 mi. road between Gillisonville and Hampton Co. line, to B. A. Havird, Newberry, $41,000. Noted Nov. 23.

Tennessee—State Hy. Dept., Nashville, improving 5.7 mi. road, Federal Aid Project 63 A, Sumner Co., using Kentucky rock asphalt on 9½ in. hand placed base "C," to Moore Bros. Carr Co., 220 Capitol Blvd., Nashville, $136,781; concrete paving Federal Aid Project 41, Knox Co., 18 ft., 8 in. cement concrete, to R. L. Peters Co., Knoxville (street address not available), $85,345, bridges over 20 ft. span, $4,605.

Ohio—Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving roads in following counties:

Streets and Roads (Continued)

Ashland Co., Sec. "B-2" Ashland-Norwalk Rd., 1.0913 mi., brick, to H. Strodbeck, Ashland, $37,549.

Lake Co., Sec. "B" Cleveland-Buffalo Rd., 1,089 mi., brick, to G. Keener, Madison, $53,969.

Lake Co., Sec. "A" Painesville-Ravenna Rd., 3.42 mi., rein.-con., to L. Gage, Booth, $86,577.

Lorain Co., Sec. "E" Medina-Norwalk Rd., 2.11 mi., rein.-con., to Barnes & Tabbert, $65,173.

Lorain Co., Sec. "J" Cleveland-Sandusky Rd., 5.62 mi., bituminous concrete A-2-a, to Highway Constr. Co., Elyria, $165,923.

Medina County, Sec. "Medina West" Ashland-Medina Rd., .83 mi., brick, to H. Strodbeck, Ashland, $40,521. Noted Dec. 28.

Ind., Indianapolis—Marion Co., grading and graveling 17,205 ft. Muesing Rd., 16 ft., to Smith Hawkins, 2937 Ruckle St., $25,304. Engrs. est. $27,454.

Ind., Jeffersonville — Clark Co. paving 12,000 ft. Spriestersbach Rd., 20 ft., macadam, to C. Lutz, Charleston, $25,500. Engrs. est. $28,200.

Ind., Laporte—Laporte Co., grading and graveling 15,150 ft. W. J. Schumaker Rd., 16 ft., to Jenkins & McKenzie, Laporte, $25,870. Engrs est. $28,964. Noted Oct. 26.

Michigan — State Hy. Dept., Lansing, grading and surfacing 12.871 mi. Federal Aid Project 80, Sect. F, Machinac Co., to S. J. Groves & Sons Co., 120 Manhattan Bldg., Duluth, Minn., incl. 12.5 acres clearing $125, 54,571 cu.yd. excav. $0.48, 142.6 cu.yd. 1:2:4 concrete $25, 101.7 cu.yd. 1:3:6 concrete $22, 135,826 sq.yd. gravel surface, Class B, $0.84, total $155,347. Noted Nov. 23.

Michigan — State Hy. Dept., Lansing, grading and surfacing 14.865 mi. Federal Aid Project 62 Wayne Co., to Wayne Co. Rd. Comn., Detroit, incl. 63,268 cu.yd. excav. $0.50, 697.9 cu.yd. 1:2:4 concrete $20.-70, 148.6 cu.yd. 1:3:6 concrete $19.70, 155,-767 sq.yd. rein.-con. pavement $2.85, 18,213 sq.yd. rein.-con. pavement $2.98, total $559,-804. Noted Nov. 9.

Minn., Duluth—St. Louis Co., gravel surfacing 18.2 mi. State Job 2215 on State Rd. 35, 24 ft., from Sandau to Ely, to C. R. McLean, 315 South 21st Ave. E, $37,053. Noted Nov. 30.

Mo., Clayton—St. Louis Co., 8,200 ft. Kirkwood Rd., 21, 30 and 34 ft. wide, incl. 11,600 cu.yd. excav. and grading, 23,700 sq.yd. rein.-con. paving, to J. McMahon, Title Guaranty Bldg., St. Louis, $70,203; Lackland Rd. incl. 9,943 cu.yd. excav. and grading, 385 sq.yd. Class B concrete, 19.7 sq.yd. Class C concrete, etc., to J. Rothwell, 731 North Euclid Ave., St. Louis, $17,663; 2,792 sq.yd. crushed stone to pave Florissant Rd. from northern limits of Ferguson to St. Francois St. in St. Ferdinand, then along St. Francois St. to Ferdinand St. and Graham Rd., also 2,432 sq.yd. crushed stone for paving New Halls Ferry Rd. from Old Halls Ferry Rd. to Parker Rd., to Bambrick Bros. Constr. Co., 5529 St. Louis Ave., St. Louis, $24,849 and $22,253 respectively; 3,200 sq.yd. crushed stone for paving Bellefontaine Rd. from city limits of St. Louis to Marimore Rd., and 2,205 sq. yd. crushed stone for Old Halls Ferry Rd. from New Halls Ferry Rd. to Black Jack and Parker Rd., to Union Quarry & Constr. Co., 4687 Natural Bridge Ave., St. Louis, $27,904 and $20,837 respectively.

Tex., Coleman—Coleman Co. grading and graveling to Womack Constr. Co., Sherman, 8 mi. Coleman-Comanche Rd., 16 ft., $52,986, 11 mi. Coleman-Red Bank Rd., 9 ft., $32,627, 9 mi. Santa Anna Buffalo Gap Rd., 16 ft., $42,990, 12 mi. Santa Anna Trickham Rd., 16 ft., $92,877, 6 mi. Camp Colorado Rd., 16 ft., $37,429, 9 mi. Whon Rd., 9 ft., $16,091. Noted Dec. 28.

Tex., Edinburg—Hidalgo Co. paving 13.92 mi. State Highway 12, Federal Aid Project 301, 18 ft., base and drainage structures to W. L. Pearson & Co., 827 First Natl. Bank Bldg., Houston, $298,188; bituminous top, to Smith Bros. Sumpter Bldg., Dallas, $154,330. Noted Dec. 21.

Tex., Pecos—Reeves Co. grading, gravel surfacing, etc., 3.75 mi. State Highway 17-A and 4.54 mi. State Highway 27, Old Spanish Trail, to Tibbetts Constr. Co., 209½ 8th St., Ft. Worth, $17,739 and $27,181 respectively. Noted Dec. 21.

Tex., Port Arthur—For 18,800 sq.yd. asphalt paving on 6 in. concrete, 4,985 ft. curb and gutter, 6,000 ft. storm sewer in various streets, to Smith Bros., Crockett, $100,000.

Wash., Seattle—Paving 11th Ave. N., et al., 7,300 sq.yd. 6 in. concrete, 665 lin.ft. asphaltic concrete and 4,075 lin.ft. concrete curbing, 1,800 cu.yd. earth excav., to R. G. Stevenson, 1327 North 34th St., $25,859. Engrs. est. $27,664. Noted Dec. 21.

Oregon—State Hy. Comn., Salem, grading and surfacing 8.73 mi. Goshen-Lowell Sect., Willamette Highway, Lane Co., to Warren Constr. Co., Craig Rd., Portland, $82,571; 4.12 mi. Goldson-Chishin Sect. Willamette Valley-Florence Highway, Lane Co., to A. C. Mathews, Eugene, 19,700 cu. yd. common excav. $0.35, 2,000 cu.yd. intermediate $0.45 and 1,100 cu.yd. solid rock $1.50, 880 lin.ft. 12 in. plain concrete pipe $1, 130 ft. 18 in. rein.-con. pipe $2, 30 cu.yd. Class C concrete $15, 9,000 cu.yd. broken stone or gravel surfacing $2.75, 800 cu.yd. broken stone or gravel for maintenance $2.50, etc., total $40,920; 0.62 mi. Murder Creek Sect. Pacific Highway, Linn Co., to Solheim & Gustafson, Astoria, 6,000 sq.yd. type A concrete pavement $2.25, 360 cu.yd. broken gravel $2.25, etc., total $15,273; 7.4 mi. Sandy-Cherryvale Sect. Mt. Hood Loop Highway, Clackamas Co., to A. D. Kern, 519 Lumber Exch. Bldg., Portland, 9,000 cu.yd. broken stone or crushed gravel $2.34, 1,400 cu.yd. maintenance gravel $2.34, total $24,336; 0.91 mi. Ravier Sect., Columbia River Highway, Columbia Co., to A. D. Kern, 519 Lumber Exch. Bldg., Portland, 9,850 sq.yd. cement concrete pavement $2.11, 600 cu.yd. broken stone shoulders $2.60, 14,125 sq.yd. preparing subgrade $0.05, etc., total $23,713.

California—State Hy. Dept., Sacramento, Yuba Co., paving with asphalt macadam 8.2 mi. highway between Morrisons Crossing and 1 mi. south of Marysville, to Blumenkranz & Vernon, Farmers and Merchants Bank Bldg., Stockton, $141,275; grading and paving with asphalt macadam 8.2 mi. between Hollister and Pacheco Pass Rd., San Benito and Santa Clara Counties, to Granite Constr. Co., Watsonville, $131,732, 14.2 mi. between westerly boundary and Califa, Madera Co., to R. T. Shea, 169 West 7th St., Riverside, $193,648; grading and concrete paving 1.8 mi. between Hercules and Rodeo, Contra Costa Co., to L. Tagnon, 1735 Napa St., Vallejo, $33,519; grading 7.4 mi. between point 3¾ mi. southeasterly from Hueneme Rd. and Rindge Ranch, Ventura Co., to Hauser Constr. Co., 1109 Hobart Bldg., San Francisco, $598,085. Noted Dec. 28.

California—State Hy. Dept., Sacramento, surfacing with asphaltic concrete 5 mi. highway between Roseville and Lincoln, Placer Co., to J. A. Costello, Jr., 512 Mission St., San Francisco, $35,530; gravel surfacing 11.9 mi. between Willows and Glenn, Glenn Co., to V. R. Dennis Constr. Co., McMinnville, Oregon, $124,150; grading 8.9 mi. between Parkfield Junction and Coalinga, Fresno Co., to C. Miles, 2509 L St., Sacramento, $120,803; bridge over Northwestern Pacific R.R. near Lytton, to C. H. Gildersleeve, Ukiah, $7,560. Noted Dec. 21.

Calif., San Francisco — City and San Francisco Co., improving north ½ Sloat Blvd. between 19th and 35th Aves., to Eaton & Smith, 407-11th St., $40,267. Noted Dec. 21.

Industrial Works

PROPOSED WORK

Me., Houlton—Bangor & Aroostook R.R., Graham Bldg., Bangor, plans 1 story car shops, at freight yards, here, to replace those destroyed by fire. $60,000. Private plans.

N. H., Concord—Boston & Maine R.R., North Station, Boston, having plans prepared 1 story car shops, brick and steel, at freight yards, here. $225,000. Private plans.

N. Y., Buffalo—Eagles & Kiener, 3074 Main St., plans 1 story, 60 x 100 ft., brick and steel garage and service station, Main St. $40,000. Architect not announced.

N. Y., Buffalo—Flexlume Sign Co., 74 Kail St., plans concrete, brick and steel factory, Skillen St and Military Rd. $40,-000. Architect not selected.

N. Y., Buffalo—International Ry., Ellicott Sq., plans to rebuild its Cold Springs car shop and barns, recently destroyed by fire. $250-$300,000.

N. Y., Jamestown—Jamestown Metal Desk Co., 104 Blackstone Ave., plans 1 story, 100 x 200 ft. factory, brick and stone, Blackstone Ave. $40,000. Beck & Tinkham, 317 Washington St., archts.

Pa., Blossburg—Gannett, Seeley & Fleming, Inc., Wellsboro, plan 1 story, 80 x 90 ft. rein.-con. and steel power plant, here. $150,000.

Pa., Pittsburgh — R. P. McCurdy Co., Baum Blvd. and Craig St., having plans prepared by Hunting-Davis Co., archts., Century Bldg., 3 story and basement, 120 x 120 ft. tile and terra cotta garage, Millvale Ave. and Baum Blvd. $300,000.

W. Va., Logan—Miller-Logan Supply, c/o J. C. Miller, 1508 5th Ave., having plans prepared by Meanor & Handloser, archts., Robson-Prichard Bldg., Huntington, 6 story and basement, 100 x 103 ft., brick and tile warehouse. $150,000.

Ala., Mobile—Benner Lumber Co., plans to rebuild major portion of lumber mill destroyed by fire. $150,000.

O., Alliance — Alliance Machine Steel Castings Co. having plans prepared 1 story, 75 x 600 ft. plant addition. Private plans.

O., Dayton—Miami Ice & Fuel Co., Ludlow Bldg., having plans prepared by A. C. Bishop Co., archts. and engrs., Guardian Bldg., Cleveland, 1 story, brick and steel plant. $250,000. P. B. Hunt, pres. Noted Aug. 31.

O., Cleveland—Atlas Fdry. Co. c/o J. H. Bruce, pres., Shaw Ave. along tracks of Cleveland, Cincinnati, Chicago and St. Louis, Ry., had plans prepared by J. E. A. Moore, archt., 1900 Euclid Ave., 1 story, 100 x 140 ft. foundry, brick and steel, West 69th St. along tracks of Wheeling and Lake Erie R.R. $60,000.

O., Cleveland—Standard Equipment Co., West 106th St. and Lorain Ave., had plans prepared 1 story, brick and steel factory addition. O. J. Ashman, mgr. $75,000.

O., Oakley (Cincinnati P. O.)—Williamson Heater Co., 335 West 5th St., plans to rebuild portion of heater factory, recently destroyed by fire. $100,000. Architect not announced.

O., Youngstown—Baldwins Flour Mill, Oak Hill Ave., plans to rebuild mill, destroyed by fire. $50,000. B. M. Baldwin, mgr. Architect not announced.

O., Zanesville—Mark Mfg. Co., Putnam Ave., plans to rebuild portion of conduit plant, destroyed by fire. $100,000. Architect not announced.

Ind., Auburn—City plans 1 story addition to light plant. $60,000. E. Weiland, city mgr.

Ind., East Chicago—Bates Expanded Steel Truss Co., Forsythe St., plans first unit of plant, 1 story, 80 x 120 ft., brick and steel. $100,000. Private plans.

Ind., South Bend — Studebaker Corp., Main and Bronson Sts., plans 4 story and basement, 120 x 700 ft. factory addition, rein.-con. $450,000. Architect not selected.

Mich., Mottville—Michigan Gas & Electric Co., Three Rivers, having tentative plans prepared 1 story rein.-con. power house, 2,500 hp. 2,000 kw., along St. Joseph River, here. $400,000. Private plans.

Ill., Chicago—J. A. Hannah, 1045 Fulton Market, plans 1 story, 100 x 133 ft. garage, rein.-con., brick and steel, 1215-23 West Harrison St. $40,000. C. E. Frazier, 30 North Dearborn St., archt.

Ill., Mt. Vernon—Mt. Vernon Car Mfg. Co. plans 1 story, 150 x 500 ft. car shop, brick. $50,000. Private plans.

Wis., Mukwonago—Weinburg Bros. having plans prepared by C. F. Ringer & Son, archts., 432 Bway., Milwaukee, 2 story, concrete garage. $40,000.

Wis., Nekoosa—Nekoosa Creamery Com., c/o W. A. Radke, chn., plans 2 story, brick, rein.-con. and steel dairy, plain foundation. $40,000. Architect not selected.

Wis., Sheboygan—Badger State Tannery Co., c/o F. Zschetzche, mgr., South Water and Maryland Sts., plans 4 story, 50 x 95 ft., addition to tannery, brick, rein.-con. and steel, plain foundation, Water St. $50,-000. Architect not selected.

Ia., Cedar Rapids—Sieg Co., 5th and Iowa Sts., Davenport, having plans prepared 2 story and basement, 60 x 140 ft. pump manufacturing plant, brick and concrete, 2nd Ave. between 6th and 7th Sts., here. $70,000. R. Vorkoper, local mgr. Architect not announced.

Ia., Clarinda—Swift & Co., 76 West Monroe St., Chicago, had surveys made by A. S. Van Sandt, engr., Clarinda, 2 story and basement, 76 x 144 ft. cold storage plant, brick and concrete, here. $125,000. H. Gilmore, mgr.

Ark., Hot Springs—Beasely Lumber Co., Winona Ave., plans to rebuild plant recently destroyed by fire. $40,000. Architect not announced.

Mo., Kansas City—Amer. Butter Co., c/o F. E. McIllvain, archt., 1001 Orear-Leslie Bldg., having plans prepared 5 story and basement, 75 x 130 ft. warehouse, rein.-con., brick and terra cotta, Pershing Rd. and Bway. $125,000-$150,000.

Tex., Dallas—Ginner & Miller Publishing Co., 1802 Jackson St., had plans prepared and soon takes bids 2 story, book bindery, brick, plain foundation, Commerce and Murray Sts. $60,000. Architect not announced.

Tex., Dallas—Lang & Witchell, archts., Amer. Exch. Natl. Bank Bldg., takes bids latter part of January or first of February 7 story and basement, loft and warehouse addition, for Higginbotham Bailey Logan Co., Jackson and Lamar Sts. $500,000.

Tex., Dallas — Texas Oklahoma Phonograph Co., 908 Commerce St., had preliminary plans prepared 3 story and basement, factory and warehouse, timber, McKinney Ave. $50,000. A. C. Dennis, mgr. Architect not announced.

Tex., Graham—Le Sage Motor Co., c/o M. K. Graham, plans 2 story, 75 x 100 ft.

Industrial Works (Continued)

brick garage. $45,000. Architect not announced.

Tex., Greenville—Greenville Mill & Elevator Co., c/o G. M. Richter, plans additions to present plant. $100,000. Architect not selected.

N. M., Bernalillo—White Pine Lumber Co. plans new lumber mill. $500,000. Archi- ect not announced.

Calif., Fresno—Sunshine Bakery Co., 1020 Fresno St., plans 2 story, brick and steel plant, Van Ness and California Sts. $60,000.

Calif., Fullerton—Placienda Orange Growers Assn., plans refrigerating and pre-cooling plant. $150,000.

Calif., Los Angeles—Union Pacific R.R., 15th and Dodge Sts., Omaha, Neb., soon takes bids constructing engine house, locomotive shop, coach and car shop, new terminal yard, etc., here. Cost between $1,-500,000 and $2,000,000. R. L. Huntley, ch. engr.

Calif., Sacramento—Lindley & Co., 220 K St., having plans prepared by Dean & Dean, archts., City Library Bldg., 1 story and basement, rein.-con. warehouse, 3rd and Q Sts. $100,000.

Calif., San Francisco—L. R. Lurie, Mills Bldg., had plans prepared by O'Brien Bros., Inc., archts., 240 Montgomery St., 2 story, 120 x 192 ft., rein.-con. garage, Fell and Gough Sts. $100,000. Pacific Telephone & Telegraph Co., 333 Grant Ave., lessee.

Calif., Stockton—Sattui Bros. Motor Co. 215 North Sutter St., plans 2 story, fireproof garage, South Hunter and Market Sts. $40,000.

Calif., Stockton—Terminal Cold Storage & Warehouse Co., c/o N. E. MacLean, archt., 16 California St., San Francisco, having plans prepared pre-cooling plant, fireproof, Main Channel and Mormon Slough. $260,000.

Ont., Ottawa—McAuliffe Davis Lumber Co., 57 Duke St., plans lumber mill. $40,-000. Architect not announced.

BIDS DESIRED

Conn., Bridgeport—Jan. 8, by Fletcher-Thompson, Inc., archts. and engrs., 542 Fairfield Ave., 3 story, 170 ft. front, factory, brick and timber, plain foundation, Federal St., for A. V. Langenegger, 2190 Park Ave. $150,000. Noted Nov. 30.

N. Y., Tonawanda—Amer. Kardex Co., Main St., taking bids 2 story, 50 x 160 ft., brick addition to factory. $70,000. L. Eggert, 35 Elmwood Ave., archt. Noted Dec. 17.

Pa., Phila.—C. K. Johnson, c/o P. H. Tyre, archt., 1509 Arch St., taking bids 2 story and basement, 40 x 68 x 76 x 96 ft. rein.-con., brick and steel garage, plain foundation, 15th and Passyunk Aves. $50,000.

Pa., Phila.—P. H. Tyre, archt., 1509 Arch St., taking bids 4 story and basement, 122 x 220 ft. rein.-con. and brick garage and service station, plain foundation, 30th and Market Sts., for G. A. Wileys Motor Co., Broad and Vine Sts. $150,000.

Ill., Chicago — W. P. Doerr, archt., 28 East Jackson Blvd., receiving bids 2 story, 100 x 136 ft. bakery, rein.-con., brick and steel, 325-29 East 26th St. $50,000. Owner's name withheld.

BIDS RECEIVED

La., New Orleans — Weis & Dreyfous, archts., Mason Blanche Bldg., opened bids 2 story addition to factory, Bayou Rd. and Claiborne St., from R. P. Farnsworth & Co., 808 Perdid St., $58,892; Geary-Oakes Inc., Guarantee Title Bldg., $61,759; J. A. Rodick, S. Charles and Palmer Sts., $62,-875, for J. Sternberg, Bayou Rd. and Claiborne St.

CONTRACTS AWARDED

R. I., East Providence (Providence P. O.)—United Electric Rys. Co., Providence, 1 and 2 story, 170 x 535 ft. car house, brick and steel, plain foundation, North Bway., here, to W. H. Hamlyn & Son, 35 Greenwich St., Providence. Archts. est. $400,000. Noted Dec. 14.

N. Y., Long Island City—Latham Lithographing & Printing Co., 33 West 42nd St., New York, 150 x 250 ft. printing plant, rein.-con., brick, steel aand stucco, plain foundation, here, to Walter Kidde & Co., Inc., 140 Cedar St., New York. Engrs. est. $450,000.

N. Y., New York — S. Rubin, c/o C. Shaefer, Jr., archt. and engr., 394 East 150th St., will build 1 story garage, brick, steel and concrete, Webster Ave., by day labor. $45,000.

Pa., Berwyn—Suburban Ice Co., 2 story, 60 x 110 ft., rein.-con. and brick garage and repair shop, plain foundation, to Merion Constr. Co., 2313 Walnut St., Phila. Archts. est. $50,000.

Pa., Chester — Stauffer Chemical Co., Front St., 1 and 2 story, brick and steel factory, plain foundation, Front St., to Chester Constr. Co., Chester, $157,000.

SUBWAY—BROOKLYN, N. Y.

Following are lowest three bids opened by Transit Comn., 49 Lafayette St., New York City, Dec. 22, for constructing subsurface railroad extending along and under 4th Ave. from 87th to 95th Sts., (A) T. A. Gillespie Co., 7 Dey St., New York City, (awarded contract); (B) Oakdale Contg. Co., Inc., Harris Ave., Long Island City; (C) H. Newman, 79 Court St. The unit bids were as follows:

	A	B	C
175,000 cu.yd. earth excavation	$3.70	$4.90	$3.60
200 cu.yd. earth excavation for sewers, etc	4.00	5.00	3.60
Maintaining No. 8724-4th Ave. (lump sum)	3,000.00	500.00	1,750.00
Maintaining No. 9002-4 4th Ave. (lump sum)	4,000.00	800.00	2,500.00
Maintaining No. 9102 4 4th Ave. (lump sum)	4,000.00	1,000.00	2,300.00
Maintaining No. 9306 4th Ave. (lump sum)	3,000.00	500.00	1,750.00
Maintaining No. 9312 4th Ave. (lump sum)	3,000.00	500.00	1,300.00
Maintaining No. 9318 4th Ave. (lump sum)	2,000.00	500.00	1,700.00
Maintaining public library, 4th Ave. and 95th St. (lump sum)	2,000.00	500.00	3,000.00
Maintaining No. 9502 4th Ave. (lump sum)	3,000.00	500.00	1,300.00
10—furnishing and setting trees	80.00	10.00	25.00
20,000 cu.yd. concrete masonry, in place	14.32	13.35	18.50
45,000 sq.ft. rubbing to smooth finish surface of concrete	.10	.5	.03
2,000 cu.yd. protective concrete masonry, in place	15.00	13.00	18.50
225 cu.yd. brick masonry, in place	30.00	30.00	38.00
Removing of bulkhead, existing subway, 4th Ave. and 87th St. (lump sum)	500.00	600.00	500.00
700 cu.yd. hollow terra cotta brick or tile masonry, in place	25.00	30.00	33.00
50 lin.ft. 4½ in. x 13 in. terra cotta flue lining, in place	1.00	1.40	1.00
100 bbl. grout of portland cement	6.00	6.00	6.00
100 cu.yd. broken stone or gravel	4.00	4.50	6.00
3,700 sq.yd. waterproofing, one ply	1.00	.80	.75
19,000 sq.yd. waterproofing, three ply	1.50	1.45	2.00
100 sq.yd. waterproofing, six ply	2.50	3.00	4.00
100 sq.yd. waterproofing, dry ply	.75	.50	.50
550 cu.yd. waterproofing brick laid in asphalt mastic	40.00	40.00	40.00
300 lin.ft. cast-iron pipe and fittings, 3 in., in place	1.00	1.00	2.00
1,250 lin.ft. cast-iron pipe and fittings, 6 in., in place	1.50	1.40	3.00
3,000 lin.ft. cast-iron pipe and fittings, 8 in., in place	2.00	2.00	8.00
70,000 duct. ft. tunnel ducts, in place	.20	.20	.40
460 duct. ft. fibre ducts, in place	.50	.70	3.00
1,156 tons riveted steel, painted and erected	96.00	95.00	90.00
2 tons steel ladders, stairs, railings, etc	300.00	186.00	200.00
1,800 tons steel beams and shapes, painted and erected	96.00	85.00	90.00
80 tons steel rods and bars built in concrete	80.00	80.00	120.00
4 tons miscellaneous iron castings, in place	150.00	143.00	150.00
10 tons miscellaneous iron furnishings for sewer manholes, etc	150.00	143.00	150.00
200 lb. special wire forms, in place	.20	.30	1.00
1,800 lin.ft. 1¾ in. oak or ash hand rail, in place	.30	.50	.52
3,800 sq.ft. steel gratings for ventilation, in place	3.00	2.50	6.00
1,000 sq.ft. vault lights, in place	2.50	2.50	2.00
1,600 sq.yd. sidewalks restored	1.00	3.00	3.00
14,000 sq.yd. roadway restored, asphalt	4.00	3.00	5.00
100 sq.yd. roadway restored, granite block	5.00	3.00	5.00
1,100 lin.ft. new bluestone curb, in place	2.00	1.70	1.50
400 sq.yd. upper 3 in. concrete walls	2.00	2.00	3.00
5,600 lin.ft. ¾ in. wrought steel electric conduits	.30	.30	.25
50 lin.ft. 1¼ in. wrought-steel electric conduits	.60	.70	.50
2,400 lin.ft. 1 in. wrought-steel electric conduits	.40	.50	.40
430—cast-iron outlet boxes, in place	1.00	1.00	1.50
10—cast-iron pull boxes, in place	3.00	3.00	5.00
100 lin.ft. cast-iron pipe and fittings, 6-in., in place	2.00	1.60	3.00
100 lin.ft. cast-iron pipe and fittings, 3-in., in place	1.50	1.20	3.00
50 lin.ft. cast-iron pipe and fittings, 4-in., in place	1.80	1.50	3.00
50 lin.ft. cast-iron pipe and fittings, 8-in., in place	2.50	3.00	3.00
1,200 lin.ft. sewer pipe, 12 in. vitrified	3.00	1.90	5.50
260 lin.ft. sewer pipe, 15 in. vitrified	4.00	3.60	6.50
350 lin.ft. sewer pipe, 18 in. vitrified	5.00	4.00	8.00
300 lin.ft. sewer pipe, 24 in. vitrified	7.00	6.00	11.00
2 tons sewer pipe, cast-iron (straight pipe)	100.00	80.00	150.00
1 ton sewer pipe, cast-iron (special castings)	150.00	110.00	400.00
450 lin.ft. concrete sewers, 3 ft. 6 in. x 2 ft. 4 in.	12.00	11.50	10.00
50 lin.ft. water pipe, 6 in.	1.50	1.50	3.00
200 ft. water pipe, 8 in.	2.50	2.15	3.00
10—service connections for water pipes	25.00	35.00	25.00
50 lin.ft. cast-iron gas pipe, 4 in.	1.00	1.00	3.00
50 lin.ft. cast-iron gas pipe, 6 in.	1.50	1.50	3.00
10—service connections for gas pipes	25.00	30.00	35.00
3 tons new cast-iron hub and spigot pipe, straight	60.00	81.00	100.00
2 tons new cast-iron hub and spigot pipe, special castings	150.00	120.00	250.00
100 duct.ft. electric ducts and conduits	.50	1.00	1.00
5—service connections for electric ducts	50.00	30.00	50.00
100 duct.ft. fibre ducts and conduits	.50	.70	1.00
Extended totals	$1,485,151	$1,615,500	$1,617,971

Pa., Pittsburgh—Van Kleek Motor Co., 420 North Craig St., 3 story and basement, 91 x 115 ft. rein.-con. garage and service station, Baum Blvd. and Commercial Way, to W. T. Grange Constr. Co., Keenan Bldg. Archts. est. $150,000.

W. Va., Williamson—Williamson Ice & Storage Co., 5 story, 40 x 60 ft. plant, brick, etc., to Good Constr. Co., Williamson. Archts. est. $60,000.

O., Cleveland—H. E. Roth, 1604 East 117th St., 1 story and basement, 50 x 100 ft. and 30 x 40 ft. hide house and garage, brick and timber, West 65th St., to G. H. Rutherford Co., 2725 Prospect Ave. Archts. est. $40,000. Noted Dec. 7.

Ill., Chicago—Tower Auto Corp., 20 East Jackson Blvd., 4 story, 130 x 175 ft. garage, rein.-con., brick and steel, 231 East Chicago Ave., to A. Brundage, 110 South Dearborn St. Archts. est. $225,000.

Wis., Beloit—Beloit Iron Wks., c/o F. L. Penney, mgr., 1 story, 50 x 80 ft., machine shop, brick, rein.-con. and steel, plain foundation, to J. Schneiberg, 945 Bluff St. Archts. est. $40,000.

Minn., Hibbing—Water, Light, Power and Building Comn., 1 story and basement, 66 x 85 ft. addition to gas plant, concrete and brick, to Phelps-Drake Co., 719 Metropolitan Life Bldg., Minneapolis, and Hibbing, $89,-948. Noted Dec. 21.

Minn., St. Paul—Hamm Realty Co., 311 Hamm Bldg., general contract garage and tire supply plant, 2½ and 3 story, and part basement, 150 x 150 ft., concrete and brick, 8th and Sibley Sts., to C. W. Lundquist & Co., 712 15th Ave. N. E., Minneapolis, $88,-000. Noted Nov. 23.

Minn., St. Paul—Northern States Power Co., 15 South 5th St., Minneapolis, will build 40,000,000 hp. steam plant, one 35,000 kw. unit to be installed now and another similar unit later, near High Bridge over Mississippi River, here, by day labor. All equipment bought. Byllesby Eng. and Management Corp., 208 South LaSalle St., Chicago, engrs.

Tex., Dallas—Gulf Colorado & Santa Fe R.R., 110 Field St., 2 story and basement, 60 x 300 ft., freight depot, (1st unit), brick, plain foundation, Young and Poydras Sts., to Sumner Sollit Co., 225 North Michigan Ave., Chicago, $135,000.

Tex., Ft. Worth—Ft. Worth Elevator Co., 1510 East 1st St., 2 story, (ultimately 6 story), 100 x 205 ft., rein.-con. warehouse, plain foundation, East 1st St., to Butcher & Sweeney, Touraine Bldg., cost plus 10% basis.

Calif., Sacramento — Consumers Ice & Cold Storage Co., 8th and D Sts., will build rein.-con. addition to ice plant, Hickman Tract near Freeport Rd., by day labor. $41,000.

Calif., San Francisco—L. R. Lurie, Mills Bldg., 2½ story, 62 x 137 ft., rein.-con. garage, Sacramento St. near Polk St., to

Industrial Works (Continued)

F. L. Hansen, 251 Kearny St. Noted Nov. 30.

Calif., San Francisco—Lurie Co., Mills Bldg., 2 story, concrete, warehouse and office, 5th and Clementina Sts., to Meyer rBos., 5324 Geary St., $80,000. Fobes Supply Co., 523 Mission St., lessee.

Buildings

PROPOSED WORK

Me., Portland—Apartment—J. I. Cope, 222 Cumberland Ave., plans 4 story, 60 x 135 ft. brick and steel, Chadwich St., $150,000. Private plans.

Mass., Boston — Market — City having plans prepared by Cram & Ferguson, archts., 248 Boylston St., fireproofing and restoring Faneuil Hall. To exceed $150,000.

Conn., Bridgeport—High School—Bd. Educ. plans 3 story and basement, brick, stone, steel and concrete, Boston and Central Aves. $900,000. Caldwell, Walker & Beckwith, 886 Main St., archts. W. B. Ittner, 911 Locust St., St. Louis, Mo., associated archt. Noted Sept. 21.

Conn., Hamden—Town Hall—Town Hall Building Com. plans 2 story, brick and steel, Dixwell Ave. $160,000. Architect not selected.

Conn., New Haven—Club, etc.—St. Michaels Young Men's Club, Greene St., having plans prepared by Della Valle & Vece, archts., Exchange Bldg., 3 story and basement, 50 x 150 ft., brick and steel, Greene St. $150,000. Noted Aug. 25, 1921.

Conn. Stamford—Hotel—Davenport Hotel Co. Park Pl. having plans prepared by Emmens & Abbott, archts., Washington Bldg., 5 story and basement, 34 x 81 ft., brick and steel addition to Hotel Davenport, Park Pl.

N. Y., Brooklyn—Hospital—Samaritan Hospital, c/o A. S. Hedman, archt. and engr., 112 East 19th St., New York, having plans prepared brick, steel and stone addition, plain foundation, 4th Ave. and 17th St., here. $200,000.

N. Y., Lakewood—High School—Lakewood School Dist. plans high school. $150,000. Johnson & Ford, Fenton Bldg., Jamestown, archts.

N. Y., New York—Bath House—Bd. Estimate, Municipal Bldg., rejected bids opened Nov. 27, public bath building, brick and steel, plain foundation, 35 West 134th St. Will readvertise.

Pa., Allentown—Bank—Dime Savings & Trust Co. plans bank, 7th and Linden Sts.

Pa., Avalon—High School—Bd. Educ. having plans prepared by P. Irwin and W. N. Zortman, archts., Renshaw Bldg., Pittsburgh, 2 story and basement, 96 x 113 ft., rein.-con., brick and terra cotta, California Ave. $180,000.

Pa., Brookville — Court House—Comrs. Jefferson Co. having plans prepared by E. E. Bailey, archt., Chambers Bldg., Oil City, 2 story, 32 x 64 ft. brick and steel addition. $150,000.

Pa., Irwin—Bank and Office—Irwin Savings & Trust Co. having revised plans prepared by P. C. Dowler, archt., Magee Bldg., Pittsburgh, 2 story and basement, 25 x 109 ft., rein.-con., brick and terra cotta, Main St. $150,000.

Pa., Johnstown—Hospital—Comrs. Cambria Co., Court House, Ebensburg, having plans prepared by W. R. Myton, archt., 1204 1st Natl. Bank, 2 story and basement, 40 x 230 ft. and 1 story and basement, 35 x 80 ft. and 30 x 40 ft. brick. $250,000.

Pa., Juniata—Business—D. G. H. Gilberg, 708-4th Ave., plans 4 story and basement, 80 x 120 ft. rein.-con., brick and steel, business block, office and apartment building on 4th Ave., to replace one recently destroyed by fire. $150,000.

Pa., Phila.—Apartment—J. Bobb, 6250 Ludlow St., having plans prepared by W. A. Young, archt., 320 South Iseminger St., 4 story, and basement, 150 x 150 ft. brick and stone, 63rd and Overbrook Aves. $350,000.

Pa., Phila.—Community—Federation of Jewish Charities, c/o M. Kind, 709 Chestnut St., soon takes bids 4 story and basement, 43 x 160 ft. brick, steel and stone, plain foundation, 9th and Pine Sts. $200,000. F. E. Hahn, 1112 Chestnut St., archt.

Pa., Phila.—Loft—Hoffman-Henon Co., archts., Finance Bldg., soon takes bids 12 story and basement, 102 x 188 ft. rein.-con., brick and steel, 21st and Market Sts. $700,000. Owner's name withheld.

Va., Richmond—Office—Imperial Job Co., 106 South 6th St., having revised plans prepared by Neff & Thompson, archts., Seaboard Bank Bldg., Norfolk, 6 story, 5th and Franklin Sts. $300,000.

Fla., St. Petersburg — Hotel — S. Lund, Huntington Hotel, plans rein.-con., 250 rooms. $1,000,000. Architect not selected.

Ind., Evansville—School—St. Boniface Church plans 2 story and basement, brick, Wabash Ave. $150,000. Clifford Shopbell, Furniture Bldg., archt.

Ind., Indianapolis—Apartment—E. G. Spink Co., Hume-Mansur Bldg., having plans prepared by W. K. Eldridge, archt., Hume-Mansur Bldg., 8 story and basement, 54 x 150 ft., rein.-con. and brick, 2035 North Meridian St. $250,000.

Ind., Indianapolis—Office and Store—S. S. Kresge Co., Kresge Bldg., Detroit, Mich., having plans prepared by G. H. Rubens, archt., Saks Bldg., 14 story and basement, 76 x 198 ft., brick and steel, East Washington St., here. $150,000.

Mich., Battle Creek—Church and Office—First Baptist Church, 119 Fountain St., plans 6 story, rein.-con., brick and stone, Main St. $300,000. Private plans.

Ill., Chicago—Apartment—P. M. Jacobs, c/o N. M. Dunning, archt., 304 South Wabash Ave., plans 3 story and basement, rein.-con., brick and steel, 2035-43 111th St. $150,000.

Ill., Chicago—Apartment—R. W. Matteson & Co., 140 South Dearborn St., plans 3 story and basement, 125 x 200 ft., rein.-con., brick and steel, George and Mildred Sts. $400,000. Private plans.

Ill., Chicago—Dormitory—Northern Baptist Theological Seminary, c/o S. M. Seator, archt., 19 South La Salle St., having plans prepared 3 story, 40 x 175 ft., rein.-con., brick and steel, Washington and Albany Sts. $150,000.

Wis., Burlington—Memorial Hospital—Memorial Hospital Assn., c/o H. A. Runkel, vice-pres., plans 3 story and basement, brick. $150,000. Architect not selected.

Wis., Mayville—Gymnasium and Auditorium—Bd. Educ. had plans prepared and soon takes bids 3 story gymnasium and 2 story auditorium, brick, tile and concrete, plain foundation. $200,000. Parkinson & Dockendorff, Linker Bldg., La Crosse, archts.

Wis., Milwaukee — Apartment — Randco Corp., c/o Rosman & Wierdsma, archts., 424 Jefferson St., having plans prepared 3 story and basement, 40 x 55 x 110 ft., brick and concrete, Cass St. $150,000.

Wis., Milwaukee — Church — Kenwood Methodist Congregation, c/o S. H. Anderson, pastor, 699 Stowell Ave., having revised plans prepared by Leenhouts & Guthrie, archts., 424 Jefferson St., 2 story and basement, stone, plain foundation, Kenwood Blvd. $150,000.

Wis., Milwaukee—Church—Salem Evangelical Assn., 405 6th Ave., had plans prepared by P. M. Christiansen, archt., 469 1st Ave., 2 story and basement, 64 x 94 ft., brick and tile, plain foundation, 25th Ave. and Mitchell St. $150,000.

Wis., Milwaukee — School, etc. — School Bd., c/o F. Harbach, secy., 10th and Prairie Sts., had plans prepared and soon takes bids 3 story and basement, 68 x 80 ft. addition, incl. 28 x 40 ft. boiler house, brick, tile and concrete, plain foundation, 27th Ave. $150,000. Van Ryn & De Gelleke, 114 Grand Ave., archts.

Wis., West Allis—Commercial and Office—Greenfield Ave. Advancement Assn., c/o W. L. Johnson, secy., 6224 Greenfield Ave., plans 3 story and basement, 120 x 120 ft., brick and concrete, plain foundation, Greenfield Ave. $150,000.

Wis., West Allis—Grade School—Bd. Educ. plans 2 story, brick and tile, in 4th Ward. $150,000. Architect not selected.

Wis., Wisconsin Rapids—Prentiss-Wabers Mfg. Co., c/o T. A. Taylor, mgr., having plans prepared by M. C. Jacobson, archt., Wisconsin Rapids, 2 story, 65 x 110 ft., brick, rein.-con. and steel factory, plain foundation.

Ia., Ottumwa—Church—First Presbyterian Congregation, plans to build church. $150,000. C. P. Shockley, 719 Black Bldg., Waterloo, archt.

Ia., Sioux City—Hospital—New Samaritan Hospital Assn. having plans prepared by Beuttler & Arnold, archts., 408 Grain Exch. Bldg., 4 story and basement, rein.-con., brick, tile and stone, 29th and Douglas Sts. $250,000 E. J. Stason, pres. . Noted Oct. 5.

Ia., Tipton—School—Defeated $273,000 bonds for 2 story and basement, rein.-con. and brick, for Bd. Educ. New election will be called soon. W. Gordon, 317 Hubbell Bldg., Des Moines, archt. Noted Dec. 7.

Ia., Wapello—School—Bd. Educ. plans 3 story and basement, rein.-con., brick, tile and stone. $150,000. H. R. Christie, secy. Architect not announced.

Minn., Duluth—Hospital—St. Lukes Hospital having plans prepared by Schmidt, Garden & Martin, archts., 104 South Michigan St., Chicago, superstructure for rein.-con. and brick. $800,000. German & Jensen, 411 Exchange Bldg., associated archts. Noted July 13.

Minn., Minneapolis — Vocational School and Administration—Bd. Educ. having tentative sketches made by Div. of Design, rein.-con., brick and tile, first unit $250,000. Total $1,000,000. G. F. Womrath, 305 City Hall, bus. supt., Bd. Educ.

Minn., St. Paul—Theatre—Orpheum Circuit, State Lake Bldg., Chicago, plans rein.-con., brick and stone. $1,000,000. Architect not announced.

Kan., Ft. Scott—Church—Presbyterian Congregation plans 1 story and basement, 3rd and Crawford Sts. $150,000. J. K. Gross, pastor.

Kan., Ft. Scott—Temple—Scottish Rite Masons having plans prepared by W. T. Schmit, archt., 1634 West 16th St., Oklahoma City, Okla., 2 story and basement, 75 x 120 ft., brick and stone. $500,000.

Kan., Great Bend—High School—Bd. Educ. having plans prepared by Payson & Caswell, archts., 505 Interstate Bldg., Kansas City, Mo., high school. $250,000.

Kan., Wichita—Hotel—O. S. Shirk, 205 Schweiter Bldg., having plans prepared by Eberson & Weaver, archts., Orpheum Bldg., 5 story, 100 x 140 ft., rein.-con. and brick, plain foundation, 2nd St. and Topeka Ave. $250,000. Noted Dec. 7.

Kan., Wichita—Jail—Sedgwick Co. having plans prepared by W. M. Bowman Co., archt., Central Savings Bank Bldg., Denver, Colo., county jail, Courthouse Sq. $200,000. Noted Dec. 7.

Mo., Kansas City—Memorial—Liberty Memorial Assn., R. A. Long Bldg., having plans prepared by H. Van Buren Magonigle, archt., 101 Park Ave., New York City, and takes bids about end of February, rein.-con., brick and steel, Station Rd. $2,000,000.

Mo., Liberty—High School—Bd. Educ. having plans prepared by C. A. Smith, archt., 602 Finance Bldg., Kansas City, 2 story and basement, 88 x 188 ft., rein.-con. and brick. $250,000.

Mo., Marshall — High School — Voted $200,000 bonds for high school.

Mo., Nevada—Schools—Voted $320,000 bonds for high school and 2 grade schools. Noted Dec. 14.

Tex., Dallas—Hotel—A. W. Childress and associates, 1714 Prairie St., plans 125 x 125 ft. hotel, San Jacinto and Masten Sts. $900,000. Architect not selected.

Ore., Astoria—Hotel—Columbia Hotel Co. having revised plans prepared by Tourtelette & Hummel, archts., Title and Trust Bldg., Portland, for hotel, here. $150,000. C. R. Higgins, secy. Former contract rescinded.

Ore., Corvallis—Hotel—Coe A. McKinney Co., Portland, entered into contract with Chamber of Commerce to raise $200,000 for fireproof hotel, here.

Calif., Durham—High School—Durham High School Dist. plans election to vote on $150,000 bonds for new high school. Architect not selected.

Calif., Fullerton—Church, etc.—Methodist Episcopal Church having plans prepared by Noerenberg & Johnson, archts., Los Angeles Ry. Bldg., for church, community hall, chapel, etc., Pomona Ave. To exceed $200,000.

Calif., Lodi—Hotel and Theatre—G. Allen, archt., 37 South Aurora St., Stockton, preparing plans and soon takes bids. 3 story, rein.-con., brick and terra cotta, here. $150,000. Owner's name withheld.

Calif., Los Gatos — High School — Los Gatos High School Dist. plans election early next year to vote on $150,000 bonds for new high school. Architect not selected.

Calif., Los Angeles—Office—G. Woodruff, A. R. Walker, et. al., c/o Walker & Eisen, archts., Pacific Finance Bldg., having plans prepared 13 story and basement, rein.-con. or steel frame with pressed brick and terra cotta, 8th St. from Spring to Main Sts. $500,000.

Calif., Los Angeles—Office and Depot—American Ry. Express, 752 South Bway., having plans prepared by J. H. Humphrey, archt., 85 2nd St., San Francisco, 3 story, 75 x 275 ft., rein.-con., San Pedro St. near 5th St.

Calif., Oakland—Banks—See "Bids Desired."

Calif., Oakland—College—Mills College having plans prepared by W. H. Ratcliff, Jr., archt., 1st Natl. Bank Bldg., Berkeley, group of buildings, 59th Ave. $500,000 or more.

Calif., Oakland — Courthouse —Alameda Co. plans election to vote on $2,000,000 bonds for courthouse.

Calif., Sacramento—Store—J. Bruener Co., 604 K St., having plans prepared by E. C. Hemmings, archt., Ochsner Bldg., 1 and 3 story building, 2 story addition to present 1 story building, and extensive alterations to present store, 6th and K Sts. $150,000.

Calif., San Francisco—Apartment and Store—Ackerman & Harris, 281 O'Farrell St., having plans prepared by Weeks & Day, archts., Phelan Bldg., 7 story and basement, probably rein.-con., Leavenworth and O'Farrell Sts. $150,000.

Calif., San Francisco — Club — Natl. League for Women's Service, c/o W. Polk &

Buildings (Continued)

Co., archts., Hobart Bldg., having preliminary plans prepared 7 story and basement, probably rein.-con., Post St., to be known at Womens City Club. $1,000,000.

Calif., Santa Ana—Club—Y. M. C. A. having plans prepared by F. H. Eley, archt., Santa Ana, 3 story and basement, Church St. $150,000.

Calif., Stockton—Church—First Church of Christ Scientist, having plans prepared by G. Allen, archt., 37 South Aurora St., rein.-con. and terra cotta, Center and Flora Sts. $150,000.

Calif., Stockton—College—College of the Pacific, College Park, San Jose, having plans prepared by Davis-Heller-Pearce Co., archts. and engrs., Delta Bldg., seven 2 story, rein.-con., brick and terra cotta buildings, on 50 acre tract, here. $650,000.

Calif., Stockton — Market — Italian Gardeners Society, c/o D. V. Marceau, Yosemite Bldg., plan farmers market building, East St. from Weber to Channel Sts. $150,000.

Que., Lachine—School—Protestant Bd. School Comrs., St. Joseph St., voted $225,000 bonds for new school.

Que., Pointe Aux Trembles—Reformatory—Provincial Government, Quebec, having plans prepared reformatory, here. $200,000. L. A. David, provincial secy.

Que., Quebec—Museum—Provincial Government, Parliament Bldgs., having plans prepared and takes bids in spring, museum. $150,000. O. Vallee, Dept. Pub. Wks., engr.

Ont., Cayuga—Court House and Prison—Provincial Government, Toronto, soon takes bids 3 story, rein.-con. and stone, to replace one recently destroyed by fire. $350,000.

BIDS DESIRED

N. Y., Brooklyn — Hospital — Sterling Private Hospital, c/o Timmis & Chapman, archts. and engrs., 315 5th Ave., New York, will build 5 story, brick, steel and stone, plain foundation, St. Johns Pl., here, by separate contracts under supervision of architects. $325,000. Noted Oct. 19.

N. Y., New York—Apartment—S. Ball c/o G. A. Baggs & Sons, archts., 299 Madison Ave., 5 story, 115 x 130 ft., brick, steel and stone, plain foundation, University Ave., by separate contracts under supervision of architects. $200,000. Noted April 6.

N. Y., New York—Apartments—B. Londen c/o Gronenberg & Leuchtag, archts. and engrs., 450 4th Ave., will build two 5 story, brick, steel and stone, plain foundations, Ft. George Ave., by separate contracts under supervision of architects. $150,000 each.

N. Y., New York—Apartment—Two East 95th St. Corp., c/o J. E. R. Carpenter, archt. and engr., 598 Madison Ave., will build 8 story, 85 x 100 ft., brick, steel and stone, plain foundation, 2-9 East 95th St., by separate contracts under supervision of architect. $500,000.

N. J., Collingswood — School and Gymnasium—Jan. 15, by Bd. Educ., 2 story and basement, 85 x 105 ft. and 1 story, 46 x 129 ft., cut stone, brick and steel, plain foundations. P. A. Davis, 3rd, 1713 Sanson St., Phila., archt. Noted Nov. 2.

Pa., State College—Club—Day & Klauder, archts., Franklin Bank Bldg., Phila., taking bids 4 story and basement, 70 x 170 ft. brick and stone, plain foundation, for Penna. State College. $250,000.

Md., Baltimore—School—Jan. 17, by Mayor and City Council, 3 story, brick, Granada and Oakford Aves. Mottu & White, 324 North Charles St., archts.

La., Baton Rouge—Engineering—Jan. 10, by R. L. Himes, secy. Bldg. Com., Louisiana State University, 2 story civil and mechanical engineering building, $225,000, also underground tunnels for steam pipes, electric power and lighting wires, sewers, etc., $30,000, for State Agricultural College. T. C. Link, Capitol Bldg., state archt.

O., Cleveland — Church — W. C. Jansen, archt., 402 Electric Bldg., taking bids superstructure for 1 story and basement, 100 x 200 ft., brick, steel and concrete, East 109th St. and St. Clair Ave., for St. Aloysius Roman Catholic Church, 10932 St. Clair Ave. $300,000.

O., Cleveland—Commercial—Retail Stores Building Co., c/o W. S. Ferguson Co., archts., 1900 Euclid Ave., taking bids 3 story and basement, 132 x 132 ft., brick and rein.-con., 12th St. and Chester Ave. $200,000.

O., Oxford — Library — Jan. 15, by Bd. Trustees Miami University, 2 story, 72 x 100 ft., brick and concrete on campus. $85,000. F. L. Packard, New Hayden Bldg., Columbus, archt. Noted Aug. 17.

O., Wooster — High School—Bd. Educ., taking bids 2 story, brick, steel and concrete. $350,000. T. R. Ridley, 58 Merriman Rd., Akron, archt.

Ind., Indianapolis — Bank and Office — Meyer Kiser Bank, 136 East Washington St., taking bids 11 story and basement, 60 x 200 ft., rein.-con., brick and terra cotta, East Washington St. $1,000,000. Vonnegut, Bohn & Mueller, Indiana Trust Bldg., archts. Noted Oct. 19.

Ill., Chicago—Apartment—Z. E. Smith, archt., 305 East 55th St., receiving bids 3 story and basement, 100 x 126 ft., rein.-con., brick and steel, 72nd and Constance Sts. $150,000. Owner's name withheld.

Ill., Chicago—Hotel—D. D. Meredith, archt., 418 North Albany St., receiving bids 4 story, 50 x 150 ft., rein.-con., brick and steel, Racine Ave. near Wilson St., for J. P. Lynch 516 Franklin St. $150,000.

Ill., Wilmette—Apartment-Hotel—Beach Manor Real Estate Impvt. Co. c/o R. L. Simons, archt., Beardsley Blk., Elkhart, Ind., receiving bids 9 story and basement, 225 x 225 ft., rein.-con., brick, steel, tile and terra cotta, here. $1,500,000. Noted Sept. 7.

Wis., Kenosha—Grade School—Feb. 10, by Bd. Educ. 2 story and basement, 67 x 180 ft., brick, tile and concrete, plain foundation. $150,000. J. D. Chubb, 109 North Dearborn St., Chicago, archt. Noted Aug. 31.

Neb., Omaha—Club and Office—Jan. 26, by J. and A. McDonald, archts., 204

SUBWAY—BROOKLYN, N. Y.

Bids were opened by Transit Comn., 49 Lafayette St., New York City, Dec. 22, for two-track subsurface railroad extending under Bushwick Ave. from Meserole to Boerum Sts., (A) F. L. Cranford, Inc., 149 Remsen St., (awarded contract); (B) Joslin Constr. Co., Inc., 354 West 24th St., New York City; (C) G. Morris Contg. Corp., 72 Hunterspoint Ave., Long Island City; (D) T. A. Gillespie Co., 7 Dey St., New York City. The unit bids were as follows:

	A	B	C	D
46,500 cu.yd. earth excavation above M.H.W.	$6.20	$5.75	$7.15	$19.00
1,900 cu.yd. earth excavation above and below M.H.W. for sewers	6.20	6.50	7.15	19.00
750 front ft. underpinning buildings less than 7 stories	42.00	50.00	48.00	50.00
425 front ft. maintaining, protecting and securing buildings	15.00	38.00	1.00	40.00
7,630 cu.yd. concrete masonry in place	15.00	15.00	17.40	28.00
35,600 sq.ft. rubbing concrete surface	.11	.05	.10	.10
1,200 cu.yd. protective concrete masonry outside W.P.	15.00	15.00	17.40	28.00
20 cu.yd. rubble stone masonry in place	10.00	10.00	8.00	8.00
20 cu.yd. dry rubble masonry in place	8.00	9.00	6.00	6.00
20 cu.yd. brick masonry in place	35.00	37.00	30.00	30.00
25 cu.yd. removal and disposal of old masonry	50.00	22.00	35.00	10.00
10 cu.yd. hollow terra cotta brick or tile masonry	30.00	30.00	30.00	25.00
18 lin.ft. 4½ in. x 13 in. terra cotta flue lining	1.00	1.00	1.00	1.00
100 bbl. grout of Portland cement	7.00	5.00	5.00	6.00
18 sq.yd. resurfacing concrete masonry	2.50	1.50	5.00	3.00
100 lin.ft. timber piles in place	1.00	1.00	.70	1.00
2 M.ft. timber foundations	100.00	90.00	100.00	100.00
35 M.ft. timber for temporary ramp structure	95.00	100.00	100.00	100.00
25 cu.yd. broken stone or gravel in place	4.00	4.50	5.00	4.00
3,800 sq.yd. waterproofing, 1-ply	.75	.80	.50	1.00
100 sq.yd. waterproofing, 2-ply	1.25	1.50	1.00	1.25
7,000 sq.yd. waterproofing, 3-ply	2.00	2.60	1.50	1.50
300 sq.yd. waterproofing 4-ply	2.00	3.20	2.00	2.00
100 sq.yd. waterproofing 5-ply	2.50	4.00	2.50	2.50
30 sq.yd. waterproofing 6-ply	3.00	5.00	3.00	3.00
100 sq.yd. waterproofing dry ply	.60	.70	.40	.75
515 cu.yd. brick in asphalt mastic	42.00	40.00	40.00	40.00
100 lin.ft. 3 in. C.I. pipe and fittings, class A	1.00	1.00	1.00	1.00
125 lin.ft. 6 in. C.I. pipe and fittings, class A	1.25	1.90	1.50	1.60
830 lin.ft. 8 in C.I. pipe and fittings, class A	1.50	2.30	2.00	2.00
3,300 duct.ft. tunnel ducts in place	.16	.25	.25	.20
20,000 duct.ft. railroad ducts in place	.20	.30	.40	.30
400 tons riveted steel	107.00	115.00	140.00	125.00
2 removings and resettings of steel columns	100.00	50.00	100.00	100.00
2 tons steel ladders, stairs, etc	200.00	250.00	300.00	300.00
370 tons steel beams and shapes	107.00	115.00	140.00	125.00
10 tons steel furnished, not erected	90.00	100.00	90.00	90.00
270 tons steel rods and bars	85.00	92.00	100.00	80.00
10 tons miscellaneous iron castings	150.00	120.00	170.00	150.00
2 tons miscellaneous iron castings for sewers	200.00	130.00	170.00	150.00
200 lb. special wire forms in place	.20	.30	.20	.20
1,500 sq.ft. steel gratings	2.75	2.50	2.50	3.00
300 sq.ft. vault lights	2.75	2.50	2.00	2.50
1,150 sq.yd. sidewalk restored	2.50	2.75	3.00	3.00
2,950 sq.yd. repavement of roadway, asphalt	5.00	4.50	5.00	5.00
800 sq.yd. repavement of roadway, granite block	5.00	2.50	4.00	5.00
100 lin.ft. new bluestone curb in place	1.50	2.50	2.50	2.00
100 lin.ft. new 8 in. granite curb in place	4.50	3.00	4.00	4.00
660 sq.yd. repavement granite block, 6 in. sand base	2.50	2.40	3.00	3.00
2,300 lin.ft. ¾ in. steel electric conduits	.50	.30	.40	.20
100 lin.ft. 1¼ in. steel electric conduits	.75	.55	.75	.50
100 lin.ft. 2 in. steel electric conduits	.95	.62	1.00	.75
5,300 lin.ft. 1 in. steel electric conduits	.50	.45	.50	.30
360 C.I. outlet boxes	2.00	1.60	1.00	1.00
10 C.I. pull boxes in place	7.00	4.00	5.00	3.00
55 lin.ft. 6 in. C.I. pipe and fittings	2.20	1.90	2.00	2.00
40 lin.ft. 3 in. C.I. pipe and fittings	1.60	1.50	1.50	1.50
390 lin.ft. 12 in. vitrified pipe sewers	4.50	3.00	5.00	3.00
470 lin.ft. 15 in. vitrified pipe sewers	5.00	4.00	6.00	4.00
175 lin.ft. 24 in. vitrified pipe sewers	6.00	7.00	10.00	7.00
8 ton C.I. sewer pipe (straight)	100.00	85.00	120.00	100.00
2 tons C.I. sewer pipe (special)	150.00	150.00	200.00	150.00
55 lin.ft. 3 ft. 6 in. x 2 ft. 4 in. concrete sewer	30.00	14.00	12.00	12.00
170 lin.ft. 5 ft. x 4 ft. 3 in. concrete sewer	31.00	32.00	20.00	25.00
1,300 lin.ft. maintaining electric overhead trolley	4.00	4.00	4.00	10.00
350 lin.ft. temporary relocation of track	10.00	6.00	5.00	3.00
640 lin.ft. 6 in. water pipe	1.00	1.20	1.00	1.50
40 lin.ft. 16 in. water pipe	4.00	2.90	3.00	4.00
760 lin.ft. 30 in. water pipe	5.00	5.20	5.00	6.00
20 service connection water pipes, all sizes	25.00	28.00	25.00	25.00
500 lin.ft. 4 in. C.I. gas pipe	1.10	1.00	1.00	1.00
50 lin.ft. 6 in. C.I. gas pipe	1.40	1.60	1.50	1.50
40 lin.ft. 12 in. C.I. gas pipe	3.00	2.00	2.00	2.00
670 lin.ft. 20 in. C.I. gas pipe	4.00	3.50	2.50	4.00
650 lin.ft. 24 in. C.I. gas pipe	5.00	4.60	3.00	5.00
2,440 lin.ft. 4 in. by-passing pipe	2.50	2.60	4.00	2.00
115 lin.ft. 12 in. wrought steel by-passing pipe	4.50	13.00	12.00	4.00
1,180 lin.ft. 20 in. wrought steel by-passing pipe	7.50	18.00	12.00	7.00
1,190 lin.ft. 24 in. wrought steel by-passing pipe	12.50	22.00	18.00	10.00
710 lin.ft. trestle to support by-passing pipe	6.00	4.20	6.00	6.00
230 lin.ft. cable support for pipe over 16 in. diameter	5.00	4.00	6.00	10.00
90 lin.ft. cable support for pipe under 16 in. diameter	5.00	3.80	6.00	6.00
2 service connections for gas pipes	40.00	31.00	30.00	25.00
40 tons new C.I. hubs and spigots (straight)	80.00	90.00	70.00	60.00
5 tons new C.I. hubs and spigots (special)	100.00	130.00	150.00	150.00
2,780 duct.ft. electric ducts and conduits	.40	.60	.50	.50
8 service connection electric ducts	50.00	31.00	50.00	50.00
300 duct.ft. wooden electric ducts and conduits	.40	.90	.50	.50
300 duct.ft. fibre electric ducts and conduits	.40	.90	.50	.50
Overflow sewer, Knickerbocker and Vandervoort Ave., lump sum	3,000.00	3,000.00	4,000.00	2,000.00
Overflow sewer, Johnson and Vandervoort Ave., lump sum	3,000.00	3,000.00	5,000.00	2,000.00
Extended totals	$750,983	$774,635	$858,213	$1,508,657

Buildings (Continued)

Standard Oil Bldg., 8 story, 132 x 132 ft., rein.-con., brick and steel, Southwest corner 18th and Dodge Sts., for B.P.O.E., c/o O. Nielson, secy., Elks Bldg. $1,500,000. Noted Nov. 16.

N. D., St. Thomas—High School—Feb. 1, by Bd. Educ., 2 story and basement, 108 x 140 ft. rein.-con., brick tile, and stone. $150,000. B. D. Keck, 1st Natl. Bank Bldg., Grand Forks, archt.

Calif., Oakland—Banks—Reed & Corlett, archts., Oakland Bank of Savings Bldg., receiving bids 1 story, brick and concrete, Fruitvale Ave. and East 14th St., for Oakland Bank of Savings, Oakland Bank of Savings Bldg. Architects also preparing plans for three 1 story, brick and concrete, banks, in various sections of city, for above owners. $50,000 each.

Calif., Petaluma—Hotel—F. Whitton, supt. of construction, 251 Kearny St., San Francisco, receiving bids 5 story, steel frame, rein.-con. or brick, for Petaluma Hotel Co., c/o Chamber of Commerce. $250,000.

Calif., Sacramento—School—Jan. 15, by Bd. Educ., constructing four 2 story wing additions to present high school, and 4 separate buildings for gymnasium, domestic science, shops and cafeteria, 34th St. $540,000. E. A. Matthews, Call Bldg., San Francisco archt. Noted Dec. 28.

Calif., San Francisco—Apartment—L. Johnson, 2260 19th Ave., receiving bids 3 story and baseemnt, concrete, Bush St. near Leavenworth St. $150,000. Baumann & Jose, 251 Kearny St., archts.

Calif., Tanforan—Clubhouse—G. A. Applegarth, archt., Claus Spreckels Bldg., San Francisco, receiving bids 2 story, frame and plaster, for Pacific Coast Jockey Club, c/o H. Spreckels, secy., 1st Natl. Bank Bldg., San Francisco. $200,000. Noted Aug. 1.

B. C., Vancouver—Store—Jan. 15, by Woodwards Dept. Stores Ltd., Hasting and Abbott Sts., 6 story, 86 x 86 ft. addition, rein.-con., brick, steel, stone and tile, Hasting and Abbott Sts. $150,000. W. T. Whiteway, Hastings St. W., archt. P. P. Brown, 410 London Bldg., engr. Noted Sept. 21.

BIDS RECEIVED

Wis., Kenosha—Courthouse, etc.—Kenosha Co. general contract 3 story and basement, 126 x 226 ft. courthouse and 67 x 138 ft. administration building, rein.-con., brick and stone, plain foundation, from Hutter Constr. Co., 128 Western Ave., Fond du Lac, $675,437; Reisinger & Co., 464 Oakland Ave., Milwaukee, $755,244; J. A. McDonald Constr. Co., 748 Builders Exch., Minneapolis, Minn., general contract and heating, plumbing and electrical work, $767,869. Noted Nov. 30.

Calif., Bakersfield—Hospital—Kern Co. opened bids, group of buildings for hospital, brick, stone and terra cotta, general contract from W. G. Reed, 204 Brock Bldg., Long Beach, $474,000, painting complete addition $22,412, if common brick, omitting heating and ventilating and tanks $427,000, excavating $1.50 per cu.yd.; concrete in foundation $12.50 per cu.yd.; K. E. Parker, 519 California St., San Francisco, general contract $505,800, excavating, grading and filling $22,000; from Currie & Dulgar, Kern Co. Land Bldg., general contract $544,573, if heating and ventilating is omitted deduct $20,000, excavating $1 per cu.yd., concrete in foundation $21 per cu.yd.; heating and ventilating from F. Davidson, Washington Bldg., Los Angeles, $29,440; plumbing, heating and ventilating, combined, from Burnham Plumbing Co., 1220 Webster St., San Francisco, $63,976; plumbing, from K. E. Parker, 519 California St., San Francisco, $24,000, Bakersfield Plumbing Co., Bakersfield, $34,806, using Nelson fixtures. Noted Nov. 16.

Calif., Los Angeles—Apartment—Wilshire-Carondelet Holding Co., 8 story and basement, rein.-con. and brick, Carondelet and Wilshire Blvd., general contract from Lange & Bergstrom, Washington Bldg., Los Angeles, and Sharon Bldg., San Francisco, $440,540; plumbing from J. Hokom, 4312 Moneta Ave., $53,217.

CONTRACTS AWARDED

Mass., Boston—Apartment—M. Bromstein, 64 Charlesgate St. E., will build 5 story, 140 x 220 ft. brick and steel, plain foundation, Audubon Rd., by day labor. $200,000. S. S. Eisenberg, 46 Cornhill, archt.

Mass., Boston—Apartment—Coleman & Gilbert, 331 Huntington Ave., 7 story, brick and rein.-con., plain and wood pile foundation, Gainsborough St. and Huntington Ave., to N. Hurwitz, 294 Washington St. Archts. est. $500,000.

Mass., Brookline (Boston P. O.)—Apartment Hotel—Owners, c/o Henderson & Ross, 148 State St., Boston, 10 story, brick, steel and stone, plain foundation, Chapel St., here to Longacre Eng. & Constr. Co., 345 Madison Ave., New York City. Archts. est. $5,000,000.

Mass., Springfield — Apartment — Lincoln Realty Trust, c/o H. C. Hearne, archt., 387 Main St., will build 4 story, 130 x 145 ft., brick and steel, plain foundation, Bowdoin Terrace, by day labor. $165,000.

Mass., Springfield—Apartment—J. H. Miller, 123 Pleasant Ave., will build 4 story, 110 x 130 ft., brick and steel, plain foundation, Sumner Ave., by day labor. $150,000. B. H. Seabury, 31 Besse Pl., archt.

N. Y., New York—Apartment—I. Kraft, c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., 6 story, 89 x 115 ft., brick, steel and stone, plain foundation, Grand Concourse and 170th St., by day labor. $200,000.

N. Y., New York—Apartment—G. Miltner c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 5 story, 100 x 120 ft., brick, steel and stone, plain foundation, 196th St. and Marion Ave. by day labor. Archts. est. $200,000.

N. Y., New York—Apartment—L. Minnoff, c/o C. Shaefer, Jr., archt. and engr., 394 East 150th St., will build 5 story, 90 x 105 ft., brick, steel and stone, plain foundation, Marcy Pl. near Walton Ave., by day labor. $175,000.

N. Y., New York—Apartment—Robson Realty Co., c/o Margon & Glaser, archts. and engrs., 2806 3rd Ave., will build two 5 story, 90 x 100 ft. and 50 x 87 ft. brick, steel and stone, plain foundations, Grand Ave. and 180th St., by day labor. $150,000 each.

N. Y., New York—Apartment—R. Rothbart, c/o J. M. Felson, archt. and engr., 1133 Bway., will build 5 story, 101 x 103 ft., brick, steel and stone, plain foundation, Grand Concourse and Marcy Pl., by day labor. $185,000.

N. Y., New York—Apartment—Schneider Holding Co., c/o W. Koppe, archt. and engr., 565 East Tremont Ave., will build brick, steel and stone, plain foundation, Mott Ave., by day labor. $500,000.

N. Y., New York—Office—Standard Oil Co. of New York, 26 Bway., general contract brick, steel and stone, 73 New St., to C. T. Wills Inc., 286-5th Ave., about $3,000,000; heating and ventilating to Almirall & Co., Inc., 1 Dominick St., about $100,000.

Pa., Phila.—Bank and Office—Mutual Trust Co., Bourse Bldg., 3 story and basement, 35 x 99 ft. rein.-con., brick and steel, 4th and Market Sts., to Smith-Hardican Co., 1606 Cherry St. Archts. est. $150,000.

Pa., Phila. — Bank and Office — Girard Trust Co., Broad and Market Sts., 8 story and basement, rein.-con., brick and steel, Penn Sq. and Broad St., to Fuller Constr. Co., Morris Bldg., $600,000.

Pa., Phila.—High School—Bd. Educ., 19th and Chestnut Sts., 3 story and basement, 143 x 290 ft., to Melody & Sons, 1713 Sansom St., $800,000.

Pa., Phila.—Hotel—H. Trumbauer, archt., Land Title Bldg., 16 story, and basement, 194 x 230 ft. rein.-con., brick and steel, plain foundation, 9th and Chestnut Sts., to F. W. Mark Constr. Co., Commercial Trust Bldg., for Benjamin Franklin Hotel Co., c/o A. H. Mershon, Land Title Bldg. Noted Dec. 21.

Md., Baltimore—School—Bd. of Awards, School Project 8, 4 story, brick and stone, Lexington St. and Central Ave., to C. L. Stockhausen Co., Gay and Water Sts., $463,427. Noted Dec. 7.

Ind., Ft. Wayne—School—Bd. Educ., 2 story and basement, 143 x 172 ft., brick, to Indiana Eng. & Constr. Co., 201-3 Central Bldg., $155,000. Archts. est. $250,000.

Ind., Indianapolis—Apartment—H. L. Dollman, 420 Merchants Bank, 3 story and basement, 70 x 205 ft., brick, stone and marble, North Pennsylvania St., to Dollman Constr. Co., 420 Merchants Bank. Archts. est. $200,000.

Ind., South Bend—Lodge—Knights of Pythias Lodge, 6 story and basement, 42 x 76 ft., brick and stone, Jefferson Blvd., to Hay-Weaver Co., South Bend (street address not available), $199,654.

Ill., Chicago—Apartment—E. N. Greenbaum, 11 South La Salle St., 3 story and basement, 122 x 162 ft., rein.-con., brick and steel, 4740-46 Greenwood St., to Lindstrom & Johnson, 30 North Dearborn St. Archts. est. $200,000.

Ill., Chicago—Apartment—P. Pfleger, 4438 North Central Park Ave., 3 story and basement, 81 x 125 ft., rein.-con., brick and steel, Ainslee and Washentaw Sts., to A. Morton, 5046 North Lincoln St. Archts. est. $150,000.

Ill., Chicago—Church—St. Rita of Casia Catholic Parish, 1 story, 165 x 168 ft., rein.-con., brick and steel, 2700-24 West 63rd St., to Broline-Nolan Co., 5 North La Salle St. Archts. est. $200,000. Noted Aug. 3.

Okla., Lawton—High School—Bd. Educ., 3 story and basement, 27 x 68 ft., to W. S. Bellows Constr. Co., Herskowitz Bldg., Oklahoma City, $175,000.

Calif., Los Angeles—Apartment—P. B. Fletcher, et al., c/o Walker & Eisen, archts., Pacific Finance Bldg., 13 story, brick and terra cotta, Kenmore Ave., to Lange & Bergstrom, Washington Bldg., Los Angeles, and Sharon Bldg., San Francisco, $1,000,000.

Calif., San Francisco—Apartment—J. Bauer, 2555 Mission St., 3 story and basement, 44 x 149 x 157 ft., frame and plaster, Taylor and Jackson Sts., to C. W. Heyer, Jr., Mills Bldg., $135,000.

Calif., Santa Barbara — High School — Santa Barbara Union High School Dist., 1 and 2 story and basement, rein.-con., to J. Y. Parker, 34 Milpas St., $375,000. Noted Nov. 30.

Calif., Santa Clara—Science—University of Santa Clara, 3 story, rein.-con., to J. S. Sampson, Monadnock Bldg., San Francisco, $148,550. Noted Dec. 14.

Federal Government Work

PROPOSED WORK

Del., Wilmington—Bridges—U. S. Engineer soon receives bids for six steel bridge superstructures, 200-400 ft. long, rein.-con. floors, 6 ft. sidewalks, over Delaware and Chesapeake Canal in Delaware and Maryland. Harrington, Howard & Ash, 1012 Baltimore Ave., Kansas City, Mo., engrs.

Oregon — Road — U. S. Forestry Dept. Bway and Glisan St., Portland, plans road through Santiam Forest Reserve, from Detroit to Niagara, in Marion Co. $100,000. U. S. Government will appropriate 75 % of cost, Marion Co. the remainder.

Calif., Livermore—Buildings, Electrical Work, etc.—C. R. Forbes, dir., U. S. Veterans' Bureau, Arlington Bldg., Wash., D. C., rejected bids for 29 rein.-con. buildings, complete incl. electrical work, plumbing, heating, ventilating, etc., refrigerating, kitchen and laundry equipment, for U. S. Veterans' Hospital, here. Work will be readvertised. Noted Dec. 28.

BIDS DESIRED

N. Y., New York—Tower—Jan. 26 at office U. S. Engineer, 608 Army Bldg., one 100 ft. range finding tower; adv. this issue.

Pa., Pittsburgh—Houses—Jan. 31 at office U. S. Engineer, for lockkeepers houses at Lock 6, Monongahela River; adv. this issue. Noted Dec. 7.

Ga., Savannah — Ward Building, etc.—Jan. 29 by Treas. Dept., Wash., D. C. for additional ward building, remodeling present building, etc., at U. S. Marine Hospital, here. J. A. Wetmore, acting superv. archt.

Ala., Florence—Barges—Jan. 27 at office U. S. Engineer, 4 steel barges; adv. this issue.

Tenn., Nashville—Barges—Jan. 30, at office U. S. Engineer, for 14 steel barges, here; adv. this issue.

O., Cincinnati—Dredging Ladder—Jan. 30 at office U. S. Engineer, 1 dredging ladder for pipe line dredge; adv. this issue.

Tex., Galveston—Dredging—Feb. 1 at office U. S. Engineer, Galveston, dredging Houston Ship Channel; adv. this issue.

Idaho, Boise—Sluice Gates—Feb. 14 at office U. S. Recl. Serv., Denver, Colo., high-pressure sluice gates for Black Canyon Dam, here. A. P. Davis, dir.; adv. this issue.

Idaho, Boise—Valves—Feb. 15 at office U. S. Recl. Serv., Denver, Colo., furnishing 2 needle valves for Black Canyon Pumping Plant, here. A. P. Davis, dir.; adv. this issue.

BIDS RECEIVED

N. Y., Tupper Lake—Equipment, etc.—Spec. 4720—Bureau Yards & Docks, Navy Dept., Wash., D. C., refrigerating equipment, etc. at U. S. Veterans Hospital, here (1) work complete from Wittenmeier Mchy. Co., 850 North Spalding Ave., Chicago $24,570 (190 days); Clothel Refrigerating Co., 61 Bway., New York (1) $26,500 (300 days) (2) $26,100 (300 days); Amer. Carbonic Mchy. Co., Wisconsin Rapids, Wis. (1) $27,000 (300 days) (2) $27,000. Noted Dec. 7.

N. Y., Tupper Lake—Radial Brick Stack—Spec. 4722—Bureau Yards & Docks, Navy Dept., Wash., D. C., for radial brick stack at U. S. Veterans Hospital, here, from A. Custodis, 95 Nassau St., New York $8,775 (35 days) alternates $9,045, $7,652 and $7,922; H. R. Heinicke, Inc., 221 South New Jersey Ave., Indianapolis, Ind. $8,950 (250 days); Ballard Pragg & Co., Inc., 200 5th Ave., New York $9,470 (250 days). Noted Dec. 7.

Federal Government (Continued)

N. Y., Tupper Lake—Tank—Spec. 4724—Bureau Yards & Docks, Navy Dept., Wash., D. C., for steel water tank, tower, etc., at U. S. Veterans' Hospital, here, from Pittsburgh-Des Moines Steel Co., Munsey Bldg., Wash., D. C., $15,890 (240 days) alternate $14,890 (240 days); Chicago Bridge & Iron Wks. Co., 30 Church St., New York, $18,200 (240 days); R. J. Mansfield, 53 Park Pl., New York, $21,433 (240 days). Noted Dec. 7.

Pa., Phila.—Fuel Oil—U. S. Engineer, 815 Witherspoon Bldg., opened bids Dec. 26, furnishing 37,000 bbl. fuel oil as follows: (1) approximately 12,000 bbl. delivered into tanks of U. S. Barge 15, at contractors wharf, per bbl. of 42 gal., (2) approximately 20,000 bbl. delivered into tanks of U. S. vessels from contractors barges anywhere in Delaware River, between Allegheny Ave., Phila., and Ft. Mifflin, Phila., inclusive, per bbl. 42 gal., (3) approximately 5,000 bbl. delivered into tanks of U. S. vessels from contractors barges anywhere in Delaware River between Ft. Mifflin, Phila., and mouth of Christiana River, Del., per bbl. 42 gal., from Atlantic Refining Co., 1211 Chestnut St., (1) $1.785 (2) $1.835 plus $10 per hr. for steam, (3) $1.995; Sun Oil Co., Finance Bldg., (1) $2.10 (2) $2.38 (3) $2.38. Noted Dec. 14.

Va., Leesburg—Post Office—Treas. Dept., Wash., D. C., U. S. Post Office, complete incl. mechanical equipment, here, from E. G. Heflin, 23 Law Bldg., Fredericksburg, $46,500; Pearce Bros., Inc., 220 West 42nd St., New York City, $48,526; Devault & Detrick, Canton, O., (street address not available), $48,631. Noted Dec. 7.

Ill., Rockford—Remodeling—Treas. Dept., Wash., D. C., remodeling and enlarging U. S. Post Office, here, from G. Peterson, 502 North Chicago Ave. $12,795; Hart Bros., Rockford, $12,900; B. A. Lyddon & Son, 1518 Chestnut St. $12,977. Noted Dec. 7.

Wis., Milwaukee—Barges—U. S. Engineer, Federal Bldg., opened bids Dec. 20 for (1) 5 barges (2) 4 barges (3) installing machinery and derricks, from Green Bay Dry Dock Co., Green Bay, (1) $57,500 (2) $49,000 (3) $14,900; Penn Bridge Co., Beaver Falls, Pa., (1) $72,550 (2) $58,040 (3) $9,260; Dravo Contg. Co., Diamond Bank Bldg., Pittsburgh, Pa., (1) $82,400 (2) $68,000 (3) $8,640. Noted Nov. 23.

Wash., Puget Sound—Pier Extension—Spec. 4707—Bureau Yards & Docks, Navy Dept., Wash., D. C., extension to Pier 4, here, (1) work complete, from Henry & McFee, 208 North Light St., Seattle, (1) $440,000 (240 days) alternate $392,000 (240 days) alternate $403,000 (3) $14,000 (4) $8,500 (5) $0.27; J. A. McEachearn, 552 Coleman Bldg., Seattle (1) $473,000 (300 days) (3) $15,400 (4) $10,000 (5) $0.25. Noted Nov. 23.

CONTRACTS AWARDED

W. Va., Huntington—Maneuver Boat—U. S. Engineer, Huntington, steel maneuver boat, Dam 30, Ohio River to Midland Barge Co., Midland, Pa., $21,475. Noted Nov. 23.

Ala., Montgomery—Barge—U. S. Engineer for 1 steel barge to Nashville Bridge Co., Shelby Ave., Nashville, Tenn., $11,740.

Miss., Vicksburg — Barges — Mississippi River Comn., 3rd Dist., P. O. Box 404, 5 steel barges to Dravo Contg. Co., Diamond Bank Bldg., Pittsburgh, Pa., $56,175. Noted Nov. 16.

Wis., Milwaukee—Piers, etc.—U. S. Engineer, Federal Bldg., completion South Arrow Head pile pier, removing old timber crib pier and dredging at Racine Harbor, to Greiling Bros. Co., 110 East Walnut St., Green Bay, $134,552. Noted Nov. 16.

Calif., Mare Island—Riprapping Dike—Spec. 4700—Bureau Yards & Docks, Navy Dept., Wash., D. C., riprapping Dike 12, here, to Daniel Contg. Co., 503 Market St., San Francisco, $675,000. Noted Nov. 23.

Calif., San Diego—Repairs—Spec. 4751—Bureau Yards & Docks, Navy Dept., Wash., D. C., repairs to coaling wharf here, to F. W. Steffgen, 428 Timken Bldg., $3,673 (30 days). Noted Nov. 23.

Miscellaneous

PROPOSED WORK

Monument—Bristol, Conn.—City plans stone memorial monument to war veterans, Boulevard. $25,000. H. A. Hayden, 175 Main St., archt.

Wood Paving Blocks—New York, N. Y.—Bd. Purch., Municipal Bldg., rejected bids opened Dec. 19, furnishing and delivering creosoted wood paving blocks to Dept. Plant & Structures. Will readvertise. Noted Dec. 14.

Dump Truck—Scranton, Pa.—Plans to purchase 3.5 ton dump truck. $6,000.

Dock and Warehouse, etc.—New Orleans, La.—Bd. Port Comrs., Suite 200, New Court Bldg., had surveys made for dock and warehouse at foot of St. Joseph St., $400,000; plans prepared for wharf apron heavy timber constructing, at foot of Barracks St., $30,000.

Wharf and Shed—New Orleans, La.—Eng. Dept. Bd. Port Comrs., 200 New Court Bldg., having plans prepared rein.-con. wharf and shed along Industrial Canal. $1,400,000.

Subways—Cleveland, O.—Plans subways in Euclid, St. Clair, Superior and Payne Aves. from Public Sq. to East 22nd St. and East 9th St. from Prospect to St. Clair Aves. $10,000,000. R. Hoffman, City Hall, engr.

Steam Shovel—Kenosha, Wis.—Kenosha Co., c/o J. F. Herzog, chn., plans to purchase steam shovel. Private plans.

Swimming Tank — Kenosha, Wis. — Fraternal Order of Eagles, c/o A. Schmitz, pres., 657 Symonds St., plans swimming tank and equipment in club house. $25,000. Engineer not selected.

Sign Posts, etc. — Oshkosh, Wis. — City c/o D. Witzel, clk., preparing specifications and soon takes bids for 425 sign posts and 1,700 street signs.

Grand Stand—Kansas City, Mo.—Kansas City Baseball Club, c/o G. Muehlebach, 182 Main St., having plans prepared and soon takes bids for rein.-con. and steel grand stand, 20,000 capacity. Osborn Eng. Co., 2848 Prospect Ave., Cleveland, O., archts.

Grain Elevator—Corpus Christi, Tex.—F. Kell, Wichita Falls, plans concrete grain elevator, here. $250,000. Engineer not selected.

Grain Elevator — Ft. Worth, Tex. — Ft. Worth Elevator Co., 1510 East 1st St., soon takes bids grain elevator with 1,500,000 bushel capacity. J. Smith, pres.

Dredge and Harbor Improvements—Aberdeen, Wash.—Voted $250,000 for dredge and Harbor improvements.

Tube—Oakland, Calif.—Alameda Co. plans election to vote on $3,000,000 bonds to construct tube across Oakland Estuary. G. A. Posey, Courthouse, co. surv.

Rock Crushing Plant—Richmond, Calif.—Healy-Tibbits Constr. Co., 64 Pine St., San Francisco, having preliminary plans prepared for rock crushing plant, here. $250,000. Private plans.

Electric Lighting System—Campbellville, Ont.—Jan. 10, to vote on $35,000 bonds for electric lighting and power distribution system. R. C. Menzies, clk.

Street Lighting System—Lansing, Ont.—North York Twp. having surveys made for street lighting system. $40,000. A. Stocking, Hydro Bldg., University Ave., Toronto, engr.

Rock Crusher—Niagara Falls, Ont.—Stamford Twp. plans to purchase rock crusher. T. R. Stokes, clk.

BIDS DESIRED

Heating and Ventilating Apparatus, etc.—New York, N. Y.—Jan. 11, by J. E. Douglass, acting pres. School Buildings of Bd. Educ., Flatbush Ave. extension and Concord St., Brooklyn, installing heating, ventilating and temperature regulating apparatus in P. S. 80, northerly side of East 120th St., 175 ft. easterly from 1st Ave., also in P. S. 139 on southerly side of West 140th St., 275 ft. easterly of 7th Ave., here.

Steam Rollers—New York, N. Y.—Jan. 10, by J. Miller, pres. Manhattan Boro. Municipal Bldg., furnishing and delivering three 8 ton tandem steam rollers.

Wood Paving Blocks—New York, N. Y.—Jan. 10, by J. Miller, pres. Manhattan Boro. Municipal Bldg., furnishing and delivering 500,000 wood paving blocks, 80,000 gal. gasoline, 6,000 cu.yd. binder stone, 500,000 gal. refined asphalt, 15,000 cu.yd. asphaltic wearing surface sand.

Sewer Brick, Portland Cement, etc.—Richmond, Va.—Jan. 12, at office Dept. Pub. Wks., 765,000 sewer brick, alternate bids for 476,000 sewer brick and 165,000 vitr. paving blocks; 30,000 bbl. Portland cement; 17,600 lin.ft. segment block sewer pipe, with specials, ranging from 30-66 in., alternate bids on 2,700 lin.ft. segment block pipe and 31,200 pieces of vitr. slab liners; 91,000 lin.ft. vitr. pipe with specials ranging from 4-24 in. A. J. Saville, dir. Pub. Wks.; adv. this issue.

Machinery and Equipment—Margerum, Ala.—Alabama Rock Asphalt Co., c/o C. W. Ashcraft, Florence, in market for complete machinery and equipment for development of 700 acre tract of asphalt deposits, here.

Power Plant Equipment—Memphis, Tenn.—Jan. 19, by Bd. Comrs. Memphis Artesian Water Dept., furnishing and installing mechanical auxiliary equipment for new Parkway pumping station, incl. steam and other power plant piping, feed water heater, feed pumps, insulation, boiler breeching, miscellaneous gauges and instruments, boiler settings and Thomas air flow meters. $140,000. Fuller & McClintock, 879 North Parkway, engrs. Noted Dec. 28.

Raising Levee—White Hall, Ill.—Jan. 8, by Hillview Drainage and Levee Dist., raising levee, 21,000 cu.yd. earthwork. Caldwell Eng. Co., Jacksonville, engrs.

Extension to Tail Race and Breakwater—Eau Claire, Wis.—L. A. De Guere, engr., Wisconsin Rapids, taking bids 40,000 cu.yd. sand rock excav. for extension to tail race, also breakwater 500 ft. long, 12 ft. wide, 10 ft. high, timber-crib construction, for Dells Paper & Pulp Co., Dells Dam.

Ball Globes—St. Paul, Minn.—Jan. 8, by H. W. Austin, city purch. agt., one hundred and forty-four 16 in. ball globes with 8 in. fitter openings, seven hundred 12 in. ball globes with 6 in. fitter openings, two hundred and four No. 109, and one hundred No. 104 glass G. E. globes, and one hundred No. 1104 G. E. glass canopies, for Bureau of Lighting. G. M. Shepard, city engr.

Grand Stand, etc.—Topeka, Kan.—T. W. Williamson & Co., archts., 312 Central Bldg., taking bids for stand, 7,000 seating capacity, incl. display stand, concession space and comfort station under stand, for Kansas Free Fair Assn., Fair Grounds. $100,000.

Power Equipment—Lamar, Mo.—Jan. 15, at office of Lamar Water and Electric Plant, additional power equipment. J. M. Earp, mayor and chn. Utilities Com.; adv. this issue.

Crane—Aberdeen, Wash.—Jan. 23, by Port of Grays Harbor, furnishing and erecting 5 ton crane. F. H. Lamb, pres.; adv. this issue.

Street Grader—Oakdale, Calif.—City in market for street grader. G. Macomber, city engr.

Transmission Line Conductors — San Francisco, Calif.—Jan. 10, by Bd. Pub. Wks., furnishing and delivering electric transmission line conductors for two 3 phase 154,000 volt circuits each approximately 96 mi. long, also for material sufficient to extend one circuit an additional 41 mi., to be delivered f.o.b. cars San Francisco, between Aug. 1 and Jan. 2, 1924. $500,000.

Turbines—Winnipeg, Man.—Jan. 22, by Chairman Com. Pub. Utilities, two 5,000 kw. and one 1,000 kw. turbo alternators with auxiliary equipment.

Dry Dock Machinery—Esquimault, B. C.—Feb. 15, (change of date), by R. C. Desrochers, secy. Dept. Pub. Wks., Ottawa, Ont., pumping and other machinery for dry dock here. Noted Dec. 21.

BIDS RECEIVED

Portland Cement—Brooklyn, N. Y.—E. Riegelmann, boro pres., Boro Hall, opened bids Dec. 21, furnishing and delivering 3,500 bbl. Portland cement, from M. M. Canda, 184 3rd St., $9,520; Burroughs Building Material Co., Johnson Ave. and Newtown Creek, $9,764; E. E. Buehler, Co., 103 Park Ave., New York, $10,115. Noted Dec. 14.

CONTRACTS AWARDED

Creosoted Piles and Steel Doors—New Orleans, La.—Bd. Port Comrs., 200 New Court Bldg., creosoted piles to Hattiesburg Creosoted Materials Co., Hattiesburg, Miss., $32,390; 90 steel rolling doors for sacking plant, Market and 7th Sts., to Kinnear Mfg. Co., 7th Ave. and Scotch St., Columbus, O., $35,390.

Wharf and Shed—New Orleans, La.—Bd. Port Comrs., Court Bldg., reconstructing wharf and ratproofing shed on Robin St., to J. Reiss, Carondelet Bldg., $196,634. Noted Dec. 21.

Pile Driving—Milwaukee, Wis.—Sewerage Comn., 508 Market St., driving 2,000 piles varying in length from 35-50 ft., on Jones Island, to W. W. Whitney, Inc., 216 West Water St., $0.123 per ft. Noted Dec. 14.

Portland Cement, etc.—St. Louis, Mo.—G. H. Oetting, supply comr., 1,258 bbl. portland cement in cloth sacks delivered in wagon lots for fairground locker building, to Missouri Portland Cement Co., Post Dispatch Bldg., $3.30 per bbl. less $0.40 for sacks, total $3,800; 430 ton Mississippi River sand and 60 ton Meramic River sand, to St. Louis Material & Supply Co., 320 North 4th St., $2.05 and $2.30 per ton respectively; 140 squares ¾ in. macadam, to Union Quarry Co., 4687 Natural Bridge Ave., $7.73 per square, total $1,100; 60 ton 6 in. and 30 ton 8 in. c.i. pipe, to Hammond-Byrd Iron Co., Amer. Trust Co., Birmingham, Ala., $45.50 per ton in 12 ft. lengths, total $4,500. Notoed Dec. 21.

Traveling Crane—San Francisco, Calif.—City and San Francisco Co., furnishing and installing electric traveling crane in Mocassin Creek Power Plant, Hetch Hetchy Project, to Pawling & Harneschfeger, 32 Beale St., $30,475. Noted Dec. 28.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ADVERTISEMENTS ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE.

OFFICIAL PROPOSALS

Bids: Jan. 23.

Intercepting Sewer

Toledo, Ohio.

Sealed proposals will be received by the Director of Public Service, Toledo, Ohio, until twelve o'clock noon, eastern standard time, on the 23rd day of January, 1923, and then publicly opened and read for the construction of Contract No. 5 of the Intercepting Sewer System, consisting of

18,955 feet of 87 in. Circular Sewer
2,255 feet of 84 in. Circular Sewer
2,640 feet of 78 in. Circular Sewer

all of which will be built in tunnel, together with manholes and appurtenances.

Bidders are invited to submit prices on monolithic concrete, vitrified segment block and brick.

Plans, specifications, contract and bond forms can be secured at the office of the Director of Public Service upon deposit of twenty dollars ($20.00) for each set, which will be refunded provided they are returned in good order on or before February 20, 1923.

Information regarding the work can be obtained through the following offices of our consulting engineers, Fuller & McClintock: 170 Broadway, New York, 319 Summit-Cherry Building, Toledo, 421 Produce Exchange Building, Kansas City Mo., 879 N. Parkway, Memphis, Tenn., and 1001 Chestnut Street, Philadelphia, Pa.

Each proposal must be accompanied by a bond executed by the bidder and a surety company satisfactory to the Director of Public Service in the sum of Ten Per Cent (10%) of the amount of the bid, or in lieu of a bond the bidder may deposit with the Director of Public Service, a certified check on a solvent bank, payable to the order of the Director of Public Service, in amount equal to such bond, said bond or certified check being required as a guarantee that if the bid be accepted, a contract will be entered into and its performance properly secured.

The contract bond will be Fifty Per Cent (50%) of the amount of the contract. Labor and material bids must be separately stated with the price therefor.

The Director of Public Service reserves the right to reject any or all bids or to accept any bid which he may deem advantageous to the City of Toledo.

W. T. JACKSON,
Director of Public Service.

GORGE E. LASKA,
Secretary.

Bids: Jan. 15.

Power Equipment

Lamar, Mo.

Notice is hereby given that sealed tentative bids will be received at the office of the Lamar Water and Electric Plant of the City of Lamar, Missouri, up to 10 o'clock a.m. on the 15th day of January, 1923, and then will be publicly opened for the furnishing of additional power equipment consisting of an engine or engines with direct connected generators as specified in the specifications now on file at the office of the Lamar Water and Electric Plant in the City of Lamar, Missouri. This power equipment is to be used in the construction of Improvements to the electric light system owned by the City of Lamar, Missouri.

The right is reserved to reject any and all bids.

J. M. EARP,
Mayor and Chairman Utilities Committee.

OFFICIAL PROPOSALS

Bids: Jan. 12.

Portland Cement

Richmond, Va.

Sealed proposals will be received at this office until 12 o'clock Noon, January 12, 1923, for the furnishing and prompt delivery to any part of the City, 30,000 barrels of Portland cement. Contract terminating January 1, 1924. Forms of proposals can be obtained on application.

A certified check for amount stated ($4,800.00) on proposals must accompany each bid as a guaranty of execution of contract.

The Director of Public Works reserves the right to reject any and all bids.

ALLEN J. SAVILLE
Director of Public Works.

Contractors Everywhere Read These Advertisements

to see where bids are desired on contracts suited to their available plant and organization. The suggestion is therefore made to advertisers that they word their advertisements so that the contractor will get a good idea of the size and kind of work to be let, and perhaps the plant needed. This should result in an increased number of desirable bidders.

Bids: Jan. 12.

Highway Work

Albany, N. Y.

Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock p.m., on Friday, the twelfth day of January, 1923, for the improvement of highways in the following counties:

Allegany.....(one highway—2.11)
Cattaraugus..(two highways—1.97 & 7.63)
Cayuga & Tompkins..(one highway—2.80)
Oneida.....(one highway—2.75)
Ontario.....(one highway—0.41)
Rensselaer.....(one highway—4.89)
Rockland.....(one highway—3.69)
Steuben.....(one highway—5.22)
Ulster.....(one highway—5.51)

Also for the reconstruction of the following:

Fulton.....(one contract—1.50)
Rensselaer.....(one contract—2.42)

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the division engineers in whose division the roads are to be improved or reconstructed. The addresses of the division engineers and the counties in which they are in charge will be furnished upon request.

The especial attention of bidders is called to "General Information for Bidders" in the itemized proposal, specifications and contract agreement.

HERBERT S. SISSON,
Commissioner.

J. C. FINCH,
Secretary.
State Commission of Highways.

OFFICIAL PROPOSALS

Bids: Jan. 15.

Bulkhead

Jersey City, N. J.

Sealed proposals will be received by the Hudson County Park Commission at its office, 1 Exchange Place, Jersey City, N. J., on Monday, January 15th, 1923, at 11 o'clock a.m., for the construction of a Bulkhead at West Side Park, Jersey City, N. J., and work connected therewith in accordance with plans and specifications on file at the office of the Hudson County Park Commission.

Blank form of bid showing estimate of quantities must be obtained at the office of the Hudson County Park Commission.

Each bidder must accompany his bid with a certified check drawn to the order of the Hudson County Park Commission to the amount of 5% of his bid.

The successful bidder will be required to furnish a surety company's bond to be approved by the Hudson County Park Commission in the full amount of his bid with satisfactory security conditioned for the faithful performance of his contract.

There shall be two contracts ,the original and copy which shall first be signed and executed by the successful bidder and presented to the Hudson County Park Commission for signature.

Bids must be enclosed in sealed envelopes indorsed "Proposals for Bulkhead and Reclamation, West Side Park, Jersey City, N. J.," directed to the Hudson County Park Commission and delivered to the Secretary of the Commission at or before the hour above specified. The Commission reserves the right to reject any or all bids.

Dated: December 18, 1922.
Hudson County Park Commission.
BY JOSEPH FILORAMO, JR.,
Secretary.

Bids: Jan. 23.

Paving

Laredo, Texas.

Sealed proposals will be received by the City Council of Laredo, Texas, at the office of the Mayor, City Hall, until 4:45 p.m., January the 23rd, 1923, for approximately one hundred and twenty thousand (120,000) sq. yds. of paving.

Bids will be received on the following types of paving:

Bitulithic, Limestone Rock Asphalt, Sheet Asphalt, Vitrified Brick and Two Course Concrete.

Plans and specifications may be seen at the office of S. F. Crecelius, Paving Engineer, Puig Building, Laredo, Texas, after January the 1st, 1923.

Bids will be publicly opened and read at 5 p.m., January the 23rd, and the award, if any, will be made after considering bids in connection with the relative values of the different types of paving.

Payment for the city's share of the work will be made monthly in cash for eighty-five (85%) per cent of the work done. Payment for the amount assessed against abutting property will be one-sixth (1/6) cash on completion and balance in five (5) annual payments on improvement certificates bearing interest at seven per cent (7%) per annum.

L. VILLEGAS, Mayor.

CONSTRUCTION NEWS

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close — See Eng. News-Record

Jan. 15 Cyril, Okla. .....Dec. 14
Jan. 15 Burbank, Okla. .....Jan. 4
Jan. 15 Scarboro, Ont. .....Jan. 1
Jan. 15 Yankton, S. D. .....Jan. 11
Jan. 15 Boston, Mass. .....Jan. 11
Jan. 15 St. Paul, Minn. .....Jan. 11
Jan. 16 New York, N. Y. .....Jan. 11
Jan. 19 Dallas, Tex. .....Jan. 11
Jan. 22 Hinsdale, Ill. .....Dec. 21
Jan. 25 Buffalo, N. Y. .....Jan. 11
Adv. Jan. 11.
Jan. 30 Zephyrhills, Fla. .....Jan. 11
Feb. 1 Spokane, Wash. .....Nov. 16

SEWERS

Jan. 15 Buffalo, N. Y. .....Jan. 4
Jan. 15 St. Petersburg, Fla. .....Dec. 28
Jan. 15 Wash., D. C. .....Dec. 23
Jan. 16 Richmond, Va. .....Dec. 21
Jan. 16 South Bend, Ind. .....Jan. 11
Jan. 16 Summit, N. J. .....Jan. 11
Adv. Jan. 11.
Jan. 16 Long Island City, N. Y. ....Jan. 11
Jan. 17 Phila., Pa. .....Jan. 11
Jan. 18 Lodi, Calif. .....Jan. 4
Jan. 22 Mamaroneck, N. Y. .....Jan. 11
Adv. Jan. 11.
Jan. 23 Toledo, O. .....Jan. 4
Adv. Dec. 28 to Jan. 11.
Jan. 23 Charlotte, N. C. .....Jan. 11
Adv. Jan. 11.
Jan. 24 San Francisco, Calif. ....Jan. 4
Jan. 29 Spring Lake, N. J. .....Jan. 11
Adv. Jan. 11.
Feb. 23 Portland, Ore. .....Jan. 11

WASTE DISPOSAL

Jan. 23 St. Louis, Mo. .....Jan. 11
Jan. 24 Fargo, N. D. .....Dec. 7

BRIDGES

Jan. 23 Spokane, Wash. .....Sept. 21
Jan. 23 Spartanburg, S. C. .....Jan. 4
Feb. 7 Mermenton, La. .....Jan. 11
Adv. Jan. 4 and 11.
Feb. 7 Appleton, Wis. .....Jan. 11
Adv. Jan. 11.
Apr. 1 Wilkes-Barre, Pa. .....Dec. 14
Sept. 1, 1923, Sydney, New South Wales, Australia .....Aug. 3

DAMS

Jan. 22 Megantic, Que. .....Jan. 11

EXCAVATION, DRAINAGE, IRRIGATION

Jan. 16 South Bend, Ind. .....Jan. 11
Jan. 22 Olivia, Minn. .....Jan. 11
Feb. 7 Baltimore, Md. .....Jan. 11

STREETS AND ROADS

Jan. 12 New York .....Jan. 4
Adv. Jan. 4 and 11.
Jan. 15 Merced, Calif. .....Jan. 4
Jan. 15 Cortland, N. Y. .....Jan. 11
Adv. Jan. 11.
Jan. 16 Bluffton, Ind. .....Jan. 4
Jan. 16 Michigan .....Dec. 28
Jan. 16 Posen, Ill. .....Jan. 11
Jan. 16 Elkhorn, Wis. .....Jan. 11
Jan. 17 Camden, S. C. .....Jan. 4
Jan. 18 Brooklyn, N. Y. .....Jan. 11
Jan. 20 Racine, Wis. .....Jan. 11
Jan. 20 Boonville, Ind. .....Jan. 11
Jan. 22 Crescent City, Calif. .....Jan. 11
Jan. 23 Laredo, Tex. .....Jan. 4
Jan. 23 Spokane, Wash. .....Dec. 21
Jan. 23 Charlotte, N. C. .....Jan. 11
Adv. Jan. 11.
Jan. 24 Faribault, Minn. .....Dec. 14
Jan. 25 Ft. Smith, Ark. .....Dec. 28
Jan. 25 Dyersville, Ia. .....Jan. 11
Jan. 28 Cisco, Tex. .....Jan. 4
Jan. 30 Quebec .....Dec. 28
Jan. 30 West Virginia .....Jan. 11
Adv. Jan. 11.
Jan. 30 Zephyrhills, Fla. .....Jan. 11
Feb. 1 Michigan .....Jan. 11
Feb. 1 North Carolina .....Jan. 11
Feb. 2 Alabama .....Jan. 11
Feb. 5 Harrisville, W. Va. .....Jan. 11
Feb. 6 Mount Vernon, Ind. .....Jan. 11

Bids Close — See Eng. News-Record

INDUSTRIAL WORK

Jan. 15 Great Falls, S. C. .....Dec. 28
Jan. 17 Charlotte, N. C. .....Jan. 11
Jan. 18 Toronto, Ont. .....Jan. 11
Feb. 5 Shelbyville, Ill. .....Jan. 11
Adv. Jan. 11.

BUILDINGS

Jan. 15 Oxford, O. .....Jan. 4
Jan. 15 Collingswood, N. J. .....Jan. 4
Jan. 15 Dallas, Tex. .....Dec. 21
Jan. 15 Sacramento, Calif. .....Jan. 4
Jan. 15 Vancouver, B. C. .....Jan. 4
Jan. 15 Mankato, Minn .....Jan. 11
Jan. 17 Baltimore, Md. .....Jan. 4
Jan. 18 Montreal, Que. .....Jan. 11
Jan. 19 Monticello, Ia. .....Dec. 21
Jan. 19 Massillon, O. .....Jan. 11
Jan. 24 Holland, Mich. .....Jan. 11
Jan. 25 Owosso, Mich. .....Jan. 11
Jan. 25 Crookston, Minn. .....Jan. 11
Jan. 26 Omaha, Neb. .....Jan. 4
Jan. 27 Port Arthur, Tex. .....Jan. 11
Jan. 27 Logansport, Ind. .....Jan. 11
Jan. 29 Columbus, O. .....Jan. 11
Jan. 29 Oakland, Calif. .....Jan. 11
Jan. 30 Lafaivre, Ont. .....Jan. 11
Jan. 30 Wenatchee, Wash. .....Jan. 11
Jan. 30 New York, N. Y. .....Jan. 11
Jan. 31 Groveport, O. .....Jan. 11
Feb. 1 St. Thomas, N. D. .....Jan. 4
Feb. 1 Chicago, Ill. .....Dec. 21
Feb. 1 Niagara Falls, N. Y. .....Jan. 11
Feb. 1 Thiells, N. Y. .....Jan. 11
Adv. Jan. 11.
Feb. 1 Kansas City, Mo. .....Jan. 11
Feb. 9 Jamestown, N. Y. .....Jan. 11
Adv. Jan. 11.
Feb. 10 Kenosha, Wis. .....Jan. 4
Feb. 15 St. Charles, Minn. .....Jan. 11
Feb. 23 Jamestown, N. Y. .....Jan. 11
Adv. Jan. 11.
Mar. 15 Trenton, N. J. .....Jan. 11
Mar. 23 Shreveport, La. .....Nov. 9

FEDERAL GOVERNMENT WORK

Jan. 15 Metal Work — Key West, Fla. .....Dec. 21
Jan. 15 Pipe Line Dredge—Cincinnati, O. .....Dec. 14
Jan. 15 Dredging—Virginia .....Dec. 28
Jan. 15 Scows—Wilmington, Del. ...Dec. 28
Adv. Dec. 28 to Jan. 11.
Jan. 15 Scows—Phila., Pa. .....Dec. 28
Jan. 15 Mains, Sewers, etc.—Edgewood, Md. .....Jan. 11
Jan. 16 Hospital—Tacoma, Wash. ..Dec. 14
Jan. 16 Hull—Nashville, Tenn. .....Dec. 21
Adv. Dec. 21 to Jan. 11.
Jan. 17 Dredging—Phila., Pa. .....Dec. 28
Jan. 17 Piers—Astoria, Ore. .....Dec. 28
Jan. 18 Remodeling—Boston, Mass. .Dec. 28.
Jan. 18 Furnishing and Placing Rock —New Orleans, La. .....Dec. 21
Jan. 22 Bridges—Alaska .....Dec. 28
Jan. 23 Lock Operating Machinery, etc. —Huntington, W. Va. .....Dec. 28
Adv. Dec. 28 to Jan. 11.
Jan. 24 Levee Work—St. Louis, Mo. Dec. 28
Adv. Dec. 28 to Jan. 11.
Jan. 24 Refrigerating and Ice-Making Plant—Pearl Harbor, H. T. Dec. 14
Jan. 24 Natatorium — Annapolis, Md. .....Jan. 11
Jan. 24 Extension—Wash., D. C. ..Jan. 11
Jan. 26 Tower—New York, N. Y. .Jan. 4
Adv. Jan. 4 and 11.
Jan. 26 Dredging, etc. — Richmond, Calif. .....Jan. 11
Jan. 27 Barges—Florence, Ala. ....Jan. 4
Adv. Jan. 4 and 11.
Jan. 29 Ward Building, etc.—Savannah, Ga. .....Jan. 4
Jan. 30 Dredging Ladder — Cincinnati, O. .....Jan. 4
Adv. Jan. 4 and 11.
Jan. 30 Barges—Nashville, Tenn. ..Jan. 4
Adv. Jan. 4 and 11.
Jan. 30 Extension — New York, N. Y. .....Jan. 11
Adv. Jan. 11.
Jan. 30 Houses—Ft. Benning, Ga. .Jan. 11
Adv. Jan. 11.
Jan. 31 Houses—Pittsburgh, Pa. ...Jan. 4
Adv. Jan. 4 and 11.
Feb. 1 Dredging—Galveston, Tex. .Jan. 4
Adv. Jan. 4 and 11.
Feb. 1 Well—Dona Ana, N. M. ...Jan. 11
Adv. Jan. 11.
Feb. 7 Detonator and Storehouse—Puget Sound, Wash. .....Jan. 11
Feb. 7 Water Supply System — Tiburon, Calif. .....Jan. 11

Bids Close — See Eng. News-Record

Feb. 8 Horses and Props—Cincinnati, O. .....Jan. 11
Adv. Jan. 11.
Feb. 14 Sluice Gates — Boise, Idaho .....Jan. 1
Feb. 15 Furnishing Stone, etc.—Crescent City, Calif. .....Dec. 28
Feb. 15 Valves—Boise, Idaho .....Jan. 1
Feb. 21 Dredging—Galveston, Tex. .Jan. 11
Adv. Jan. 11.

MISCELLANEOUS

Jan. 15 Bulkhead — Jersey City, N. J. .....Dec. 21
Adv. Dec. 21 to Jan. 11.
Jan. 15 Power Equipment — Lamar, Mo. .....Jan. 4
Jan. 19 Power Plant Equipment — Memphis, Tenn. .....Jan. 1
Jan. 19 Bulkhead—Brooklyn, N. Y. Jan. 11
Jan. 22 Machinery and Equipment—Georgia .....Jan. 11
Jan. 22 Turbines—Winnipeg, Man. .Jan. 4
Jan. 23 Crane—Aberdeen, Wash. ...Jan. 4
Adv. Jan. 4 and 11.
Jan. 23 Tar Patching Material, etc. —Trenton, N. J. .....Jan. 11
Adv. Jan. 11.
Jan. 26 Grand Stand, etc. — Topeka, Kan. .....Jan. 11
Feb. 7 Motor Truck — Appleton, Wis. .....Jan. 11
Feb. 15 Dry Dock Machinery—Esquimalt, B. C. .....Jan. 4

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y., Binghamton—Broome Co. plans extension to county hospital waterworks, incl. drilling of several wells, etc. $15,000. W. Weeks, clk. Engineer not announced.

N. Y., Brooklyn—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, rejected bids opened Dec. 22, installing and connecting steel forged crossheads at Atlantic Ave. pumping station, here. Will readvertise.

N. Y., Chenango Bridge — Towns of Chenango and Fenton in conjunction with Bd. Supervs. Broome Co. (Binghamton), plan new water system, here. $100,000.

N. Y., Niagara Falls—Plans mains. $100,000. D. J. Fort, 251 2nd St., city mgr.

N. Y., Potsdam—Plans filtration plant on Racquette River. $30,000-$40,000. Address N. E. Clark, Jr., Potsdam.

N. Y., Watertown—Dept. of Water plans to purchase 500 house service meters. $10-$11 each. J. W. Ackerman, city mgr.

N. Y., West Carthage—Plans filtration plant. $25,000. Address S. D. Hewitt, West Carthage.

Ia., Oakland — Plans waterworks improvements, incl. concrete reservoir and installation of auxiliary pump. $15,000. G. A. Luxford, clk.

Pa., Johnstown—Johnstown Water Co., Locust and Market Sts., plans 600,000,000 gal. reservoir on north fork of Bens Creek, $100,000. This is first part of $2,000,000 program. G. W. Sullivan, Locust and Market Sts., engr.

Mo., Trenton—Voted $175,000 bonds and takes bids in February new filtration plant. Burns & McDonnell, 402 Interstate Bldg., Kansas City, engrs. Noted Sept. 28.

Tex., Bridgeport — Making plans waterworks system. $30,000. Elrod Eng. Co., 3206 Elm St., Dallas, engrs.

Tex., Ft. Worth—Voted $1,500,000 bonds for new mains, filters, etc. D. L. Lewis, city engr.

Tex., Texarkana—Texas & Pacific R. R., Union Sta., Ft. Worth, making plans storage reservoir, here. $125,000. Address Engineers c/o owner.

Tex., Vernon — Making plans storage reservoir. $50,000. A. J. Robinson, city engr.

S. D., Aberdeen — Plans to improve waterworks system incl. 500,000 gal. rein.-

Waterworks (Continued)

con. reservoir, 125 ft. elevated tank, 200,000 gal. capacity, laying 12 mi. main in South Main St., pumphouse. $150,000. F. LeCocq, city engr.

Colo., Grand Junction — Takes bids in February new rein.-con. reservoir, 15,000,000 gal. capacity. $190,000 bonds voted. Burns & McDonnell, Interstate Bldg., Kansas City, Mo., engrs. Noted Dec. 14.

Calif., Scales—See "Excavation, Drainage, Irrigation."

Calif., San Diego — Having plans prepared extending watermains, $300,000; constructing stand-pipe, $85,000. Election will be held probably March 20, to vote on bonds for above projects. F. A. Rhodes, city engr.

Ont., Toronto—Plans 16,000 ft. c. i. mains, mostly 6 in. in following: Manor Rd., $1,762, Brookdale Ave., $2,882, Heath St. E., $3,976. Kingsmere Rd., $1,821, Lexie St., $1,819, Moore Ave., $3,665, Mt. Pleasant Rd., $1,819, Pinehurst Ave., $1,823, Welland Ave., $1,945, Duplex Ave., $2,039, Old Orchard Grove, $4,473, Kilbarry Rd., $2,849, Roe Ave., $4,408 and Wilburton Rd., $2,925. R. C. Harris, city engr.

Ont., Windsor — Essex Border Utilities Comn. plans filtration plant. $760,000 bonds voted. W. Walker, 300 Ouellette Ave., engr.

B. C., North Vancouver—Voted $50,000 bonds for additions and extensions to waterworks system. Work will probably be done by day labor. F. M. Sharp, Municipal Hall, engr.

BIDS DESIRED

Mass., Boston—Jan. 15, by Pub. Wks. Dept., Water Div., 35,000 lb. c. i. flanged frames, 150,000 lb. c. i. service pipe fittings, 30 ton 4 in. iron bell and spigot pipe, 38,000 lb. composition castings, 200,000 lb. c.i. branches, sleeves, curves, etc., 100,000 lb. c. i. manhole frames and covers, 350,000 lb. c. i. hydrant and gate fittings, 65,000 lb. c. i. meter boxes, five thousand fire hundred ⅝ in., two hundred ¾ in., fifty 1 in., thirty five 1½ in., twenty five 2 in. and ten 3 in. meters. F. A. McInnes, water div. engr.

N. Y., Buffalo—Jan. 25, by A. W. Kreinheder, comr. Pub. Wks., Municipal Bldg., 56 rectangular sluice gates; adv. this issue.

N. Y., New York—Jan. 16, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in Ave. A, 1st and 2nd Aves., East 42nd, East 51st, East 62nd, East 69th, East 74th, East 78th and East 81st Sts.

Fla., Zephyrhills—Jan 30, by City Council, waterworks improvements, incl. 200 ton c. i. pipe, 10,000 ft. galv. pipe, one 75,000 gal. tank, 110 ft. tower, 2 centrifugal pumps and engines, pumping station, buildings and well. $25,000. E. V. Camp & Associates, Moreland and De Kalb Aves., Atlanta, Ga., engrs.

Tex., Dallas—Jan. 19, by City Comn., two 2,000,000 gal. steel standpipes, one in Belmont other at Lakewood Heights. $40,000 each. G. D. Fairtrace, city engr.

Minn., St. Paul — Jan. 15, by H. W. Austin, city purch. agt., c. i. pipe specials; lead pipe, thirty ⅝ in., one thousand ¾ in., two hundred and fifty 1 in. and one hundred and twenty five 1½ in. extra strong coils; 2,550 corporation cocks, 190 curb cocks, 200 brass soldering nipples, 150 brass gate valves, for Water Dept. G. M. Shepard, city engr.

S. D., Yankton—Jan. 15, sinking artesian well, 8 in. diam., 640 ft. deep. J. W. Summers, city clk.

CONTRACTS AWARDED

N. Y., Brooklyn — Bd. Water Supply, Municipal Bldg., New York, constructing Mt. Prospect conduit a portion of city conduits of Catskill aqueduct from Shaft 24 of city tunnel in Fort Greene Park, along Cumberland St., Lafayette, Washington and Flatbush Aves., here, to A. Paino, 32 Court St., $995,305. Noted Dec. 28.

O., Cleveland—For 1 story, 30 x 35 ft. pumphouse for Lake Shore Blvd. Pumping Station, to D. Lowensohn, Davis & Farley Bldg., $25,918. Former contract rescinded. Noted Dec. 21.

Mich., Detroit — Secretary Bd. Water Comrs., 176 East Jefferson Ave., pipe line across River Rouge at Fort St. W., to Greiling Bros., 906 McDonald St., Green Bay, Wis., $34,373. Noted Jan. 4.

Kan., Rexford—Complete new waterworks and distribution system, to F. M. Buson Mchy. Co., 308 Mutual Bldg., Kansas City, Mo., $22,000. Noted Nov. 16.

Okla., Oklahoma City—For three 3,450 gal. per minute centrifugal pumping units driven by Marine type high speed engines, to Rhinehart & Donavan, Tradesmans Natl. Bank Bldg., $27,520.

Wash., Yakima — Laying 30,809 ft. of 3-6 in. wood pipe lines for irrigation water, to Coluccio & Erickson, Sloan Bldg., $29,313.

Ont., Port Credit—Steel waterworks intake with anchors and intake crib, to A. Blower, Port Credit. 1,000 ft. 12 in. steel pipe, to Toronto Iron Wks., Cherry St., Toronto. Engrs. est. $40,000.

Ont., Toronto — Bd. Control, to J. T. Farmer, 20 St. Nicholas St., Montreal, Que., five 24 in. horizontal geared stop valves, fitted with 6 in. bypass, $421 each, also twelve 20 in. stop valves, $388.35 each; to F. Hankin & Co., Ltd., 20 St. Nicholas St., Montreal, Que., 242 lengths 20 in. c.i. pipe, $103.25 per length; to J. Inglis Co. Ltd., Strachan Ave., special pipes and castings; to J. T. Hepburn, Ltd., 18 Van Horne St., c.i. specials; to Canadian, Fairbanks Morse Co., Front St. W., one 20 in. steel check valve $301.

Sewers

PROPOSED WORK

N. Y., Niagara Falls—Plans sewers in various streets. $75,000. D. J. Fort, 251 2nd St., city mgr.

Pa., Erie—See "Streets and Roads."

O., Akron—W. F. Peters, dir. Pub. Serv., plans to issue $700,000 bonds for vitr. clay and segmental block sewers, etc., to prevent pollution of Pigeon Creek. J. E. Root, Delaware Bldg., engr.

O., Barberton -- Director Pub. Serv. takes bids in February 74,000 ft. vitr. clay and segmental block sewers in various streets in East Barberton. $225,000. H. W. Alcorn, City Hall, engr.

Mich., Detroit—Had plans prepared 7,263 ft. Butternut St. Arm of Clark Ave. Sewer in Michigan Ave., 24th and Butternut Sts. from Clark Ave. to 14th St., 290 ft. 9 ft., 1,220 ft. 8 ft. 9 in., 700 ft. 8 ft. 3 in., 1,730 ft. 7 ft. 9 in., 1,610 ft. 6 ft. 6 in., 1,375 ft. 3 ft. 4 in. x 5 ft. egg section, also 6,813 ft. Buchanan Ave. Arm of Clark Ave. Sewer in Buchanan Ave. from 29th to 18th Sts., 382 ft. 9 ft. 6 in., 1,120 ft. 9 ft., 1,355 ft. 8 ft. 6 in., 2,638 ft. 7 ft. 6 in., 452 ft. 6 ft. 3 in., 100 ft. 5 ft., 263 ft. 4 ft. 3 in., 291 ft. 3 ft. 4 in. x 5 ft., 73 ft. 3 x 4 ft. egg section, brick or monolithic concrete. J. W. Reid, city engr.

Ill., East St. Louis—Soon receives bids repairing outlet sewer in Kansas Ave., from 14th to 15th Sts. and vicinity, steel reinforcement, etc., $25,000. E. E. Harper, city engr.

Okla., Tulsa — C. Schultz, city engr., takes bids in about 2 weeks, 10,000 ft. 8 in. vitr. clay pipe sewers. $43,000.

Tex., Park Place—Citizens voted $70,000 bond issue for sewerage system. W. N. Pearson, mayor.

Calif., Merced—Having plans completed for outfall sewer, 20,000 lin.ft. 24 in. pipe. Bids will be asked on both tongue, groove, bell and spigot pipe. To exceed $30,000. C. D. Martin, city engr.

Calif., Richmond—Had preliminary plans prepared storm sewers in various sections of city. $350,000-$400,000. H. D. Chapman, city engr.

Ont., Stratford—Plans sanitary sewers in Whitelock St. from Mowat to Louise Sts., Louise St. from Whitelock to Brydges Sts., and Downie St. from Iverness to Gore Sts., storm sewers in Kent Lane, Kent and Iverness Sts. from Nelson to Walnut Sts., and McNab St. from Whitelock to Player Sts., 6,000 ft. vitr. tile pipe, 8 in. up, also remodeling rein.-con. sewage disposal plant. $50,000. A. B. Manson, City Hall, engr.

BIDS DESIRED

N.Y., Long Island City—Jan. 16, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., storm sewers in 25th St. from point about 100 ft. northerly from north line of Riker to Ditmars Aves., combined sewer in 25th St. from Riker to Ditmars Aves.; temporary screen and drop chamber at intersection of 25th St. and Riker Ave.; temporary 30 in. sanitary sewer in 25th St. from Riker Ave. to bulkhead line continuing at an angle of 61 degrees with bulkhead line in a northerly direction to point about 1,250 ft. beyond pierhead line, 2nd Ward.

N. Y., Mamaroneck — Jan. 22, by Bd. Sewer Comrs. of Sewer Dist. 1, Weaver St. School House (1) constructing Contr. 4 of Dist. 1 Sect. A (2) house connections, etc. L. E. Van Etten, 12 Lawton St., New Rochelle, engr.; adv. this issue.

N. J., Spring Lake—Jan. 29, by Mayor and Boro Council, 1,500 lin.ft. 6 and 8 in. sewer. J. M. Braly, Natl. Bank Bldg., boro engr.; adv. this issue.

N. J., Summit — Jan. 16, by Common Council, concrete or vitr. storm water sewer in Essex and Whittredge Rds. J. C. Brigham, City Hall, city engr.; adv. this issue.

Pa., Phila.—Jan. 17, by F. H. Caven, dir. pub. wks., 2,800 ft. concr. and vitr. pipe sewer in Delaware Ave. from Snyder to Bigler Sts., incl. 500 ft. 2 ft. 6 in. x 1 ft. 8 in. concrete, 850 ft. 15-18 in. concrete, 1,500 ft. vitr. pipe piles, $35,000, 5,312 lin. ft. 18 in. creosoted walks at northeast sewerage plant, $15,000, flood lights and accessories at Pennypack Creek sewerage plant, $5,000, 2,352 ft. channel through 40th ward lowlands, 54 ft. wide, 10 ft. deep, rein.-con. sides and bottom, $200,000. J. A. Vogelson, 416 City Hall, engr.

N. C., Charlotte—Jan. 23, by Bd. Comrs., 8 mi. sewers and drains with appurtenances. F. Firth, city engr. W. S. Stancill, comr. pub. wks.; adv. this issue.

Ind., South Bend—Jan. 16, by City Clerk and Bd. of Wks., 8,090 ft. 24 and 36 in. cement pipe. $32,820. F. J. Anderson, city engr.

Ore., Portland—Feb. 23, for extension North Branch Rhine St. Sewer, 1,863 ft. 6-24 in. cement or vitr. pipe, 3,221 ft. 60 in., 3,526 ft. 54 in., 1,204 ft. 48 in. rein.-con. pipe and 1,514 ft. 42 in. and 554 ft. 36 in. plain concrete pipe, 45,255 cu.yd. earth excav. and backfill, etc., $180,574. East 30th St. Sewer, 1,530 ft. 6-10 in. cement or vitr. pipe, $2,688; 26th St. Sewer, 1,534 ft. 8-24 in. cement or vitr. pipe, etc., $4,402; Ballinger Dr. and 86th St. Sewer, 1,666 ft. 8-12 in. cement or vitr., $3,725; East 13th St. Sewer, 472 ft. 6-8 in. cement or vitr., $639. O. Laurgaard, city engr.

BIDS RECEIVED

N. Y., Brooklyn—E. Riegelmann, boro. pres., opened bids Jan. 3, sewers in (1) Lenox Rd. (2) 40th St. (3) East 10th St. (4) Malta St. (5) Vandervoort Ave. (6) Hegeman Ave. (7) Bristol St. (8) Rutherford Pl., from A. Mannino, 263 86th St. (1) 96% of engrs. est. ($7,219); C. F. Vacharis, (1) 97% (2) 109% of engrs. est. ($4,571); Tomasetti & Co., Inc., 1133 60th St., (1) 98% (2) 103%; B. Peconi & Son, 570 18th St., (2) 102% (3) 101% of engrs. est. ($3,348) (4) 87% of engrs. est. ($2,917) (5) 120% of engrs. est. ($2,631) (6) 99% of engrs. est. ($2,264) (7) 105% of engrs. est. ($1,259); G. L. Schrade, 693 Flatbush Ave., (3) 108% (4) 83% (5) 108% (6) 106% (7) 106% (8) 107% of engrs. est. ($1,975); Nazzaro & Querriero, (3) 111%; J. Jennings, Belle Harbor, (4) 103% (5) 133% (7) 123% (8) 122%; J. W. Murphy, (6) 122% (8) 117%. Noted Dec. 28.

O., Lakewood (Cleveland P. O.)—Opened bids Dec. 30, 5,250 ft. 48 in. segmental block intercepting sewer, from J. Winterbottom, 1815 Corning Ave., Cleveland, $162,764; Joseph & Kalill, Bangor Bldg., Cleveland, $172,163. Noted Dec. 21.

CONTRACTS AWARDED

Pa., Wilkes-Barre—Sewers in east end district, to Goeringer Constr. Co., Wilkes-Barre, $59,984.

O., Cleveland—Cuyahoga Co. 4,193 ft. 66 and 72 in. segmental block sewer in Sewer Dist. 1, Impvt. 26, Sect. A, to Gallagher Burke Constr. Co., 1228 Bonnieview Ave., Lakewood, $160,000. Noted Jan. 4.

Ind., Michigan City — Trunk sewer, to Byrne Bros. Constr. Co., 358 East 115th St., Chicago, $507,000.

Mich., Detroit—To W. Blanck Co., 823 Ford Bldg., Ext. 2 of Alter Rd. Sewer $54,090, Lateral 3801 $5,375, Lateral 3809 $5,658, Lateral 3810 $8,056; to Hammen & Co., 4612 Woodward Ave., Watson St. Arm of Bates St. Sewer $64,146; to R. D. Baker, 1631 Elmhurst Ave., Ext. to 3rd Ave. Relief Sewer $30,444; to J. Porath, 745 Griswold St., Byron Ave. Arm south of Highland Park Arm Sewer $22,635, Byron Ave. Arm north of Highland Park Arm Sewer $29,339; to Detroit Drainage Constr. Co., 5099 LeMay Ave., Lateral 3794 $7,067, Lateral 3806 $6,000; to Western Constr. Co., 1208 Ford Bldg., Lateral 3800 $19,517; to Langley & Barton, 1604 Pennsylvania Ave., Lateral 3802 $3,900; to A. G. St. John, 400 Penobscot Bldg., Lateral 3803 $9,600, Lateral 3804 $11,300. Noted Dec. 21.

Mich., Springwells—To A. Rossi, 1984 Erskine St., Detroit, 2,657 ft. Sect. 22 in Colson Ave., $34,006; to W. Blanck & Co., 827 Ford Bldg., 3,015 ft. Sect. 23 in. Marconi, Springwells and Pompeii Sts., $43,200. Noted Jan. 4.

Kan., Oakley—Complete new sewerage system and disposal plant, to Reed & Wheelock, Clay Center, $47,284. Noted Dec. 14.

Okla., Sand Springs—Monolithic storm sewers, to Comstock-Smedley Constr. Co., 432 Iowa Bldg., Tulsa, $52,002. Noted Dec. 14.

Calif., Watts — Cement pipe sewerage system, to J. G. Beckford, San Fernando Bldg., Los Angeles, $445,000. Noted Dec. 21.

Waste Disposal

PROPOSED WORK

Wis., West Allis—Rejected bids garbage incinerator. Will readvertise soon. A. L. Wichner, supt. Pub. Wks. Noted Aug. 31.

BIDS DESIRED

Mo., St. Louis—Jan. 23, by Bd. Pub. Serv., 208 City Hall, disposal of city garbage amounting to average of 225 ton daily. $165,000. C. H. Fisk, 324 City Hall, engr. Noted Nov. 23.

CONTRACTS AWARDED

Ont., Toronto—To F. Hankin Co., 20 Nicholas St., Montreal, Que., 400 ton concrete and brick garbage incinerator, $203,000. Noted Dec. 21.

Bridges

PROPOSED WORK

N. H., Manchester—State Hy. Dept., Concord, having plans prepared bridge here. $750,000-$800,000. Fay, Spofford & Thorndike, 200 Devonshire St., Boston, engrs.

N. Y., Niagara Falls—Plans repairs and replacements on Pierce Ave. Bridge, $30,000; steel bridge over Gill Creek, at Walnut Ave. and Sugar St., $40,000. D. J. Fort, 251 2nd St., city mgr.

N. Y., Rochester—Plans east approach to bridge over Genesee River between Lewiston Ave. and Ridge Rd., $55,000, also extending Arbordale Ave., $4,500. C. A. Poole, city engr.

O., Girard — Trumbull Co. (Warren) takes bids in March, steel and concrete bridge, here. $1,000,000. Wendell P. Brown & Co., 412 Finance Bldg., Cleveland, engrs.

Wisconsin—Following are county appropriations for county aid bridge construction. Adams Co. $2,000, J. A. McGregor, Friendship, comr.; Ashland Co. $6,500, W. E. Dillon, Highbridge, comr.; Barron Co. $4,200, E. Gleason, Barron, comr.; Bayfield Co. $9,000, J. Friberg, Washburn, comr.; Buffalo Co. $27,434, J. Rhinehart, Nelson, comr.; Burnett Co. $9,200, G. E. Miller, Webster, comr.; Calumet Co. $3,500, J. Gillis, Chilton, comr.; Chippewa Co. $24,768, P. O. Lokrantz, Chippewa Falls, comr.; Clark Co. $10,562, O. Weymiller, Neillsville, comr.; Dane Co. $20,000, E. J. Smith, Courthouse, Madison, comr.; Door Co. $4,975, J. M. Laurie, Sturgeon Bay, comr.; Douglas Co. $5,125, C. Hanson, Superior comr.; Eau Claire Co. $16,000, G. Osborne, Eau Claire, comr.; Grant Co. $35,693, H. Mink, Lancaster, comr.; Iowa Co. $9,537, C. Wonn, Saxon, comr.; Jackson Co. $21,893, O. Overlien, Black River Falls, comr.; Jefferson Co. $19,023, R. D. Royce, Ft. Atkinson, comr.; Juneau Co. $1,500, A. V. Robison, New Lisbon, comr.; Kenosha Co. $1,650, J. F. Herzog, Kenosha, comr.; Kewaunee Co. $7,633, M. Shaw, Algoma, comr.; La Crosse Co. $852, J. Hintgen, La Crosse, comr.; Lafayette Co. $15,000, G. H. Priestley, Darlington, comr.; Langlade Co. $7,093, C. Olsen, Antigo, comr.; Lincoln Co. $5,000, H. H. Kuehling, Merrill, comr.; Manitowoc Co. $15,380, J. Connell, Manitowoc, comr.; Marathon Co. $27,849, J. H. Vogt, Wausau, comr.; Marinette Co. $13,605, A. Eklund, Peshtigo, comr.; Monroe Co. $15,597, C. H. Millard, Sparta, comr.; Oneida Co. $10,000, B. L. Horr Rhinelander, comr.; Outagamie Co. $12,428, A. G. Bruswitz, Appleton, comr.; Pepin Co. $7,000, G. A. Goss, Durand, comr.; Polk Co. $2,100, C. W. Nystrom, Balsam Lake comr.; Portage Co. $23,500, T. E. Cauley, Stevens Point, comr.; Racine Co. $5,000, W. A. Bechthold, Racine, comr.; Richland Co. $31,469, W. V. Robinson, Richland Center, comr.; Rock Co. $20,000, C. E. Moore, Janesville, comr.; Sawyer Co. $8,300, E. J. Collett, Haywood, comr.; Shawno Co. $29,674, W. F. Meyer, Shawano, comr.; Sheboygan Co. $30,275, G. W. Ubbelohde, Sheboygan comr.; Taylor Co. $19,119, C. Kelnhoffer, Medford, comr.; Trempealeau Co. $15,325, E. F. Robering, Arcadia, comr.; Vernon Co. $15,440, A. Ristow, Viroqua, comr.; Vilas Co. $3,000, W. Hunter, Eagle River, comr.; Washburn Co. $8,000, J. R. Allen, Spooner, comr.; Waushara Co. $1,300, G. Grimm, Wautoma, comr.; Winnebago Co. $12,671, J. Binning, Oshkosh, comr.; Wood Co. $19,197, E. Morris, Wisconsin Rapids, comr.; Dodge Co. $30,000, E. T. Klug, Juneau, comr.; Green Co. $30,050, E. J. Smith, Monroe, comr.; Price Co. $4,550, B. M. Griffin, Phillips comr.

South Dakota—See "Streets and Roads."

California — Dumbarton Bridge Assn., Redwood City, plans concrete and steel toll bridge with bascule type of draw in channel, over San Francisco Bay at Dumbarton Straits, San Mateo Co. $1,212,000. J. MacBain, care County Clerk, Redwood City, interested.

Ont., Brantford—Soon takes bids 420 ft. rein.-con. bridge with 3 arch spans, center span 140 ft. long and 2 end spans 135 ft., over Thames River. $335,000 bonds voted. F. P. Adams, City Hall, engr. Noted Nov. 23.

BIDS DESIRED

West Virginia—See "Streets and Roads."

La., Mermentau—Feb. 7, by Louisiana Highway Comn., Reymond Bldg., Baton Rouge, bridge over Mermentau River, here, on Federal Aid Project 122. J. M. Fourmy, ch. engr.; adv. this issue.

Wis., Appleton—Feb. 7, by E. L. Williams, city clk., bridges across Fox River at Lawe and Cherry Sts. O. F. Weissgerber, city engr.; adv. this issue.

BIDS RECEIVED

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, opened bids Dec. 21 for bridges (1) 2 concrete, Route 1, Sect. 13-B, Wabash Co. (2) concrete, Route 1, Sect. 15-B, Lawrence Co. (3) 2 concrete and substructure for steel, Route 1, Sect. 16-B, Lawrence Co. (4) superstructure for steel, Route 1, Sect. 16-C, Lawrence Co. (5) 1 steel, Route 1, Combination Z, Lawrence Co. (6) 3 concrete and substructure for steel, Route 1, Combination A-1, Lawrence Co. (7) 3 concrete and 1 steel, Route 1, Combination B-1, Lawrence Co. (8) 5 concrete and 1 steel, Route 1, Combination D-1, Lawrence Co. (9) 2 concrete, Route 26, Sect. 1, Stephenson Co. (10) 3 concrete, Route 42, Sect. 112, Cook Co., from L. Clotfelter, Hillsboro, (1) $13,951 (2) $15,908 (3) $119,818; Whitewater Bridge Co., Whitewater, Wis., (1) $15,381; D. W. Carmine Constr. Co., Sullivan, (1) $15,385; M and P Contg. Co., Rockport, Ind., (2) $17,665 (7) $158,000 (8) $191,500; Vincennes Bridge Co., Vincennes, Ind., (2) $17,984 (3) $123,505 (4) $32,372 (5) $152,000 (8) $184,500; Stressenreuter Bros., 3020 South Halsted St., Chicago, (3) $122,670 (5) $156,196; Central States Bridge Co. (address not available), (4) $30,175; Stein Constr. Co., 204 Grand Ave., Milwaukee, Wis., (4) $32,809 (7) $187,500; W. C. Johnson, 512 South High St., Belleville, (5) $164,198 (7) $173,915 (8) $185,806; J. P. Lyon, Robinson, (6) $154,000; J. R. Stevens, Kirkwood, (9) $14,103; Gund-Graham, Freeport, (9) $14,283; F. Keeney, Forreston, (9) $14,372; G. Sheldon, Putnam Bldg., Davenport, Ia., (10) $214,407; Oltendorf Constr. Co., Palatine, (10) $258,467; C. E. Giertz, Elgin, (10) $269,854. Noted Dec. 14.

Missouri—See "Streets and Roads."

Missouri — State Hy. Dept., Jefferson City, opened bids four 60 ft. and one 50 ft. steel truss, one 50 ft. I-beam and two 80 ft. skewed steel truss spans on rein.-con. pile foundations, on road from Charleston to Wolf Island, Federal Aid Project 198B, Mississippi Co., from Keeley Bros. Contg. Co., 2100 State St., East St. Louis, Ill., $34,490; R. L. Williams, Wyatt, $50,166. Noted Nov. 16.

Missouri—State Hy. Dept., Jefferson City, three 410 ft., three 250 ft., two 190 ft., two 100 ft. and six 50 ft. steel truss, two 25 ft., three 24 ft. and two 45 ft. steel girder spans, 5 steel towers, 11 concrete piers, 20 ft. roadways, etc., over Missouri River at Lexington, Federal Aid Project 223, Lafayette and Ray Counties, from Missouri Valley Bridge & Iron Co., 4th and Walnut Sts., Leavenworth, Kan., $439,080; Mt. Vernon Bridge Co., Mt. Vernon, O., $526,020; McClintic-Marshall Co., Oliver Bldg., Pittsburgh, Pa., $561,026. Noted Nov. 16.

Missouri—State Hy. Dept., at div. office Marble Hill, opened bids Dec. 27, deck girder and steel truss span bridge on road from Marble Hill to Patton, Federal Aid Project 202A, Bollinger Co., from M. E. Gilliox, Monett, $37,570; C. P. O'Reilley & Co., Wainwright Bldg., St. Louis, $38,041; W. A. Reynolds, Marble Hill, $39,165. Noted Dec. 7.

Missouri—State Hy. Dept. at div. office Neosho, opened bids Dec. 27, one 30 ft. rein.-con. deck girder, one 80 ft. and two 50 ft. steel truss and four 20 ft. rein.-con. slab spans, 20 ft. roadways, concrete substructures, on road from Neosho to Granby, Federal Aid Project 155, Newton Co., from Concrete & Steel Constr. Co., 214-223 West 3rd St., Joplin, $28,114; Kelley & Underwood, Granby, $28,441; M. E. Gilliox, Monett, $31,343. Noted Dec. 21.

Missouri—State Hy. Dept. at div. office Fredericktown, opened bids Dec. 28, one 35 ft. rein.-con. deck girder, two 50 ft. and one 140 ft. steel truss spans, 20 ft. roadways, on road from Fredericktown westward, Federal Aid Project 203A, Madison Co., from M. E. Gilliox, Monett, $44,434; Hogan & Humphreys, Little Rock, Ark. (street address not available) $49,252. Noted Dec. 21.

Missouri—State Hy. Dept. at div. office Carthage, opened bids Dec. 28, one 70 ft. and two 60 ft. rein.-con. arch spans, spandrel filled, 20 ft. roadway, 2 concrete piers, 2 concrete abutments and wing walls, over Spring River, on road from Carthage eastward, Federal Aid Project 84, Jasper Co., from M. E. Gilliox, Monett, $19,311; Concrete & Steel Constr. Co., 214-223 West 3rd St., Joplin, $19,155; Carterville Constr. Co., Carterville, $19,765. Noted Dec. 21.

Missouri—State Hy. Dept., at div. office Platte City, opened bids Dec. 29, one 70 ft. rein.-con. arch span-spandrel filled, 20 ft. roadway, on Sta. 399 plus 15, and one 30 ft. rein.-con. arch span, spandrel filled, 34 ft. roadway, over Mitchell Creek, on Sta. 199 plus 90, on road from Parkville southeastwardly, Federal Aid Project 48B, Platte Co., from Carterville Constr. Co., Carterville, $25,466; T. A. Woods Constr. Co., Smithville, $26,239; Diemer-Williamson Constr. Co., Brookfield, $29,205.

CONTRACTS AWARDED

Mass., Boston—Pub. Wks. Dept., one 110 ft. span, steel and concrete girder bridge, 100 ft. wide, over Boston & Albany R.R., Beacon St., to Phoenix Bridge Co., 110 State St., $93,404. Noted Dec. 14.

North Carolina—State Hy. Dept., Raleigh, constructing rein.-con. bridge with steel draw span over Roanoke River near Scotland Neck, known as Edwards Ferry Bridge, State Project 138 B, Northampton and Halifax Counties, to Pensacola Shipbuilding Co., Amer. Natl. Bank Bldg., Pensacola, $347,189; rein.-con. bridges and culverts on State Project 201, Carteret Co., to Batson-Cook Co., West Point, Ga., $25,000. Noted Dec. 28.

Ia., Onawa—Monona Co., Primary Bridge Projects 48 and 171, 12 box culverts, 4 culvert extensions, 1 pony truss, 1 multiple span I-Beam and 3 deck girder bridges, to Lamoreaux Bros., 805 Brandeis Theatre Bldg., Omaha, Neb., $36,857.

Minnesota—State Hy. Dept., St. Paul to Minneapolis Bridge Co., Metropolitan Life Bldg., Minneapolis, Bridge 3700 over Baudette River at Baudette, State Project 11-24, Federal Aid Project 227, five 80 ft. deck truss spans, $44,850, Bridge 3112, Beltrami Co., State Project 8-25, Federal Aid Project 57, three 75 ft. truss spans, $23,000; to Ormand & Fellard, Rochester, Bridges 3799 and 3800, over Des Moines River, Cottonwood Co., State Project 16-26, Federal Aid Project 314, 50 ft. deck girder and three 40 ft. concrete deck girder spans respectively, $9,300 and $24,355 respectively; to Wausau Iron Wks., Wausau, Wis., Bridge 3945, over Minnesota River, Le Sueur Co., State Project 5-27, Federal Aid Project 213, 400 ft., steel, $52,188; to Widell Co., Mankato, Bridge 3921, Steel Co., State Project 1-39, three 40 deck girder spans, $19,989. Noted Oct. 14 and Dec. 7.

Minn., Chaska—See "Streets and Roads."

S. D., Yankton—Meridian Hy. Bridge Co. steel superstructure for double deck bridge, 5,820 ft., incl. approaches, over Missouri River, to Bethlehem Steel Co., Bethlehem, $381,350. Noted Dec. 28.

Missouri — State Hy. Dept., Jefferson City, one 50 ft. one 60 ft. and two 70 ft. steel bridges with 20 ft. slab approaches, near Faucett, Buchanan Co., to F. E. Marsh & Co., Jefferson, Ia., $57,812. Buchanan Co., owner. Noted Dec. 21.

Missouri—State Hy. Dept. at div. office Hermann, one 200 ft. and three 95 ft. steel truss, two 35 ft. I-beam and three deck plate girder spans, 1 concrete abutment, 4 rein.-con. pile bents, 5 rein.-con. piers, 20 ft. roadway, etc., over Gasconade River at Mt. Sterling on road from Jefferson City to St. Louis, Federal Aid Project 219, Gasconade Co., to Wausau Bridge & Iron Wks., Wausau, Wis., $109,000. Noted Jan. 4.

Tex., Kaufman — Kaufman Co., grading, etc., 10.31 mi. Highway 51, from Van Zandt Co. line west from Terrell east, 24 ft., 413 cu.yd. concrete, 20,497 cu.yd. roadway and 19,251 cu.yd. borrow excav., 42,920 lb. reinforcing, 1,414 lin.ft. concrete piling, to C. W. Burgess, 501 Dallas Co. State Bank Bldg., Dallas, $23,590. Engrs. est. $25,949 incl. 10 for engineering and contingencies.

Tex., Junction—Kimble Co. grading and gravel surfacing 8.75 mi. Highway 27, 16 ft., 883 cu.yd. concrete, 41,505 cu.yd. roadway and 4,219 cu.yd. loose rock excav., 10,858 cu.yd. gravel surfacing, 73,394 lb. reinforcing steel, to W. T. Hutto & Sons, Gonzales, $48,118. Engrs. est. $52,157.

Ore., Coquille — Coos Co., steel girder draw-span over Catchny Slough, near Marshfield, to M. W. Payne, Marshfield, $23,796. Noted Dec. 7.

Bridges (Continued)

California—State Hy. Dept., Sacramento, bridge across Stony Creek, near Hamilton City, Glenn Co., to A. W. Kitchen, Piedmont, $88,238; bridge over San Francisco and Sacramento R.R. near Denverton, Solano Co., to O. B. Chaney & Sons, Acampo, $12,540. Noted Jan. 4.

B. C., Vancouver—Burrard Inlet Bridge & Tunnel Co., North Vancouver, bridge over Second Narrows, Burrard Inlet to connect Vancouver and North Vancouver, to Northern Constr. Co., Ltd., 736 Granville St., $1,250,000. McClintic-Marshall Constr. Co., Oliver Bldg., Pittsburgh, withdrew their contract. Noted Aug. 31.

Dams

PROPOSED WORK

N. Y., Hornell—City and State plan daming Canisteo River to eliminate flood danger. $400,000. F. H. Robinson, city engr.

Wash., Kettle Falls—See "Industrial Works."

Wash., Yakima — City having surveys made dam at Rattlesnake Creek, pipe line, etc. C. F. Wilson, Yakima, engr. Noted Dec. 7.

Calif., Scales—See "Excavation, Drainage, Irrigation."

Ont., Ottawa—N. Cauchon, chn. Ottawa Town Planning Comn., plans dam above Lemieux Island in Ottawa River, to develop 30,000 hp. N. H. H. Lett, city clk.

BIDS DESIRED

Que., Megantic—Jan. 22, by D. L. Lippe, clk., concrete dam and other works. $75,000. J. O. C. Mignault, 24 Sanborn St., Sherbrooke, engr.

Railways

PROPOSED WORK

New York—Black River Traction Co., 753 West Main St., Watertown, plans extending trackage system to cover northeast section of city. $40,000-$50,000. Address L. Schmerzman, Main St. W., Watertown.

North Carolina—Seaboard Air Line Ry., Royster Bldg., Norfolk, Va., and Carolina Power & Light Co., Raleigh, (street address not available), plan 1½ mi. spur line from point on Seaboard Air Line Ry. near Moncure, to point on Cape Fear River, near Brickhaven, at which point Carolina Power & Light Co. will construct large steam plant. $30,000. W. D. Faucette, ch. engr. of Seaboard Air Line Ry. P. A. Tillery, genl. mgr., Carolina Power & Light Co.

Montana—Brook-Scanlon Lumber Co., Libby, having surveys made by M. D. Mohler, engr., Libby, for 6 mi. standard gauge logging railroad between Libby and Eureka. $65,000.

Washington — See "Industrial Works" under Kettle Falls.

Ontario—Ratepayers of Ottawa voted to purchase civic street railway now owned by Ottawa Electric Co., and plan to expend $1,500,000 for 17 mi. single track, carbarns and 47 new cars. N. H. H. Lett, Ottawa, city clk.

Ontario—Temiskaming & Northern Ontario Ry., North Bay, having estimates made for 6-20 mi. branch line from either Englehart or Swastika Sta. eastward to Kirkland Lake and Larder Lake mining districts and possibly further east, 80 lb. rails, wood ties, gravel ballast. $300,000 to $1,000,000. S. B. Clement, North Bay, ch. engr.

CONTRACTS AWARDED

Ontario—Canadian Natl. Ry., 407 Old Union Sta., Toronto, 29½ mi. single track, steam railroad connecting Canadian Natl. Ry., with Natl. Transcontinental Ry., near Nakina, known as Long Lake cut off, incl. grading, clearing, gravel ballast, 80 lb. rails, etc., to Foley, Welch & Stewart, Ltd., 739 Hastings St. W., Vancouver, B. C. Noted Nov. 23.

Excavation, Drainage, Irrigation

PROPOSED WORK

Fla., Bradentown — Defeated $50,000 bonds for excavating Manatee River and filling in 7 acres. Kirley & Myler, Bradentown, engrs. Noted Nov. 23.

Mo., Alexandria—Des Moines & Mississippi Levee Dist. 1, Clark Co. (Kahoka) had plans prepared 36 mi. ditches, 0.7 mi. levees, 352,000 cu.yd. earth excav. incl. pumping plant. C. Wiegner, Memphis, Mo., ch. engr. Morgan Engr Co., Goodwin Institute, Memphis, Tenn., consult. engrs. Noted Nov. 2.

Calif., Oakdale—Oakdale Irrigation Dist. plans election to vote on $200,000 or more bonds, for canal enlargements, etc. R. E. Hartley, Oakdale, engr.

Calif., Scales — Peer & Berkey, represented by J. P. Sweeney, Nevada Bank Bldg., San Francisco, plans 4.51 mi. of 60 in. riveted steel pipe line, 56,100 linft. earth and rock canals, 2 concrete diversion dams, 20 ft. high, 100 ft. long, several concrete storage dams, power plants developing 36,000 hp. using impulse wheels direct connected to generators, fall of 1,330 ft. 250 sec.ft. through penstocks.

B. C., Penticton—See "Miscellaneous."

BIDS DESIRED

Md., Baltimore — Feb. 7, by Bd. of Awards at office of City Register, City Hall, dredging and making fill at proposed McComas St. bulkhead. Contr. 1, 1,300,000 cu.yd. excav. B. Hill, harbor engr. A. E. Christhilf, ch. engr.

Minn., Olivia—Jan. 22, by A. O. Schmidt, aud. Renville Co., Co. Ditch 85A, 7 mi. open ditch, 267,861 cu. yd. excav., $48,215; 228,200 lin.ft. 5-24 in. tile, $88,161. E. L. Chamberlain, Olivia, engr.

BIDS RECEIVED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, opened bids Jan. 3, dredging Fresh Creek from head of Fresh Creek Basin to channel of Jamaica Bay, from Wilm & Quinlivan, 2 Rector St., New York, $0.5803 per cu. yd.; Gull & Finlay, $1.2305. Noted Dec. 28.

CONTRACTS AWARDED

N. J., Jersey City—Pennsylvania R. R., Broad St. Sta., Phila., removing 20,000 cu. yd. rock and 500 cu.yd. earth, here, to H. S. Kerbaugh Co., 11 East 43rd St., New York City. $200,000.

Wis., Green Bay—Hotel Wisconsin Co., c/o W. Schroeder, 86 Michigan St., Milwaukee, excavating and wrecking for 9 story and basement, 130 x 160 ft., brick and concrete hotel, plain foundation, to L. M. Hansen Co., 113 West Walnut St.

Ore., Redmond—Central Oregon Irrigation Dist. 12 ft. creosoted wood flume to Continental Pipe Co., 211 Lewis Bldg., Portland, $61,664; foundations for flumes, Sect. 1, pedestals for 4 post bents, Sects. 1-A, and substructures for flume, Sect. 2-C, to Warren Constr. Co., Craig Rd., Portland, $70,960; transitions and canal lining, Sect. 4, intake, Sect. 5, to Inland Constr. Co., Ry. Exch. Bldg., Portland, $20,559. Total $153,183.

Streets and Roads

PROPOSED WORK

N. Y., Binghamton—Plans paving 1,500 ft. Park Ave., 3,000 ft. State St. and 1,000 ft. of various streets. W. E. Weller, city engr.

N. Y., Canandaigua — Plans paving Telyea and Adelaide Sts., et. al. $110,413. Engineer not announced.

N. Y., Hornell—Plans new paving. $100,000. F. H. Robinson, city engr. Noted Aug. 2.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., rejected bids repaving Canal St. also flagging, reflagging and paving West 190th St., granite block. Noted Dec. 21.

N. Y., Niagara Falls — Plans asphalt pavement on portions of Main St. between James St. and city line. $10,000; Sugar St. overhead crossing $15,000; repaving Pierce Ave., various materials, $63,560 based on granite or wood block. W. Bennett, city engr.

N. Y., Rochester—See "Bridges."

N. Y., Watertown—Plans new asphalt paving. $40,000-$45,000. P. B. Sutton, city engr.

Pa., Erie—Plans asphalt pavement on State St. from Mill Rd. to Glenwood Park. $60,000; 28th St. from Raspberry St. to Elmwood Ave., $11,300; also 8 in. tile sewers in 32nd St., $2,300. Patterson St., $2,300, and 12th St., $2,000. F. G. Lynch, city engr.

Pa., Greenville — Plans paving South Mercer, West Main and North High Sts., to exceed $30,000. A. Clarke, city engr.

N. C., Greenville—Pitt Co. plans paving 7 mi. road from Greenville to Cox Mill, concrete or asphalt. $200,000. J. B. Harding, Greenville, engr.

Ohio—Dept. Highways and Pub. Wks., Columbus, rejected bids opened Dec. 29, grading, bridging and paving 3.965 mi. Sect. "R" Dayton-Greenville Rd., Montgomery Co. Noted Jan. 4.

O., Canton—Stark Co. takes bids about Jan. 25 grading and paving 1.72 mi. Sect. "B" Canton-Sherman Church Rd., 16 ft., 13,110 cu.yd. unclassified earth excav., 16,655 sq.yd. bituminous macadam $53,990, 16,655 sq.yd. 4 in. brick $77,807. 17,663 sq.yd. 5 in. combination base and curb brick top $83,432; 5.3 mi. Navarre-Richville Rd., 18 ft., 44,000 cu.yd. unclassified earth excav., 56,383 sq. yd. vitr. brick or monolithic brick, 6 in. concrete base with combination curb, $261,445. G. S[illegible] Toose, co. surv. Noted Dec. 7.

O., Cleveland — Takes bids in spring, grading, curving and paving Ada, Argus, Behrwald, Bessemer, Central, Carnegie, Corlett, Curtiss, Damon, Darby, Eaglesmere, Elk, Gray, Grovewood, Gross, Henritze, Hlavin, Hoy, Hamilton, Inverose, Iroquois, Jesse, Lamont, Lorain, Lamontier, Linton, Maryland, Mayview, Maplesde, Oakwood, Oakview, Oak Park, Schade, Scovitt and Shaw Aves., Arbor, Broadview, Bosworth, Glenside, London, Roseclift and Spring Rds., Beyerle Pl. from Beyerle to Independence Rds., Beyerle Pl. from Sykora Ave. to Beyerle Pl., Cypress Ave. from West 28th to West 35th Sts., Cypress Ave. from Pearl Rd. to West 35th St. $800,000. R. Hoffman, City Hall, engr.

O., Cleveland Heights (Warrensville, P. O.)—Takes bids in spring paving various streets, brick, asphalt and concrete. $500,000. F. A. Pease Eng. Co., Marshall Bldg., Cleveland, engrs.

O., Dayton—City and Montgomery Co. plan paving 1 mi. Brandt Pike from end of paving to Valley St., 20 ft., 11,000 sq.yd. brick $38,000, wood block $44,000 or Kentucky rock asphalt $31,000. W. O. Pease, co. surv.

Ind., Peru—Plans paving with either concrete, asphalt, wood block or brick, 5,300 ft. 5th St., 36 ft., 20,476 sq.yd. pavement, 7,973 lin.ft. concrete curbing, 7,973 lin.ft. concrete gutter, 1,620 ft. cement sidewalk, 860 ft. stone headers, 1,023 ft. 15 in. sewer pipe, 635 ft. 12 in. sewer pipe, 9 drop inlets, 13 manholes, 18 catch basins, 3,960 sq.ft. alley paving. $96,751. E. E. Phillips, Peru, engr.

Mich., Detroit—Plans prepared for paving 3½ in. sheet asphalt on 8 in. concrete, 6,600 sq.yd. Calvert Ave. from Linwood Ave. to Dexter Blvd., 26 ft., $39,700; 5,500 sq.yd. Margaret Ave. from Woodward Ave. to John R St., 26 ft., $33,350, 6 alleys with one course 6 in. concrete, totaling $18,640. J. W. Reid, city engr.

Mich., Kalamazoo—Kalamazoo Co. Rd. Comn. had plans prepared grading and paving 1¼ mi. Indian Reserve Line Rd., bituminous concrete or one course cement concrete. $30,000.

Ill., Chicago — Bd. Local Impvts., City Hall, soon receives bids paving Randolph St. $418,000. C. D. Hill, city engr.

Ill., Troy—Plans reconstruction ¾ mi. Market St., 30 ft. $40,000. R. L. Dawson, mayor.

Wisconsin—Following are county appropriations for state and county aid road and bridge construction during 1923. Washburn Co. $39,799, J. R. Allen, Spooner, comr.; Iron Co. $57,951, W. Weber, Saxon, comr.; Lincoln Co. $100,979 H. H. Huehling Merrill, comr.; Sauk Co. $247,903, W. Halbersleben, Baraboo, comr.; Dane Co. $496,347, E. J. Smith, Madison, comr.; Rock Co. $389,640, C. E. Moore, Janesville, comr.; Juneau Co. $50,606, A. V. Robinson, New Lisbon, comr.; La Crosse Co. $574,234, J. Hintgen, La Crosse, comr.; Waukesha Co. $617,891, C. J. Hahn, Waukesha, comr.; Buffalo Co. $168,041, J. Reinhardt, Nelson, comr.; Oneida Co. $98,159, B. L. Horr, Rhinelander, comr.; Vilas Co. $42,707, W. F. Hunter, comr.; Calumet Co. $55,958, J. A. Gillis, Chilton, comr.; St. Croix Co. $82,278, J. Caffrey, Hammond, comr.; Pierce Co. $51,133, C. F. Kenall, Ellsworth, comr.; Green Co. $642,893, C. J. Smith, Monroe, comr.; Dodge Co. $2,175,000, E. T. Klug, Juneau, comr.

Ia., Harlan — Making plans paving 25 blocks. $75,000. H. E. Swain, clk.

Ia., Le Mars—Making plans paving 60 blocks. $200,000. J. A. Cook, clk.

Ia., Marshalltown—Making plans paving 39 blocks, concrete, asphalt or vibrolithic concrete. $117,000. O. G. Herm, city engr.

Ia., Storm Lake—Making plans paving ¾ mi. road from Hudson St. east to city limits. $25,000. V. Flindt, city engr.

Minn., St. Paul—Plans paving 3½ mi. Phalen Blvd. around Lake Phalen. $178,000. H. C. Wenzel, comr. of parks, playgrounds and public buildings.

Neb., Omaha — Take bids in about 2 weeks, paving and curbing 70 Districts, asphalt, stone, artificial stone, asphaltic concrete, macadam, creosoted wood block, vitr. brick, vitr. brick blocks and concrete, stone curbing. $200,000-$300,000. H. Beal, city engr.

South Dakota—State Hy. Dept., Pierre, takes bids in next few months, 9 mi. Federal Aid Project 121, Beadle Co., $57,772, 13 mi. Project 113, Bon Homme Co., $79,263, 16.4 mi. Project 89, Brookings Co., $100,870, 14.5 mi. Project 105, Brown Co., $80,456, 9 mi. Project 131, Campbell Co., $26,719, 6.11 mi. Project 124, Codington Co., $39,459, 16.13 mi. Project 92, Day Co., $86,009, 10 mi. Project 122, Deuel Co., $59,763, 10.9 mi. Project 119, Grant Co., $44,539, 6.8 mi. Project 117, Haakon Co., $38,760, 13.8 mi. Project 127, Sully Co., $37,-

Streets and Roads (Continued)

176, 15 mi. Project 116, Hutchinson Co., $99,380, 13 mi. Project 125, McCook Co., $87,166, 10 mi. Project 132, McPherson Co., $29,013, 9 mi. Project 120, Moody Co., $64,400, 5.29 mi. Project 100, Pennington Co., $44,689, 7.66 mi. Project 128, Moody Co., $21,599, bridge on Project 118, Lyman Co., $18,400. F. D. Hudgins, ch. engr.

S. D., Sioux Falls—Plans paving 9 blocks on 14th St. and 3½ blocks in 6th St. $50,000. S. B. Howe, city engr.

N. D., Wahpeton — Plans paving 37 blocks. $111,000. S. H. Murray, city clk.

Montana—State Hy. Dept., Helena, plans following work in 1923, gravel surfacing 7 mi. from Dixon west, $50,000, 12 mi. McDonald-Knowles Rd. $83,000, both Sanders Co.; 13 mi. Pablo-Rollins Rd. $200,000, Flathead Co. J. N. Edy, ch. engr.

Missouri—State Hy. Dept., Jefferson City, rejected bids opened Dec. 2, grading and gravel surfacing 4.482 mi. road from Jefferson Co. line to Bloomsdale, 16 ft., State Project Route 25 Sect. 5, St. Genevieve Co. also 3.53 mi. road west of Bethany, 18 ft., State Project Route 4 Sect. 24, Harrison Co. Noted Nov. 9.

Missouri — State Hy. Dept., Jefferson City, rejected bids opened Dec. 2, 4.934 mi. road from Franklin Co. line east, 18 ft., State Project Route 14, Sect. 76, St. Louis Co.; 2.244 mi. road near Ballurn westwardly, 18 ft., State Project Route 14, Sect. 77, St. Louis Co.; 3.35 mi. road east of Danville, 18 ft., State Project Route 2, Sect. 57, Montgomery Co.; 1.891 mi. road from Macon south, 16 ft., State Project Route 7, Sect. 21, Macon Co.; 3.548 mi. road east and west through Beaufort, 16 ft., State Project Route 12, Sect. 52, Franklin Co.

Mo., St. Louis—Soon takes bids reconstructing 1.725 ft. Shaw Ave. from Grand Blvd. to 39th St., 30 ft., 3,450 lin.ft. concrete curb, 6,750 sq.yd. asphalt on concrete. $26,700. W. W. Horner, City Hall, engr.

Tex., Cameron—Election soon to vote on $100,000 bond issue improvement of Hall and McKeown Sts. U. S. Hearell, mayor.

Tex., Coleman—Talpa Precinct of Coleman Co. voted $30,000 bonds for road from Valera to Runnels Co. line. W. E. Dickerson, co. engr.

Tex., Columbus—Colorado Co. election Jan. 27, to vote on $100,000 bond issue for construction State Highway 3-D, between here and Weimar. B. H. Faber, co. engr.

Tex., Ft. Worth—Voted $800,000 bonds for new pavements. D. L. Lewis, city engr.

Tex., Franklin — Robertson Co. voted $200,000 bonds for new roads. L. Acker, Nacogdoches, engr.

Tex., Hemphill—Rd. Dist. 10 of Sabine Co. voted $90,000 bonds for hard surfaced road connecting Kings Highway with Jasper Co. line. Formal application for state and federal aid to be submitted, to supplement county funds. W. A. French, San Augustine, co. engr.

Tex., Mt. Pleasant — Titus Co. making plans grading and gravel surfacing 4.17 mi. State Highway 1-A, 16 ft. $30,000. H. S. Wilder, co. engr.

Tex., Nacogdoches—Voted $225,000 bond issue for repaving streets in business section and paving 6-7 mi. of residential streets. W. I. Baker, mayor.

Tex., Palestine—Jan. 20 to vote on $78,000 bond issue for paving streets. A. L. Bowers, mayor.

Okla., Tulsa — Tulsa Co. having plans prepared road work. Plan to vote on $2,000,000 bonds. D. W. Patton, Court House Bldg., engr.

Wash., Endicott—Feb. 6, to vote on $50,000 bonds for street work.

Wash., Spokane—Having surveys made paving 2 mi. North West Blvd. to Nine Mile Highway, 20 ft. $25,000. A. Butler, City Hall, city engr.

Calif., Piedmont—See "Miscellaneous."

Calif., Redwood City—Having plans prepared concrete paving and construction several concrete bridges on Jefferson Ave. from State Highway to west city limits, 30 ft. wide. To exceed $25,000. C. L. Dimmitt, city engr.

Calif., San Diego—Had plans prepared improving Imperila, Clinton, Wabash, Superba, Gilmore Sts., etc., 15,352 cu.yd. earth excav., 8,993 cu.yd. earth embankment, 20,663 lin.ft. concrete curb, 101,100 sq.ft. concrete walks, 2,115 sq. ft. concrete gutters, 432 lin.ft. 12 in., 880 lin.ft. 15 in. and 178 lin.ft. 24 in. corrugated culvert, etc.; Ampudia St. and Ft. Stockton Dr., 1,037 cu.yd. earth excav., 175 cu.yd. earth embankment, 22,308 sq.ft. 1½ in. asphaltic concrete on 2½ in. bituminous base, 4,490 sq. ft. concrete walks, 903 lin.ft. concrete curb. F. A. Rhodes, city engr.

Calif., San Diego—San Diego Co. election Jan. 26, to vote on $600,000 bonds to complete 53.95 mi. county highway system. E. R. Childs, co. surv.

Calif., San Francisco—City and San Francisco Co. received no bids improving Buchanan St., etc. Will re-advertise. M. M. O'Shaughnessy, city engr. Noted Nov. 16.

Calif., Santa Cruz—Had plans prepared improving portion Woodrow Ave., 43,065 sq.ft. 5 in. concrete pavement, 43,065 sq. ft. grading to subgrade, etc. J. K. James, city engr.

Calif., Tulare—Soon take bids improving portions Tulare and Salida Sts., 2,609 cu.yd. excav., 6,535 lin.ft. concrete curbs, 5,989 sq. ft. concrete gutter, 6,276 sq.ft. sidewalks, 145,815 sq.ft. 1½ in. warrenite bitulithic on 2½ in. asphaltic concrete, etc. R. M. Berryhill, city engr. Noted Nov. 16.

Calif., Visalia—Tulare Co. had surveys made 9½ mi. auto road east of Three Rivers. L. A. Moye, co. surv.

Quebec — Provincial Dept. Highways, Quebec, takes bids in February, 48 mi. macadam road between Lachute and St. Jovite. M. Nectkar, ch. engr.

Ont., Hamilton—Plans asphalt pavement on Cumberland Ave. $50,000. E. R. Gray, city engr.

Ont., Kitchener — Plans paving work. $50,000. L. O. Breithaupt, mayor, chn. com.

Ont., Listowel—Preparing plans and will probably take bids in March, 1½ mi. cement highway. $90,000. A Bolton, city engr.

British Columbia—Provincial Government, Victoria, appropriated $1,326,500 for new roads in following towns and cities: Alberni $47,500, Atlin $35,000, Cariboo $71,000, Chilliwack $34,500, Columbia $38,700, Comox $58,500, Cowichan $40,500, Cranbrook $50,500, Delta $21,500, Dewdney $40,000, Esquimalt $29,000, Fernie $35,000, Fort George $75,500, Grand Forks $23,500, Greenwood $24,000, Islands $33,000, Kamloops $76,000, Kalso $33,000, Lillooet $55,600, Nanaimo $13,000, Nelson $2,500, Newcastle $21,500, New Westminster $1,800, North Okanagan $52,000, North Vancouver $21,000, Omineca $77,000, Prince Rupert $63,000, Revelstoke $35,500, Richmond $10,000, Rossland $7,000, Saanich $6,000, Similkameen $41,000, Slocan $28,000, South Okanagan $33,000, South Vancouver $8,900, Trail $39,500, Yale $43,000. W. H. Sutherland, minister pub. wks.

BIDS DESIRED

N. Y., Brooklyn—Jan. 18, by Park Bd. at office Dept. Parks, Municipal Bldg., New York, grading and sheet asphalt paving, etc., Bay Parkway from 78th St. to Gravesend Bay, here. F. D. Gallatin, pres.

N. Y., Cortland—Jan. 15, by F. B. Gilbert, deputy comr. of Education, Education Bldg., Albany, grubbing, clearing, laying sewers, paving and other improvements to grounds at State Normal and Training School, here; adv. this issue.

West Virginia—Jan. 30, by State Rd. Comn., Charleston, grading 6 mi. Project 3052, Raleigh Co., 8.3 mi. Project 3182 B, Pocahontas Co., 2 mi. Project 3171, Pocahontas Co., 5.3 mi. Project 3045 B, Monroe Co., 2.25 mi. Project 3091, Boone Co., 5 mi. Project 3074 D, Jackson Co., 3 mi. Project 3167 A, Marshall Co., 5 mi. Project 3163, Tyler Co., 3.5 mi. Project 3203 A, Preston Co., 7.2 mi. Project 3184, Barbour Co., 5 mi. Project 3147, Hampshire Co., 5 mi. Project 3198, Morgan Co., 12.5 mi. Project 122 B and C, Grant Co., 5 mi. Project 3175, Pendleton Co., 8.5 mi. Project 3148, Hardy Co.; grading and paving 8 mi. Project 127, Greenbrier Co., 1 mi. Project 47 S, Wetzel Co., 2.8 mi. Project 3187, Marion Co., 7 mi. Project 3036, Jefferson Co.; constructing Amigo Bridge 833, Project 3133, Raleigh Co., Hartland Bridge 805, Project 3037, Clay Co., Heath Bridge 873, Project 3155, Cabell Co., Burlington Bridge 735, Project 3010, Mineral Co. E. B. Carskadon, secy.; adv. this issue.

W. Va., Harrisville—Feb. 5, by Comrs. Ritchie Co., grading 3.1 mi. Harrisville-Pullman Rd., Sect. 2, 21,000 cu.yd. unclassified excav., 227 cu.yd. concrete, 4,200 lb. reinforcing, 1,846 lin.ft. 12-36 in. rein.-con. bell and spigot pipe. D. W. Shock, co. engr.

North Carolina—Feb. 1, by State Hy. Comn., Raleigh, constructing 20.55 mi. State Project 555, Randolph and Montgomery Counties, 30 acres clearing, 96,100 cu. yd. common and 1,900 cu.yd. rock excav., 2,826 ft. 18-30 in. concrete pipe, 54,300 cu. yd. topsoil, 545 cu.yd. concrete, 30,000 lb. reinforcing, $70,000; 6.94 mi. State Project 429 Granville Co., 43,000 cu.yd. common excav., 1,024 ft. 18-24 in. concrete pipe, 73,200 sq.yd. concrete or asphaltic paving, 362 cu.yd. concrete, 26,770 lb. reinforcing, etc. $224,000; 19.31 mi. State Project 155 B Pitt and Martin Counties, 25,200 cu.yd. common excav., 180,000 sq.yd. concrete or asphaltic paving, $500,000; 14.96 mi. State Project 163, Nash Co., 20,500 cu.yd. common excav., 139,360 sq.yd. concrete or asphaltic paving, $390,000; 15.22 mi. State Project 363, Onslow Co., 76 acres clearing, 52,400 cu.yd. common excav. 118,800 cu.yd. borrow, 1,700 ft. 18 to 30 in. concrete pipe, 129 cu.yd. concrete, 40,000 cu.yd. topsoil or gravel surfacing, $100,000; 9.04 mi. State Project 486, Wake Co., 9 acres clearing, 53,100 cu.yd. common excav., 109 cu.yd. concrete, 2,050 ft. 18-24 in. concrete pipe, 23,900 cu.yd. topsoil or gravel surface, $36,000; 11.67 mi. State Project 512, Caswell Co., 23 acres clearing, 63,900 cu.yd. common excav., 185 cu.yd. concrete, 2,274 ft. 18-24 in. concrete pipe, 30,850 cu.yd. topsoil, 7,360 lb. reinforcing, $44,000; 8.94 mi. State Project 273, Sampson Co., 46,600 cu. yd. common excav. and borrow, 1,074 ft. 18-30 in. concrete pipe, 83,920 sq.yd. waterbound macadam 427 cu.yd. concrete, 26,680 lb. reinforcing, $134,000; 19.43 mi. State Project 107, Bertie Co., 53 acres clearing, 114,900 cu.yd. common excav. and borrow, 2,000 ft. 18-30 in. concrete pipe 169 cu.yd. concrete $53,000; 7.34 mi. State Project 671, Rowan Co., 10 acres clearing, 66,700 cu.yd. common excav., 1,764 ft. 18-30 in. concrete pipe 90 cu.yd. concrete 77,180 sq. yd. concrete or asphaltic paving, $237,000; 11.63 mi. State Project 815, Burke Co., 37 acres clearing, 80,000 cu.yd. common excav. 1,000 cu.yd. drainage ditches, 13,300 cu.yd. rock excav., 4,210 ft. 18-30 in. concrete pipe, 245 cu.yd. concrete 31,100 cu.yd. topsoil, etc., $90,000. C. M. Upham, state highway engr.

N. C., Charlotte—Jan. 23, by Bd. Comrs., 45,000 sq. yd. concrete sidewalk and 210,000 sq. yd. paving. J. Firth, city engr. W. S. Stancill, comr. pub. wks.; adv. this issue.

N. C., Red Springs — Mayor receiving bids and opens same about Jan. 31, paving Main St. and probably other streets, sheet asphalt on concrete, to exceed $25,000. W. M. Piatt, Durham, engr.

Fla., Zephyrhills—Jan. 30, by City Council, grading, curbing and paving 7,000 yd. various streets, alternate bids on asphalt, brick, cement, etc. $30,000. E. V. Camps and Associates, Moreland and De Kalb Aves., Atlanta, Ga., engrs.

Alabama—Feb. 2, by W. S. Keller, state highway engr., Montgomery, grading and gravel surfacing 6.68 mi. Ozark-Dothan Rd., Federal Aid Project 109, Dale Co., 3 acres clearing, 42,634 cu.yd. common excav., 894 sta.yd. overhaul on excav., 17,640 cu.yd. gravel surfacing within 1 mi., 200,500½ mi. units overhaul on gravel surfacing, 481 lin.ft. 15-24 in. pipe, 138 cu.yd. concrete, 7,784 lb. reinforcing, etc.

Ind., Boonville—Jan. 20, by City Clerk, concrete or asphalt paving 3,800 ft. 4th St., 45 ft., 18,990 sq.yd. asphalt or concrete on concrete, 7,600 lin.ft. concrete curbing, 7,590 lin.ft. concrete gutter. $50,000.

Ind., Mount Vernon—Feb. 6, by Auditor Posey Co., grading and graveling 2.78 mi. J. P. Weiss Rd., 20 ft. $25,816. L. Rowe, Mount Vernon, engr.

Michigan—Feb. 1, by F. F. Rogers, state highway comr., at office Co. Rd. Comrs., St. Ignace, grading and surfacing 13 mi. Federal Aid Project 80, Sects. C, D and G, Mackinac Co., incl. 57,000 yd. excav., 137,700 sq.yd. surface.

Ill., Posen (Harvey P. O.)—Jan. 16, for 290,000 sq.ft. portland cement concrete sidewalks, in five contracts varying from 14,000 to 105,000 sq.ft. E. Hancock, 2047 Ogden Ave., Chicago, engr. Noted Dec. 28.

Wis., Elkhorn—Jan. 16, by H. J. Peters, highway comr. Walworth Co., grading 1.6 mi. Burlington-Elkhorn Rd., State Highway 20, 22,070 cu.yd. earth excav., 120 cu. yd. concrete in culverts. Wisconsin Highway Comn., Madison, engrs.

Wis., Racine—Jan. 20, by W. A. Bechthold, highway comr., Racine Co., concrete surfacing, etc. Union Grove, 12th St. Rd., 18 ft., 9,916 cu.yd. earth excav., 37,000 sq. yd. concrete surfacing. 81.05 cu.yd. concrete in culverts and bridges. Wisconsin Highway Comm., Madison, engrs. Noted Dec. 21.

Ia., Dyersville — Jan. 25 paving 52 blocks, 54,390 sq.yd. 7 in. one course concrete, 7 in. vibrolithic, brick or sheet asphalt on concrete, 20,000 lin.ft. concrete curb and gutter, 900 lin.ft. ft. storm sewer, etc., $170,000. N. B. Barber, 228 West 4th St., Waterloo, engr. Noted Dec. 28.

Calif., Crescent City—Jan. 22, by City Clerk, improving various streets, 15,335 cu.yd. grading excav., 201,800 sq.ft. grading surface, 158,000 sq.ft. rebuilt asphalt macadam, 201,800 sq.ft. new asphalt macadam, 13,960 lin.ft. concrete curb, 39,200 sq.ft. concrete gutter and concrete valley, 670 lin.ft. 12 in. c. i. pipe outfall sewer, 1,770 lin.ft. 12 in., 1,200 lin.ft. 10 in., 1,200 lin.ft. 8 in. and 9,186 lin.ft. 6 in. vitr. pipe sewer, 449 lin.ft. 10 to 24 in. corrugated iron pipe culvert, 466 lin.ft. 18 to 30 in. corrugated iron segment culvert, etc. C. C. Kennedy, Call Bldg., San Francisco, engr. Noted Dec. 28.

Streets and Roads (Continued)

BIDS RECEIVED

N. Y., Brooklyn—Park Bd. at Office Dept. Parks, Municipal Bldg., New York, opened bids Jan. 4, improving Bay Parkway from 59th to 78th Sts., here, from Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., $112,224; Cranford Co., 52 9th St., $116,317; Borough Asphalt Co., 1301 Metropolitan Ave., $117,549. Noted Dec. 28.

N. Y., Long Island City—M. E. Connelly, pres. Queens Boro, Queens Subway Bldg., opened bids Dec. 26, curbing, laying sidewalks and paving (1) 48th St. (2) McKinley Ave., curbing, laying sidewalks and receiving basins in (3) Edsall Ave., paving (4) Olmstead Pl., sheet asphalt; grading, curbing and laying sidewalks on (5) Linden St., from Cleveland Trinidad Paving Co., Flushing. (1) $19,073 (2) $7,287 (4) $6,565; Borough Asphalt Co., 1301 Metropolitan Ave., Brooklyn, (1) $20,466 (2) $6,757 (4) $6,029; Sicilian Asphalt Paving Co., 41 Park Row, New York, (1) $21,744; W. P. McDonald Constr. Co., 17 West 42nd St., New York, (2) $6,579 (4) $5,915; Soviero & Britten, 10111 114th St., Richmond Hill, (3) $3,759 (5) $2,619; C. Kurth 9519 126th St., Richmond Hill, (3) $3,893 (5) $2,616; E. Block, (3) $3,913; Welsh Bros. Contg. Co., 32 Queens St., (5) $2,546. Noted Dec. 21.

Ohio—Dept. Highways and Pub. Wks., Columbus, opened bids Jan. 5, grading, bridging and paving roads in (1) Cuyahoga Co., Sects. A and B Solon-Willoughby and Chagrin Falls-Cuyahoga Falls Rds., 2.52 mi. (2) Summit Co., Sect. "I" Cleveland-Massillon Rd., 1.49 mi. (3) Summit Co., Sect. "J" Cleveland-Massillon Rd., 2.7 mi. (4) Summit Co., Sect. "K" Cleveland-Massillon Rd., 3.44 mi. (5) Summit Co., Sect. "L" Cleveland-Massillon Rd., 1.7 mi. (6) Summit Co., Sect. "M" Cleveland-Massillon Rd., 139 mi. (all Summit Co. work to be let as one job) with (a) brick (b) reinforced. (c) bituminous concrete oil (d) reinforced. lake (e) warrenite bitulithic, from Ohio Contg. Co., Elyria (street address not available). (1a) $157,351 (1b) $122,885 (1c) $144,901; McHugh Bros., Springfield (street address not available), (1a) $160,278 (1b) $125,281; Freshwater Constr. Co., Natl. Bldg., Cleveland, (1a) $158,827 (1b) $126,631 (1d) $155,200 (1e) $159,900; Smith Constr. Co., Youngstown (street address not available), (1c) $137,138; Highway Constr. Co., 309 Lorain Co. Bank Bldg., Elyria, (1c) $152,111 (1e) $163,659 (2c) $77,221 (3c) $116,661 (4c) $158,860 (5c) $74,119 (6c) $73,313; Cleveland Trinidad Paving Co., The Arcade, Cleveland, (1e) $164,525; Acme Constr. Co., Louisville, Ky. (street address not available), (2c) $62,974 (3c) $94,651 (4c) $129,440 (5c) $58,489 (6c) $60,981; T. E. McShaffrey Co., Forge St., Akron, (2c) $75,912 (3c) $113,938 (4c) $155,762 (5c) $72,412 (6c) $72,093; Dorsey Constr. Co., Findlay, (2a) $80,173 (3a) $123,467 (4a) $166,391 (5a) $77,274 (6a) $76,061. Noted Dec. 28.

Missouri—State Hy. Dept., Jefferson City, (1) road from Charleston to New Madrid, Federal Aid Project 198A, Mississippi Co., (a) 18,337 cu.yd. earth excav. (b) 6,995 cu. yd. borrow (c) 54,695 sq. yd. 1 course plain concrete (d) 49,916 sq. yd. gravel pavement (2) road from Charleston to Wolf Island, Federal Aid Project 198B, Mississippi Co., (a) 30,831 cu. yd. earth excav. (b) 18,277 cu. yd. borrow (c) 78,335 sq. yd. 1 course plain concrete (d) 60,615 sq. yd. gravel surfacing, etc., from R. L. Williams, Wyatt, (1a) $0.40 (1b) $0.40 (1c) $2.80 (1d) $0.70 total $201,062 (2a) $0.40 (2b) $0.40 (2c) $3 (2d) $0.70 total $322,084; Keeley Bros. Contg. Co., 2100 State St., East St. Louis, Ill., (1a) $0.40 (1b) $0.40 (1c) $2.69 (1d) $1.20 total $216,354 (2a) $0.50 (2b) $0.70 (2c) $2.82 (2d) $1,19 total $353,794.

Missouri—State Hy. Dept. at div. office Fredericktown, opened bids Dec. 27, 6.519 mi. road from Fredericktown, westward, 12 ft., Federal Aid Project 203A, Madison Co., (1) 27,080 cu.yd. earth excav. (2) 8,473 cu.yd. rock excav. (3) 28,881 cu.yd. borrow, (4) 45,945 sq.yd. gravel pavement, etc., from M. E. Gillioz, Monett, (1) $0.45 per cu.yd. (2) $2.25 (3) $0.35 (4) $0.50, total $79,739; Hogan & Humphreys, Little Rock, Ark. (street address not available) (1) $0.45 (2) $2 (3) $0.45 (4) $0.50, $80,805. Noted Dec. 21.

Missouri—State Hy. Dept. at div. office Ironton, opened bids Dec. 22, (1) 7,197 mi. road from Bruel east and west, 12 ft., Federal Aid Project 193A, Iron Co., (a) 31,187 cu.yd. earth excav. (b) 1,253 cu.yd. rock excav. (c) 13,960 cu.yd. borrow (d) 51,192 sq.yd. gravel surfacing, etc. (2) one 50 ft. rein.-con. arch, spandrel filled, one 20 ft. rein.-con. slab, one 100 ft. steel truss and one 30 ft. rein.-con. deck girder spans, 18 ft. roadways, concrete abutments, on above road, from J. P. Sparks, Kirkwood, (1a) $0.45 (1b) $2 (1c) $0.45 (d) $0.40, total $60,472 (2) $19,171. Noted Dec. 14.

Missouri—State Hy. Dept., at div. office Marble Hill, opened bids Dec. 27, (1) 4.943 mi. road from Marble Hill southward, 12 ft., Federal Aid Project 208A, Bollinger Co., (a) 53,914 cu.yd. earth excav. (b) 1,393 cu.yd. rock excav. (c) 4,499 cu.yd. borrow (d) 34,720 sq.yd. gravel surfacing, etc. (2) 16,369 mi. road from Marble Hill to Patton, 12 ft., Federal Aid Project 202A, Bollinger Co., (a) 124,244 cu.yd. earth excav. (b) 20,755 cu.yd. rock excav. (c) 116,828 sq.yd. gravel surfacing, etc., from M. E. Gillioz, Monett, (1a) $0.40 per cu. yd. (1b) $2 (1c) $0.35 (1d) $0.40 total $48,465, (2a) $0.45 (2b) $0.40 (2c) $0.40 total $135,893; C. P. O'Reilley & Co., Wainwright Bldg., St. Louis, (1a) $0.42 (1b) $2 (1c) $0.38 (1d) $0.38 total $48,535 (2a) $0.40 (2b) $0.38 (2c) $0.38 total $126,565; W. A. Reynolds, Marble Hill (1a) $0.45 (1b) $2 (1c) $0.40 (1d) $0.40 total $52,365 (2a) $0.48 (2b) $0.40 (2c) $0.44, total $146,797. Noted Dec. 21.

Missouri—State Hy. Dept. at div. office Montgomery City, opened bids Dec. 8, 4.062 mi. road from Montgomery City east and west, Federal Aid Project 141, Montgomery Co., (1) 26,423 cu. yd. earth excav. (2) 1,201 cu.yd. rock excav. (3) 6,400 cu.yd. borrow (4) 29,313 sq.yd. gravel pavement, etc., from Doehla & Kolkmeyer, Jefferson City, (1) $0.40 (2) $1.75 (3) $0.40 (4) $0.57 total $41,653; Maloney & Whalen, St. Louis (street address not available) (1) $0.50 (2) $2 (3) $0.50 (4) $0.65, total $47,238; J. P. Sparks, Kirkwood (1) $0.45 (2) $2 (3) $0.45 (4) $0.75, total $49,691. Noted Nov. 30.

Missouri—State Hy. Dept. at div. office Neosho, opened bids Dec. 27, 4.854 mi. road from Neosho to Granby, 24 ft., Federal Aid Project 155, Newton Co. (1) 27,353 cu.yd. earth excav. (2) 16,982 cu.yd. borrow, etc., from Kelley & Underwood, Granby, (1) $0.37 per cu.yd. (2) $0.37, total $24,588; M. E. Gillioz, Monett, (1) $0.45 (2) $0.40, $28,455; Carterville Constr. Co., Carterville, (1) $0.41 (2) $0.41, $28,631. Noted Dec. 21.

Missouri—State Hy. Dept. at div. office Platte City, 4.703 mi. road from Parkville southeastward, 24 ft., Federal Aid Project 48B, Platte Co., (1) 16,732 cu.yd. earth excav. (2) 3,529 cu.yd. rock excav. (3) 33,876 cu.yd. borrow, etc., from J. O. Patterson, 310 Ridge Bldg., Kansas City, (1) $0.42 per cu.yd. (2) $1.80 (3) $0.35, total $52,744; T. A. Woods Constr. Co., Smithville, (1) $0.40 (2) $2 (3) $0.35, $54,530; Cook & O'Brien, 305 Ry. Excl. Bldg., Kansas City, (1) $0.46 (2) $2 (3) $0.35, $54,853. Noted Dec. 14.

Missouri—State Hy. Dept. at div. office Poplar Bluff, opened bids Dec. 23, 19.791 mi. road from Poplar Bluff northwestwardly, 12 ft., Federal Aid Project 207, Butler Co., (1) 108,337 cu.yd. earth excav. (2) 15,985 cu.yd. borrow (3) 949 cu.yd. rock excav. (4) 119,518 sq.yd. gravel surfacing, etc., from C. M. Wilson and P. S. Smith, Poplar Bluff, (1) $0.47 per cu.yd. (2) $0.40 (3) $1.75 (4) $0.40 total $138,509; Service Constr. Co., Poplar Bluff, (1) $0.45 (2) $0.45 (3) $1.75 (4) $0.50, $147,853; W. A. Leach, Poplar Bluff, (1) $0.55 (2) $0.45 (3) $2 (4) $0.50, $159,483.

Missouri—State Hy. Dept., at div. office Potosi, opened bids Dec. 22, 3.386 mi. road from Ironton to Potosi, 24 ft., Federal Aid Project 160A, Washington Co., (1) 26,578 cu.yd. earth excav. (2) 2,283 cu.yd. rock excav. (3) 1,972 cu.yd. borrow, etc. from St. Louis Constr. Co., 743 Frisco Bldg., St. Louis, (1) $0.44 per cu.yd. (2) $2 (3) $0.44 total $26,666; Coopers Constr. Serv. Co., Federal Reserve Bldg., St. Louis (1) $0.45 (2) $2 (3) $0.45, $30,471.

Missouri—State Hy. Dept. at div. office Rolla, opened bids Dec. 22, (1) 3.693 mi. road from Rolla southward, 12 ft., Federal Aid Project 110A, Phelps Co., (a) 15,296 cu.yd. earth excav. (b) 3,767 cu.yd. rock excav. (c) 4,864 cu.yd. borrow (d) 25,979 sq.yd. gravel surfacing, etc. (2) one 85 ft. steel truss and one 25 ft. rein.-con. deck girder spans, 20 ft. roadways, on above road, from Birmingham Jones Lenox, Rolla, (1a) $0.45 per cu.yd. (1b) $2 (1c) $0.40 (1d) $0.40, total $32,412 (2) $14,376; M. E. Gillioz, Monett, (1a) $0.40 (1b) $2 (1c) $0.40 (1d) $0.45, $33,014 (2) $13,347; Concrete & Steel Constr. Co., 214-223 West 3rd St., Joplin, (1a) $0.55 (1b) $1.80 (1c) $0.45 (1d) $0.47, $35,281; Dennison & Phelps, Rolla, (2) $14,405. Noted Dec. 14.

CEMENT—WISCONSIN

Bids were opened Jan. 3, by State Highway Comn., for cement for Federal-Aid construction, (A) Universal Portland Cement Co., 210 South La Salle St., Chicago; (B) Lehigh Portland Cement Co., 111 West Washington St., Chicago; (C) Marquette Cement Mfg. Co., Marquette Bldg., Chicago; (D) Alpha Portland Cement Co., Easton, Pa.; (E) Sandusky Cement Co., Engineer's Bldg., Cleveland, O.; (F) Northwestern States Portland Cement Co.; (G) Petoskey Portland Cement Co.; (H) Huron Western Lime & Cement Co., 1525 Ford Bldg., Detroit, Mich.

Federal Aid Project No.	Destination	Barrels	A	B	C	D	E	F	G	H
2,502	Allens Grove	7,500	$2.50	$2.52	....	$2.52	....	....	....	....
3,765	Amberg	260	2.69	2.71	....	2.71	....	....	....	....
7,617	Arbor Vitae	410	2.68	2.77	....	....	....	....	....	....
277	Arcadia	200	2.70	2.71	....	2.71	$2.70	$2.70	....	....
293	Argyle	636	2.58	2.58	$2.58	2.58	2.58	....	....	....
4,916	Auburndale	8,650	2.65	2.69	....	2.69	....	....	....	....
10,546	Baraboo	7,150	2.61	2.61	2.61	2.61	2.61	....	....	....
10,577	Baraboo	3,800	2.61	2.61	2.61	2.61	2.61	....	....	....
10,552	Beaver Dam	7,050	2.56	2.58	2.58	2.58	....	....	....	....
122 "B"	Beldenville	575	2.66	2.77	....	2.77	....	2.66	....	....
221	Belmont	760	2.58	2.58	....	2.58	2.58	....	....	....
4,932	Birnamwood	25,833	2.65	2.69	....	2.69	....	....	....	....
1,012	Black River Falls	500	2.65	2.69	....	2.69	2.65	2.65	....	....
3,772	Bonduel	12,000	2.63	2.65	2.65	2.65	....	....	2.63	....
1,017	Boscobel	430	2.61	2.63	2.63	2.63	2.61	2.61	....	....
285	Brown Deer	7,500	2.54	2.61	....	2.61	....	....	....	$2.54
6,726	Chelsea	177	2.63	2.71	....	2.71	....	2.63	....	....
8,204	Chetek	256	2.59	2.71	....	2.71	....	2.59	....	....
3,769	Chilton	19,000	2.58	2.65	....	2.65	....	....	....	....
'10,554	Clinton	15,450	2.48	2.52	2.52	2.52	....	....	....	....
6,692	Columbia	355	2.66	2.71	....	2.71	....	2.66	....	....
10,553	Columbus	10,900	2.56	2.58	2.58	2.58	....	....	....	....
1,020	Danbury	200	2.53	2.84	....	2.84	....	....	....	....
2,502	Darien	7,500	2.50	2.54	....	2.54	....	....	....	....
3,651 "A"	DePere	8,100	2.61	2.65	....	2.65	....	....	2.61	....
2,507	Dousman	25,000	2.54	2.56	2.56	2.56	....	....	....	....
187	Drummond	344	2.55	2.82	....	2.82	....	....	....	....
7,615	Elcho	400	2.68	2.71	....	2.71	....	....	....	....
234	Ellsworth	770	2.66	2.77	....	2.77	....	2.66	....	....
1,014	Ellsworth	417	2.66	2.77	....	2.77	....	2.66	....	....
7,614	Elmhurst	315	2.65	2.71	....	2.71	....	....	....	....
5,676	Ettricks	659	2.82	2.84	....	2.84	....	2.82	....	....
1,005	Exeland	650	2.57	2.75	....	2.75	....	....	....	....
9,058	Fennimore	2,455	2.61	2.61	2.61	2.61	2.61	....	....	....
2,483	Fransville	11,000	2.52	2.56	....	2.56	....	....	....	....
4,930	Fremont	13,400	2.61	2.65	....	2.65	....	....	2.61	....
187	Grandview	650	2.55	2.82	....	2.82	....	....	....	....
285	Granville	11,000	2.52	2.58	....	2.58	....	....	....	2.52
2,405	Granville	5,500	2.52	2.58	....	2.58	....	....	....	2.52
291	Gordon	2,000	2.47	2.77	....	2.77	....	....	....	....
9,077	Gratiot	430	2.56	2.56	2.56	2.56	2.56	....	....	....
4,936	Green Lake	11,800	2.61	2.63	2.63	2.63	....	....	....	....
3,651 "A"	Greenleaf	7,100	2.61	2.65	....	2.65	....	....	2.61	....
1,014	Hager City	343	2.66	2.71	....	2.71	....	2.66	....	....
266	Harshaw	182	2.66	....	....	2.75	....	....	....	....
8,205	Hayward	150	2.57	2.80	....	2.80	....	....	....	....
246	Hayward	500	2.57	2.80	....	2.80	....	....	....	....
7,616	Heafford Jct	660	2.66	2.71	....	2.71	....	....	....	....
10,557	Hubbleton	12,150	2.56	2.58	2.58	2.58	2.56	....	....	....
303	Humbird	413	2.65	2.69	....	2.69	....	2.65	....	....

Federal Aid Project No.	Destination	Barrels	A	B	C	D	E	F	G	H
4,937	Hustler	1,280	2.63	2.63	2.63	2.63	2.63	....	....	....
5,692	Hustler	1,145	2.63	2.63	2.63	2.63	2.63	....	....	....
277	Independence	400	2.70	2.71	....	2.71	2.70	2.70	....	....
3,768	Kaukauna	4,700	2.61	2.65	....	2.65	....	....	2.61	....
7,613	Kennon	518	2.59	2.75	....	2.75	....	....	....	....
10,524	Kilbourn	500	2.61	2.61	2.61	2.61	2.61	....	....	....
6,719	Knapp	471	2.66	2.75	....	2.75	....	2.66	....	....
221	Kodatz	394	2.61	2.61	2.61	2.61	2.61	....	....	....
1,009	Koepenick	255	2.68	2.71	....	2.71	....	....	....	....
3,764	Lakewood	460	2.65	2.71	....	2.71	....	....	2.65	....
8,185	Lehigh	352	2.59	2.75	....	2.75	....	2.59	....	....
4,924	Lyndon	200	2.61	2.61	....	2.61	2.61	....	....	....
3,771	Manitowoc	10,750	2.58	2.65	....	2.65	....	....	....	....
5,678	Marshland	2,990	2.69	2.69	....	2.69	2.69	2.69	....	....
4,924	Mouston	5,930	2.61	2.63	2.63	2.63	2.61	....	....	....
269	Medina	14,500	2.61	2.63	2.63	2.63	....	....	2.61	....
2,497	Menomonee Falls	14,500	2.52	2.58	....	2.58	....	....	....	2.52
3,776	Middle Inlet	180	2.65	2.71	....	2.71	....	....	2.65	....
9,058	Montfort	250	2.61	2.61	....	2.61	2.61	....	....	....
3,764	Mountain	830	2.65	2.71	....	2.71	....	....	2.65	....
3,769	New Holstein	14,700	2.58	2.65	....	2.65	....	....	....	....
2,493	N. Fond du lac	9,700	2.56	2.61	2.61	2.61	....	....	....	....
2,490	Oostburg	22,500	2.54	2.63	....	2.63	....	....	....	....
5,677	Osseo	500	2.68	2.71	....	2.71	....	2.68	....	....
2,500	Peck Station	17,000	2.52	2.54	....	2.54	....	....	....	....
4,913	Plover	13,500	2.63	2.65	....	2.65	2.63	....	....	....
10,524	Portage	750	2.58	2.58	....	2.58	2.58	....	....	....
2,510	Port Washington	18,000	2.54	2.61	....	2.61	....	....	....	....
9,058	Preston	250	2.61	2.61	2.61	2.61	2.61	....	....	....
239	Readstown	1,350	2.65	2.65	....	2.65	2.65	2.65	....	....
239	Richland Center	490	2.61	2.63	....	2.63	2.61	2.61	....	....
9,066	Richland Center	150	2.61	2.63	....	2.63	2.61	2.61	....	....
8,202	Sarona	480	2.57	2.77	....	2.77	....	....	....	....
246	Seeley	660	2.57	2.82	....	2.82	....	....	....	....
3,772	Shawano	15,000	2.63	2.65	2.65	2.65	....	....	2.63	....
2,490	Sheboygan	15,000	2.54	2.63	....	2.63	....	....	....	....
4,916	Sherry	8,650	2.65	2.69	....	2.69	....	....	....	....
2,409	Somers	7,400	2.44	2.54	....	2.54	....	....	....	....
273	South Madison	5,400	2.54	2.54	2.54	2.54	....	....	....	....
9,059	South Wayne	1,210	2.56	2.56	2.56	2.56	2.56	....	....	....
5,674	Sparta	11,174	2.63	2.65	2.65	2.65	2.63	2.63	....	....
5,675	Sparta	249	2.63	2.65	....	2.65	2.63	2.63	....	....
1,010	Stanley	144	2.61	2.71	....	2.71	....	2.61	....	....
301	Stanley	455	2.61	2.71	....	2.71	....	2.61	....	....
4,910	Stevens Point	17,400	2.63	2.65	2.65	2.65	2.63	....	....	....
8,182	Strickland	270	2.59	2.75	....	2.75	....	2.59	....	....
7,615	Summit Lake	220	2.68	2.71	....	2.71	....	....	2.68	....
2,483	Sylvania	17,000	2.48	2.56	....	2.56	....	....	....	....
2,482	Truesdell	9,200	2.44	2.54	....	2.54	....	....	....	....
2,486	Ulao	10,500	2.54	2.61	....	2.61	....	....	....	....
10,556	Watertown	5,200	2.54	2.56	....	2.56	....	....	....	....
3,776	Wausaukee	670	2.65	2.71	....	2.71	....	....	2.65	....
268	Wauwatosa	18,200	2.52	2.56	....	2.56	....	....	....	2.52
286	West Allis	15,000	2.52	2.56	....	2.56	....	....	....	2.52
6,726	Westboro	178	2.63	2.71	....	2.71	....	2.63	....	....
276	Westby	11,200	2.65	2.65	2.65	2.65	2.65	2.65	....	....
4,930	Weyauwega	13,400	2.61	2.65	....	2.65	....	....	....	....
8,182	Weyerhauser	850	2.59	2.75	....	2.75	....	2.59	....	....
5,677	Whitehall	675	2.70	2.71	....	2.71	....	2.70	....	....
6,722	Wilson	308	2.66	2.75	....	2.75	....	2.66	....	....
6,719 "A"	Wilson	325	2.66	2.75	....	2.75	....	2.66	....	....
3,768	Wrightstown	7,000	2.61	2.65	....	2.65	....	....	2.61	....
Special State Bridges										
Black River Falls		4,000	2.65	2.69	2.69	2.69	2.65	2.65	....	....
Eau Claire		11,000	2.61	2.71	....	2.71	....	2.61	....	....

Streets and Roads (Continued)

Missouri—State Hy. Dept. at div. office West Plaines, opened bids Dec. 22, 4.621 mi. road from Willow Springs eastward, 12 ft., Federal Aid Project 138A, Howell Co., (a) 28,190 cu.yd. earth excav. (b) 8,611 cu.yd. borrow (c) 16,141 sq.yd. gravel surfacing, etc., from Summerfield-Jones Co., Springfield (street address not available) (a) $0.50 per cu.yd. (b) $0.50 (c) $0.40 total $36,737.

Mo., St. Louis—Bd. Pub. Serv., 208 City Hall, opened bids Jan. 2, reconstructing 7,200 ft. Choteau Ave. from Bway. to Jefferson Ave., (1) gross bid (2) refund 26,480 sq. yd. granite blocks (3) net bids, from Independent Quarries & Contg. Co., 4875 Ashland Ave., (1) $224,649 (2) $26,840 (3) $197,917; Skrainka Bros. Contg. Co., Security Bldg., (1) $232,457 (2) $17,446 (3) $215,011; F. A. Stiers Contg. Co., 4500 Enright Ave., (1) $238,349 (2) $24,156 (3) $214,193. Noted Dec. 7.

Calif., Arcata—Paving 33 blocks, 2 course, 5 in., asphaltic concrete, from Mercer-Fraser Co., 1st and G Sts., Eureka, $84,521; Padgett & Kelly, Eureka, $88,189. Noted Dec. 7.

Calif., Fresno—Improving portions of Tuolumne and Divisadero Sts., 198,940 ft. grading, 186,427 ft. asphalt pavement, 12,102 ft. concrete gutter, 7,504 ft. concrete curb, 13,725 ft. concrete walks, etc., from W. F. Hanrahan, Griffith-McKenzie Bldg., $70,849; Thompson Bros., Divisadero and G Sts., $72,578; California Road & Street Impvt. Co., Bank of Italy Bldg., $72,857. Noted Dec. 28.

CONTRACTS AWARDED

N. Y., Brooklyn—Park Bd. at office Dept. Parks, Municipal Bldg., New York, grading, paving, etc., Bay Parkway, here, sheet asphalt, to Cranford Co., 52 9th St., $79,201. Engrs. est. $80,000. Noted Jan. 4.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, grading, curbing and flagging East 15th St. and Skillman Ave., to T. B. Scott, 671 Halsey St., $4,361 and $3,369 respectively; paving East 15th St., asphalt, to Cranford Co., 52 9th St., $8,164; Skillman Ave., asphalt, to Borough Asphalt Co., 1301 Metropolitan Ave., $4,359. Noted Jan. 4.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., repaving Grand St., granite block, to Necaro Co., 97 Court St., Brooklyn, $117,978. Noted Dec. 21.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., repaving Bway. at Canal St. and Bway. at Chambers St., to D. J. McCarthy, 88 Audubon Ave., $6,198 and $5,542 respectively; West St., to W. J. Fitzgerald, 547 West 45th St., $244,169; Dyckman St., 5th and Lenox Aves., to C. D. Beckwith, 2875 Bway., $22,424, $96,600 and $58,444 respectively. Noted Dec. 21.

N. Y., Richmond Hill—Park Bd. at office Dept. Parks, Municipal Bldg., New York, improving main drive in Forest Park, etc., here, to Cleveland Trinidad Paving Co., Flushing, $93,095. Noted Jan. 4.

N. J., Penns Grove—Mayor and Common Council constructing streets, bituminous macadam, to B. Foster Co., 20th and Venango Sts., Phila., $45,700. Noted Dec. 14.

North Carolina — State Hy. Dept., Raleigh, clearing and grading 14.14 mi. State Project 201. Carteret Co., to Duplin Constr. Co., Warsaw, $49,273. Noted Dec. 28.

N. C., Lincolnton—Hardsurfacing various streets to Boyd, Higgins & Goforth, Realty Bldg., Charlotte, $30,000.

Fla., Tavares—Lake Co. clearing, grading, bridging and sand clay surfacing 18 mi. Eustis, Cossia and Sorrento Sts., to Hardee Constr. Co., Tampa, (street address not available), $86,845; constructing sand clay road on east 9 mi., and clearing only on west 10 mi., between Altoona and Crows Bluff, to G. O. Barnes, Lecanto, $46,901.

Louisiana — State Hy. Dept., Reymond Bldg., Baton Rouge, grading and gravel surfacing 18 mi. Tallulah-Delhi Highway, Federal Aid Project 117, to Nicholson Constr. Co., Lake Providence, $65,131 for Sect. A, $53,567 for Sect. B. Noted Dec. 14.

Kentucky—State Hy. Dept., Frankfort, grading and draining using cement rubble masonry and vitr. pipe 8.8285 mi. Louisville-Paducah Rd., Federal Aid Project 91, State Project 8, Sect. A, Crittenden Co., to Brantley & Costello, Knoxville, Tenn. (street address not available), $86,494, 17.045 mi. Louisville-Paducah Rd., Federal Aid Project 92, Livingston Co., to Ellis & Smeathers, Owensboro, $120,600; grading and draining using cement rubble masonry and concrete pipe 9.639 mi. Frenchburg-West Liberty Rd., Federal Aid Project 83, State Project 32, Sect. A, Menifee Co., and 5.018 mi. Stanton-Winchester Rd., Federal Aid Project 87, Sect. A, State Project 4, Sect. B, to Ellis & Smeathers, Owensboro, $82,260 and $59,870 respectively; paving with waterbound macadam using Class B corrugated metal pipe, 9.55 mi. Vanceburg-Maysville Rd., State Project 20, Sect. A, Lewis Co., to J. W. Harris, Covington, $95,828; surface treating 9.55 mi. Vanceburg-Maysville Rd., State Project 20, Sect. A, Lewis Co., to Southern Oil & Tar Co., Clay and Fulton Sts., Louisville, $9,294. Noted Dec. 28.

Ohio—Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving roads in following counties:

Licking and Knox Counties, Sect. "K" Columbus-Millersburg Rd., 1.42 mi., rein.-con., to Walsh & McDaniel Co., Columbus (street address not available), $47,391.

Lorain Co., Sects. "N" "O" "P" Oberlin-Norwalk Rd., 5.14 mi., bitulithic, to Highway Constr. Co., 903 Lorain Co. Bank Bldg., Elyria, $227,207.

Stark Co., Sects. "D-2" and "E" Alliance-Minerva Rd., 3.96 mi., brick, to G. W. Hadley, 204 Goldberg Bldg., Canton, $153,032.

Columbiana Co., Sect. "R" Cleveland-East Liverpool Rd., 2.325 mi., brick, to C. W. Milarr & Co., 305 Prof. Bldg., Youngstown, $81,648.

Montgomery Co., Sect. "A" Germantown-Middletown Rd., 2.494 mi., (grading only), to Putnam & Sunday, Van Wert, $34,143. Noted Dec. 28 and Jan. 4.

Ind., Decatur—Adams Co., concrete paving 1.5 mi. Warren M. Striker Rd., 16 ft., 14,070 sq.yd. concrete on concrete to G. W. Fleming & Son, New Corydon, $35,450. Engrs. est. $43,000.

Ind., Elizabethtown—Bartholomew Co., grading and surfacing with stone, 29,154 ft. Sawyer Rd., 16 ft., to Major & Smith, Martinsville, $33,791. Engrs. est $50,000. Noted Dec. 28.

Ind., Logansport—Cass Co., grading and graveling 18,480 ft. Charles V. Cotner Rd., 16 ft., to Andrews Paving Co., Logansport, $25,425. Noted Dec. 21.

Ia., Burlington—Grading and paving 21,805 sq.yd. Agency St., to Matthes Coal & Constr. Co., 1810 Bowditch St., Davenport, $61,490. Noted Nov. 24.

Ia., Burlington—Des Moines Co., grading and paving 1.504 mi. Primary Rd. Project 273, Mt. Pleasant and Agency Rd., 14,009 sq.yd. concrete, 4,415 cu.yd. excav., etc., to C. Weitz & Sons Co., 713 Mulberry St., Des Moines, $43,228.

Ia., Marion—Linn Co. concrete paving and incidental work on 5.589 mi. primary road from Cedar Rapids east, Federal Aid Project 96, 61,146 sq.yd. concrete, 16,134 cu.yd. excav., to Moore & Young Constr. Co., Waterloo, $187,168.

Ia., Washington—Washington Co., grading 9.297 mi. Primary Rd. Project 253, from Jefferson Co. Line northeast through Brighton, 182,462 cu.yd. earth and 200 cu. yd. loose rock excav., to Empire Constr. Co., 308 Flynn Bldg., Des Moines, $44,821.

Minnesota—State Hy. Dept., St. Paul, 2.4 mi. State Project 12-22, Federal Aid Project 310, 108,000 cu.yd. excav., 3 bridges, portable culverts, to G. J. Grant Constr. Co., 907 Exchange Bank Bldg., St. Paul, $53,715. Noted Dec. 7.

Minn., Chaska—Carver Co., improving 7 mi. State Rd. 9, west of St. Bonifacius, 130,000 cu.yd. excav., to Thomas Bros., Foley, $45,742; Bridge 3961, concrete, to Independent Bridge Co., 1101 Metropolitan Life Bldg., Minneapolis, $7,976; culverts to H. Briesemeister, New Germany, $6,079.

Minn., Minneapolis — Bd. Park Comrs., City Hall, will pave Cedar Lake Blvd. from Depot St. to Superior Blvd., 27,700 sq.yd. tar macadam on concrete, by day labor. $123,000. Engineering Dept., Bd. Park Comrs., City Hall, engrs.

Kan., El Dorado—Butler Co. gravel surfacing 6.258 mi. Augusta Gordon Rd., Project 124, 18 ft., to Cornelison & Kelly, Wichita, (street address not available), $31,381. Engrs. est. $33,490.

Kan., Emporia—Lyon Co. concrete paving 8.071 mi. Santa Fe Trail, 18 ft., to Stamey & Mackey, Hutchinson, 12,000 cu. yd. excav. $0.70, 85,235 sq.yd. 7 in. concrete $2.57, etc., total $233,025. Engrs. est. $262,517.

Kan., Mound City — Linn Co. grading 7.284 mi. La Cygne-Pleasanton-Prescott Rd., Project 146, 30 ft., and 10.473 mi. La Cygne-Pleasanton-Prescott Rd., Project 109 C, to L. O. Hales, 1230 College St., Topeka, $53,129 and $39,974 respectively. Engrs. est. $68,713 and $50,820 respectively.

Streets and Roads (Continued)

Neb., Harvard—Paving various streets, asphalt on concrete, to A. A. Dobson Co., 809 1st Natl. Bldg., Lincoln, $51,010. Noted Dec. 7.

Missouri—State Hy. Dept. at div. office Caruthersville, 3.08 mi. road on Kings Highway, 16 ft., Federal Aid Project 173 A, Pemiscot Co., to Little & Morgan, Hayti, $29 502. Noted Oct. 5.

Missouri—State Hy. Dept., Jefferson City, 4.489 mi. road south of Elsinore to Butler Co. line, 24 ft., State Project Route 16, Sect. 74, Carter Co., to W. A. Leach, Poplar Bluff, $11,772; 4.84 mi. road between Monett and Cassville, 16 ft., State Project Route 37, Sect. 2, Barry Co., 4.482 mi. road from Jefferson Co. line to Bloomdale, 16 ft., State Project Route 25, Sect. 5, St. Genevieve Co., and 4.914 mi. road from Cassville southwestwardly, 16 ft., State Project Route 37, Sect. 7, Barry Co., to Allhands & Davis, 705 Frisco Bldg., Joplin, $38,418, $27,855 and $39,260 respectively; 3.53 mi. road west of Bethany 18 ft., State Project Route 4, Sect. 24, Harrison Co., to Rand Constr. Co., 1007 New York Life Bldg., Kansas City, $136,769; 2.322 mi. road from California eastwardly, 24 ft., State Project Route 12, Sect. 29, and 5 mi. road from McGirk east and west, 16 ft., State Project Route 12, Sect. 30, both Moniteau Co., to J. W. Newton, Eldon, $36,293; 0.303 mi. road from Lebanon to Pulaski Co. line, 34 ft., State Project Route 14, Sect. 45, Pulaski Co. and 0.559 mi. road from Lebanon to Pulaski Co. line, 34 ft., State Project Route 14, Sect. 38, Laclede Co., to Reiley & Bailey, International Life Bldg., St. Louis, $172,000; 3.049 mi. road east of Risco, 24 ft., State Project Route 82, Sect. 3, New Madrid Co., to Novaculite Constr. Co., Marion, Ill., $45,830; 4.215 mi. road from Jackson Co. line to Warrensburg 26 ft., State Project Route 12, Sect. 5, Johnson Co., to J. W. Wilson, Warrensburg, $22,289; 4.061 mi. road from Vienna northwardly, 16 ft., State Project Route 7, Sect. 55, Maries Co., to Birmington & Terry, Vienna, $17,819; 2,348 mi. road from Milan to Green City, 24 ft., State Project Route 6, Sect. 35, 5 mi. road from Milan eastwardly, 24 ft., State Project Route 6, Sect. 34, and 4.394 mi. road from Milan east, 24 ft., State Project Route 6, Sect. 33, all in Sullivan Co., to C. P. O'Reilley & Co., Wainwright Bldg., St. Louis, $68,930; 4.855 mi. road from Jefferson City southwestwardly toward Eldon, 12 ft., State Project Route 15, Sect. 52, Cole Co., to F. Kersting, Jefferson City, $66,177; 4.974 mi. Sni-a-bai Rd. from Blue Ridge Rd. east, 18 ft., State Project Route 2, Sect. 6, 4.942 mi. Sni-a-bai Rd. from Blue Ridge Rd. east, 18 ft., State Project Route 2, Sect. 5, 4 mi. Sni-a-bai Rd. from Blue Ridge Rd. east, 18 ft., State Project Route 2, Sect. 4, and 4 mi. Sni-a-bai Rd. from Blue Ridge Rd. east, 18 ft., State Project Route 2, Sect. 3, all in Jackson Co., to Alzina Constr. Co., Unity Bldg., Springfield, Ill., $747,500. Noted Dec. 14 and 21.

Missouri—State Hy. Dept., Jefferson City, 4.864 mi. road from Fairfax northwardly toward Tarkio, 30 ft., State Project Route 1, Sect. 72, Atchison Co., to W. R. Larson Constr. Co., 519 Secy. Natl. Bank Bldg., Sioux Falls, S. D., $70,318; 3,351 mi. road from México eastwardly, 16 ft., State Project Route 22 Sect. 9, Audrain Co., to Henderson-Washam, Alexander, $49,915; 2.585 mi. road on Kings Highway, 26 ft., State Project Route 25 Sect. 19, Cape Girardeau Co., to Carroll, Bedwell & Hartle, Cape Girardeau, $17,378; 4.016 mi. road from Grayson to Clay Co. line, 30 ft., State Project Route 33 Sect. 10, Clinton Co., to Land Constr. Co., Ballinger Bldg., St. Joseph, $23,954; 4.866 mi. road from Centerville southwardly, 24 ft., State Project Route 21 Sect. 25, Reynolds Co. and 3.095 mi. road from Elsinore southeastwardly, 24 ft., State Project Route 16, Sect. 73, Carter Co., to Coopers Service Constr. Co., Federal Reserve Bank Bldg., St. Louis, $53,161 and $22,369 respectively; 2.674 mi. road from Lawrence Co. line to Billings, 18 ft., State Project Route 16 Sect. 20, Christian Co., to W. F. Plummer, Inc., 434 East Elm St., Springfield, $56,346; 3.994 mi. road from Wayland southwardly, 24 ft., State Project Route 9 Sect. 7, Clark Co., to General Constr. Co., Syndicate Trust Bldg., St. Louis, $52,484; 1.608 mi. road from Grayson to Clay Co. line, 30 ft., State Project Route 33 Sect. 9, Clinton Co., to J. O. Patterson & Co., 310 Ridge Bldg., Kansas City, $13,689; 4.896 mi. road from Buffalo westwardly, 24 ft., State Project Route 15 Sect. 80, Dallas Co., to C. F. Johnson & Sons, Buffalo, N. Y. (street address not available) $26,275; 4.972 mi. road from Clarksdale northwardly, 24 ft., State Project Route 31 Sec. 1, De Kalb Co., to W. A. Gierke, St. Joseph (street address not available) $15,211; 3.01 mi. road from Ava southeastwardly, 24 ft., State Project Route 5 Sect. 93, and 3.31 mi. road from Ave southeastwardly, 24 ft., State Project Route 5 Sect. 94, both Douglass Co., to Summerfield & Jones Co., Springfield (street address not available) $25,041; 4.98 mi. road from Sullivan to St. Clair, 30 ft., State Project Route 14 Sect. 66 and 1.658 mi. road from Sullivan to St. Clair, 30 ft., State Project Route 14 Sect. 67, both Franklin Co. to Frazier Davis Constr. Co., Arcade Bldg., St. Louis, $47,400; 4.234 mi. road from Pettis Co. line at Windsor southwestwardly, 18 ft., State Project Route 24 Sect. 6 and 2.673 mi. road from Pettis Co. line at Windsor southwestwardly, 18 ft., State Project Route 24 Sect. 5, both Henry Co., to J. Pope, Jefferson City, $201,600; 4.94 mi. road from West Plains southwestwardly, 24 ft., State Project Route 80 Sect. 7, Howell Co., to H. A. Warman, Pittsfield, Ill. (street address not available) $11,135; 4.469 mi. road from Opolis to Asbury, 18 ft., State Project Route 57 Sect. 2, Jasper Co., to V. E. Koch, Box 604, Joplin, $76,200; 4.132 mi. road between Festus and St. Genevieve Co. line, 16 ft., State Project 25 Sect. 2 and 4.012 mi. road from Festus to St. Genevieve Co. line, 16 ft., State Project Route 25 Sect. 3, both Jefferson Co., to W. J. Knorpp and J. Richardson, De Soto, $28,902 and $28,834 respectively; 4.94 mi. road from Warrensburg south, 30 ft., State Project 13 Sect. 26, 4.899 mi. road south of Warrensburg, 30 ft., State Project Route 13 Sect. 27 and 4.096 mi. road from Warrensburg south, 26 ft., State Project Route 13, Sect. 28, all in Johnson Co., to A. L. Cook, Ottawa, Kan., $93,473; 4.767 mi. road north of Lebanon, 12 ft., State Project Route 5 Sect. 73, Laclede Co., to Pioneer Contg. Co., 101 New York Life Bldg., Springfield, $18,528; 4.991 mi. road from Hardin east and west, 26 ft., State Project Route 10 Sect. 14 and 4.732 mi. road between Richmond and Hardin, 26 ft., State Project Route 10 Sect. 13, both in Ray Co., to Cook and O'Brien, 305 Ry. Exch. Bldg., Kansas City, $39,747; 3.159 mi. road from Lexington to Wellington, 18 ft., State Project Route 20 Sect. 10 and 5 mi. road from Jackson Co. line to Odessa, 24 ft., State Project Route 2 Sect. 7, both in Lafayette Co., to Cook & O'Brien, 305 Ry. Exch. Bldg., Kansas City, $112,463 and $79,104 respectively; 1.942 mi. road from Linneus northwardly, 18 ft., State Project Route 5 Sect. 15, Linn Co., to J. F. Meek, Chillicothe, $36,699; 3.078 mi. road from Cole Co. line to Eldon, 24 ft., State Project Route 15 Sect. 57 and 4.991 mi. road from Cole Co. line to Eldon, 24 ft., State Project Route 15 Sect. 56, both in Miller Co., to Fogleman & Thompson, Eugene, $38,000; 2 mi. road from Tipton Ford to Neosho, 18 ft., State Project Route 1 Sect. 105 and 5 mi. road from Tipton Ford to Neosho, State Project Route 1 Sect. 104, both in Newton Co., to Independent Constr. Co., Pittsburg, Kan., $285,758; 2,986 mi. road between Wentzville and St. Peters, 18 ft., State Project Route 2 Sect. 71, 2.265 mi. road between Wentzville and St. Peters, 18 ft., State Project Route 2 Sect. 68 and 2.304 mi. road between Wentzville and St. Peters, 18 ft., State Project Route 2 Sect. 69, all in St. Charles Co., to S. M. Timberlake, 236 Amer. Central Life Bldg., Indianapolis, Ind., $319,019; 3.564 mi. road from Memphis southwardly, 16 ft., State Project Route 15 Sect. 4, Scotland Co., to W. H. and G. H. Turner, Memphis, $54,616; 2.575 mi. road from Seymour westwardly, 16 ft., State Project Route 15 Sect. 35, Webster Co., to Allhands & Davis, 705-6 Frisco Bldg., Joplin, $17,615; 1.279 mi. road from Mansfield northeastwardly, 12 ft., State Project Route 5 Sect. 86, Wright Co., to A. M. Curtis and M. J. Graig, Hartville, $7,609. Noted Dec. 14, 21 and 28.

Missouri—State Hy. Dept. at div. office Kennett, 6.586 mi. road from Kennett to Paragould, 16 ft., Federal Aid Project 199, Dunklin Co., to Robertson-Carmaen-Bennett, Caruthersville, $130,496. Noted Oct. 5.

Mo., Galena—Clerk Stone Co., grading, etc., 5¼ mi. secondary road between Crane and Galena, 18 ft., to R. H. Sharp, Reeds Springs, $41,172. Engrs. est. $51,000.

Mo., Kansas City — Paving Locust St., 17,000 yd. 3 in. bituminous macadam on 11 in. base, to W. C. Mullins Constr. Co., 419 Nelson Bldg., $2.53 per sq.yd.

Mo., St. Louis—Bd. Pub. Serv. grading and paving 700 ft. Tennessee Ave. from Iron to Fillmore Sts., to F. B. Grant, 810 Chestnut St., $5,055; 860 ft. Esther Ave. from Elizabeth to Wilson Aves., to Webb-Kunze Constr. Co., 5927 Fyler Ave., $5,037; 3,000 ft. Goodfellow Ave. from Maffitt to Natural Bridge Aves., to Fruin-Colnon Constr. Co., Merchants-Laclede Bldg., $5,618, Terminal R.R. Assn. is doing 18,140 cu.yd. grading, etc., in connection with this project, $11,500. Noted Dec. 21.

Tex., Crockett—Houston Co. grading and gravel surfacing 6.9 mi. State Highway 21, 16 ft., to Smith Bros., Crockett, $112,802. Engrs. est. $124,083. Noted Dec. 14.

Tex., Dallas—Paving, curbing and guttering Travis St. from Bowser to Hester Sts. and Clinton St. from Kingshighway to north city limits, 40 ft. bitulithic on 5 in. concrete, to Central Bitulithic Co., Praetorian Bldg., $105,610 and $19,216 respectively.

Tex., Jefferson—Marion Co., to Henderson & Co., Omaha, grading, claying, gravel surfacing, etc., 3.56 mi. Highway 8 from here to Marion Co. line, 16 ft., $34,115, gravel surfacing to be furnished by county $15,000, engrs. est. $55,000; 7.57 mi. Highway 8 from here to Cass Co. line, 16 ft., $53,752, gravel surfacing furnished by county $14,000. Noted Dec. 28.

Tex., Jourdanton—Atascosa Co. grading, 1.76 mi. State Highway 2, Federal Aid Project 332, 18 ft., to C. M. Kelly & Co., San Antonio, (street address not available) $16,384. Contract for bituminous topping will be let at later date. Cost of surfacing to be furnished by county. Engrs. est. $27,500 incl. 10% for engineering and contingencies. Noted Oct. 19.

Tex., Kaufman—Kaufman Co. grading 9.37 mi. Highway 15 from Terrell west to Talley-Forney Rd., 24 ft., to C. W. Burgess, 501 Dallas Co. State Bank Bldg., Dallas, $55,164. Engrs. est. $60,000. Noted Dec. 21.

Tex., Kerville — Kerr Co. grading and gravel surfacing 4.45 mi. Highway 41, 16 ft., to G. Alvis, Winnsboro, $30,953. Noted Dec. 28.

Tex., Marlin — Falls Co. grading and gravel surfacing 9.22 mi. State Highway 44, Federal Aid Project 297, 16 ft., to Hannah Constr. Co., Box 994, Waco, $80,354. Gravel furnished by county $28,175. Engrs. est. $108,000.

Tex., Orange—Orange Co. grading, shell or gravel surfacing 10.66 mi. East Texas Highway 8, 18 ft., 76.74 cu.yd. concrete, 10,500 cu.yd. earth excav., 7,100 cu.yd. shell or gravel, 6,765 lb. reinforcing, to F. P. McElwrath, Corsicana, $12,057. Surfacing furnished by county $15,000. Engrs. est. $30,000.

Tex., San Angelo—Tom Green Co. grading 25.78 mi. Highway 7 and 7A, Federal Aid Project 229, 24 ft., and 16.44 mi. Highway 9A, 24 ft., to L. F. McMillan, 4212 Ave. D, Austin, $24,463 and $16,992 respectively; bridging and draining above projects to Austin Bros. Bridge Co., Coombs St., Dallas, $27,067 and $24,462 respectively. Engrs. ests. $57,000 and $53,138 respectively incl. 10% for engineering and contingencies.

Tex., Waco — McLennan Co. grading, gravel surfacing and bituminous topping 3.7 mi. Highway 7, The McGregor Rd., 16 ft., to Wear & Thomas, Rogers, $29,947. Engrs. est. $32,075. Noted Dec. 28.

Oklahoma—State Hy. Dept., Oklahoma City, hardsurfacing on low type paving 31.0729 mi. Federal Aid Project 84, Le Flore Co., to M. R. Ammerman, 246 North Market St., Wichita, Kan., $424,707. Noted Nov. 16.

California—State Hy. Dept., Sacramento, constructing 3.32 mi. highway from Donner Summit to Donner Lake, Federal Aid Project 113, Nevada Co., to J. Wilmshurst and T. Manetas, 2860 Folsom St., San Francisco, 77,200 cu.yd. excav., (ledge rock and boulders ½ cu.yd. in size and over) at $1.18 per cu.yd., 25,700 cu.yd. excav. without classification (incl. boulders less and ½ cu. yd. in size), $0.78, 360 cu.yd. Class A Portland cement concrete $24, 169 cu.yd. rubble masonry (retaining walls $14, etc., total $124,599; grading and paving 9.4 mi. highway between New County Well and Old County Well, Imperial Co., to G. H. Oswald, 366 East 58th St., Los Angeles, 18,000 cu.yd. excav. without classification at $0.85 per cu.yd., 15,300 ton asphaltic concrete paving (Grading A) $8.35, total $143,055. Noted Jan. 4.

California—State Hy. Dept., Sacramento, grading and paving with asphalt macadam 8.5 mi. highway between Granada and Yreka, Siskiyou Co., to V. R. Dennis Constr. Co., McMinnville, Ore., $158,645. Noted Dec. 21.

Calif., El Centro—To J. A. Costello, 1083 Shotwell St., San Francisco, improving portions Orange, Commercial, 3rd and 4th Sts., $101,415; portions Neil, Holt, Hamilton, Vine Wensley and 7th Sts., $94,993; portions Olive and Brighton Aves., $56,754; portion 2 main alleys, $59,334; portions 5th, 6th, El Centro and Euclid Sts., $41,482. Noted Jan. 4.

Industrial Works

PROPOSED WORK

N. H., Nashua—Amer. Box and Lumber Co., 103 Main St., plans plant, at Edgeville, to replace one recently destroyed by fire. $175,000-$200,000. Architect not announced.

Mass., East Walpole—Bird & Son plan

Industrial Works (Continued)

large factory addition. Monks & Johnson, 99 Chauncey St., Boston, archts. and engrs.

Mass., Marlboro — Marlboro Wire Goods Co., High St., having plans prepared by J. F. Bigelow, archt., 64 Highland Ave., 1 story, 80 x 150 ft. factory, brick and steel, High St. $50,000.

Conn., Bridgeport — New Haven Dairy Co., 201 Hazel St., New Haven, plans 3 story ice cream factory, brick and concrete, Railroad and South Aves. $150,000. Architect not announced.

Conn., New Haven—H. M. Hodges & Bro., 290 York St., having plans prepared by Brown & Von Beren, archts., 185 Church St., 5 story, 40 x 60 ft. warehouse, brick and timber, York St. $40,000.

Conn., Norwalk — Griffing Mfg. Co., 61 Wall St., plans factory, brick and timber. $50,000. Architect not announced.

Conn., Waterbury—Connecticut Castings Co., Watertown Ave., plan large 1 story shop, brick and steel, Watertown Ave. Architect not announced.

N. Y., Buffalo—See "Buildings."

N. Y., Buffalo—Montgomery & Co., Court St. plans rebuilding lumber plant destroyed by fire. $200,000. Architect not announced.

N. Y., Jamestown—Acme Worsted Mills, Jones St. and Gifford Ave., plans 2 story, 70 x 100 ft., brick addition to mill. $100,000. Architect not announced.

N. Y., Marion — Wayne Food Products Co. plans reconstructing its plant, destroyed by fire. $70,000. Architect not announced.

N. Y., New York—Arctic Hygeia Ice Mfg. Co., 300 East 133rd St., having plans prepared by Ophuls & Hill, archts. and engrs., 112 West 42nd St., brick, steel and concrete addition to plant, plain foundation. $500,000.

N. Y., Niagara Falls—Cataract City Milling Co., Canal Basin, plans rebuilding major portion of its wheel house in lower Niagara River, destroyed by fire. $40,000. Architect not announced.

N. Y., Oswego—Netherlands Co., Inc., plans cold storage and milk pasteurization plant. $250,000.

N. Y., Saratoga — Saratoga Hospital, Church St., plans new central power house. $50,000. W. H. Vaughn, 400 Bway., engr.

N. Y., Syracuse — Onandaga Hide & Leather Co., East Water St., plans rebuilding portion of factory destroyed by fire. $45,000. Architect not announced.

N. Y., Syracuse—See "Buildings."

N. Y., Tonawanda — Hoefler Ice Cream Co., 61 Fillmore Ave., purchased site on Seymour and Adams Sts. and plans factory. To exceed $50,000. Architect not selected.

N. J., Atlantic City—P. Hernigs Sons Co., Inc., having plans prepared by W. H. Tunius, archt., Perry Bldg., Phila., and soon takes bids 1 story, 93 x 100 ft., milk depot, brick, plain foundation, Pennsylvania and Mediterranean Aves. $40,000.

N. J., Newark—Kolba Constr. & Wrecking Co., 28 Peshine Ave., having plans prepared by W. A. Tilton, archt., 76 Montgomery St., Jersey City, 1 story, 100 x 100 ft. and 45 x 101 ft., brick and timber garage, plain concrete foundation, Madison and Monroe Sts. $50,000.

Pa., Allentown—Penn Throw Silk Co., Lena and Collom Sts., Phila., soon takes bids 2 story and basement, 90 x 120 ft. brick and steel mill, plain foundation. $60,000. W. Steele & Sons, 16th and Arch Sts., Phila., engrs.

Pa., Easton—Binnery & Smith Co. having plans prepared by Lockwood-Greene & Co., engrs., 101 Park Ave., New York City, 4 story, 80 x 100 ft. rein.-con. plant and 250 hp. power plant.

Pa., Mount Carmel—Mt. Carmel Item, having plans prepared by W. Steele & Sons, archts., 16th and Arch Sts., Phila., 3 story, and basement, 50 x 50 ft. brick and steel, plant, plain foundation. $45,000.

Pa., Phila.—Phila. Electric Co., 10th and Chestnut Sts., plans addition to power house, three 30,000 k.w. units, Beach and Palmer Sts. $6,500,000 to $7,000,000. Stone & Webster, Real Estate Trust Bldg., engrs.

Pa., Pittsburgh—Hollander-Lewis Co., 1316 Forbes St., having plans prepared by T. Hannah, archt., Publication Bldg., 2 story, 80 x 135 ft. brick addition to factory, 1316 Forbes St. $40,000.

Pa., Reading—Reading Coal & Iron Co., plans to completely electrify all its machinery breakers on properties in Northumberland and Schuylkill Counties, work will include 5 or 6 large power plants, to exceed $500,000.

Md., Baltimore—F. A. Munsey Co., 280 Bway., New York City, and Baltimore, had plans prepared by McKim, Meade & White, archts., 101 Madison Ave., New York City, 2½ story, 96 x 200 ft. plant, rein.-con. and brick, concrete pile foundation, St. Paul Pl., Centre and Hamilton Sts., here. $450,000.

In 1922—

Construction News Service of *Engineering News-Record*

offered you a greater number of construction tips than in any preceding year.

We endeavored to serve you to the best of our capabilities in the year just past, and we shall continue to do so cheerfully in the year just started.

Here's a little résumé of the service rendered

	Number of items published					
	Bids Desired			Proposed Work		
	1922	1921	1920	1922	1921	1920
Water-Works	506	335	205	751	560	622
Sewers	500	407	340	675	563	540
Bridges	497	409	424	435	419	427
Waste Disposal	17	.....	.....	37	.....	.....
Dams	28	.....	.....	86	.....	.....
Railways	13	13	15	91	64	103
Excavation & Dredging	169	186	218	219	161	220
Streets and Roads	2,150	1,946	1,952	2,300	2,011	2,197
Industrial Works	546	420	427	1,840	1,514	1,514
Buildings	1,539	1,951	1,235	3,834	5,663	5,115
Federal Gov't Work	492	479	573	272	195	412
Miscellaneous	661	685	639	740	549	559
	7,118	6,831	6,028	11,280	11,699	11,709

In addition to 7,118 jobs on which bids were desired and 11,280 items of proposed work, we published 1,855 reports of bids received, 8,140 announcements of contracts awarded and 128 decrees of the Federal Power Commission.

A total for 1922 of.....28,521 items
Against the 1921 record of....27,455 items
For 1920.....26,986 items
And for 1919.....25,643 items

Are you taking full advantage of this valuable

Construction News Service

Industrial Works (Continued)

D. C., Wash. — Milburn-Heister Co., archts., 710-14th St., preparing plans for factory. $80,000. Owner's name withheld.

D. C., Wash.—H. Wardman, 1430 K St., N. W., is having plans prepared by Waggaman & Wardman, archts., 1430 K St., N. W., for warehouse, 64,000 sq. ft. floor space, here. Owner will build by separate contracts. $200,000.

N. C., Cramerton—Mays Mill, Inc., having plans prepared by J. E. Sirrine, archt., Greenville, S. C., addition to weave shed, to house 2,000 looms. $1,000,000. Noted Dec. 7.

N. C., Raleigh—Carolina Power & Light Co., plans 60,000 volt sub-station near State Hospital, here. P. A. Illevy, genl. mgr.

La., Marrero—Celotex Co., 636 Carondelet St., New Orleans, having plans prepared and will open bids end of January, 2 additional units to plant here, frame also brick, steel and rein.-con. buildings, $100,000.

La., Monroe—Atlas Oil Co. plans plant. $100,000. Architect not announced.

La., New Orleans—New Orleans Cigar Box Co., 1636 St. Roch St., plans 1 story factory, all shaped, 40 x 180 ft. and 60 x 90 ft. O. Moser, vice-pres.

Ky., Lexington—Lexington Mine & Mill Supply Co., 544 West Main St., plans 1 and 2 story, 50 x 210 ft., addition to plant, West Main St. $50,000. Architect not announced.

O., Cleveland—Eclipse Electrotype & Engraving Co., 2041 East 3rd St., plans 5 story, brick, steel and concrete plant, plain foundation, on lot 67 x 170 ft., 1457 Superior Ave. $200,000. Architect not selected.

O., Cleveland — Fisher Bros. Co., 2323 Lakeside Ave., having plans prepared by W. S. Lougee, archt., 500 Marshall Bldg., 1 and 2 story, 120 x 120 ft., brick, steel and concrete garage and machine shop, Lakeside Ave. near East 23rd St. $75,000.

O., Cleveland—Fuller Cleaning Co., 7606 Carnegie Ave., having plans prepared by J. F. Steffens, archt., Fidelity Mortgage Bldg., 3 story, dry cleaning plant, brick and concrete. $60,000.

O., Columbus—H. C. Godman Co., 31 North 4th St., having plans prepared by Richards, McCarty & Bulford, archts., 384 East Broad St., 1 story and basement, brick, concrete and steel factory, West State St. $75,000.

O., Dayton—C. Zonars Co., 116 West 4th St., plans 3 story and basement, 57 x 132 ft., rein.-con. and brick factory, 5th and Wilkinson Sts., $150,000. Architect not selected.

Ind., Brazil—Stout Furniture Co. plans 3 story and basement addition to factory, brick. $50,000. Architect not selected.

Ind., Clinton—Dering Coal Co., 332 South Michigan Ave., Chicago, having plans prepared by Allen & Garcia Co., engrs., 21 East Van Buren St., Chicago, 1 story, 50 x 125 ft. coal washer, brick, here. $50,000.

Ind., Evansville—Chicago & Eastern Illinois Ry., McCormick Bldg., Chicago, plans 2 story shops and roundhouse, Ross Ave. Rd., here. $3,000,000. Architectural Dept. of Company. archts.

Ind., Ft. Wayne—Ft. Wayne Box Co., Superior St., having plans prepared by C. R. Weatherhogg, archt., Citizens Trust, 4 story, 50 x 120 ft. factory, rein.-con. and brick, Superior St. $100,000. Noted Dec. 28.

Ind., Gary—Bd. Educ. having plans prepared by J. H. Wildermuth, archt., 690 Bway, 1 story, 70 x 115 ft. machine shop, foundry and laundry building, brick, 6th St. $40,000.

Ind., Indianapolis—Wangelin Sharp, 443 Virginia Ave., having plans prepared by R. F. Daggett, archt., Consolidated Bldg., 2 story and basement, 40 x 150 ft. plant, brick, Virginia Ave. $45,000.

Mich., Mottville—Michigan Gas & Electric Co., Three Rivers, having plans prepared by Holland, Ackerman & Holland, engrs., 53 West Jackson St., Chicago, 30 x 60 x 140 ft. hydro electric plant, on St. Joseph River, incl. rein.-con. dam 11 ft. 6 in. high, 250 ft. long. $400,000. Noted Jan. 4.

Ill., Chicago—Garibaldi & Cuneo, 1 West South Water St., having plans prepared by R. G. Schmidt & Co., archts., 154 West Randolph St., 4 story, 100 x 125 ft., factory, rein.-con., brick and steel, 212 West Illinois St. $50,000.

Wis., Green Bay—Green Bay Newspaper Co., 315 Cherry St., having plans prepared by Foeller, Schober & Stephenson, archts., Nicolet Bldg., 2 story and basement, 60 x 150 ft., printing plant, brick, terra cotta and concrete, plain foundation. $100,000.

Wis., Sheboygan—F. Hensel Co., North 7th and Center Sts., plans 2 story, 60 x 100 ft., garage, repair shop, etc., brick, rein.-con. and steel, plain foundation. Center St. $50,000. Architect not selected.

Wis., Sheboygan—J. and W. Jung Co., 720 North 8th St., having plans prepared by W. C. Weeks, archt., 720 Ontario Ave., 1 story, 50 x 100 ft., refrigerating plant and central heating station, brick, rein.-con. and steel, plain foundation. $50,000.

Wis., Sheboygan — Northern Furniture Co., South Water and New Jersey Sts., having plans prepared by W. C. Weeks, archt., 720 Ontario Ave., 2 story, 185 x 200 ft., brick, rein.-con. and steel factory, plain foundation. $75,000.

Minn., Minneapolis—Buzza Co., 16 South 8th St., having plans prepared by Magney & Tusler, archts., 126 South 9th St., 3 story addition to factory and office, rein.-con., brick and tile, Lake St. and Colfax Ave. $150,000.

Minn., St. Paul—St. Paul Gas Light Co., 6th and Cedar Sts., having plans prepared by Toltz, King & Day, engrs., 1410 Pioneer Bldg., 100 x 225 ft. generating plant, and 60 x 150 ft. coal pulverizing shed, brick and concrete, on island in Mississippi River near Omaha Rd. Bridge.

Mo., St. Louis—Von Hoffman Press, 9th and Walnut Sts., soon takes bids 7 story, 61 x 125 ft., brick addition to plant, plain foundation. $175,000.

Ark., Eldorado — North Amer. Oil Co., plans to rebuild refinery recently destroyed by fire. $200,000. Architect not announced.

Tex., Dallas—Oak Cliff Paper Mills, care E. T. Fleming, pres., having plans prepared box factory. $75,000. Architect not announced.

Idaho, Lewiston—Clearwater Timber Co., Old Natl. Bank Bldg., Spokane, Wash., having plans prepared by Wilkinson Bros., archts., Minneapolis, Minn., for sawmill, here. $2,000,000. F. W. Farnham, secy.

Wash., Kettle Falls — White Pine Sash Co., Myrtle St. along tracks Northern Pacific R.R., Spokane, having plans prepared by F. W. Horstkotte, engr., Mohawk Bldg., Spokane, and takes bids in spring, band sawmill, incl. power plant, dam logging road, etc., here. $150,000.

Wash., Walla Walla—Whitman Canning Co. plans cannery. $100,000.

Wash., Yakima—Northern Pacific R. R. having plans prepared freight terminal here, $150,000; also stations at Harrah and Wapato, $6,000 and $50,000 respectively. H. A. Glen, Yakima, engr. Noted Oct. 19.

Calif., Berkeley—C. H. Skidmore, archt., 426 Call Bldg., San Francisco, preparing plans 5 story, fireproof warehouse, University Ave. $100,000. Owners name withheld.

Calif., Oakland—C. H. Skidmore, archt., 426 Call Bldg., San Francisco, preparing plans 5 story, fireproof warehouse, San Pablo Ave. $90,000. Owners name withheld.

Calif., San Francisco—C. H. Skidmore, archt., 425 Call Bldg., preparing plans 5 story, fireproof warehouse, downtown district. $100,000. Owners name withheld.

Calif., San Francisco—Auto Service Co., of Los Angeles, care O'Brien Bros., Inc., archts., 240 Montgomery St., having plans prepared 1 story, rein.-con. garage and service building, Richmond district. $40,000.

Calif., San Rafael — National Ice Co., Postal Telegraph Bldg., San Francisco, having plans prepared 2 story, rein.-con. addition to ice plant, 4th St., here. $100,000. Private plans.

Calif., Visalia—Visalia Agricultural Wks. purchased 132 x 654 ft. site and plans factory, Pratt Villa Tract. J. S. Johnson, 415 North Garden St., member of company.

Que., East Broughton—Asbestos Mines Ltd., plans to rebuild plant recently destroyed by fire. $200,000. Architect not announced.

Ontario—See "Railways."

Ont., Dundas — Hydro Electric Power Comn., Hydro Bldg., University Ave., Toronto, plans to rebuild concrete, brick and steel substation and transformer station, recently destroyed by fire. $125,000. F. A. Gaby, ch. engr.

BIDS DESIRED

Mass., Pittsfield—H. N. Wilson, archt., 651 North St., taking bids 1 story, 60 x 110 ft. garage, brick, plain foundation, for W. K. George, 108 West Housatonic St. $55,000.

R. I., Providence—G. Wolf, archt., 88 Althea St., taking bids 1 story garage and service station, brick, concrete and steel, plain foundation, Library Court, for Goldberger & Steiner, Olneyville Sq. $40,000. Noted Nov. 16.

N. Y., Brooklyn — Rubin Coal & Ice Corp., Glenmore Ave., 2 story, 120 x 131 ft., brick, steel and concrete plant, plain foundation, 18th Ave. near Tropsey Ave. $500,000. Work will be done by separate contracts under supervision of E. M. Adelsohn, 1778 Pitkin Ave., archts. and engrs.

Pa., Ardmore—C. Norton, archt., taking bids 2 story and basement, 60 x 150 ft. brick and steel garage, plain foundation, Lancaster Ave., for Harris, LeRoy & Clarke. $60,000.

N. C., Charlotte—Jan. 17, by Lockwood, Greene & Co., engrs., Piedmont Bldg., 4 story, 150 x 180 ft. brick factory for B. M. Wade, South Graham Ext., $130,000. Noted Dec. 21.

Ill., Chicago—D. S. Klafter, archt., 64 West Randolph St., receiving bids 125 x 150 ft. garage, rein.-con., brick and steel, Lawrence Ave. near Kentucky St., for B. Schwartz, care architect.

Ill., Chicago—D. Mahaffey, archt., 110 North La Salle St., receiving bids 2 story, 79 x 80 ft. factory, rein.-con., brick and steel, Argyle and Lincoln Sts., for N. A. Strand & Co., 631 West Jackson Blvd. $50,000.

Ill., Shelbyville—Feb. 5, complete electric light and power plant. W. A. Fuller Co., Ry. Exch. Bldg., St. Louis, Mo., engrs.; adv. this issue. Noted Oct. 19.

Wis., Milwaukee—R. E. Oberst, archt., 317 Grand Ave., taking bids and opens same about Jan. 15, 1 story and basement, 64 x 100 ft. garage, brick, tile and concrete, plain foundation, for C. W. Valencourt, 172 12th St. $45,000.

Wis., Racine—Horlick Malted Milk Co., Northwestern Ave., taking bids 1 story 75 x 120 ft., brick and concrete garage, plain foundation. $40,000. Private plans.

Tex., Ft. Worth—Arctic Ice Co. taking bids 2 story ice plant, Jassamine and Clay Sts. $60,000. Engineer not announced.

Calif., Emeryville — Westinghouse Electric & Mfg. Co., 1st Natl. Bank Bldg., San Francisco, receiving bids first unit insulator factory, 1 and 2 story, on 12 acre tract, here. B. H. Prack, Keyston Bldg., Pittsburgh, Pa., archt. Noted Dec. 7.

Ont., Toronto—Jan. 18, by Chairman Toronto Transportation Comn., 35 Yonge St., general repair shops, 1 story, brick and steel incl. boiler house and subsidiary buildings, also general stores building of rein.-con., Bathurst St. and Davenport Rd. $1,500,000. H. H. Couzens, genl. mgr.

BIDS RECEIVED

Mo., St. Louis—Bd. Pub. Serv., 208 City Hall, opened bids Jan. 2, general contract 2 story, 54 x 225 ft., rein.-con. and brick service building, plain foundation, for St. Louis Training School for Feeble Minded at Scott Farm, from J. A. Godfrey & Co., Wainwright Bldg., $107,433; J. J. Clark Constr. Co., Arcade Bldg., $108,927; Kellerman Contg. Co., Victoria Bldg., $110,381. Noted Dec. 7.

CONTRACTS AWARDED

Mass., Fitchburg—Star Worsted Co., 5 story, 67 x 125 ft. mill addition, brick and steel, plain foundation, to Wiley & Foss, Central St. Archts. est. $125,000. Noted Nov. 16.

Mass., Holyoke—Germania Mills, Race and South St., 6 story, 70 x 300 ft. factory and storage building, concrete and brick, South St., to Casper Ranger Constr. Co., 20 Bond St. Archts. est. $300,000.

Mass., New Bedford — Acuchnet Mills Corp., Delano St., 1 story, 60 x 100 ft. picker house, brick and timber, South Front St., to J. W. Bishop Co., 908 Purchase St. Archts. est. $40,000.

R. I., Woonsocket—A. E. Bonin, 137 Oakley Rd., 2 story, 104 x 106 ft. mill, brick and timber, plain foundation, Mendon Rd., to J. A. Savoie, Woonsocket (street address not available). Archts. est. $75,000.

Conn., Bristol—H. H. Judd, West and Laurel Sts., will build 1 story, 80 x 100 ft. garage, brick and steel, plain foundation, West and Laurel Sts., by day labor. $40,000. H. A. Hayden, 175 Main St., archt.

Conn., New Haven—R. G. Davis & Sons, 552 Grand Ave., 3 story, 50 x 125 ft. plant, rein.-con. and brick, plain foundation, Grand Ave., to Sperry Eng. Co., 82 Church St. Archts. est. $60,000.

Conn., New Haven—Yale University, 1 story and basement, 55 x 70 ft. and 50 x 65 ft. power plant, brick and rein.-con., plain foundation, Rose St., to Thompson-Starret, Inc., 49 Wall St., New York City. Archts. est. $500,000.

Industrial Works (Continued)

Conn., Stamford—Stamford Gas & Electric Co., 11-17 Bank St., 3 story switch house, brick, steel and concrete, plain foundation, to T. J. Pardy Constr. Co., 1387 Seaview Ave., Bridgeport. Archts. est. $50,000.

N. Y., Jamestown — Jamestown Metal Desk Co., 104 Blackstone Ave., 1 story, 100 x 200 ft., brick and stone factory addition, to P. A. Peterson, 108 Charles St. Archts. est. $40,000. Noted Jan. 4.

N. Y., New York—D. Picin, c/o M. Del Gaudio, archt. and engr., 160 West 45th St., 1 story, 95 x 210 ft., brick, steel and concrete garage, plain foundation, 170th St. and 3rd Ave., by day labor. $50,000.

N. J., Trenton—Trenton Potteries Co., 4 story, 72 x 114 ft., brick and steel plant, Lalor St., to S. W. Mather & Sons, Greenwood Ave., $95,000. Noted Dec. 14.

Pa., Erie — Watson Peck Co., Erie, 2 story, 50 x 110 ft. steel garage and service station, State St., to Erie Steel Constr. Co., Erie.

Md., Baltimore—Poe & Davies, Standard Oil Bldg., 2 story, 98 x 110 ft. garage and salesroom, rein.-con. and brick, plain foundation, 414-24 North Calvert St., to J. Waters Building Co., 23 East Centre St., $54,000. Maryland Motors, Inc., 607 St. Paul St., lessee.

W. Va., Logan—Kentucky and West Virginia Power Co., enlarging power plant, incl. 125 mi. lines from here to Hazard, Ky., to Foundation Co., 120 liberty St., New York City, $800,000. Noted Dec. 28.

W. Va., Parkersburg—Blackwood Electric Steel Corp., 1 story, 140 x 230 ft., factory, to Plate & Vogel, Parkersburg. Noted Nov. 23.

Tenn., Union City—Brown Shoe Co., 1700 Washington Ave., St. Louis, Mo., 3 story, 45 x 250 ft. and 60 x 80 ft. factory, brick, plain foundation, to T. J. Nahahan, Boatmans Bank Bldg., St. Louis, Mo. Archts. est. $200,000.

O., Cleveland—Cox Brass & Mfg. Co., 5601 Carnegie Ave., 1 story, 60 x 200 ft., brick and steel warehouse and machine shop, East 55th St. and Luther Ave., to W. Dunbar Co., 8201 Cedar Ave. Archts. est. $50,000.

O., Cleveland—Peerless Motor Co., 2555 East 93rd St., 1 story, 60 x 156 ft., steel factory, to Trus-con Steel Co., Cook Bldg. Archts. est. $40,000.

Ind., Crawfordsville—City, 1 story, 28 ft. extension to light and power plant, 200 ft. radial stack, etc., brick, to Bowyer Constr. Co., Newcastle, $45,000. Noted Oct. 5.

Ind., Lawrenceburg—Johnson & Klare Furniture Co., will build 3 story, 80 x 200 ft. factory addition, frame and stucco, by day labor. $58,000. Private plans. Noted Dec. 23.

Mich., Detroit—Pub. Lighting Comn., East Atwater St., rein.-con., steel and stone sub-station, to Gorrick Bros., 507 Owen Bldg., $54,989.

Ill., Cahokia—Union Electric Light & Power Co., 12th and Locusts Sts., St. Louis, Mo., 1st unit or approximately one-fourth of eventual plant, which will measure 345 x 800 ft., and generate 320,000 hp., rein.-con., brick and steel building, to McClellan & Junkersfeld, 45 William St., New York City. Equipment for first unit will embrace 2 steam turbo-generator units, each 40,000 hp. capacity, 8 super boilers, etc. Cost of 1st unit $8,500,000 with $1,500,000 additional for cables, conduits, etc. Eventual cost $25,000,000 without interconnections. Noted March 30 under "East St. Louis."

Ill., Chicago—F. J. Fadner, 941 Glengyle Pl., 2 story, 106 x 135 ft. garage, rein.-con., brick and steel, 1824-32 Juneway Terrace, to H. Janisch & Co., 1813 Winona St. Archts. est. $125,000. Noted Dec. 21.

Wis., Milwaukee — Barclay Realty Co., c/o J. P. Bruecker, archt., 482 Frederick Ave., 2 story, 100 x 142 ft., brick and timber warehouse, plain foundation, Barclay St., to G. E. Kahn, 114 Grand Ave. Archts. est. $45,000.

Wis., Milwaukee—T. L. Smith Co., 1125 32nd St., 2 story 40 x 85 ft., brick and timber warehouse, plain foundation, to Klug & Smith Co., 69 Wisconsin St. Engrs. est. $40,000.

Wis., Sheboygan Falls — Falls Motor Co. 1 story, 50 x 75 ft., brick and rein.-con. factory, to M. Stubenrauch, 1820 North 7th St., Sheboygan. Noted Dec. 14.

Wis., West Allis—Gas Tank Recharging Co., 1245 23rd Ave., Milwaukee, 1 story, brick and concrete plant, plain foundation, 60th Ave., here, to O. C. Randolph, 53 West Jackson Blvd., Chicago. Engrs. est. $65,000. Noted Dec. 28.

Minn., St. Paul—Amer. Radiator Co., 1807 Elmwood Ave., Buffalo, N. Y., 1 and 2 story factory, 1,000 ft. long, 65-200 ft. wide, brick, concrete and tile, Minnehaha and Fairview Aves., here, general contract to H. C. Struchen, 405 Dakota Bldg. Noted Nov. 2.

Mo., St. Louis—R. Britton, 2 story, 112 x 124 ft., brick factory, plain foundation, Rankin Ave., to Pelligreen Contg. Co., 816 Chestnut St. Archts. est. $55,000.

Ont., Welland — Welland Cotton Mills, Ltd., general contract for 1 and 2 story, 100 x 350 ft. rein.-con. and brick mill, to Diffin Constr. Co., Main St. E. Archts. est. $250,000. Noted Nov. 30.

Buildings

PROPOSED WORK

Me., Portland—Hotel—Hotel Brunswick, 21 Preble St., having plans prepared by Desmond & Lord, archts., 1 Beacon St., Boston, 5 story, 61 x 125 ft. addition, brick and steel, Preble St. $150,000.

Mass., Boston—Bank—Home Savings Bank, 75 Tremont St., plans bank and office building. $2,000,000. Architect not selected.

Mass., New Bedford — High School — City having plans prepared by F. I. Cooper Corp., archts., 172 Tremont St., Boston, 4 story brick and concrete. $300,000.

Mass., Springfield—Synagogue—Congregation Beth-Israel, c/o B. Wozny, archt., 94 State St., having plans prepared 2 story and basement, brick and steel, Chestnut St. $150,000.

Mass., Three Rivers—Church—St. Annes Roman Catholic Church plans church. $300,000. L. Geoffray, pastor.

Mass., Watertown — Church — Phillips Congregational Church, 24 South Market St., having plans prepared by G. F. Newton and R. H. Wambolt, archts., 6 Beacon St., Boston, and takes bids in about 2 months, 2 story, probably stone, South Market St. $160,000.

Conn., Hartford—Apartment—L. Bitondi, 192 Front St., having plans prepared by J. E. Marchetti, archt., 721 Main St., 4 story and basement, 50 x 110 ft., brick and steel, Vernon St. $150,000.

Conn., Hartford — Church — First and South Baptist Church, plans 1 story and basement, brick and stone, Main St. $150,000. H. B. Austin, 64 Russ St., member of com. Architect not selected.

Conn., Thompsonville—School and Convent—St. Adelbert's Church plans parochial school and convent, 2 story and basement, brick and steel. $150,000. J. Federkiewicz, pastor. H. F. Ludorf, 122 Main St., New Britain, archt.

Conn., Waterbury—Church and Parish House — Bunker Hill Congregational Church, c/o M. O. Owens, pastor, 22 Marion St., plans brick and stone, Bunker Hill Ave. and Windsor St. $150,000. F. A. Webster, 51 West Main St., archt.

N. Y., Allegany—Dormitory—St. Bonaventures College plans new dormitory, hotel style, 500 student capacity, on eastern end of college grounds. $150,000. Architect not announced.

N. Y., Binghamton—School—Bd. Educ. plans new school to replace present Carroll and Pine St. buildings. $376,000. Architect not announced.

N. Y., Buffalo—School, etc.—Nichols School, Amherst and Colvin Sts., plans 3 new buildings containing dining hall, study hall, offices, etc. also plans central heating plant. $175,000. Architect not selected.

N. Y., Buffalo—Store and Office—Huyler Candy Co., 350 Main St., plans store and office building, Delaware Ave. To exceed $200,000. Architect not selected.

N. Y., Elmira—Dormitories, etc.—Elmira College plans new dormitory buildings $150,000, gymnasium $100,000, library $100,000, hall $100,000 and administration building $50,000. Architect not announced.

N. Y., Kingston—School and Recreation—Immanuel Evangelical Lutheran Congregation having plans prepared by Siewert & Fries, archts., 2524 Fond du Lac Ave., Milwaukee, Wis., 2 story and basement, 50 x 120 ft., brick and tile, plain foundation. $150,000. F. T. Schroeder, pastor.

N. Y., Lockport—School—School Bd. purchased site on High St. and plans school and athletic field. $175,000.

N. Y., Lockport—School—Bd. Educ. having preliminary plans prepared by C. G. Schmill & Sons, archts., Prudential Bldg., Buffalo, 2 story and basement, rein.-con. and brick, Clinton St. $200,000.

N. Y., New York — Apartment — E. Brandt, c/o Springsteen & Goldhammer, archts. and engrs., 32 Union Sq., having plans prepared 5 story, brick, steel and stone, plain foundation, Edgecomb Ave. and 159th St. $250,000.

N. Y., New York—Apartment—S. Hoseff & Son, c/o R. T. Lyons, archt. and engr., 342 Madison Ave., having plans prepared 14 story, brick, steel and stone, plain foundation, Cathedral Parkway. $1,000,000.

N. Y., New York—Hotel—P. Meirowitz, c/o Sommerfeld & Steckler, archts. and engrs., 31 Union Sq., having plans prepared 14 story, 75 x 100 ft., brick, steel and stone, plain foundation, 111-115 West 46th St. $700,000.

N. Y., New York—Office—H. W. Jones-Mansville Co., Inc., Madison Ave. and 41st St., having plans prepared by Ludlow & Peabody, archts. and engrs., 101 Park Ave., 16 story, brick, steel and stone addition, plain foundation.

N. Y., New York—Theatre—A. L. Erlanger, 214 West 42nd St., having plans prepared by Warren & Wetmore, archts. and engrs., 16 East 47th St., 2 story, 90 x 125 ft., brick, steel and stone, 246 West 44th St. $500,000.

N. Y., Niagara Falls—Hotel—Chamber of Commerce having preliminary plans prepared by Esenwein & Johnson, archts., Ellicott Sq. Bldg., Buffalo, 11 story and basement, rein.-con., brick and steel, 1st St. $1,000,000. Noted Nov. 23.

N. Y., Riverhead—Bank—Riverhead Savings Bank, plans 3 story, brick, steel and stone, plain foundation, $200,000. Architect and engineer not selected.

N. Y., Rochester—Office—Neisner Bros., Inc., 190 Main St., plan 8 story, brick and steel, $250,000. Architect not announced.

N. Y., Rochester—Office—H. Sibley Estate, Sibley Bldg., having preliminary plans prepared by Gordon & Kaelber, archts., 126 Sibley Bldg., 3 story, 54 x 332 ft., brick and steel addition, 328 East Main St. $200,000.

N. Y., Syracuse—Hospital—Bd. Contr. & Supply plans hospital, Teall Ave. $400,000. Architect and engineer not selected.

N. Y., Syracuse—Hospital, etc.—St. Joseph's Hospital plans 5 story, 100 x 275 ft., concrete, brick and steel, hospital, power house and laundry building, Prospect Ave. $500,000. Noted Dec. 15, 1921.

N. Y., Syracuse—School—Bd. Contr. & Supply plans new Danforth School, West Kennedy St. $300,000. J. S. Randall, S. A. and K. Bldg., archt. and engr.

N. J., Bordentown—High School—Fowler & Seaman, archts., Broad St. Bank Bldg., Trenton, rejected bids opened Dec. 11, 2 story and basement, 92 x 121 ft., brick and steel, here, for Bd. Educ. Project postponed. Noted Dec. 21.

N. J., Jersey City—Apartment—C. H. Ziegler, archt., 75 Montgomery St., takes bids about Feb. 15, 5 story, 75 x 126 ft., brick, terra cotta and limestone, Glenwood Ave., for N. Delia Constr. Co., 574 Newark Ave. $150,000.

N. J., Newark—Apartment—S. and H. Constr. Co., 150 Harrison St., East Orange, having plans prepared by R. Bottelli, archt., 207 Market St., and takes bids about Feb. 1, 5 story, 100 x 120 ft., brick, steel and marble, Prospect Ave. and Treadwell St. $400,000.

N. J., Overbrook (Verona P. O.)—Hospital—Sutton & Sutton, archts., 402 Broad St., Newark, preparing plans and take bids in about 2 months, 2 and 3 story, rein.-con., brick and steel, here, for Essex Co. (Newark). $1,000,000.

Pa., Altoona—Synagogue—Agudth Achim Hebrew Orthadox Congregation, 1306 17th St., plans 2 story and basement, 50 x 142 ft. brick and stone. $150,000. J. Berman, 921½ A 26th St., chn. com. Architect not selected.

Pa., Beaver—College—Beaver College taking competitive sketches for steel, stone and terra cotta college buildings, Dutch Ridge Rd. $1,250,000. Noted Sept. 28.

Pa., Erie—Y. W. C. A., 134 East 44th St., New York City, soon takes bids 3 story, brick, steel and stone, plain foundation, West 7th St., here. $200,000. W. F. Thompson, 342 Madison Ave., New York City, archt.

Pa., Johnstown—Church—Zion Lutheran Church, plans 80 x 120 ft. steel and stone, Locust St. $150,000. C. Young, pres.

Pa., New Castle — St. Johns Lutheran Church, plans church, to exceed $150,000. C. W. H. Hess, deacon. Architect not selected.

Pa., Phila.—Apartment—Kenin & Shapiro, 5850 Market St., soon take bids 4 story and basement, brick and stone, 63rd and Jefferson Sts. $500,000. K. F. Otto, 3 North 19th St., archt.

Pa., Phila. — Church — Gloria Dei Lutheran Church, 5204 North Carlisle St.,

Buildings (Continued)

soon takes bids 1 story and basement, brick, steel and stone, plain foundation, 7th St. and North East Blvd. $200,000. C. W. Bolton & Sons, Witherspoon Bldg., archts.

Pa., Phila.—Schools—Bd. Educ., 19th and Chestnut Sts., soon takes bids 4 story and basement, 350 x 380 ft., 54th and Berks Sts., $750,000, 3 story, Large and Haworth Aves., $375,000, 3 story and basement, 17th and Ludley Aves., $450,000, all brick and stone. Private plans.

Pa., Sharon—Clubhouse—B. P. O. E. plans new clubhouse here, to exceed $150,000. Architect not announced.

Pa., Uniontown—Bank and Office—Citizens Title & Trust Co. having plans prepared by A. Kahn, archt., 1000 Marquette Bldg., Detroit, Mich., and H. W. Altman, associated archt., Uniontown, 2 story and basement, 43 x 150 ft., Main St. and Bway. $200,000.

Del., Wilmington—Hospital—Sisters of Mercy, c/o J. J. Monaghan, bishop, plans 4 story and basement, stone and brick, plain foundation, 7th and Clayton Sts. $500,000. Architect not selected.

Md., Baltimore — Clubhouse — Park Bd. had plans prepared by J. Pennington, archt., 330 North Charles St., 2 story, brick, plain foundation, Venable Park. $150,000. J. C. Boyd, Druid Hill Park, pres.

Md., Baltimore — Laboratory — Johns Hopkins University, Homewood, had plans prepared by E. L. Palmer, archt., 513 North Charles St., and H. E. Doeleman, engr., 507 North Charles St., 4 story, brick. $600,000.

Md., Frederick — Home — I.O.O.F., Cathedral and Saratoga Sts., had plans prepared by J. E. Sperry, archt., Calvert Bldg., seven 2 story, brick. $300,000. W. A. Jones, grand secy.

D. C., Wash.—Apartment—H. B. Davidson, 1432 K St., having plans prepared by C. West, archt., Maryland Bldg., for apartment house. $300,000.

D. C., Wash.—Apartment—D. J. Partello, 4227 8th St., N. W., having plans prepared for apartment building. $150,000. Architect not announced.

D. C., Wash.—Apartment—J. Randall, Albes Bldg., plans apartment building. $250,000. Architect not announced.

D. C., Wash.—Hotel—Powhatan Hotel Co., 18th St. and Pennsylvania Ave., N. W., having plans prepared by G. N. Ray, archt., 1147 Connecticut Ave., 10 story addition. $500,000. E. C. Owens, mgr. Noted Sept. 28.

N. C., Charlotte—Theatre—O. J. Theis, et al., Myers Park, having plans prepared by C. C. Hook, archt., Trust Bldg., theatre. $200,000.

N. C., Winston-Salem — Courthouse — Forsyth Co. plans courthouse. $300,000. L. Cash, chn. Bd. Co. Comrs. Architect not selected.

La., New Orleans—Hotel—L. Jacobs, Liverpool, London, and Globe Bldg., and A. D. Dansiger, Carondelet Bldg., having revised plans prepared by Weiss & Dreyfus, archts., Maison Blanche Bldg., and takes bids about Feb. 1, 4 story, 121 x 128 ft. Canal, North Rampart and Basin Sts. $175,000.

Tenn., Nashville—Dormitory, etc.—Peabody Teachers College, raising funds for dormitory, $200,000; 4 other buildings contemplated incl. demonstration school $400,000; administration building $200,000; men's dormitory $200,000; science hall $200,000. B. R. Payne, dir. Architect not selected.

Ky., Louisville—Temple—Kosiar Temple of Mystic Shrine having plans prepared by Joseph & Joseph, archts., Francis Bldg., for temple. $600,000.

O., Cleveland—Apartment—R. A. Boccia, 9902 Leo Ave., having plans prepared by H. W. Grieme, archt., 110 Engineers Bldg., 4 story, 45 x 120 ft., brick and timber, plain foundation, 1849 East 90th St.

O., Cleveland—Hospital—R. S. Harsh, archt., Ohio Hartman Bldg., Columbus, rejected bids opened Jan. 3, 1 story and basement, 180 x 180 ft., concrete and brick, at Cleveland State Hospital, here, for Dept. Pub. Welfare, 9th and Oak Sts., Columbus. Will readvertise. $175,000. Noted Dec. 14.

O., Cleveland—Hotel—Hollenden Hotel Co., c/o J. Thompson, mgr., East 6th St. and Superior Ave., plans 10 or 12 story, brick, steel and concrete addition, Superior Ave. near East 6th St. $2,000,000. Architects name withheld.

O., Cleveland — Orphanage — Cleveland Protestant Orphan Asylum, c/o E. J. Henry, supt., 5000 St. Clair Ave., having preliminary plans prepared by C. W. Hopkinson, archt., 900 Rose Bldg., 1 and 2 story, brick, steel and concrete, plain foundation, Harper and South Kinsman Rds. $500,000.

O., Cleveland—School—Bd. Educ., East 6th St. and Rockwell Ave., having plans prepared by W. R. McCornack, archt., East 6th St. and Rockwell Ave., 2 story, 12 room, brick, steel and concrete, East 131st St. and Corlett Ave. $200,000.

O., Cleveland—Store and Apartment—Bonar Realty Co., c/o P. F. Price, 307 Union Bldg., having plans prepared by Allen Osborn Co., archts., Rose Bldg., 4 story, Mayfield Rd., $225,000, and 3 story, 70 x 175 ft., Euclid Ave., $150,000, both brick and timber, plain foundations.

O., Cleveland—Store and Apartment—L. B. Cahn, 10615 Grantwood Ave., plans 3 or 4 story, 100 x 130 ft., brick and steel, East 105th St. south of St. Clair Ave. $250,000. Architect not selected.

O., Cleveland—Store and Apartment—M. Marmorstein, Ulmer Bldg., had plans prepared by S. H. White, archt., 1032 Schofield Bldg., 12 story, 150 x 172 ft., brick, steel and concrete, Euclid Ave. and Ford Dr. $200,000. Noted Nov. 2.

O., Lorain—Commercial and Clubhouse—Fraternal Order of Eagles, c/o P. W. Cook, chn. building com., having plans prepared by P. Rissman, archt., Lorain, 5 story, brick, steel and concrete, 6th St. and Bway. $250,000.

Ind., Delphi—High School—Bd. Educ. plans 2 story and basement, brick. $250,000. E. E. Dunlap & Co., 1050 North Delaware St., Indianapolis, archts.

Williamsport (Pa.) Building

Permits: 1100 for new buildings (double the number for 1921), valued at $1,443,814, as compared with $1,412,103 the year before. In 1921 permits numbered 557; in 1920, there were 307; and 207 in 1919, valued at $313,859—Construction News Correspondent.

Ind., Ft. Wayne—College—Ross College, West Jefferson St., plans 4 story and basement addition, brick and steel, West Jefferson St. $150,000. A. M. Strauss, 706-7-8 Shoaff St., archt.

Ind., Frankfort—High School—Bd. Educ. plans 2 story and basement brick. $200,000. Architect not selected.

Ind., Hammond—Hotel—Dickson Bros. Hotel Co., State St., plans 3 story and basement, 50 x 125 ft., brick, State St. $150,000. Private plans.

Ind., Indianapolis—Apartment—W. F. Meyers, Indiana Pythian Bldg., plans 3 story and basement, 65 x 132 ft., brick and stone, Woodruff Pl. $150,000. Private plans.

Ind., Indianapolis—Apartment—H. H. Woodsmall, Fidelity Trust Bldg., having revised plans prepared by D. Graham, archt., Hume-Mansur Bldg., 3 story and basement, rein.-con., steel and brick, 3847-49 North Meridian St. $600,000.

Ind., Indianapolis—Business and Apartment—R. S. MacGregor, 312 North Meridian St., plans 2 story and basement, 120 x 142 ft., rein.-con. and brick, East Washington St. $150,000. Private plans.

Ind., Indianapolis—High Schools—Bd. Educ. plans high school for colored children 2 story and basement, $500,000; West Side High School, 2 story and basement, $500,000, both brick. Architect not selected.

Ind., Indianapolis—Office—Amer. Central Life Insurance Co., 8 East Market St., plans 4 story and basement, brick, North Meridian St. $200,000. Rubush & Hunter, Amer. Central Life Bldg., archts.

Ind., Indianapolis—Office—E. Lilly & Co., 210 East McCarty St., having plans prepared by R. F. Daggett, archt., Lemcke Annex, 5 story and basement, 50 x 180 ft., rein.-con. and brick, South Alabama St. $225,000.

Ind., Indianapolis — Office — Monument Place Building Corp., care Vonnegut, Bohn & Mueller, archts., Indiana Trust Bldg., plans 14 story and basement, rein.-con. steel and brick, North Meridian St. $1,000,000.

Ind., Indianapolis—Office—E. G. Spink, Hume-Mansur Bldg., having plans prepared by W. K. Eldridge, archt., Hume-Mansur Bldg., 9 story and basement, 67 x 130 ft., brick and stone, East Michigan St. $875,000.

Ind., Logansport — High School — Bd. Educ. having revised plans prepared by Allen & Garlott, archts., Masonic Temple, 2 story and basement, 122 x 160 ft., brick and steel. $200,000. Noted Aug. 17.

Ind., Martinsville — Church — Christian Church plans 2 story and basement, brick, $150,000. A. A. Honeywell, Fenway Bldg., Indianapolis, archt.

Mich., Detroit—Apartment and Store—Kohner & Seeler, archts., 1402 Kresge Bldg., preparing plans 8 story, 125 x 130 ft. brick and steel, plain foundation, Hamilton Ave. and West Grand Blvd. $300,000. Owner's name withheld.

Mich., Detroit — Church — St. Theresa Church, c/o Van Leyen, Schilling, Keough & Reynolds, archts., 3440 Cass Ave., having plans prepared 2 story, 61 x 173 ft. brick and stone, plain foundation, $200,000.

Mich., Detroit—Clubhouse—League of Catholic Women, 89 Watson St., having plans prepared by Smith, Hinchman & Grylls, archts., 800 Marquette Bldg., 6 story and basement, 100 x 150 ft. concrete, brick, steel and stone, Parsons St. $350,000.

Mich., Highland Park (Detroit P. O.)—Apartment—Hamilton Land Co., c/o J. P. Jogerst, archt., 1951 Ford Bldg., Detroit, having plans prepared 16 story, 105 x 212 ft. concrete, brick and steel, plain foundation, $2,500,000.

Ill., Chicago—High School—St. Joseph's Convent, 575 Layton Blvd., Milwaukee, Wis., soon receives bids 4 story and basement, 220 x 236 ft., brick and concrete, plain foundation, Lawndale Ave. and Byron St. here, $500,000. Brust & Philipp, 405 Bway., Milwaukee, Wis., archts. Noted Nov. 2.

Ill., Evanston—Apartment—J. A. Nyden, archt., 190 North State St., Chicago, preparing plans 3 story, 60 x 100 ft., rein.-con., brick and steel, Michigan Ave. and Keeney St., here. $200,000. Owner's name withheld.

Ill., Evanston—Store and Office—Church St. Building Corp. c/o J. A. Nyden, archt., 190 North State St., Chicago, plans 2 story, 185 x 200 ft., rein.-con., brick and steel, Church and Orrington Sts., here. $200,000.

Ill., Naperville—Church—Saints Peter and Paul Catholic Parish, c/o H. J. Gaul, archt., 111 West Washington St., Chicago, plans 1 story, rein.-con., brick and steel, here. $150,000.

Wis., Fond du Lac—School—St. Patricks Congregation, c/o T. J. Cosgrove, pastor, 19 East Follett St., having preliminary plans prepared by F. J. Stepnoski, archt., 93 South Main St., 2 story and basement, brick, tile and concrete, plain foundation. $150,000.

Wis., Green Bay—High School—Bd. Educ., c/o I. H. McIntire, supt., soon takes bids 3 story and basement, 120 x 400 ft., brick, tile and concrete, plain foundation. Foeller, Schober & Stephenson, Nicollet Bldg., archts.

Wis., Kenosha—School—St. James Congregation, c/o R. J. Smith, pastor, 305 Sheridan Rd., plans 2 story and basement, brick and concrete, plain foundation, Sheridan Rd. $150,000. Architect not selected.

Wis., Milwaukee—High School—Our Lady of Mercy Academy, 705 Natl. Ave., had plans prepared by Brust & Philipp, archts., 405 Bway., and soon takes bids 3 story and basement, 106 x 150 ft., brick and concrete, plain foundation, Mineral and 15th Sts. $300,000.

Wis., Milwaukee—Office—M. Goldstine, 220 South State St., Chicago, plans 8 story and basement, 40 x 90 ft., brick and concrete, plain foundation, Grand Ave. and 3rd St., here. $350,000. Architect not selected.

Ia., Cedar Rapids—Lodge—Iowa Consistory Assn., c/o A. Hurst, Cedar Rapids, having plans prepared by B. Rugh, archt., 811 Security Bldg., for consistory lodge building, North 6th St., between A and B Aves. $400,000.

Ia., Ida Grove—School—Bd. Educ. having plans prepared by Keffer & Jones, archts., 204 Masonic Temple, Des Moines, for school. $175,000 bonds voted. J. T. Peterson, secy. Noted Dec. 14.

Minn., Brainerd — High School — Bd. Educ. plans 3 story and basement, rein.-con., brick, tile and stone. $300,000. L. F. Hohman, clk. Architect not announced.

Minn., Minneapolis—Club—Minneapolis Aerie 34, Fraternal Order of Eagles, 1927 Central Ave., having sketches made by Newstrom-Lindquist Co., archts., 810 Lumber Exchange Bldg., 4 story and basement, 82 x 132 ft., 4th Ave. S. and 8th St.

Minn., Minneapolis—Schools—Bd. Educ. plans Junior High School, in Franklin district, near 15th Ave. N. and 4th St., 3 story and basement, $475,000; grade school in Johnson Dist., near 38th Ave. S. and 31st St., 2 story and basement, $185,000; grade school in Motley Dist., Washington Ave. S.E. and Oak St., $160,000, all rein.-con., brick and tile. Div. of Designs, Bd. Educ., 305 City Hall, archts. Noted Nov. 23.

Kan., Wichita—Apartment—L. M. Crawford, 108 East 8th St., Topeka, having plans prepared by Squires & Ross, archts., 628 Kansas Ave., Topeka, 4 story, 60 x 90 ft., brick, plain foundation, Williams and Topeka Sts., here. $200,000.

Buildings (Continued)

Kan., Wichita — Apartment — O. Skirk, 240 North Topeka St., having plans prepared by Eberson & Weaver, archts., Orpheum Bldg., 7 story, 100 x 140 ft., rein.-con. and brick, plain foundation. $400,000.

Kan., Wichita—Home—Kansas Masonic Home Co., 404 South Seneca St., having preliminary plans prepared by G. Thomas, archt., 601 Caldwell Murdock Bldg., for additions incl. 25 x 63 ft. boys' building, 24 x 58 ft. girls' building, 33 x 74 ft. men's building and 33 x 64 ft. women's building, tile and stucco, also dairy barn. $150,000.

Neb., Falls City—Courthouse—Richardson Co. takes bids about Jan. 15, 2 story and basement, 66 x 100 ft., brick, steel and terra cotta. $200,000. W. F. Gernandt, 701 Omaha L. & B. Assn. Bldg., Omaha, archt. Noted Dec. 28.

Neb., Omaha—Museum—S. Joslyn, c/o J. and A. McDonald, archts., 204 Standard Oil Bldg., having plans prepared 2 story and basement, 180 x 430 ft., rein.-con., granite and marble, 22nd to 24th Sts. and Dodge St. to Capital Ave. $3,000,000.

N. D., Wahpeton—High School—Bd. Educ. plans 3 story and basement, rein.-con., brick, tile and stone. $200,000. Architect not announced.

Mont., Glendive—Store and Office—W. F. Stutz plans 4 story and basement, rein.-con., brick, tile and stone, Merrill Ave. and Towne St. $150,000. Architect not announced.

Mo., Sedalia—Court House—Pettis Co. plans election to vote on $250,000 bonds new 3 story court house, City Sq., to replace one destroyed by fire.

Tex., Amarillo — Club — Masonic Lodge having plans prepared by H. M. Green Co., archts. and engrs., Texas Bldg., Dallas, 4 story and basement. $250,000.

Tex., Dallas—Schools—Election in April to vote on $1,000,000 bond issue for new high school, 3 new elementary schools and additions and repairs. C. M. Moore, secy.

Tex., Ft. Worth—Church—First Baptist Church, North Ft. Worth St., 2 story, stone and steel addition, Throckmorton St. $200,000.

Tex., Ft. Worth—Fire Station—Voted $200,000 bonds for fire station. D. L. Lewis, city engr.

Tex., Ft. Worth—Municipal—City plans new municipal building and auditorium, probably on Jennings and Throckmorton Sts. $1,000,000. W. B. Townsend, finance comr.

Nev., Reno—Depot—Southern Pacific Co. Southern Pacific Bldg., San Francisco, Calif., had plans prepared 1 story, frame and stucco passenger depot, 400 ft. long, and 1 story, concrete and steel freight depot, 800 ft. long, here. $250,000. G. W. Boschke, 65 Market St., San Francisco, Calif., ch. engr.

Wash., Kalama—Court House—Cowlitz Co. having plans prepared by W. W. Lucas, archt., Lewis Bldg., Portland, Ore., for court house. $150,000.

Wash., Walla Walla—Hotel—Tourist Hotel Assn. raising funds to build hotel. $350,000.

Calif., Berkeley—Store and Office—L. W. Hink, c/o Hink Dept. Store, Durant St. and Shattuck Ave., having plans prepared by W. H. Ratcliff, Jr., archt., 1st Natl. Bank Bldg., 50 x 80 ft., probably 5 story rein.-con., Durant St. and Shattuck Ave.

Calif., Long Beach—Store and Apartment—W. D. Lovell, et al., c/o W. H. Austin, archt., 1st Natl. Bank Bldg., Los Angeles, having plans prepared 3 story, brick and steel, Pine and 6th Sts. $250,000.

Calif., Oakland—Apartment—P. C. Renaud, c/o W. E. Schirmer, archt., Thayer Bldg., having plans prepared 4 story, rein.-con., Lake Merritt Dist. $150,000.

Calif., Oakland—Theatre and Hotel—Franklin Theatre Co., c/o Weeks & Day, archts., California Insurance Bldg., San Francisco, had preliminary plans prepared fireproof theatre and hotel, Grand Ave. and Bway. $350,000.

Calif., San Francisco — Apartments — G. W. Burnett, 141 Sutter St., having plans prepared by C. H. Skidmore, archt., 426 Call Bldg., 7 story, Pacific Ave., $120,000; 6 story, both brick and concrete, California St., $100,000.

Calif., San Francisco — Apartment — H. Shermund, archt., Hearst Bldg., preparing plans 6 story and basement, rein.-con., California St. near Jones St. $250,000. Owners name withheld.

Calif., San Francisco—Apartment and Store—A. F. Rousseau, 110 Sutter St., plans 6 story, concrete and steel, southeast Ellis and Taylor Sts. To exceed $150,000. Architect not selected.

Calif., Santa Barbara — Office and Theatre—E. A. Johnson, c/o A. B. Rosenthal, archt., Orpheum Bldg., Los Angeles, having plans prepared 8 story, rein.-con., brick and terra cotta. $500,000.

Calif., Santa Rosa—Hospital—Supervs. Sonoma Co. plan to levy tax to finance construction hospital. $250,000. W. W. Felt, Jr., co. clk.

Calif., Santa Rosa—Hotel and Apartment—Dunn-Hurst & Martin, Insurance Exch. Bldg., San Francisco, are representing corporation which is being formed and plans to construct 6 story, concrete, $500,000. Architect not selected.

Que., Quebec — Hospital — Hospitalleres Sisters, Hotel Dieu, plans 3 story and basement, brick, steel and stone, St. Foye Rd. $200,000. Architect not selected.

Que., St. George de Beauce—Convent—Good Shepherd Convent, plans 3 story and basement. $200,000.

Ont., Cornwall—School—Bd. Educ. plans 2 story and basement, 8 room, brick. $150,000. J. C. Harkness, town clk. Architect not selected.

Ont., Peterboro — College — Bd. Educ. plans 3 story and basement, 20 room, brick. $200,000 to $300,000. Architect not selected.

BIDS DESIRED

Conn., Hartford—Business—S. S. Nelson, 290 Trumbull St., will build 8 story, 100 x 130 ft., rein.-con. and brick, plain foundation, Church St., by separate contracts. $225,000. F. C. Walz, 407 Trumbull St., archt. Noted Oct. 12.

N. Y., Jamestown—High Schools—Feb. 9, by Bd. Educ., East 2nd St., junior high school, Front St.; adv. this issue.

N. Y., Jamestown—High School—Feb. 23, by Bd. Educ., East 2nd St., junior high school, Buffalo St.; adv. this issue.

N. Y., New York—Apartment—H. A. Hyman, c/o Schwartz & Gross, archts. and engrs., 347 5th Ave., 14 story, 95 x 150 ft., brick, steel and stone, plain foundation, 5th Ave. and 10th St. $2,000,000. Work will be done by separate contracts under supervision of architects.

N. Y., New York—High School—Jan. 30, by J. E. Douglass, acting supt. of School Buildings of Bd. Educ., Flatbush Ave. extension and Concord St., Brooklyn, George Washington High School, easterly side of Audubon Ave. about 432 ft. north of West 190th St., here. Noted Dec. 28.

N. Y., New York—Loft—A. E. Lefcourt, 152 West 42nd St., 14 story, brick, steel and stone addition, plain foundation, West 37th St. Work will be done by separate contracts under supervision of L. Haas, chn. Building Comn. Private plans.

N. Y., Niagara Falls — High School — Feb. 1, by Bd. Educ., Gluck Bldg., brick and steel high school to replace one recently destroyed by fire. $650,000. Noted June 1.

Altoona (Pa.) Building

Greatest building year in its history was 1921, when improvements amounted to $3,313,242, against $1,769,834 in 1921, the previous record—Altoona Correspondent.

N. Y., Theills—Assembly Hall, etc.—Feb. 1, by M. B. Patterson, pres. Bd. Mgrs. Letchworth Village, 7 Wall St., New York City, attendents home, assembly hall and industrial building, at Letchworth Village, here. L. F. Pilcher, Albany, state archt.; adv. this issue. Noted Dec. 7.

N. J., Trenton—Bank—March 15, by A. C. Bossom, archt., 680 5th Ave., Jersey City, 14 story, 66 x 149 ft., steel, brick and concrete, West State St. and Chancery Lane, here, for Trenton Trust Co. $800,000.

Pa., Carrick (Pittsburgh P. O.)—School—Bd. Educ. and Estep & Estep, archts., Century Bldg., Pittsburgh, taking bids on revised plans for 2 story, basement and sub basement, 151 x 260 ft., Park Way. $425,000. Noted Oct. 19. Incorrectly noted Dec. 7.

Pa., Phila.—Bank—P. A. Davis, archt., 1713 Sansom St., taking bids 1 story and basement, brick, steel and stone addition, plain foundation, 7th and Dauphin Sts., for Northern Natl. Bank. $150,000. Noted Nov. 23.

Pa., Phila.—Recreation—H. Trumbauer, archt., Land Title Bldg., taking bids 10 story and basement, 50 x 136 ft., rein.-con., brick, steel and stone, caisson foundation, 307-311 South Broad St. $750,000. Owner's name withheld.

Pa., Phila.—Sales and Office—A. J. Sauer & Co., archt., Denckla Bldg., taking bids 15 story and basement, 38 x 104 ft., 1312-1314 Chestnut St., for Cunningham Piano Co., 11th and Chestnut Sts., $2,000,000.

Det., Wilmington — W. F. Thompson, archt. and engr., 342 Madison Ave., New York City, taking bids and opens same about Jan. 15, brick, steel and stone building, plain foundation, here, for Y. W. C. A., 134 East 44th St., New York City. $250,000.

O., Cleveland—Commercial and Office—H. T. Spencer of H. T. Spencer Novelty Co., 1450 West 3rd St., taking bids 6 story, 66 x 89 ft., brick, steel and concrete, West 2nd St. and St. Clair Ave. $200,000. Lehman Schmitt Co., Electric Bldg., archts.

O., Columbus—School—Jan. 29, by E. L. McCune, clk., Bd. Educ., Town and High Sts., 2 story and basement, 125 x 145 ft., brick and concrete, Fairwood Ave. $175,000. H. D. Smith, 50 East Town St., archt. Noted Oct. 5.

O., Groveport—School—Jan. 31, by Bd. Educ., 2 story and basement, 90 x 200 ft., brick and concrete. $200,000. D. Riebel & Sons, New 1st Natl. Bank Bldg., Columbus, archts. Noted Aug. 24.

O., Lakewood (Cleveland P. O.)—Apartment—J. J. Libman, 3817 West 25th St., and I. Lerman, 12324 Edmonton Ave., Cleveland, taking bids 4 story, 66 x 133 ft., brick, steel and concrete, 11851 Lake Ave., here. $175,000. Branerman & Havermaet, Ulmer Bldg., Cleveland, archts.

O., Massillon—High School—Jan. 19, by O. D. Howard, archt., 8 East Broad St., Columbus, remodeling and 2 story and basement, 160 x 171 ft., rein.-con. and brick addition, to Washington High School, here, for Bd. Educ. $300,000. Noted Sept. 7.

Ind., Indianapolis—Apartment—E. G. Spink Co., 914 Hume-Mansur Bldg., taking bids 8 story and basement, 54 x 170 ft., brick and stone, North Meridian St. $500,000. W. K. Eldridge, Hume-Mansur Bldg., archt. Noted Jan. 4.

Ind., Logansport—High School—Jan. 27, by Bd. Educ., 2 story and basement, 122 x 160 ft., rein.-con. and brick. $250,000. Allen & Garriott, Masonic Temple, archts. Noted Jan. 11.

Mich., Detroit — Apartment — M. H. Finkel, archt., 919 Majestic Bldg., taking bids 11 story and basement, rein.-con., brick and steel, plain foundation, Putnam and Cass Aves., for H. Silverman, 1030 Penobscot Bldg., $500,000. Noted Nov. 30.

Mich., Holland—School and Gymnasium—Jan. 24, by Secy. Bd. Educ., 2 story and basement, concrete, brick and steel, plain foundation. $175,000. Robinson & Campau, 715 Michigan Trust Bldg., archts.

Mich., Owosso—Schools—Jan. 25, by W. Seegmiller, secy. Bd. Educ., three 2 story and basement, concrete, brick and steel, plain foundations. $200,000. Lane, Davenport & Peterson, Dime Bank Bldg., Detroit, archts. Noted Sept. 28.

Ill., Chicago—Apartment—A. Rootberg, 3859 West Adams St., receiving bids 3 story, 150 x 177 ft., rein.-con., brick and steel, Washington and Lotus Sts. $200,000. Private plans.

Ill., Chicago—Apartment—N. M. Dunning, archt., 304 South Wabash Ave., receiving bids 3 story, 122 x 221 ft., rein.-con., brick and steel, Hoyne and 11th Sts., for Triangle Building Corp., 2112 West 119th St. $300,000.

Ill., Chicago—Apartment—F. F. Tunk & Co., 3968 Avondale Ave., receiving bids 3 story, 107 x 120 ft., rein.-con., brick and steel, Washington and Lombard Sts. $150,000. W. G. Kreig, and T. J. and M. D. Hetherington, 105 North Clark St., archts.

Ill., Chicago—Hospital—F. O. De Money, archt., 5 North La Salle St., receiving bids 2 story, 80 x 161 ft., rein.-con., brick and steel, Monroe and Loomis Sts., for owner c/o J. D. Robertson, 7 West Madison St. $200,000.

Ill., Chicago—Store and Loft—R. R. Cenek, archt., 118 North La Salle St., receiving bids 2 story, 125 x 125 ft., rein.-con., brick and steel, Kedzie Ave. near Montrose St., for D. S. Horwich, 11 South La Salle St. $150,000.

Ill., Oak Park—Apartment—D. Lazar, 1614 South Sawyer Ave., receiving bids 3 story, 100 x 147 ft., rein.-con., brick and steel, Taylor St. near Randolph St. $175,000. Architect not announced.

Wis., Milwaukee—Church—P. M. Christiansen, archt., 469 1st Ave., taking bids and opens same about Jan. 18, 2 story and basement, 64 x 96 ft., brick and tile, plain foundation, Mitchell St. and 25th Ave., for Salem Evangelical Assn., care G. H. Blum, 405 6th Ave. $150,000.

Wis., Milwaukee—Theatre and Office—M. Tulligren & Sons Co., 425 East Water St., receiving bids and opens same about Jan. 16, 7 story and basement, 150 x 205 ft., rein.-con., brick and steel, on Grand Ave. and 6th St., for Grand & Sixth Bldg., Inc., 425 East Water St. $1,500,000. C. W. and G. L. Rapp, 190 North State St., Chicago, associated archts. Noted Oct. 26.

Buildings (Continued)

Minn., Crookston—Convent and School—Jan. 25, by Mother Superior, Sisters of St. Benedict, 3 story and basement, 47 x 203 ft., rein.-con., brick faced. $350,000. Ellerbe & Co., 681 Endicott Bldg., St. Paul, archts. and engrs.

Minn., Mankato—School—Jan. 15, by State Bd. of Control, Capitol, St. Paul, 3 story and basement, rein.-con., brick, tile and stone addition to State Teachers College, here, $250,000. C. H. Johnston, 715 Capital Bank Bldg., St. Paul, engr. Noted Oct. 19.

Minn., St. Charles—High School—Feb. 15, by Bd. Educ., 2 story and basement, 140 x 150 ft., rein.-con., brick and tile. $150,000. G. Pass & San, Mankato, archts. Noted April 20.

Mo., Kansas City—Market and Store—Feb. 1, by H. B. Schoolfield, 412 Scarritt Bldg., 12 story and basement, rein.-con., terra cotta and steel, 23rd and Grand Sts. $2,000,000. W. S. Ferguson & Co., 1900 Euclid Ave., Cleveland, O., engrs.

Mo., St. Louis—Hospital—Graham, Anderson, Probst & White, archts., 80 East Jackson Ave., Chicago, taking bids 6 story, fireproof construction, Forest Park Blvd. and Kings Highway, here, for Jewish Hospital Bd., 5414 Delmar Blvd. $800,000.

Tex., Albany—Dormitories, etc.—Presbyterian Orphanage taking bids 2 story dormitories, cottage system. $300,000. D. Castle Co., Abilene, archts. and engrs.

Tex., Port Arthur—High School, etc.—Jan. 27, by Bd. Educ. two 2 story 145 x 160 ft. wings to present high school, also 1 story 30 x 65 ft. boiler house, Lake Shore Blvd. $400,000; 2 story 80 x 232 ft., grade school, De Queen Blvd. $150,000; all rein.-con. and brick, plain foundations. W. B. Ittner, 911 Locust St., St. Louis, Mo., archt. Noted Dec. 28.

Wash., Wenatchee—City and County—Jan. 30, by City and Chelan Co., 4 story, 160 x 200 ft., rein.-con. and brick, plain foundation, Okanogan St. $350,000. Morrison & Stimson, Symons Bldg., Spokane, archts.

Calif., Oakland—School—Jan. 29, by Bd. Educ., 3 story, brick and steel addition to Lakeview School, Perry and Grand Aves. C. W. Dickey and J. J. Donovan, 2149 Bway., archts.

Que., Montreal—Court House—Jan. 18, by A. Galipeault, minister Pub. Wks., annex to court house. E. Cormier, Drummond Bldg., archt.

Ont., Lafalvre—Church—Jan. 30, by A. Bedard, pastor, 50 x 90 ft. brick, steel and stone. $150,000.

BIDS RECEIVED

R. I., Providence—School—Bd. Contract and Supply, 3½ story, 83 x 151 ft., brick and steel, plain foundation, Summit Ave., from Haley & Hart, Providence (street address not available) $217,000; C. S. Cunningham & Sons, Union Trust Bldg., $221,670; A. F. Smiley, 202 Oak Hall Block, Pawtucket, $223,920. Noted Dec. 21.

N. C., Raleigh—School—School Bd., 3 story and basement, 120 x 162 ft., Wiley School, from C. V. York Constr. Co., Citizens Bank Bldg., $151,884; W. P. Tennant, Florence, S. C., $155,700; J. W. Stout & Co., Sanford, $158,000. Noted Dec. 14.

O., Cleveland—School—Bd. Educ., East 6th St. and Rockwell Ave., 2 story, 187 x 191 ft., brick, steel and concrete addition, East 79th St. and Hough Ave., from Camp Constr. Co., Newman-Stern Bldg., $361,500; Moore-Lamb Constr. Co., 203 Stambaugh St., Youngstown, $367,500.

Minn. Aitkin—Court House—Aitkin Co., opened bids Dec. 30, general contract 3 story and basement, rein.-con., brick and tile, from Carlested Bros., 542 Builders Exch., Minneapolis, $151,745; Natl. Contg. Co., 311 Metropolitan Bank Bldg., Minneapolis, $151,763; A. B. Drygas, St. Cloud, $154,780. Noted Dec. 21.

CONTRACTS AWARDED

Mass., Boston—Market—City, restoring Faneuil Hall, to Cram & Ferguson, 248 Boylston St., who will supervise letting of various contracts (with city approval) on cost plus percentage basis. $150,000. Noted Jan. 4.

Mass., Boston — Police Station — Public Buildings Dept., City Hall, 10 story, 65 x 90 ft., brick and steel, plain foundation, Milk and Sears St., to M. Seretto, 3 Tremont Row, $530,000. Noted Dec. 21.

R. I., Pawtucket—High School—School Dept., 3 story, brick, steel and concrete addition, plain foundation, Bway., to Willmarth-Mackillop, Inc., Freeman St., $253,713. Archts. est. $300,000.

Conn., New Haven—Apartment—J. E. Hennessey, Chapel and Park Sts., will build 6 story, brick and steel, plain foundation, Chapel St., by day labor. $150,000. H. E. Baldwin, 956 Chapel St., archt.

Conn., Norwich—Theatre—Norwich Palace Theatre Corp., 59 Bway., 4 story, 80 x 160 ft., rein.-con. and brick, plain foundation, Rose Pl. and Ferry St., to H. Wales Lines Co., 134 State St., Meriden. Archts. est. $200,000. Noted Nov. 30.

N. Y., Brooklyn—Apartment—M. Jones, c/o B. W. Dorfman, archt. and engr., 26 Court St., 4 story, 100 x 100 ft., brick, steel and stone, Ft. Hamilton Parkway and 55th St., by day labor. $150,000.

N. Y., Brooklyn—Apartment—Midwood Holding Co., Inc., c/o Springsteen & Goldhammer, archts. and engrs., 32 Union Sq., New York, 5 story, 100 x 100 ft., brick, steel and stone, plain foundation, Palisade Ave. near Ocean Ave., here, by day labor. $200,000.

Montreal Building

Permits: 3426 for new buildings worth $16,486,602; 1594 repairs costing $2,999,099. Last year 396 garages were erected, 21 factories, 16 schools, 8 churches—Montreal Correspondent.

N. Y., Freeport—High School—Bd. Educ. brick, steel and stone, plain foundation, Pine St., to Moody Constr. Co., 90 West St., $557,131. Archts. est. $560,000. Noted Dec. 21.

N. Y., New York—Apartment—C. Cohen, c/o Moore & Landseidel, archts. and engrs., 148th St. and 3rd Ave., 5 story, 100 x 120 ft., brick, steel and stone, plain foundation, 203rd St. and Grand Concourse, by day labor. $250,000.

N. Y., New York—Apartment—W. Garman, c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., 5 story, 100 x 105 ft., brick, steel and stone, plain foundation, Grand Ave., by day labor. $200,000.

N. Y.—New York—Apartment—Groshall Building Corp., c/o D. S. Lang, archt. and engr., 110 West 34th St., 5 story, 100 x 100 ft., brink, steel and stone, plain foundation, West 175th St., by day labor. $175,000.

N. Y., New York—Apartment—H. W. C. Realty Corp., c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 5 story, 75 x 100 ft., brick, steel and ston,e plain foundation, Longfellow Ave. and East 174th St., by day labor. $150,000.

N. Y., New York—Apartment—One Thirty One East 93rd St., In., c/o F. Braun, archt. and engr., 588 Steinway Ave., Long Island City, 9 story, 60 x 85 ft., brick, steel and stone, plain foundation, 129 East 93rd St., here, by day labor.

N. Y., New York—Apartment—A. Stillman, c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., 5 story, 100 x 118 ft., brick, steel and stone, plain foundation, Bainbridge Ave., by day labor. $200,000.

N. Y., New York—Bank and Office—Chatham & Phoenix Bank, 149 Bway., 4 story, brick, steel and stone, plain foundation, Bowery and Grand St., to Tidewater Building Co., 16 East 33rd St. Archts. est. $300,000. Noted Dec. 7.

N. J., Camden—High School—Bd. Educ., 3 story and basement, 149 x 282 ft., cut stone and brick, plain foundation, Park Blvd. and Euclid St., to H. J. Homans & Co., 1701 Chestnut St., Phila., $465,750. Noted Dec. 21.

Pa., Chester—School—Bd. Educ., 2 story and basement, 138 x 212 ft. school to Chester Constr. & Contg. Co., Chester, $267,484.

Pa., Phila.—Apartment—Kenin & Shapario, 5850 Market St., will build 4 story and basement, 150 x 250 ft., brick, steel and stone, plain foundation, 47th and Walnut Sts., by day labor. $600,000.

Pa., Wilkes-Barre—Armory—State Armory Bd., Harrisburg, 1 and 2 story and basement, 213 x 263 ft. and 43 x 141 ft. brick and steel, plain foundation, to Sinclair & Griggs, Medical Arts Bldg., $300,000.

Pa., York—Bank—First Natl. Bank, 3 story, stone, to Cogswell-Koether Co., 406 Park Ave., Baltimore, Md., $150,000.

Md., Baltimore — Apartment — Stratford Apartment Co., 562 University Parkway, 4 story, 90 x 100 ft., rein.-con. and brick, Liberty Heights Ave. and Denison St., to F. E. Yewell, 562 University Parkway, $250,000.

Tenn., Chattanooga—Office—Chattanooga Trust Co., 1st Natl. Bank Bldg., razing old building and constructing 8 story, 60 x 150 ft., brick and rein.-con., concrete pile foundation, Market and 6th Sts., to M. Wilson Co., James Bldg., $197,300, (270 days).

O., Cleveland—Store and Clubhouse—Slovenian Natl. Home, c/o F. Somik, 6512 St. Clair Ave., 2 story and basement, 175 x 185 ft., brick and steel, East 65th St. and St. Clair Ave., to M. Sattkovick, 1060 East 176th St. Archts. est. $150,000.

O., Columbus—Hotel—Franklin Constr. & Realty Co., 327 East State St., Ft. Hays Hotel, 12 story and basement, 84 x 125 ft., brick, steel, concrete and terra cotta, West Spring St., by day labor. $1,000,000. L. E. Pruitt, Comstock Bldg., archt.

O., McComb—Grade and High School—Bd. Educ., 2 story and basement, 114 x 182 ft., brick and concrete, to O. M. Green, 325½ North Elizabeth St., Lima, $229,842. Noted Dec. 28.

Ind., Hammond—Hotel and Store—Hammond Hotel & Improvement Co., 306 Hammond Bldg., 4 story and basement, 135 x 210 ft., rein.-con. brick and stone, State St., to Finlayson Bros. Constr. Co., 139 North Clark St., Chicago, $348,000. Archts. est. $400,000. Noted Dec. 28.

Mich., Hancock—School—Bd. Educ., general contract 3 story and basement, 80 x 336 ft rein.-con., brick, stone and tile, to A. J. Verville Co., Hancock, $275,450.

Ill., Chicago — Bank and Office — First Natl. Bank, Dearborn and Monroe Sts., 21 story, 48 x 90 ft. addition, rein.-con., brick and steel. Monroe and Clark Sts., to Leonard Constr. Co., 37 South Wabash Ave. Archts. est. $1,000,000. Noted Feb. 9.

Ill., Chicago—School and Hall—St. Anns Catholic Parish c/o A. Foster, archt., 56 East Randolph St., 3 story, 75 x 125 ft., rein.-con., brick and steel, 2213-17 West 18th Pl., to S. W. Constr. Co., 4140 Archer Ave. Archts. est. $200,000. Noted Aug. 17.

Kan., Lawrence—Library—Bd. Administration, Topeka, general contract 4 story and basement, 84 x 151 ft., steel, rein.-con. and stone, plain foundation, on campus of Kansas University, to A. H. Neumann & Co., 519 Hubbell Bldg., Des Moines, Ia., $234,000. Archts. est. $250,000. Noted Dec. 14.

Mo., St. Charles—High School—Bd. Educ., general contract, 3 story, 130 x 150 ft., brick, rubble stone foundation, 6th St., to R. B. Higgins Constr. Co., 1143 Childress Ave., St. Louis. $114,700. Noted Dec. 7.

Tex., Amarillo—Hospital—Potter Co., c/o R. C. Johnson, judge, 3 story, 35 x 140 ft. hospital, incl. nurses building and tuberculosis building, rein.-con. and brick, to V. E. Ware, 1614 East Missouri St., El Paso $145,000. Archts. est. $155,000.

Tex., Dallas — Apartment Hotel — Efficiency Apartment Corp., Great Southwestern Life Bldg., 11 story and basement, brick and steel, caisson foundation, Wolf and Maple Sts., to Gilsonite Constr. Co., Great Southwestern Life Bldg. Archts. est. $1,250,000.

Tex., Georgetown—School—School Bd. general contract 1 and 2 story, junior and high school building and remodeling ward school, rein.-con., brick and stone, to Wattinger Bros., Austin (street address not available), $126,958.

Ore., Portland—Institution—State Bd. Control, Salem, general contract for group of 3 buildings, 42 x 150 ft., 60 x 176 ft. and 32 x 72 ft., 1 and 2 story, rein.-con. and timber, plain foundations, 82nd and 86th Sts., here, to Rounds & Clist, Pittock Blk., $103,463; heating and plumbing, to J. F. Shea, 4 North 2nd St. $29,800.

Calif., Bakersfield—Hospital—Kern Co. group of buildings for hospital, brick, stone and terra cotta, general contract to W. G. Reed, 204 Brock Bldg., Long Beach; plumbing to Bakersfield Plumbing Co., Bakersfield, $34,806 using Nelson fixtures; heating and ventilating to F. Davidson, Washington Bldg., Los Angeles, $29,440. Noted Jan. 4.

Federal Government Work

PROPOSED WORK

Mass., Boston—Pier, etc.—Spec. 4778—Bureau Yards & Docks, Navy Dept., Wash. D. C., plans fuel oil pier, bulkhead and dredging, here.

Ga., Savannah—Maneuver Boat—U. S. Engineer Office, plans to purchase maneuver boat for Dam 30, Ohio River, also repairs to dredge "Macon."

Miss., Gulfport—Hospital—Spec. 4774—Bureau Yards & Docks, Navy Dept., Wash. D. C., plans hospital, here.

Tenn., Nashville—Derrick Boats, etc.—U. S. Engineer, plans to purchase 2 steel derrick boats and 9 barges for revetment work.

Calif., Mare Island — Reconstructing Dikes—Spec. 4776—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans reconstructing dikes 9 and 14, here.

Federal Government (Continued)

Calif., Mare Island—Riprapping Dike—Spec. 4775—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans riprapping dike, here.

H. T., Pearl Harbor—Piers—Spec. 4687—Bureau Yards & Docks, Navy Dept., Wash., D. C., two 335 ft. rein.-con piers, 18 ft wide, also some dredging and filling (1) work complete, from Hawaiian Dredging Co., 854 Kuhuhuana St., Honolulu (1) $180,247 (270 days) (2) $187,247 (270 days) (3) add $2 deduct $0.75 (4) $4 deduct $2.25 (5) add $4 deduct $0.50 (6) add $0.70 (7) add $2.50. Noted Nov. 16. Above bid rejected.

BIDS DESIRED

N. Y., New York—Extension—Jan. 30 by Treas. Dept., Wash., D. C., extension to platform at U. S. Appraisers Warehouse, here. J. A. Wetmore, acting superv. archt.; adv. this issue.

Md., Annapolis—Natatorium—Spec. 4754—Jan. 24 by Bureau Yards & Docks, Navy Dept., Wash., D. C., 1 story, 89 x 289 ft. rein.-con., brick, steel and granite, here. L. E. Gregory, ch. of bureau. Noted Nov. 23.

Md., Edgewood—Mains, Sewers, etc.—Jan. 15 by Constructing Quartermaster, Edgewood Arsenal, for mains, sewers and water troughs at Ft. Hoyle, here.

D. C., Wash.—Extension—Spec. 4773—Jan. 24, by Bureau Yards & Docks, Navy Dept., extension to refrigeration and cold storage plant, here.

Ga., Ft. Benning—Houses—Jan. 30 by Constructing Quartermaster, 23 sets of 2 family houses; adv. this issue.

O., Cincinnati—Horses and Props—Feb. 8 at office U. S. Engineer, horses and props for Dams 34, 36 and 38, Ohio River; adv. this issue.

Tex., Galveston—Dredging—Feb. 21 at office U. S. Engineer, dredging at Brazos Island Harbor; adv. this issue.

N. M., Dona Ana—Well—Feb. 1 at office Constructing Quartermaster, Ft. Bliss, Tex., well at target range, here; adv. this issue.

Wash., Puget Sound—Detonator and Storehouse—Spec. 4750—Feb. 7, by Bureau Yards & Docks, Navy Dept., Wash., D. C., detonator and storehouse, here. Noted Nov. 9.

Calif., Richmond—Dredging, etc.—Jan. 26, at office U. S. Engineer, Custom House, San Francisco, dredging 1,000,000 cu.yd. and constructing 2,000 lin.ft. retaining wall, here.

Calif., Tiburon—Water Supply System—Spec. 4716—Feb. 7, by Bureau Yards & Docks, Navy Dept., Wash., D. C., water supply system, here. Noted Oct. 5.

BIDS RECEIVED

N. Y., Tupper Lake—Drainage System—Spec. 4723—Bureau Yards & Docks, Navy Dept., Wash., D. C., drainage system at U. S. Veterans Hospital, here, from H. W. Bachelder, West German St., Herkimer, (1) $60,000 (200 days) (2) $3,500 (10 days); Noland-Clifford Co., 322 28th St., Newport News, Va., (1) $65,210 (2) $7,380; Newport News Eng. Co., Newport News, Va., (1) $65,400 (210 days) (2) add $5,731. Noted Dec. 14.

N. Y., Tupper Lake—Hospital—Spec. 4718—Bureau Yards & Docks, Navy Dept., Wash., D. C., opened bids Dec. 28, for U. S. Veterans Hospital, here, Group A, Item (1) net price for entire basic work all parts, Subdivision—Infirmary Bldg 5, Bldg. 6, Ambulant Ward 8, boiler house, outside steam, outside electric, boiler house equipment, all else; Item (2a) Nurses quarters 7 (2b) ambulant Ward 4, (2c) garage (2d) quarters for S. M. Officer (2e) quarters for J. M. Officer (2f) quarters for A. Asst.; Item (3) add or deduct from Item 1 for steel sash; Item (4) Nurses Quarters Building 7 steel sash (4b) Ambulant Ward 4. Group B Item (5) net price for basic work under Part 1—Subdivision—Infirmary subsistence building, Bldg. 5, Bldg. 6, Ambulant Ward 8, boiler house, all else; Item (6a) Nurses Quarters Bldg. 7, (6b) Ambulant Ward 4 (6c) garage (6d) quarters for S. M. Officer (6e) quarters for J. M. Officers (6f) quarters for A. Asst.; Item (7) add or deduct from Item (5) for steel sash; Item (8a) Nurses Quarters Bldg. 7 (8b) Ambulant Ward 4; Item (9) net price for basic work under Part 2—Subdivision—Infirmary, Bldg. 5, Bldg. 6, Ambulant Ward 8, boiler house, all else; Item (10a) Nurses Quarters Bldg. 7 (10b) Ambulant Ward 4, (10c) garage (10d) quarters for S. M. Officers (10e) quarters for J. M. Officers (10f) quarters for A. Asst. Item (11) Net amount for basic work under Part 3—Subdivision—Infirmary, Subsistence Building, Bldg. 5, Bldg. 6, Ambulant Ward 8, boiler house, outside steam, all else; Item (12a) Nurses Quarters Bldg. 7, (12b) Ambulant Ward 4 (12c) garage (12d) quarters for S. M. Officers (12e) quarters for J. M. Officers (12f) quarters for A. Asst.; Item (13) Net price for basic work under Part 4—Subdivision—Infirmary Subsistence Building, Bldg. 5, Bldg. 6, Ambulant Ward 8, boiler house, outside electric, all else; Item (14a) Nurses Quarters Bldg. 7, (14b) Ambulant Ward 4 (14c) garage (14d) quarters for S. M. Officers (14e) quarters for J. M. Officers (14f) quarters for A. Asst.; Item (15) Net price for all under Part 5; Item (16a) 1.2½ 5 ft. plain concrete per cu.yd. (16b) 1.2.4 rein.-con. per cu.yd. (16c) excavation. grading, etc., per cu.yd. (16d) 9 in. brick walls per sq.ft. of surface (16e) 13 in. brick walls per sq.ft. of surface (16f) steel reinforcement per lb.; Item (17) add to Items (1) and (13): Group A, Part 1, 2, 3, 4 and 5, no bids received. Group B, Part 1, from G. DeKempe, 143 Summit Ave., West Hoboken, N. J., Item (5) $873,000 (5a) $385,000 (5b) $174,500 (5c) $74,750 (5d) $76,000 (5e) $92,000 (5f) $31,400 (5g) $39,350 Item (6a) $82,800 (6b) $92,000 (6c) $29,100 (6d) $28,750 (6e) $28,750 (6f) $28,850 Items (7) (8a) and (8b) no difference; Item (16a) $13 (16b) $15 (16c) $2.30 (16d) $1 (16e) $1.50 (16f) $0.05; W. M. Sutherland Building and Constr. Co., 408 Compton Bldg., St. Louis, Mo., Item (5) $895,500 (5a) $435,901 (5b) $172,327 (5c) $72,066 (5d) $73,134 (5e) $84,241 (5f) $23,361 (5g) $34,570 Item (6a) $72,360 (6b) $75,239 (6c) $22,417 (6d) $26,755 (6e) $24,054 (6f) $22,944 Item (16a) $28 (16b) $30 (16c) $3 (16d) $0.75 (16e) $1,125 (16f) $0.05; Northeastern Constr. Co., 101 Park Ave., New York, Item (5) $913,000 (5a) $432,243, $181,186, $70,256, $71,994, $88,213, $33,604 $35,504 Item (6a) $70,567 (6b) $85,881 (6c) $22,530 (6d) $26,960 (6e) $25,079 (6f) $23,851 Item (7) add $15,420 Item (8a) add $1,868 Item (8b) add $3,936 Item (16a) add $24.18 deduct $18.16 (16b) add $31.20 deduct $24.06 (16c) add $2.30 deduct $1.80 (16d) add $0.91 deduct $0.71 (16e) add $1.31 deduct $1.01 (16f) add $0.067 deduct $0.051; Group C, Part 11 from W. G. Cornell Co., 19 Patterson St., N. E., Wash., D. C., Item (9) $83,000 (9a) $42,271 (9b) $13,942 (9c) $4,991 (9d) $6,578 (9e) $6,501 (9f) $1,587 (9g). $7,130 Item (10a) $6,920 (10b) $6,785 (10c) $1,281 (10d) $2,744 (10e) $2,501 (10f) $2,489 Item (11) $98,278, $29,237, $10,713, $6,089, $5,786 $7,969, $391, $32,563, $5,530, Item (12a) $6,885, $7,400, $4,293, $1,957, $1,453, $1,510 Item (13) Group E, Part 4, $50,329, $17,700, $4,000, $1,800 $1,900 $1,900 $765 $21,684, $580, Item (14a) $1,932, $1,911, $1,032, $1,880, $805, $694, Item (15) $13,975 (net price for all under Part 5) Item (17) $2,085; Noland-Clifford Co., 322 28th St., Newport News, Va., Item (9) Group C, Part 2, $85,034, $48,350, $14,320, $5,392, $6,230, $6,907, $1,625, $2,210, Item (10a) $6,500, $7,200, $1,596, $2,320, $2,275, $2,200, Item 11, Group D, Part 2, $119,003, $35,201, $14,318, $8,042, $7,150, $11,374, $500, $41,140, $1,278, Item (12) Group D, Part 2, $8,350, $9,600, $4,478, $2,100, $1,800, $1,800, Item (13) Group E, Part 4, $49,700, $16,700, $3,800, $1,570, Item (13e) $1,205 (13f) $1,735 (13g) $570 (13h) $23,400 (13i) $210, Item (14a) $1,200, $2,000, $1,200, $2,700, $900, $700, Item (15) Group E, Part 5, net price for all $65,733, Item (16a) $25 (16b) $35 (16c) $3.50 (16d) $0.75 (16e) $0.90 (16f) $0.05, Item (17) add to Items (1) and (13) $2,800; S. W. Rittenhouse, 1327 Taylor St., Wash., D. C., Item (9) Group C, Part 2, $86,518, $44,818, $14,191, $5,364, $6,437, $8,282, $1,883, $5,543, Item (10a) $8,799, $8,282, $1,083, $1,962, $1,966, $1,988, Item (11) Group D, Part 3, $13,311, $39,236, $12,674, $6,529, $6,437, $5,961, $2,926, $36,877, ($2,671, Item (12a) $9,744, $6,461, $1,214, $1,837, $1,416, $1,496; Shevlin Eng. Co., 259 West 34th St., New York, Item (11) Group D, Part 3, $100,858, Item (11a) $28,869, $12,089, $6,153, $6,116, $7,732, $200, $38,129, $1,570, Item (12a) $5,352, $7,096; $3,068, $1,547, $1,306, $1,299, Item (15) net price for all under Part 5, $53,998; F. Eisinger, 310 St. John Pl., Brooklyn, Item (15) $47,140; E. G. Woolfolk Co., 15 West 38th St., New York, Item (11) $97,923 (11a) $32,498 (11b) $14,192 (11c) $6,892 (11d) $6,248 (11e) $8,563 (11f) $465 (11g) $27,874 (11h) $1,221; Electric work—Item (13) net price for basic work under Part 4, from Strang Electric Co., 214 South 7th St., Phila., Pa., Item (13) $39,735 (13a) $14,864 (13b) $3,340 (13c) $1,348 (13d) $1,226 (13e) $1,876 (13f) $564 (13g) $16,077 (13h) $443; Item (14a) $1,348, $1,750, $939, $1,946, $570, $451; L. R. Comstock, 21 East 40th St., New York, Item (13) $45,963, $13,393, $3,515, $1,436, $1,128, $1,541, $439, $24,363, $148, Item (14a) $2,100, $2,150, $1,080, $3,420, $817, $679; H. Alexander, 20 West 34th St., New York, Item (13) $47,434, $16,730, $3,950, $1,685, $1,585, $2,274, $750, $19,500, $960, Item (14a) $863, $1,790, $880, $2,780, $699, $578. Noted Dec. 7.

N. Y., Tupper Lake—Roads, etc.—Spec. 4727—Bureau Yards & Docks, Navy Dept., Wash., D. C., roads, sidewalks, etc., at U. S. Veterans Hospital, here, (1) work complete, from Newport Contg. & Eng. Co., Silsby Bldg, Newport News, Va., (1) $52,052 (2) add $6,416 (3a) add $400 deduct $300 (3b) add $3 deduct $2 (3c) add $3 deduct $2; D. W. Robbins, 376 Gennessee St., Utica, (1) $87,900 (2a) $7,600 (2b) $2,450 (2c) $650 (2) deduct $10,700 (3a) $3.15 (3b) $2.25 (3c) $2.10. Noted Dec. 14.

CONTRACTS AWARDED

Pa., Pittsburg—Lock Gates—U. S. Engineer, steel lock gates for Lock 1, Allegheny River, to John Eichleay Jr. Co., 45 South 20th St., $7,371. Noted Nov. 23.

Del., Wilmington—Excavating—U. S. Engineer, excavating cut-offs in St. Jones and Mispillion Rivers, to Delaware Dredging Co., 139 South 3rd St., Phila., Pa. $45,632. Noted Nov. 23.

D. C., Wash.—Crane—Chief of Engineers Office, 250 Old Land Office Bldg., 1 steam locomotive crane to McMyler-Interstate Co., Stop 27, A, B & C Electric Ry., Bedford, O., $5,870.

Wis., Milwaukee—Barges —U. S. Engineer, Federal Bldg., five barges and installation of machinery in same, to Green Bay Dry Dock Co., Green Bay, $72,400. Noted Jan. 4.

Calif., San Diego—Covering Railroad Track—Spec. 4737—Bureau Yards & Docks, Navy Dept., Wash., D. C., covering railroad tracks at Marine Barracks, here, to D. H. Ryan, 1615 Fern St., $15,528 (70 days). Noted Dec. 7.

Calif., San Diego—Dredging—U. S. Engineer, 725 Central Bldg., Los Angeles, dredging in harbor, here, to United Dredging Co., Exposition Park, Los Angeles, $103,676. Noted Nov. 16.

Miscellaneous

PROPOSED WORK

Dock—Alexandria Bay, N. Y.—Thomson & Freeman, plan new concrete landing dock at Hotel Crossman. $20,000. Address C. S. Thomson, Alexandria Bay.

Dock Improvements—Alexandria Bay, N. Y.—Thousand Island Country Club, Wellesley Island, plans concrete and rein.-con. improvements to docks. $25,000-$30,000. Address A. S. Willcox, Alexandria Bay.

Transmission Line—Binghamton, N. Y.—Binghamton Light, Heat & Power Co., 172 Washington St., plans transmission line from here to Sayre, Pa. $225,000.

Park—Elmira, N. Y.—City Park Comn. plans improvements to park incl. rest room, swimming pool, new road, etc. $25,000.

Road Roller—Fowler (Gouverneur, P. O.) N. Y.—Town Clerk taking bids 10 ton gasoline road roller.

Turbines, etc.—Johnson City, N. Y.—Binghamton Light, Heat & Power Co., 172 Washington St., Binghamton, plans installing new 10,000 kw. turbine and 3 new 600 h.p. boilers incl. auxiliary equipment, in plant, here. $850,000.

Athletic Field—Lockport, N. Y.—See "Buildings."

Retaining Wall—Niagara Falls, N. Y.—Plans concrete retaining wall at south end of 11th St. overhead crossing. $25,000. D. J. Fort, 251 2nd St., city mgr.

Trucks—Niagara Falls, N. Y. — D. J. Fort, city mgr., plans to purchase six 3.5 ton and three 1.5 ton trucks for Dept. Pub. Serv. $20,000.

Street Sweeper—Watertown, N. Y.—City plans to purchase motor driven street sweeper. $7,000. J. W. Ackerman, city mgr.

Electric Crane—Ogdensburg, N. Y.—Hall Coal Co., plans to replace electric crane destroyed by storm last season. $40,000.

Elimination of Grade Crossings, etc.—Trenton, N. J.—Pennsylvania R. R., Broad St. Sta., Phila., plans to eliminate 4 grade crossings, remove bed of Delaware and Raritan Canal a few hundred feet north and build conduit 25 ft. wide and 6 ft. deep, here. $800,000.

Parks—Trenton, N. J.—Plans 11th Ward and North Trenton Parks. $38,000. G. W. Page, dir. Parks.

Subway—Altoona, Pa.—H. J. Baum, city engr., making survey for 140 ft. concrete subway, 40 ft. wide, under Pennsylvania R.R. on 23rd St. $100,000.

Elimination of Grade Crossing — Van, Pa.—State, Venango Co. and Lake Erie, Franklin & Clarion R.R., Franklin, plan to eliminate grade crossing here. $52,924.

Seawall and White Way—Bradentown, Fla.—Defeated $100,000 bonds for seawall and white way. Kirley & Myler, Bradentown, engs. Noted Nov. 23.

Miscellaneous (Continued)

Dock and Warehouse—New Orleans, La.—Bd. Port Comrs. takes bids in 30, days for rein.-con. dock and warehouse on Industrial Canal. $1,500,000.

Toll Lines, etc.—Nashville, Tenn.—Cumberland Telephone & Telegraph Co., 3rd and Church Sts., plans extensions, cables, exchanges, toll lines, etc. $300,000. K. Hardcastle, genl. mgr.

Road Machinery — Wisconsin—Following are county appropriations for road machinery. Washburn Co. $5,000, incl. patrol graders, road planes, scarifiers, J. R. Allen, Spooner, comr.; Iron Co. $10,000, incl. large tractor, crusher and trucks, W. Weber, Saxon, comr.; Lincoln Co. $7,000, H. H. Kuehling, Merrill, comr.; Sauk Co. $12,000, incl. 2 rock crushers, 6 graders, etc., W. Halbersleben, Baraboo, comr.; Dane Co. $35,000, incl. small grading outfits, E. J. Smith, Madison, comr.; Juneau Co. $10,000, incl. graders, wheelers and slip scrapers, A. V. Robison, New Lisbon, comr.; La Crosse Co. $15,000, J. Hintgen, La Crosse, comr.; Waukesha Co. $8,000, incl. tractor and possibly large grader, C. J. Hahn, Waukesha, comr.; Buffalo Co. $3,000, J. Reinhardt, Nelson, Comr.; Oneida Co. $10,000, B. L. Horr, Rhinelander, comr.; Vilas Co. $7,000, incl. trucks, W. F. Hunter, Eagle River, comr.; St. Croix Co. $13,000, incl. caterpillar tractor, large grader, patrol graders, wheelers, slips, etc., J. Caffery, Hammond, comr.; Pierce Co. $5,000, incl. patrol graders, C. F. Kenall, Ellsworth, comr.; Green Co. $30,000, incl. crushing outfit and tractor, C. J. Smith, Monroe, comr.; Dodge Co. $10,000, E. T. Klug, Juneau, comr.; Calumet Co. $8,000, incl. one heavy tractor and two 2 ton motor trucks, J. A. Gillis, Chilton, comr.

Steam Shovel, etc.—Sturgeon Bay, Wis.—L. D. Smith Co., soon takes bids for steam shovel and stone crushing machinery. L. D. Smith, pres.

Grain Elevator—Duluth, Minn.—Occident Elevator Co., Bd. of Trade Bldg., plans 6 story, 200 x 350 ft. grain elevator, rein.-con., on pile and concrete foundation, Rices Point, $900,000. Engineer and architect not announced.

Swimming Pool—Kansas City, Kan.—Park Bd. takes bids in spring, rein.-con. swimming pool in 3 story and basement brick building. G. Grinrod, City Hall, archt.

Electric Street Lighting—Ft. Worth, Tex.—Voted $250,000 bonds for electric street lighting. D. L. Lewis, city engr.

Harbor Inmprovements, etc.—Houston, Tex.—Harris Co. and city voted $4,000,000 bonds for harbor and dock improvements. J. C. McVea, city engr.

Community Center—Piedmont, Calif.—Piedmont Civic Assn., had preliminary plans prepared community center, incl. street improvements, public buildings, etc. To exceed $500,000. H. Sawyer, Hearst Bldg., San Francisco, A. Farr, 68 Post St., San Francisco, and C. W. Dickey, 2149 Bway., Oakland, archts.

Telephone Lines—San Diego, Calif.—Pacific Telephone & Telegraph Co., 1130-6th St., plans enlarging and extending system, incl. 38,000 ft. underground cable and 220,000 ft. aerial cable, of various capacities, from 25 to 1,200 pairs. Additional sections of switchboards will also be installed in main and branch stations. A. E. Scott, local mgr.

Electrification of Railways—Ontario—H. Thornton, chn. Canadian Natl. Ry., 407 Old Union Sta., Toronto, announced that examination and plans will be prepared for electrifying Grand Trunk Ry. from Toronto to Hamilton and from Hamilton to Niagara Falls, also laying additional tracks for fast radial service, total distance 80 mi. A. F. Stewart, 407 Old Union Sta., Toronto, ch. engr.

Freight Sheds—Ft. Williams, Ont.—Canadian Pacific Ry., Windsor St., Montreal, Que., plans to rebuild freight sheds here recently destroyed by fire. $200,000. J. C. Holden, Winnipeg, Man., ch. engr. of western line.

Grain Elevator—Ft. William, Ont.—James Stewart Grain Co., had plans prepared 1,500,000 bu. terminal grain elevator, concrete, $850,000. Pile foundation to Thunder Bay Harbor Improvement Co., Molsons Bank Bldg., Port Arthur, $150,000.

Electric Distribution System—Galt, Ont.—Pub. Utilities Comn. plans to expend $125,000 for altering and extending electric distribution system, incl. sub-station equipment, wire, transformers, switches, poles, etc.

Grain Elevator, etc — Goderich, Ont. — Goderich Elevator & Transit Co., Horton St., London, having plans prepared grain elevator, $250,000, also improving harbor, $250,000. Private plans.

Subway—Mimico, Ont.—Plans subway 66 ft. wide under tracks of Grand Trunk Ry. on Grand Ave., probably concrete abutments, plate girder construction, $135,000. G. Telfer, city clk.

Gas Mains—Owen Sound, Ont.—Utilities Comrs. plan extending gas mains. $40,000. Prices wanted on materials. C. Gordon, mgr.

Grain Elevator—Burrard Inlet, B. C.—E. A. Woodward Grain Co. Ltd., 721 Grain Exch., Winnipeg, Man., plans grain elevator on 150 x 1,650 ft. site, here. $500,000. Engineer not selected.

Flume—Pentieton, B. C.—Provincial Government, Victoria, appropriated $400,000 for miscellaneous work in connection with irrigation of land for Soldier Settlement at Oliver, and Osoyoos, near here, to include large flume, probably concrete, to cost $168,000. Work will probably be done by day labor. F. H. Latimer, Penticton, engr.

BIDS DESIRED

Bulkhead—Brooklyn, N. Y.—Jan. 19, by G. A. Whalen, comr. Plant & Structures, Municipal Bldg., New York, bulkhead east of Brooklyn tower of Williamsburg Bridge.

Tractors—Canton, N. Y.—Bd. Supervs. St. Lawrence Co. receiving bids 2 or more heavy duty tractors. Address N. E. Clark, Jr., Potsdam.

Road Roller—Carthage, N. Y.—Town Bd. receiving bids 10 ton road roller. Address M. J. Pfister, Great Bend.

Tractor, etc—Gouverneur, N. Y.—Village Bd. receiving bids heavy duty tractor and snow plow. Address W. L. Hayden, street comr.

Auto Truck—Niagara Falls, N. Y.—E. J. Fort, city mgr., taking bids one 5 ton auto truck for Highway Dept. $6,200.

Crane—Syracuse, N. Y.—Onondaga Co. receiving bids 1 caterpillar crane, revolving ¾ yd. clamshell bucket. $9,500. F. X. Wood, Court House, purch. agt.

Tar Patching Material, etc—Trenton, N. J.—Jan. 23, by Bd. Freeholders Mercer Co., Court House, furnishing and delivering 40,000 gal. tar patching material, and 20,000 gal. asphalt "but back." H. F. Harris, Court House, co. engr.; adv. this issue.

Dump Wagons — Milton, Pa. — W. Godcharles, taking bids several dump wagons. $1,000.

Machinery and Equipment — Georgia — Jan. 22, by State Hy. Dept., Atlanta, eleven 3 blade road drags, three 8 ft., one 7 ft. 3 in., three 7 ft., four 8 ft. and three 10 ft. road graders, 16 tractors, two 10 ft. and three 12 ft. road graders with scarifier attachment, 3 sets Crawler attachment for Fordson tractor, 120 ft. ¾ in. cable, 11 steel dump bodies for Ford trucks, 7 road maintainers, 90 ft. 1 in. cable, two 12 ft. scarifier attachment for 12 ft. road grader, 2 Fordson tractors with crawler attachment, above to be used in maintaining State System of Highways. W. R. Neel, Atlanta, state highway engr.

Motor Truck—Appleton, Wis.—Feb. 7, by E. L. Williams, city clk., one 2½ ton motor truck complete with automatic dump, prices f.o.b. Appleton, for use of street department.

Street Roller, etc.—La Crosse, Wis.—Taking bids furnishing one 8 ton street roller and purchasing from city 10 ton and 15 ton rollers. M. R. Burnbaum, city clk.

Sign Posts, etc.—Oshkosh, Wis.—Taking bids 425 street sign posts and 1,700 street name signs. Noted Jan. 4.

Grand Stand, etc.—Topeka, Kan.—Jan. 26, by Williamson & Co., archts., 312 Central Bank Bldg., concrete and steel grand stand, 7,000 seating capacity incl. display stand, concession space and comfort station under stand, for Kansas Free Fair Assn., Fair Grounds. Noted Jan. 4.

BIDS RECEIVED

Motor Gasoline—New York, N. Y.—H. Bruckner, pres. Bronx Boro, Tremont and 3rd Aves., opened bids Jan. 3, furnishing and delivering 6,000 gal. motor gasoline, from Standard Oil Co., 26 Bway., $1,125; Tidewater Oil Sales Corp., 11 Bway., $1,133. Noted Dec. 28.

Coal Handling Equipment—Phila., Pa.—F. H. Caven, dir. pub. wks., City Hall, opened bids Dec. 29, (1) coal handling equipment also tracks, grading, shelter houses, etc., (2) locomotive crane, from J. B. McHugh, 403 Markoe St., (1) $6,063; (2) $9,650; Acme Machine Co., 710 Wood St., (1) $8,757, (2) $11,146; Browning Co., Weidner Bldg., (2) $11,720. Noted Dec. 21.

Levee and Bridge—Redwood City, Calif.—San Mateo Co. constructing levee and bridge over Bean Hollow. (a) 13,000 yd. earth embankment (b) 175 yd. concrete in bridge (c) 32,400 ft. sheet piling, (d) 150 yd. concrete slope pavement, etc., from A. Mattson, San Bruno, (a) $1 (b) $31 (c) $0,10 (d) $29; C. B. Cowden, 2082 Green St., San Francisco, (a) $1.20 (b) $33 (c) $0.09 (d) $30. Noted Dec. 28.

CONTRACTS AWARDED

Gas Holder and Trestle—Leominster, Mass.—Leominster Gas Light Co., 46 Main St., steel gas holder and trestle on concrete foundation, Mill St., holder, etc., to Stacey Mfg. Co., Elmwood Pl., Cincinnati, O.; masonry to Wiley & Foss, Central St., Fitchburg. Archts. est. $60,000.

Park—Astoria, N. Y.—Park Bd. at office Dept. Parks, Municipal Bldg., New York, improving Astoria Park, here, to T. Di Roma, 33 Evelyn Pl., New York City. $99,973.

Portland Cement—Brooklyn, N. Y.—E. Riegelmann, boro pres., Boro Hall, furnishing and delivering 3,500 bbl. Portland cement, to M. M. Canda, 184 3rd St., $9,520. Noted Jan. 4.

Transmission Line—Logan, W. Va.—See "Industrial Works."

Facade and Retaining Walls—New Orleans, La. — Bd. Port Comrs., 201 New Court Bldg., facade, paving and coping walls at foot of Canal St.. to Geary-Oakes Co. Inc., Title Guarantee Bldg., $65,000. Noted Dec. 28.

Grandstand—Chicago, Ill.—Chicago Natl. League Baseball Club, 400 North Michigan Ave., remodeling and enlarging baseball park, North Clark St. and Addison Ave., increasing seating capacity of grandstand 13,000, etc., to Languist & Illstey Co., 1100 North Clark St. Archts. est. $200,000.

Portland Cement—Wisconsin—State Hy. Comn., Madison, awarded contracts for Portland cement as follows: 225,000 bbl., to Marquette Cement Co., Marquette Bldg., Chicago; 175,000 bbl., to Lehigh Portland Cement Co., 111 West Washington St., Chicago; 125,000 bbl., to Sandusky Portland Cement Co., Engineers Bldg., Cleveland, O.; 50,000 bbl., to Petoskey Portland Cement Co., Petoskey, Mich.; 80,000 bbl., to Northwestern States Portland Cement Co., 327 Liberty Exch., Minneapolis, Minn.; 75,000 bbl., to Huron Portland Cement Co., through Western Lime & Cement Co., 68 Wisconsin St., Milwaukee, state agents; 160,000 bbl., to Alpha Portland Cement Co., Easton, Pa.; 500,000 bbl., to Universal Portland Cement Co., 210 South La Salle St., Chicago, this company may take contract for larger quantity. Price is $1.75 gross, Buffinton, La Salle or Dixon. To this will be added the sacks and freight. Discount of 10 per cent for cash in 10 days. Noted Dec. 28.

Piling—Milwaukee, Wis.—Gimbel Bros., 3 Grand Ave., piling for 8 story and basement, 77 x 120 and 58 x 177 ft. store building, rein.-con. and terra cotta, plain and wood pile foundation, to E. E. Gilien Co., 388 East Water St. Noted Dec. 21.

Swimming Pool—Sheboygan, Wis.—Bd. Educ., steel and tile swimming pool in high school, to L. M. Hansen, 133 West Walnut St., Green Bay. Engrs. est. $40,000.

Shore Protection—Glenwood, Ia.—Mills Co., 9 mi. shore protection along Missouri River, to Wood Bros. Constr. Co., Lincoln, Neb., $56,603. Noted Aug. 4, 1921.

Signal System—Minneapolis, Minn.—Fire alarm system in underground conduits, 99,878 lin.ft. cable, 3 to 55 pairs, 6 to 110 conductors, to Standard Undergronud Cable Co., Conway Bldg., Chicago, $54,869. Noted Oct. 5.

Elimination of Grade Crossing—Oklahoma City, Okla.—Elimination of grade crossing on 23rd St. over tracks Atchison, Topeka & Santa Fe R. R. 13,000 cu.yd. excav., 100 cu.yd. rein.-Con., 160 cu.yd. concrete, 4,400 lin.ft. 18 in. tile, to Smith Bros., 308 Sumpter Bldg., Dallas, Tex., $98,400. City will do paving, construct storm sewers and small concrete culvert.

Stadium—Berkeley, Calif.—University of California, grading, culverts, etc. for stadium, under Group 1, incl. general and detail excavations, embankments, concrete culverts, tunnels, retaining walls, foundations and piers, to Bates & Borland, Bank of Savings Bldg., Oakland, $335,000. Noted Dec. 7.

Pier—San Diego, Calif.—Common Council constructing first unit of mole type pier No. 2, to United Dredging Co., foot of Beech St., 305,000 cu.yd. dredging at $0.295 per cu.yd., 12,000 ton rock fill $2.70, constructing curtain walls, etc., $87,525. Noted Dec. 14.

Foundation—Port Arthur, Ont.—N. Bawlf Grain Co., Ltd., 571 Grain Exch. Bldg., Winnipeg, Man., and 1415 Royal Bank Bldg., Toronto, foundation for 200 x 250 ft. rein.-con. grain elevator, 80 ft. high, to Barnett-McQueen Ltd., Ft. William, $150,000. Total cost $800,000. Noted Dec. 21.

Construction News

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close — See Eng. News-Record

Jan. 22 Hinsdale, Ill. .....Dec. 21
Jan. 22 St. Paul, Minn. .....Jan. 18
Jan. 23 Morris, Okla. .....Jan. 18
Jan. 25 Buffalo, N. Y. .....Jan. 11
Adv. Jan. 11 and 18.
Jan. 25 Milwaukee, Wis. .....Jan. 18
Jan. 26 Milwaukee, Wis. .....Jan. 18
Jan. 29 Buffalo, N. Y. .....Jan. 18
Jan. 30 Zephyrhills, Fla. .....Jan. 11
Jan. 30 New York, N. Y. .....Jan. 18
Adv. Jan. 11 and 18.
Jan. 30 Bunkie, La. .....Jan. 18
Feb. 1 Spokane, Wash. .....Nov. 16
Feb. 15 Cheney, Wash. .....Jan. 18

SEWERS

Jan. 22 Mamaroneck, N. Y. .....Jan. 11
Jan. 23 Toledo, O. .....Jan. 4
Jan. 23 Charlotte, N. C. .....Jan. 11
Adv. Jan. 11 and 18.
Jan. 23 Springwells, Mich. .....Jan. 18
Jan. 24 San Francisco, Calif. .....Jan. 4
Jan. 29 Spring Lake, N. J. .....Jan. 11
Adv. Jan. 11 and 18.
Jan. 29 Clover, S. C. .....Jan. 18
Feb. 2 Denver, Colo. .....Jan. 18
Feb. 6 Springwells, Mich. .....Jan. 18
Adv. Jan. 18.
Feb. 23 Portland, Ore. .....Jan. 11

WASTE DISPOSAL

Jan. 24 Fargo, N. D. .....Dec. 7
Mar. 1 Spokane, Wash. .....Jan. 18

BRIDGES

Jan. 23 Spokane, Wash. .....Sept. 21
Jan. 23 Spartanburg, S. C. .....Jan. 4
Jan. 30 Ft. Dodge, Ia. .....Jan. 18
Jan. 30 Marshalltown, Ia. .....Jan. 18
Feb. 7 Mermenton, La. .....Jan. 11
Adv. Jan. 4 to 18.
Feb. 7 Appleton, Wis. .....Jan. 11
Adv. Jan. 11 and 18.
Feb. 7 Bison, S. D. .....Jan. 18
Feb. 14 New Orleans, La. .....Jan. 18
Adv. Jan. 18.
Apr. 1 Wilkes-Barre, Pa. .....Dec. 14
Sept. 1 Sydney, New South Wales, Australia .....Aug. 3

DAMS

Jan. 22 Megantic, Que. .....Jan. 11

EXCAVATION, DRAINAGE, IRRIGATION

Jan. 22 Olivia, Minn. .....Jan. 11
Feb. 6 Terra Bella, Calif. .....Jan. 18
Feb. 7 Shreveport, La. .....Jan. 18
Feb. 7 Baltimore, Md. .....Jan. 11

STREETS AND ROADS

Jan. 22 Crescent City, Calif. .....Jan. 11
Jan. 23 Georgia .....Jan. 18
Jan. 23 Laredo, Tex. .....Jan. 4
Jan. 23 Spokane, Wash. .....Dec. 21
Jan. 23 Charlotte, N. C. .....Jan. 11
Adv. Jan. 11 and 18.
Jan. 24 Faribault, Minn. .....Dec. 14
Jan. 24 Oklahoma .....Jan. 18
Jan. 24 Brooklyn, N. Y. .....Jan. 18
Jan. 25 Ft. Smith, Ark. .....Dec. 28
Jan. 25 Dyersville, Ia. .....Jan. 11
Jan. 25 Douglas, Ia. .....Jan. 18
Jan. 26 Ohio .....Jan. 18
Jan. 26 Peru, Ind. .....Jan. 18
Jan. 26 New York, N. Y. .....Jan. 18
Jan. 28 Cisco, Tex. .....Jan. 4
Jan. 30 Quebec .....Dec. 28
Jan. 30 West Virginia .....Jan. 11
Adv. Jan. 11 and 18.
Jan. 30 Zephyrhills, Fla. .....Jan. 11
Jan. 30 Starke, Fla. .....Jan. 18
Jan. 30 Indiana .....Jan. 18
Jan. 30 Platte, S. D. .....Jan. 18
Jan. 31 Silverton, Tex. .....Jan. 18
Feb. 1 Michigan .....Jan. 11
Feb. 1 North Carolina .....Jan. 11
Adv. Jan. 18.
Feb. 1 Georgia .....Jan. 18
Feb. 2 Alabama .....Jan. 11
Feb. 2 Oswego, Kan. .....Jan. 18
Feb. 5 Harrisville, W. Va. .....Jan. 11

Bids Close — See Eng. News-Record

Feb. 5 San Jose, Calif. .....Jan. 18
Feb. 5 Williamsport, Ind. .....Jan. 18
Feb. 5 Lawrenceburg, Ind. .....Jan. 18
Feb. 6 Oroville, Calif. .....Jan. 18
Feb. 6 Russellville, Ark. .....Jan. 18
Feb. 6 St. Louis, Mo. .....Jan. 18
Feb. 6 Wabash, Ind. .....Jan. 18
Feb. 6 Marion, Ind. .....Jan. 18
Feb. 6 Austin, Minn. .....Jan. 18
Feb. 6 Duluth, Minn. .....Jan. 18
Feb. 6 Mount Vernon, Ind. .....Jan. 11
Feb. 7 New York .....Jan. 18
Adv. Jan. 18.
Feb. 7 Auburn, Ind. .....Jan. 18
Feb. 9 New Castle, Pa. .....Jan. 18
Adv. Jan. 18.
Feb. 12 Ontario .....Jan. 18
Feb. 13 Atwood, Kan. .....Jan. 18
Feb. 15 Salina, Kan. .....Jan. 18

INDUSTRIAL WORK

Feb. 5 Shelbyville, Ill. .....Jan. 11

BUILDINGS

Jan. 19 Boston, Mass. .....Jan. 18
Jan. 22 Winfield, Kan. .....Jan. 18
Jan. 22 Kalamazoo, Mich. .....Jan. 18
Jan. 22 Des Moines, Ia. .....Jan. 18
Jan. 24 Holland, Mich. .....Jan. 11
Jan. 24 Boston, Mass. .....Jan. 18
Jan. 25 Owosso, Mich. .....Jan. 11
Jan. 25 Crookston, Minn. .....Jan. 11
Jan. 25 Alhambra, Calif. .....Jan. 18
Jan. 25 Glendale, Calif. .....Jan. 18
Jan. 25 Chisholm, Minn. .....Jan. 18
Jan. 25 Coldwater, Mich. .....Jan. 18
Jan. 26 Omaha, Neb. .....Jan. 4
Jan. 27 Port Arthur, Tex. .....Jan. 11
Jan. 27 Logansport, Ind. .....Jan. 11
Jan. 27 Evansville, Ind. .....Jan. 11
Jan. 29 Columbus, O. .....Jan. 18
Jan. 29 Oakland, Calif. .....Jan. 11
Jan. 29 Wash., D. C. .....Jan. 18
Adv. Jan. 18.
Jan. 30 Lafaivre, Ont. .....Jan. 11
Jan. 30 Wenatchee, Wash. .....Jan. 11
Jan. 30 New York, N. Y. .....Jan. 11
Jan. 30 Jenkinstown, Pa. .....Jan. 18
Jan. 30 Ames, Ia. .....Jan. 18
Jan. 30 Baltimore, Md. .....Jan. 18
Jan. 31 Trenton Junction, N. J. .....Jan. 18
Jan. 31 Groveport, O. .....Jan. 11
Feb. 1 St. Thomas, N. D. .....Jan. 4
Feb. 1 Chicago, Ill. .....Dec. 21
Feb. 1 Niagara Falls, N. Y. .....Jan. 11
Feb. 1 Thiells, N. Y. .....Jan. 11
Adv. Jan. 11 and 18.
Feb. 1 Kansas City, Mo. .....Jan. 11
Feb. 1 Milwaukee, Wis. .....Jan. 18
Feb. 1 New Orleans, La. .....Jan. 18
Feb. 2 Perry, N. Y. .....Jan. 18
Adv. Jan. 18.
Feb. 5 Trenton, N. J. .....Jan. 18
Adv. Jan. 18.
Feb. 6 San Antonio, Tex. .....Jan. 18
Feb. 7 Weston, Ont. .....Jan. 18
Feb. 9 Jamestown, N. Y. .....Jan. 11
Adv. Jan. 11 and 18.
Feb. 10 Kenosha, Wis. .....Jan. 4
Feb. 12 Albion, Mich. .....Jan. 18
Feb. 15 St. Charles, Minn. .....Jan. 11
Feb. 23 Jamestown, N. Y. .....Jan. 11
Adv. Jan. 11 and 18.
Mar. 1 Red Lion, Pa. .....Jan. 18
Mar. 1 Denver, Colo. .....Jan. 18
Mar. 15 Duluth, Minn. .....Jan. 18
Mar. 15 Trenton, N. J. .....Jan. 11
Mar. 23 Shreveport, La. .....Nov. 9
Apr. 1 Oil City, Pa. .....Jan. 18

FEDERAL GOVERNMENT WORK

Jan. 22 Bridges—Alaska .....Dec. 28
Jan. 23 Lock Operating Machinery, etc. —Huntington, W. Va. .....Dec. 28
Adv. Dec. 28 to Jan. 18.
Jan. 24 Levee Work—St. Louis, Mo. Dec. 28
Adv. Dec. 28 to Jan. 18.
Jan. 24 Refrigerating and Ice-Making Plant—Pearl Harbor, H. T. Dec. 14
Jan. 24 Natatorium — Annapolis, Md. .....Jan. 11
Adv. Jan. 18
Jan. 24 Extension—Wash., D. C. .Jan. 11
Jan. 26 Tower—New York, N. Y. .Jan. 4
Adv. Jan. 4 to 18.
Jan. 26 Dredging, etc. — Richmond, Calif. .....Jan. 11
Jan. 27 Barges—Florence, Ala. .....Jan. 4
Adv. Jan. 4 to 18.
Jan. 29 Ward Building, etc.—Savannah, Ga. .....Jan. 4
Jan. 30 Dredging Ladder — Cincinnati, O. .....Jan. 4
Adv. Jan. 4 to 18.

Bids Close — See Eng. News-Record

Jan. 30 Barges—Nashville, Tenn. .Jan. 4
Adv. Jan. 4 to 18.
Jan. 30 Extension — New York, N. Y. .....Jan. 11
Adv. Jan. 11 and 18.
Jan. 30 Houses—Ft. Benning, Ga. .Jan. 11
Adv. Jan. 11 and 18.
Jan. 31 Houses—Pittsburgh, Pa. .Jan. 4
Adv. Jan. 4 to 18.
Feb. 1 Dredging—Galveston, Tex. .Jan. 4
Adv. Jan. 4 to 18.
Feb. 1 Well—Dona Ana, N. M. .Jan. 11
Feb. 7 Detonator and Storehouse—Puget Sound, Wash. .....Jan. 11
Feb. 7 Water Supply System — Tiburon, Calif. .....Jan. 11
Feb. 8 Horses and Props—Cincinnati, O. .....Jan. 11
Adv. Jan. 11 and 18.
Feb. 10 Plotting Room, etc. — Ft. Tilden, N. Y. .....Jan. 18
Adv. Jan. 18.
Feb. 12 Steel, etc.—Cincinnati, O. .Jan. 18
Adv. Jan. 18.
Feb. 14 Sluice Gates — Boise, Idaho .....
Feb. 15 Furnishing Stone, etc.—Crescent City, Calif. .....Jan. 4
Feb. 15 Valves—Boise, Idaho .....Dec. 28
Feb. 16 Hospital — Battle Creek, Mich. .....Jan. 4
Adv. Jan. 18. .....Jan. 18
Feb. 21 Dredging—Galveston, Tex. .Jan. 11
Adv. Jan. 11 and 18.

MISCELLANEOUS

Jan. 20 Lumber—Phila., Pa. .....Jan. 18
Jan. 22 Machinery and Equipment—Georgia .....Jan. 11
Jan. 22 Turbines—Winnipeg, Man. .Jan. 4
Jan. 22 Motor Trucks—Long Island City, N. Y. .....Jan. 18
Jan. 22 Road Plows — Scarboro, Ont. .....Jan. 18
Jan. 22 Coal and Ash Handling Plant and Equipment — Toronto, Ont. .....Jan. 18
Jan. 22—Bulkhead Wall—New York, N. Y. .....Jan. 18
Jan. 23 Crane—Aberdeen, Wash. .Jan. 4
Jan. 23 Tar Patching Material, etc. —Trenton, N. J. .....Jan. 11
Jan. 23 Lumber, etc.—Toledo, Ia. .Jan. 18
Jan. 23 Lumber, etc. — Montezuma, Ia. .....Jan. 18
Jan. 23 Lumber, etc.—Mt. Ayr, Ia. .Jan. 18
Jan. 24 Steel, Lumber, etc. — Charles City, Ia. .....Jan. 18
Jan. 25—Alterations — New York, N. Y. .....Jan. 18
Jan. 25 Lumber—New Orleans, La. Jan. 18
Jan. 25 Timber Jetties, etc. — Rockaway Beach (Far Rockaway P. O.), N. Y. .....Jan. 18
Jan. 26 Grand Stand, etc. — Topeka, Kan. .....Jan. 11
Jan. 29 Bulkhead, etc. — Mineola, N. Y. .....Jan. 18
Adv. Jan. 18.
Jan. 30 Flushers—Mankato, Minn. .Jan. 18
Jan. 31 Lumber, etc. — Iowa City, Ia. .....Jan. 18
Feb. 1 Sand—New Orleans, La. .Jan. 18
Feb. 5 Water Pipe and Fittings — Redwood City, Calif. .....Jan. 18
Feb. 5 Turbine, Generator, etc. — Arizona .....Jan. 18
Feb. 5 Lumber, etc.—Harlan, Ia. .Jan. 18
Feb. 7 Screening Plant — Mora, Minn. .....Jan. 18
Feb. 7 Motor Truck — Appleton, Wis. .....Jan. 11
Feb. 7 Lumber, etc — Waverly, Ia. .....Jan. 18
Feb. 7 Lumber, etc.—Vinton, Ia. .Jan. 18
Feb. 15 Dry Dock Machinery—Esquimalt, B. C. .....Jan. 4

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Mass., Erving—Having tentative sketches made by F. D. Avery, engr., 288 Main St., Greenfield, new mains, reservoir and probably pumping station. $75,000.

Waterworks (Continued)

Pa., Harrisburg — Making borings and having plans prepared 30,000,000 gal. reservoir, probably concrete, in Reservoir Park. J. H. Fuertes, 140 Nassau St., New York City, engr.

La., De Quincy—Plans election to vote on $120,000 bonds for waterworks and electric power plants. Engineer not announced.

La., Rayne—Acadia Parish voted $125,000 bonds for water and light extensions. J. B. McCrary & Co., 3rd Natl. Bank Bldg., Atlanta, Ga., consult. engrs.

O., Cleveland Heights (Warrensville, P. O.)—Plans 16 in. c.i. mains in Mayfield Rd. $100,000. F. A. Pease Eng. Co., Marshall Bldg., Cleveland, engrs.

O., Dayton — Plans to issue $200,000 bonds for high pressure pipe line from Taylors St. to Fairview standpipe, also for purchasing and laying numerous small mains. I. E. Houk, city engr.

O., Martins Ferry — Preparing plans pumping station, two 4,000,000 gal. pumps, ash handling facilities, boiler plant and electric generating station. $450,000. J. N. Chester Eng. Co., Union Bldg., Pittsburgh, Pa., engrs.

Wis., Fond du Lac—Soon takes bids furnishing and installing one 5,000,000-10,000,000 gal. per day pump, steam or motor driven. J. J. Breister, supt. Water Dept.

Ia., Hawkeye—Having plans prepared remodeling plant. Taking bids on machinery and equipment. Midwest Eng. Sales Co., 321 Masonic Temple Bldg., Cedar Rapids, engrs.

S. D., Watertown—Plans filtration plant. $40,000. W. T. Cochrane, city engr.

Mo., La Plata—Defeated $190,000 bonds for new water system and sewers. Noted Dec. 7.

Tex., Alvaredo—Attorney Generals Dept., Austin, approved $30,000 bonds for waterworks improvements. Municipal Eng. Co., Praetorian Bldg., Dallas, engrs.

Tex., Seymour—City plans extending mains and improving waterworks. $25,000 available.

Ore., Gold Hill—Plans to reconstruct water supply system. $23,000 bonds voted.

Calif., Delano—Plans election to vote on $45,000 bonds for extensions and repairs to waterworks.

Calif., Manteca—See "Excavation, Drainage, Irrigation."

Calif., Santa Barbara—City Water Dept. plans to lay within next few months 25,000 ft. of 6-16 in. mains. G. Morrison, city engr.

Que., Montreal—Takes bids in March enlarging filtration plant from 50,000,000 to 70,000,000 gal. H. A. Thereault, City Hall, engr.

Ont., Essex—Plans to improve and extend waterworks. $35,000. A. Proctor, 36 Toronto St., Toronto, engr.

Ont., Gananoque—Had plans prepared 12,000 ft. mains, mostly 6 in. $40,650. J. A. Jackson, secy. water comn.

BIDS DESIRED

N. Y., Buffalo—Jan. 29, by Commissioner Pub. Wks., Municipal Bldg., furnishing and delivering special pipe castings for Buffalo Filtration plant. G. C. Andrews, Col. Ward Pumping Sta., engr.

N. Y., Dunkirk—Water Comrs. taking bids for electrical pumping machinery to be used in connection with extensions to waterworks.

N. Y., New York—Jan. 30, by Bd. Water Supply, Municipal Bldg., furnishing and delivering gate valves and hydrants for Mt. Prospect, Park Slope, Ft. Hamilton and Clove conduits and Narrows Siphon 2 of Catskill Aqueduct. Former bids rejected. G. J. Gillespie, pres.; adv. this issue. Noted Dec. 14 under "Miscellaneous."

S. C., Clover—See "Sewers."

La., Bunkie—Jan. 30, by Town Bd., 4 mi. c.i. mains, hydrants, valves, etc. $50,000. Kramer Eng. Co., Magnolia, Miss., engrs.

Wis., Milwaukee—Jan. 25, at office Central Bd. Purchases, two hundred 6 in. gate valves; 200 fire hydrants; one thousand five hundred ⅝ in. and two thousand ¾ in. corporation cocks, one thousand five hundred ⅝ in. and one thousand five hundred ¾ in. meter cocks, three thousand ⅝ in. and three thousand ¾ in. meter couplings, one thousand five hundred ¾ in. and two thousand 1 in. curb cocks; one hundred thirty-seven 8-16 in. gate valves, sixty 2-6 in. special or tapping valves; all f.o.b. Milwaukee. G. Staal, city engr.

Wis., Milwaukee — Jan. 26, by J. H. Fowles, secy. Sewerage Comn., 508 Market St., furnishing 32 sluice gates and valves, sizes from 8 in. to 6 ft., also 1,125 ton c.i. pipe and specials. G. Staal, city engr.

Ia., Hawkeye—See "Proposed Work."

Minn., St. Paul—Jan. 22, by H. W. Austin, city purch. agt., castings and fittings for Water Dept. G. M. Shepard, city engr.

Okla, Morris—Jan. 23, by City Clerk, rapid sand filter plant, basins, pumping machinery, pipe lines and dirt dam. 10,000 ft. 8 in. c.i. pipe, 75 cu.yd. concrete, 10,000 cu.yd. earth excav., two 150 gal. per min. centrifugal pumps driven by 25 hp. oil engines. $67,000. H. G. Olmstead & Co., 415 Oil Exch. Bldg., Oklahoma City, engrs. Noted Jan. 4.

Wash., Cheney—Feb. 15, 14 in. well, 800 ft. deep, pump, housing, etc., for addition to water supply. $12,000.

Ont, Brantford—Taking bids 2 motor driven direct connected centrifugal pumps. F. P. Adams, city engr.

Ont., London—Utilities Bd. taking bids installing 5,000 water meters. $150,000. E. V. Buchanan, Hydro Office Bldg., engr.

BIDS RECEIVED

Calif., Terra Bella—Terra Bella Irrigation Dist., opened bids furnishing riveted steel water pipe, f.o.b. Ultra on or before Feb. 1, as follows: 700 ft. 4 in., 6,700 ft. 6 in., 700 ft. 7 in. and 2,700 ft. 8 in. from Montague Pipe & Steel Co., Hobart Bldg., San Francisco, $5,400; Pacific Pipe Co., 201 Howard St., San Francisco, $5,400. Western Pipe & Steel Co., 444 Market St., San Francisco, $5,725. Noted Dec. 21.

CONTRACTS AWARDED

Pa., Phila.—Furnishing 6, 8 and 12 in. c.i. pipe, to U. S. Cast Iron Pipe & Fdry. Co., Morris Bldg., $26,280; 6, 8 and 12 in. stop valves, also fire hydrants, to A. P. Smith Mfg. Co., Norman St., East Orange, N. J. $8,274 and $17,025 respectively. Noted Jan. 4.

N. C., Albemarle—Installing filtration plant, extending water and sewer lines, to Tucker & Laxton, Albemarle, $70,000. Noted Dec. 21.

Miss., Corinth—See "Sewers."

Okla., Bristow — Constructing 100,000 gal. tank and tower. 20,000 ft. 4-8 in. c.i. pipe, to Fielder & Eads, Bristow. $46,485.

Okla., Oklahoma City—Extending water and sewerage systems, to Sherman Iron Wks., East Main St., $29,700.

Sewers

PROPOSED WORK

N. Y., Rochester — See "Streets and Roads."

Md., Back River (Baltimore P. O.)—Having plans prepared auxiliary sludge pumping station, plant building and waiting station. M. J. Ruark, City Hall, sewerage engr.

Fla., Miami—Had plans prepared storm and sanitary sewers in Westmoreland Sect. and 12th Ave. Dist. $150,000. C. W. Murray, Dir. Pub. Wks.

Wis., Milwaukee—Sewerage Comn. soon takes bids intercepting sewer, Sect. 1, from Mason St. and Bway. to Brady St. and Cambridge Ave., 400 ft. of 72 in., 8,475 ft. 84 in., 687 ft. 54 in. and 355 ft. 18 in. rein.-con. sewer, 220 drop manholes, 275 ft. standard manholes; Sect. 2, from Brady St. and Cambridge Ave. to Concord and Cambridge Aves., 3,171 ft. 84 in., 4,639 ft. 78 in., 295 ft. 60 in. concrete, and 790 ft. 84 in. and 96 ft. 78 in. rein.-con. sewer, 906 ft. 24 in. and 75 ft. 12 in terra cotta pipe sewer encased in concrete, 80 standard manholes, 127 drop manholes; Oklahoma Ave. from 1st to 12th Aves., 4,215 ft. 42 in. concrete sewer, 1 junction chamber, 250 standard manholes; Scott St. from 2nd Ave. to Barclay St., 1,130 ft. 48 in. concrete sewer, 1,548 ft. 48 in. c.i. pipe sewer; completing intercepting sewer at foot of Park St., 140 ft. combined 48 in. c.i. pipe and 6 x 4 ft. concrete sewer, 75 ft. 24 in. c.i. pipe sewer, 28 ft. 54 in. concrete sewer 155 ft., 18 in. terra cotta pipe sewer incased in concrete, 1 valve chamber, 1 junction chamber. Total cost $900,000. J. H. Fowles, 508 Market St., secy.

Mo., La Plata—See "Waterworks."

Okla., Tulsa—C. Schultz, city engr., will take bids in March, storm sewers, 144 ft. horse shoe shape, in St. Louis Sect. $250,000.

Okla., Tulsa — Having plans prepared portion Elm Relief Sewer, involving 266 ft. arch span of 22 ft. $35,000. C. Schultz, city engr.

Calif., Ventura — City Council plans sewage disposal plant.

Ont., Fort Erie—Voted $50,000 bonds for extending sewers, incl. pumping plant and force mains. Prices wanted on material and equipment. T. M. Dodds, engr.

BIDS DESIRED

S. C., Clover—Jan. 29, by Town, complete sewerage system and disposal plants, ground water reservoir, and extensions to waterworks system, incl. pumps, c.i. pipe lines, etc. Carolina Eng. Co., Wilmington, N. C., engrs.

Mich., Springwells—Jan. 23, by B. P. Esper, village clk., open cut sewer outlet 4,700 ft. long through Ford property, together with bridges, channel with various cross sections. A. Roth, engr., and C. W. Hubbell, consult. engr., both at 2348 Penobscot Bldg., Detroit.

Mich., Springwells—Feb. 6, by B. P. Esper, village clk., Sewer Arms Sects. 25 to 35. C. W. Hubbell, 2348 Penobscot Bldg., Detroit, consult. engr.; adv. this issue.

Colo., Denver — Feb. 1, by Dept. Improvements and Parks, 5 mi. 8-10 in. vitr. pipe sewer in Eastern Capitol Hill Special Sanitary Sewer Dist., $34,293; 5 mi. 8 in. vitr. sewer in South Side Special Sanitary Sewer Dist. 7, $34,811. A. K. Vickery, City Hall, city engr. Noted Dec. 28.

CONTRACTS AWARDED

N. C., Albemarle—See "Waterworks."

Miss., Corinth—Sewerage and water systems, to Merkle Mchy. Co., 1733 Walnut St., Kansas City, Mo., $68,012. Noted Dec. 14.

O., Lakewood (Cleveland, P. O.)—For 5,280 ft. 48 in. concrete or segmental block intercepting sewer, to J. Winterbottom, 1815 Corning Ave., Cleveland, $162,764. Noted Jan. 11.

Mich., Highland Park (Detroit P. O.)—For 1,518 ft. Sects. 1 and 2, Davison Ave. Sewer, to W. Blanck & Co., 823 Ford Bldg., Detroit, $25,000. Noted Dec. 14.

Wis., North Milwaukee—Metropolitan Sewerage Comn. of Milwaukee Co., 508 Market St., Milwaukee, main sewer in 32nd St. and Hampton Ave. to 48th St. and Roosevelt Dr., to Balliet Constr. Co., Adams Ave., Milwaukee, $297,725. Noted Jan. 4.

Okla., Bristow—To Fielder & Eads, Bristow, 8,000 ft. of 8-12 in. vitr. clay sanitary sewers also sprinkling filter, $32,628 and $19,079 respectively; 7,000 ft. 48 in. segmental block storm sewers, to Standard Paving Co., 1742 East 4th St., Tulsa, $59,397.

Okla., Oklahoma City — See "Waterworks."

Calif., Santa Ana — Constructing new main line outfall sewer, concrete pipe, to B. R. Ford, 407 West 17th St., $100,078.

Calif., Turlock — Constructing outfall sewer, 12,750 ft. 24 in. glazed cement pipe, to W. J. Tobin, 527 Santa Ray Ave., Oakland, $25,832. Noted Jan. 4.

Ont., Hamilton—For 2,878 ft. brick and tile sewer in main St. from Kenilworth to Strathearn Aves., to Cope & Sons, 29 Albert St., $29,430.

Ont., Sandwich—Sewers in Askin Blvd., Randolph St., and Rankin Ave., up to 18 in., to Merlo, Merlo & Ray, Sandwich St. Ford, $143,871.

Waste Disposal

PROPOSED WORK

Ore., Portland—Opened bids Dec. 29 for garbage incinerator, Proposal A, repairing and enlarging by 100 ton present incinerator, Proposal B, repairing and enlarging present incinerator by tearing out old furnaces and building new 200 ton furnace, Proposal C, building new 200 ton incinerator, Proposal D, building new 100 ton incinerator, from Pacific Coast Constr. Co., c/o Houghtaling, Dougan & Dougan, Elks Bldg., Proposal A, $45,165 plus 10 per cent of labor cost, Proposal B, $84,185, Proposal C, $125,975, Proposal D, $79,185; Superior

Waste Disposal (Continued)

Garbage Incinerator Co., Dallas, Tex., (street address not available) Proposal D, $99,800; Decarie Incinerator Co., 817 McKnight Bldg., Minneapolis, Minn., 150 ton plant, 50 x 85 ft., $208,960, 45 x 65 ft., $160,940, 200 ton plant, $216,620. All bids rejected. Plans will be revised and work readvertised. Noted Nov. 30.

BIDS DESIRED

Wash., Spokane—March 1, by C. T. Bogard, city purch. agt., 50 ton incinerator for crematory. $30,000. Noted Nov. 22.

Bridges

PROPOSED WORK

Pennsylvania—Lycoming Co. (Williamsport) and Clinton Co. (Lock Haven) plans bridge over Pine Creek, 100 ft. long, 25 ft. wide. M. H. Krause, Susquehanna Trust Bldg., Williamsport, consult. engr.

Alabama—State Hy. Dept., Montgomery, having plans prepared 511 ft. bridges on Centerville-Woodstock Rd., one 80 ft. arch, remainder deck girder type, 18 ft. roadway, Bibb Co.; 915 ft. bridge over Tallapoosa River, between Alexander City and Dadeville, six 150 ft. steel spans on mass concrete piers, 18 ft. roadway, Tallapoosa Co., $160,000; 715 ft. bridge on Montgomery-Lawrence Rd., creosote timber approach and one 120 ft. steel span, 18 ft. roadway, Grenshaw Co., $36,000; 642 ft. bridges on Greenville-Belleville Rd., one 65 ft. steel span, remainder creosoted timber, 18 ft. roadway, Conecuh Co. W. S. Keller, state highway engr.

Wis., Milwaukee—City had plans prepared and takes bids in spring 115 ft. rein.-con. and steel bridge, with bascule, 55 ft. roadway, 15 ft. walks, total length incl. approaches 200 ft., State St. $630,000. M. C. Cutler, City Hall, engr.

North Dakota—See "Streets & Roads."

Missouri — State Hy. Dept., Jefferson City, rejected bids opened Dec. 2, one 30 ft. rein.-con. deck girder, one 80 ft., one 60 ft. and one 50 ft. steel truss spans, rein.-con. slab approach spans each end, concrete piers and pile bents, etc., on road from Chillicothe north, State Project Route 3, Sect. 16, Livingston Co. Noted Dec. 28.

Tex., Liberty—See "Streets and Roads."

Tex., Richmond—Ft. Bend Co. making plans 1,510 ft. bridge over Brazos River on State Highway 3, 3 steel spans with rein.-con. pile trestle approach. $224,700. C. H. Kendall, Sugarland, co. engr.

BIDS DESIRED

Georgia—See "Streets and Roads."

Georgia—Feb. 1, by State Hy. Dept., Atlanta, furnishing all labor, material, (except cement) for construction of culverts and fills on River Rd., approach to Savannah River Bridge, near Savannah, Federal Aid Project 318, 24,294 cu.yd. common and borrow, 393 cu.yd. borrow, 23 cu.yd. wet and 24 cu.yd. dry excav., 84.96 cu.yd. concrete, 19, 1,946 lb. reinforcing. W. R. Neel, Atlanta, highway engr. State will furnish cement f.o.b. nearest railroad station.

La., New Orleans — Feb. 14, at office Dept. Pub. Finances, Purch. Div., Room 24, City Hall, furnishing and erecting Scherzer rolling lift bridge over Navigation Canal; adv. this issue.

Ohio—See "Streets and Roads."

Ia., Ft. Dodge — Jan. 30 by Auditor Webster Co., 308 ft., 6 span, cantilever deck girder bridge, concrete pier and abutments, near north limits of Ft. Dodge. $35,000. Ia. Hy. Comn., Ames, engrs. Noted Dec. 21.

Ia., Marshalltown—Jan. 30, by Auditor Marshall Co., 35 box culverts and extensions, 23 circular culverts and extensions, 1 deck girder and 1 pony truss, 1,875.6 cu. yd. concrete, 41,265 lb. steel, 128,465 lb. reinforcing. $41,300. Iowa Hy. Comn., Ames, engrs.

S. D., Bison—Feb. 7, by L. N. Robinson, aud. Perkins Co., three pony truss bridges, one 180 ft. at Jesfjeld crossing on South Grand River, one 90 ft. over Moreau River north of Imogene, and one 60 ft. over North Grand River at Hove crossing. $25,000.

BIDS RECEIVED

Missouri—State Hy. Dept., at div. office Albany, opened bids Dec. 22, (1) one 12 ft. rein.-con. slab, one 40 ft., four 20 ft. and six 30 ft. I-beam spans, 20 ft. roadways, etc., on road from Stanberry to Albany, Federal Aid Project 37B, Gentry Co. (2) sixteen 20 ft. rein.-con. slab and four 20 ft. I-beam approach spans, to main span, 20 ft. roadways, etc., on road from Albany westward, Federal Aid Project 57B, Gentry Co., from W. R. Larson Constr. Co., 519 Secy. Natl. Bank Bldg., Sioux Falls, S. D., (1) $22,910 (2) $29,733; Monarch Eng. Co., Falls City, Neb., (1) $24,343 (2) $23,397.

Missouri—State Hy. Dept. at div. office Houston, opened bids Dec. 28, one 25 ft. rein.-con. deck girder and one 100 ft. and two 80 ft. steel truss spans, 2 concrete piers, four rein.-con. abutments, 20 ft. roadways, on road from Houston southward, Federal Aid Project 90C, Texas Co., from Concrete & Steel Constr. Co., 214-223 West 3rd St., Joplin, $36,052; Coppers Constr. Sev. Co., Federal Reserve Bank Bldg., St. Louis, $37,732; Davis Constr. Co., Mammoth Springs, Ark., $39,774. Noted Dec. 21.

Missouri—State Hy. Dept., at div. office Marshall, opened bids Dec. 23, one 90 ft. and two 60 ft. rein.-con. open spandrel arch spans, 20 ft. roadway, 2 concrete piers, 2 rein.-con. abutments, over Salt Fork River on Sta. 35 plus 40, on road from Marshall east and west, Federal Aid Project 16, Saline Co., from M. E. Gillioz, Monett, $46,276; H. H. Hanenkratt, 53rd and Brooklyn Sts., Kansas City, $48,066. Noted Dec. 21.

Missouri—State Hy. Dept. at div. office Platte City, opened bids Dec. 29, three 120 ft. and one 60 ft. steel truss spans, 20 ft. roadway, concrete substructure, over Platte River, on Sta. 37 plus 00 on road from Platte City to Tracy, Federal Aid Project 93, Platte Co., from Missouri Valley Bridge & Iron Co., 4th and Walnut Sts., Leavenworth, Kan., $43,749; J. Stanton, 6th and Kiowa Sts., Leavenworth, Kan., $44,064; Kansas City Bridge Co., 510 Orear-Leslie Bldg., Kansas City, $47,479. Noted Dec. 21.

Florida—See "Streets and Roads."

Missouri—State Hy. Dept. at div. office Springfield, opened bids Dec. 28, two 100 ft. steel truss spans, 20 ft. roadway, concrete substructure, over James River on Sta. 255 plus 00, on road from Springfield to Ozark, Federal Aid Project 162, Greene Co., from M. E. Gillioz, Monett, $29,898; Concrete & Steel Constr. Co., 214-223 West 3rd St., Joplin, $30,045; Pioneer Constr. Co., 101 New York Life Bldg., Kansas City, $31,085.

Colo., Denver—City opened bids rein.-con. river spans for bridge on 16th St. between Platte and Wagee Sts., from C. S. Lambie, Tramway Bldg., $37,000, N. M. Stark & Co., 1215 Mulberry St., Des Moines, Ia., $39,460, R. M. Larson, 1309 Lalamath St., $40,000; 110 ton reinforcing steel for trusses and columns, from Milwaukee Bridge Co., 1400 34th St., Milwaukee, Wis., $0.0472 per lb., Amer. Bridge Co., 320 First Natl. Bank Bldg., $0.0476, Omaha Steel Wks., 4802 Leavenporth St., Omaha, Neb., $0.0525.

CONTRACTS AWARDED

Virginia—State Hy. Dept., Richmond, bridge on Project 169-B, Botetourt Co., to H. A. Donald Co., Lexington, $37,655; bridge on Project 205, Spottsylvania Co., to Pittsburg-Des Moines Steel Co., Curry Bldg., Pittsburgh, Pa., $10,506. Noted Nov. 30 under Streets and Roads.

Ia., Dubuque — Dubuque Co. to Even-Uhlrick-Staner Co., 446 Garfield Ave., 6 box culverts, $5,359, 8 box culverts and 1 pony truss $12,340; P. Eisbach & Sons, 605 Windsor Ave., 23 box culverts $15,200; W. Hantleman, Dubuque, 21 box culverts $6,323. Noted Nov. 30.

Missouri—State Hy. Dept. at div. office Kennett, one 30 ft. I-beam, one 70 ft., five 85 ft. and two 75 ft. steel truss spans, 20 ft. roadways, concrete substructures, on road from Kennett to Hayti, Federal Aid Project 212, Dunklin Co., to W. A. Leach, Poplar Bluff, $94,502; four 25 ft. rein.-con. deck girders, sixteen 20 ft. rein.-con. slabs, four 80 ft., two 50 ft., one 75 ft. and one 60 ft. steel truss spans, 20 ft. roadways, concrete substructures, etc., on road from Campbell northwestward, Federal Aid Project 221A, Dunklin Co., to M. E. Gillioz, Monett, $126,317.

Missouri—See "Streets and Roads."

Missouri — State Hy. Dept., Jefferson City, one 50 ft., one 100 ft. and one 120 ft. steel truss spans, 20 ft. roadways, rein.-con. abutments, etc., on road from Kansas City to St. Louis, State Project Route 2, Sect. 7, Lafayette Co., to Cook & O'Brien Constr. Co., 305 Ry. Exch. Bldg., Kansas City, $48,718; one 25 ft. rein.-con. deck girder and three 60 ft. steel spans, 20 ft. roadways, concrete piers and abutments, on road from St. Louis to Kansas City, State Project Route 2, Sect. 6, Jackson Co., and one 60 ft., one 100 ft. and two 50 ft. steel truss and two 20 ft. rein.-con. slab spans, on road from St. Louis to Kansas City, State Project Route 2, Sect. 4, Jackson Co., to Alzina Constr. Co., Unity Bldg., Springfield, Ill., $28,413 and $40,102 respectively; one 120 ft. and two 60 ft. steel truss spans, 20 ft. roadway, rein.-con. piers and abutments, etc., over Big Creek, on Sta. 23 plus 80, on road from Bethany westward, State Project Route 4 Sect. 24, Harrison Co., to Rand Constr. Co., 1007 New York Life Bldg., Kansas City, $27,547; one 100 ft. and one 60 ft. steel truss, four 20 ft. and four 15 ft. rein.-con. slab spans, 20 ft. roadways, concrete piers and pile bents, etc., on road from Wayland to Canton, State Project Route 9, Sect. 7, Clark Co., to General Constr. Co., Syndicate Trust Bldg., St. Louis, $30,282; five 20 ft. rein.-con. slab, two 160 ft., one 120 ft. and one 80 ft. steel truss spans, 20 ft. roadways, concrete piers, and pile bents, etc., on road from Kansas City to Springfield, State Project Route 14, Sect. 38, Laclede Co., to Riley & Bailey, International Life Bldg., St. Louis, $79,910. Noted Dec. 28.

Missouri—State Hy. Dept., Jefferson City, 4,470 ft. steel bridge to have two 246 ft. and two 408 ft. through truss and three 208 ft. deck spans, 700 ft. trestle approach and earth embankment, over Missouri River, at Lexington, in Ray, Lafayette and Richmond Counties, to Kansas City Bridge Co., Orear-Leslie Bldg., Kansas City, $972,644.

Colorado—State Hy. Dept., Denver, steel and timber bridge on State Highway 30, Huffman Crossing of Sand Creek, El Paso Co., to J. R. Donaghy, 416 North Nevada Ave., Colorado Springs, $23,747. Engrs. est. $26,399. Noted Dec. 28.

Dams

PROPOSED WORK

N. Y., Watertown—See "Miscellaneous."

O., Troy—Preparing plans 300 ft. concrete dam and flexible rein.-con. slab apron. $60,000 bonds sold. M. Gantz, city engr.

Arizona—Salt River Valley Water Users Assn., Salt River Valley Water Users Bldg., Phoenix, plans variable radius dam, solid concrete, 166 ft. high, 90 ft. wide at bottom, 8 ft. thick on top, 27 ft. thick on bottom, canyon 320 ft. across top, Tainter gates, to store 90,000 acre feet, at Mormon Flat, Gila Co.; also nineteen 15 x 20 ft. Tainter gates in spillway, turbine and generator to generate 16,000 kilowatts at Roosevelt Dam. $1,800,000 voted for these projects. C. C. Craigin, ch. engr.

Wash., Walla Walla—Burbank Irrigation Dist. plans wing dam in Snake River, for irrigation and hydro electric development. $700,000. E. H. Chandler, Walla Walla, engr.

Ore., Bend—See "Excavation, Irrigation and Drainage."

BIDS DESIRED

Okla., Morris—See "Waterworks."

CONTRACTS AWARDED

N. H., Sunapee—See "Industrial Works."

Railways

PROPOSED WORK

Illinois—Illinois Central R.R., 135 East 11th Pl., Chicago, soon lets contract laying 5 tracks, each 2,000 ft., motor transportation for hump, $65,000, new machinery for shops, $45,000, and new machinery shed 50 x 100 ft., in yards at Centralia. Total cost $200,000. F. L. Thompson, ch. engr.

California—Atchison, Topeka & Santa Fe R.R., Kerckhoff Bldg., Los Angeles, having plans prepared double tracking 137 mi. railroad from Los Angeles to Alburquerque, N. M., $7,500,000. R. B. Ball, ch. engr.

Ontario—Toronto Transportation Comn., 35 Yonge St., Toronto, having surveys made for 1½ mi. double tracking along Dundas St. from Keele St. to Runnymede Rd. $500,000. H. H. Couzens, mgr.

CONTRACTS AWARDED

Ontario—Grand Trunk Ry., London, will lay 100 lb. steel rails from London to Sarnia, by day labor. $500,000. C. Forrester, London, engr.

Excavation, Drainage, Irrigation

PROPOSED WORK

Wis., Green Bay—Brown Co. Drainage Bd., c/o F. Desnoyer, secy., 605 Cherry St., making plans system to drain about 800 acres, incl. 2 or 3 mi. 8-16 in drain tile. $25,000. L. M. Schindler, 721 Clark St., Appleton, engr.

Mont., Boulder — Whitehall Irrigation Dist. plans to complete irrigation project in Jefferson Co. $125,000. Black & Black, Whitehall, engrs.

Mont., Bozeman—South Bend Irrigation Dist. plans to irrigate 15,000 acres in Gallatin Co. $800,000 F. M. Brown, 822 South 3rd St., engr.

Mont., Dillon — East Bench Irrigation Dist. plans to irrigate approximately 16,000 acres in Beaverhead Co. $825,000. G. V. Elder, 232 East Bannock St., engr.

Mont., Glendive—Upper Glendive-Fallon Irrigation Dist. plans to irrigate 4,210 acres in Dawson Co. $150,000. D. P. Woods, 721 Realty Bldg., Spokane, Wash., engr.

Mont., Harlowton — Harlowton-Durand Irrigation Dist. having plans prepared irrigating 20,000 acres in Wheatland Co. $1,000,000. A. W. Verharen, 616 Holter St., Helena, engr.

Mont., Red Lodge—Red Lodge-Rosebud Irrigation Dist. had plans prepared irrigating 11,000 acres in Carbon Co. $418,000. R. H. Fifield, Billings, engr.

Utah, Price — Price Conservation Dist. takes bids early in spring, canal work. $466,000. McGonagle & Ulrick, Deseret Bank Bldg., Salt Lake City, engr.

Wash., Riverside—Riverside Irrigation Dist. plans canals, pipe lines, pumps, flumes, power plant, etc. $450,000. Engineer not selected.

Ore., Bend—Snow Creek Irrigation Dist. plans irrigation system, incl. dam at outlet of Big Lake, near here. $40,000 bonds voted.

Calif., Manteca—C. R. Lenfest, 1195 East Santa Clara St., San Jose, plans 11,750 ft. canals, 25.8 ft. wide on top, 12 ft. wide on bottom, 3.4 ft. through earth, 2 pumping plants operated by 100 hp. electric motors. $30,000.

Calif., Oroville — Thermalito Irrigation Dist., plans election to vote on $300,000 bonds, irrigating 3,000 acres, involving 6-30 in. steel and wood pipe lines. S. J. Norris, 400 Lincoln St., ch. engr.

Calif., Paradise — Paradise Irrigation Dist., had plans prepared lining ditches of district with gunite, involving 130 sta. of ditch, 14 ft. wide on bottom, 3 ft. deep. To exceed $25,000. L. M. Edwards, supt.

Ont., Owen Sound—Dominion Government, Ottawa, plans to dredge Owen Sound Harbor. $150,000. S. H. Craig, Royal Bank Bldg., London, engr.

BIDS DESIRED

La., Shreveport—Feb. 7, by Comrs. Caddo Levee Dist., 126 Milan St., improving Bayou Pierre, Caddo Parish, 245,000 cu.yd, also improving Eagle Lake Lateral, 76,000 cu.yd. J. H. Jordon, pres. bd. comrs.

Calif., Terra Bella — Feb. 6, by E. R. Clemens, secy. Terra Bella Irrigation Dist., furnishing f.o.b. Terra Bella, 300 lin.ft. 10 in., 300 lin.ft. 12 in., 300 lin.ft. 14 in. and 300 lin.ft. 16 in., double number 14 gauge well casing and 2 starter sections with shoe ⅜ in. x 8 in. for each of above named sizes; drilling 2 or more wells, each 150 ft. deep, 10, 12, 14 and 16 in. dia.

CONTRACTS AWARDED

Minn., Owatonna — Steele Co., Judicial Ditch 12, 65,052 lin.ft. 6-32 in. tile, 58 surf water inlets, etc., to North Star Concrete Co., Mankato, $24,645 for tile; labor, to Morristown, Block & Tile Co., Morristown, $20,000. Noted Dec. 21.

Streets and Roads

PROPOSED WORK

N. Y., Rochester—Plans asphalt paving Bemis alley $4,200, Kosciuslo St. $18,850, Furlong St. $30,200, Cumberland St. $30,-400, Blossom Rd. $56,000; extending Arbordale Ave. $4,500; sewer and walks on Lasco St. $2,900. C. Poole, city engr.

N. J., Trenton—Plans paving 5,000 sq. yd, New York Ave., asphalt. A. Swan, City Hall, engr.

N. J., Trenton — Mercer Co. plans to improve several streets and build 9 mi. highways. $622,173. H. F. Harris, Court House, engr.

Pa., New Castle—Plans paving Lathrop, Williams and Long Aves., vitr. block on concrete. $25,000. C. E. Brown, city clk.

Pa., New Castle—Plans paving Liberty, East Washington and Croton Aves. $150,000.

Pa., Phila.—Soon takes bids grading, paving, building shelters, etc. $100,000. P. B. Sinkler, 1211 Chestnut St., archt.

Pa., Williamsport—State, Lycoming Co. and Clinton Twp. take bids in spring, 2 mi. road from Montgomery boro line to Montgomery Turnpike, across White Deer Mt. at Sylvan Dell. Total cost $90,000. Clinton Twp. voted $23,000 bonds, its share toward cost.

Md., Baltimore—Plans paving York St. from Charles to Sharp Sts., recut granite blocks; Elmora and Ravenwood Aves. between Greenview and St. Cloud Aves., and St. Cloud Ave. from Hill Top Rd. to Green Spring Ave., sheet asphalt. Private plans.

Fla., Miami — Having plans prepared laying cement sidewalks in Westmoreland Sect. and 12th St. Dist., $75,000; paving with asphalt North Miami St., $75,000; West Flagler St., $217,000, Northeast 2nd Ave., $128,000. C. W. Murray, Dir. Pub. Wks.

Louisiana—State Hy. Comn., Reymond Bldg., Baton Rouge, plans to surface 8.9 mi. Federal Aid Project 91, Madison Parish, sand clay and washed gravel, $108,000; 6.22 mi. Federal Aid Project 126, St. Tammany Parish, shell, $189,000; 7.7 mi. Federal Aid Project 131, East Baton Rouge Parish, sand clay, $102,000. J. M. Fourmy, ch. engr.

La., Rayne—voted $250,000 bonds for road work, connecting up with gravel roads of Lafayette on South and Roberts Cove Rd. on north, etc.

Tennessee—State Hy. Dept., Nashville, plans grading, surfacing and bridging 8 mi. road from Elizabethtown to Hampton, Carter Co., 16 ft. $200,000. D. Q. McComb, Nashville, ch. engr.

Tenn., Erwin—Unicoi Co. voted $30,000 bond issue for road from here to North Carolina state line. W. F. Paisley, co. judge.

O., Cleveland—Takes bids in spring, grading, curbing and paving Valley Rd., West 44th Pl., West Blvd., Stardale and Tyler Courts, Swack, Sysilvia, Tate, Tampa, Unity, Way and Windsor Aves., East 55th, East 76th, East 105th, East 107th, East 108th, East 110th, East 111th, East 118th, East 119th, East 121st., East 122nd, East 124th, East 125th, East 130th, East 131st, East 145th, West 9th, West 24th, West 33rd, West 34th and West 47th Sts., East 116th St. from Union to Farringdon Aves., East 116th St. from Farringdon Ave. to old city limits, East 117th St. from Union to Craven Aves., East 117th St. from Kinsman Rd. to Union Ave., East 117th St. from Sellers Ave. to point 270 ft. south, East 127th St. from Penobscot Ave. to C. S. Realty Sub. 4, East 127th St. from Buckeye Rd. to Williams Ave., East 129th St. from Arlington to Iroquois Aves, East 129th St. from Union to Gay Aves. $700,000. R. Hoffman, City Hall, engr.

Ind., Bloomington — Monroe Co. plans gravel surfacing 3 mi. Gordon Rd., $26,-000; 2.9 mi. Byers Rd., $25,500; 3.2 mi. Carmichael Rd., $27,200, all 16 ft. H. Chestnut, Bloomington, engr.

Ind., Decatur—Adams Co. plans gravel surfacing 2.95 mi. Mazelin Rd., 16 ft. $26,-000. D. Boch, Decatur, engr.

Ind., Evansville—Vanderburgh Co. plans surfacing 16,400 ft. Green River Rd., 16 ft., crushed stone. $27,706. R. W. Meissinger, Evansville, engr.

Ind., Monticello—White Co. plans paving 14,781 ft. Dennis P. Teeter Rd., 18 ft., 27,-763 sq.yd. vitr. brick on concrete. $89,892. G. A. Thomas, Monticello, engr.

Ind., Peru—Miami Co. plans paving 2 mi. Chili Rd., 16 ft., asphalt on concrete. $57,000. L. C. Johnson, Peru, engr.

Ind., Princeton—Gibson Co. had revised plans prepared surfacing with crushed stone 40,112 ft. Graper Rd., and 5 mi. H. W. Barrett Rd., both 16 ft., $73,893 and $49,174 respectively. Former bids rejected. Noted Oct. 26.

Ind., Salem — Washington Co. plans gravel surfacing 16,253 ft. Little York Rd., 16 ft. $27,106. J. C. Prow, Salem, engr.

Ind., Versailles—Ripley Co. plans paving 9,061 ft. John Bland Rd., 18 ft. 18,120 sq. yd. macadam. $37,000. O. W. Pegee, Versailles, engr.

Mich., Detroit—Having tentative plans prepared 2,000 ft. esplanade, 100 ft. wide, running parallel to Jefferson Ave. from Belle Isle Bridge to Baldwin Ave., to relieve traffic at approach of bridge. $800,000. H. H. Esselstyn, 3456 Cass Ave., engr.

Ill., Urbana—Champaign Co. plans election to vote on $250,000 bonds for approximately 200 mi. hard roads.

Ia., Knoxville—Plans paving 60 blocks. $200,000. W. E. Rinehart, clk.

Ia., Merrill—Takes bids about Feb. 1 for 30,000 sq.yd. paving, various types. $90,000. W. E. Buell & Co., 205 Davidson Bldg., Sioux City, engrs. Noted Jan. 4.

Ia., Muscatine—Making plans paving 4 mi., brick and concrete. $225,000. J. H. Selden, Muscatine, engr.

Minn., Bemidji—Plans paving 7 blocks. $30,000. W. Everts, city engr.

Kan., Topeka—Comrs. Shawnee Co. soon take bids concrete paving 6½ mi. Southwest Trail, Dover Rd., 18 ft. $180,000. A. C. Lagerwall, Topeka, co. engr.

South Dakota—State Hy. Comn., Pierre, takes bids in spring, grading 9.6 mi. Federal Aid Project 129, Turner Co. $64,400.

S. D., Mitchell—Plans paving, curbing, guttering, etc. about 48 blocks. $180,000. F. McGovern, city aud.

S. D., Sioux Falls—Plans paving 11 blocks 22nd St. between Phillips and Menlo Aves. $33,000. W. C. Leyse, city clk.

North Dakota—State Hy. Dept., Bismarck, takes bids in spring 450 mi. grading, 160 mi. gravel surfacing, incl. 2,400,-000 cu.yd. excav., 210,000 cu.yd. gravel, 2,500 pipe culverts, 50 concrete bridges. $1,000,000. W. H. Robinson, ch. engr.

N. D., Rolla—Rollette Co. plans grading 22 mi. road from Dunseith through Belcourt and Rolla to Towner Co. line. $45,-000. J. H. Penny, aud.

Missouri — State Hy. Dept., Jefferson City, plans grading, etc., 5 mi. road north and south of Pemiscot, 30 ft., State Project Route 9, Pemiscot Co.; 5 mi. road east and west through Lawrence Co., 30 ft., State Project Route 14, Lawrence Co.; 3 to 5 mi. road from Doniphan eastwardly, 24 ft., State Project Route 42, Ripley Co.; 3 to 5 mi. road east and west of Wayne, 28 ft., State Project Route 34, Wayne Co.; 4 mi. road from St. Louis to St. Clair, 30 ft., State Project Route 14, Sect. 77, St. Louis Co.; 3 to 5 mi. road north and south of Taney, 24 ft., State Project 3, Taney Co.; 5 mi. road east and west through Jasper Co., 30 ft., State Project Route 14; 5 mi. road from St. Louis to Springfield, 30 ft., State Project Route 14, Laclede Co.; 3 to 5 mi. road from Crane to Galena, 24 ft., State Project Route 43, Stone Co.; 3 to 5 mi. road from Rolla southwardly, 24 ft., State Project Route 7, Phelps Co.; 5 mi. road from St. Louis to Springfield, 30 ft., State Project Route 14, Pulaski Co.; 5 mi. road from St. Louis to St. Clair, 30 ft., State Project Route 30, St. Louis Co.; 5 mi. road from St. Louis to Springfield, 30 ft., State Project Route 14, Phelps Co.; 5 mi. road south of Sikeston, 30 ft., State Project Route 55, Scott Co.; 2 mi. road from St. Clair northward, 28 ft., State Project Route 24, St. Clair Co.; 4 mi. road from Albany westward, 28 ft., State Project Route 4, Gentry Co.; 4 mi. road from Holt northward, 28 ft., State Project Route 1, Holt Co.; 3 to 5 mi. road from Rock-port eastward, 28 ft., State Project Route 1, Atchison Co.; 3 to 5 mi. road from Carroll southward, 28 ft., State Project Route 3, Carroll Co.; 3 to 5 mi. road from Jefferson City to Tuscumbia, 24 ft., State Project Route 15, Camden Co.; 3 to 5 mi. road from Gallatin eastward, 28 ft., State Project Route 6, Daviess Co.; 4 mi. road south of Tarkio, 30 ft., State Project Route 61, Sect. 4, Atchison Co.; 1 mi. road from Malta Bend to Marshall, 28 ft., State Project Route 20, Saline Co.; 3 to 5 mi. road from Harrisonville northward, 30 ft., State Project Route 35, Cass Co.; 5 mi. road from Jefferson City to Columbia, 30 ft., State Project Route 7, Callaway Co.; 3 to 5 mi. road from Chariton westward, 28 ft., State Project Route 10, Chariton Co.; 5 mi. road from Troy southward, 30 ft., State Project Route 9, Lincoln Co.; 3 to 5 mi. road from North Kansas City to Liberty, 28 ft., State Project Route 10, Clay Co.; 4 mi. road from Edina northward, 28 ft., State Project Route 15, Knox Co.; 5 mi. road from Hannibal westward, 30 ft., State Project Route 9, Ralls Co.; 5 mi. road from St. Louis to Kansas City, 30 ft., State Project Route 2, Lafayette Co.;

Streets and Roads (Continued)

4 mi. road from Holt to Andrew, 28 ft., State Project Route 1, Andrew Co.; 1 mi. road from Moberly eastward, 28 ft., State Project Route 10, Randolph Co.; 3 to 5 mi. road from Adair westward, 28 ft., State Project Route 6, Adair Co. B. H. Piepmeier, state highway engr.

Tex., Anderson—Grimes Co. election Jan. 27, to vote on $25,000 bonds issue for Richards Rd. Dist. R. W. West, co. judge.

Tex., Brenham—Washington Co. making plans grading and bridging 6.4 mi. Brenham-Gay Hill-Phillipsburg Highway on State Highway 36, 16 ft. $45,000. G. A. Bracher, co. engr.

Tex., Bryan—Attorney Generals Dept., Austin, approved $32,000 bond issue for street paving and improvements. Address Mayor.

Tex., Cameron—Milam Co. making plans grading, gravel surfacing and bituminous topping State Highway 36, 18 ft. $128,935. A. F. Mitchell, co. engr.

Tex., Columbus—Colorado Co. election Jan. 27, to vote on $100,000 bond issue improving Highway 3-D, from here to Weimar. B. H. Faber, co. engr.

Tex., Franklin—Robertson Co., Rd. Dist. 2, voted $200,000 bond issue for road and highway improvements. J. Reid, co. judge.

Tex., Gonzales—Voted $25,000 bond issue for street paving and improvements. S. B. Hopkins, Sr., mayor.

Tex., Hemphill—Sabine Co. making plans grading and gravel surfacing 11.2 mi. State Highway 21, 16 ft. $130,000. W. A. French, San Augustine, co. engr.

Tex., Kountze—Hardin Co. making plans grading, shell surfacing, etc., 29 mi. Beaumont-Silsbee Rd., on Highway 40, 16 ft., $177,500; 15 mi. Beaumont-Kountze-Valley Mills section of Highway 8, 16 ft., $165,000. G. C. Brown, co. engr.

Tex., Liberty—Liberty Co. making plans grading and bridging 36 mi. Houston-Beaumont Highway, 24 ft. Road to be surfaced at later date. $529,760. W. C. Youngs, Dayton, engr.

Colo., Denver — Plans concrete paving Alley Paving Dists. 87, 88, 89, 90 and 91, 12 blocks in each, 12-16 ft. $25,000 each A. K. Vickery, City Hall, engr.

Calif., Fresno—Had plans prepared improving Belmont Ave. between Fresno and 1st Sts., 99,712 sq.ft. grading, 90,260 sq. ft. asphalt pavement, 9,000 sq.ft. cement gutter, 21,046 sq.ft. walks, 4,998 lin.ft. concrete curb, 425 lin.ft. 12-24 in. culverts; Pine Ave. between Lucerne and Moroa Sts., and Florodora St. from Lucerne Lane to Van Ness St., 100,643 sq.ft. grading, 90,997 sq.ft. asphalt pavement, 9,262 sq.ft. concrete gutter, 3,966 lin.ft. concrete curb, 13,236 sq.ft. walks, 240 lin.ft. 12 in. corrugated iron culvert, etc. W. Stranahan, city engr.

Calif., Hayward—Having plans prepared paving 15 blocks, asphalt on concrete or asphalt base. $60,000. J. B. Holly, city engr.

Calif., Los Banos—Town Trustees plan paving 30 blocks.

Calif., Placerville — Eldorado Co. plans paving 10 mi. road between Placerville and Mosquito. H. Lahiff, co. surv.

Calif., San Rafael—Having plans prepared concrete curbing and laying sidewalks on 4 mi. streets in various sections of city. H. K. Brainerd, city engr.

Calif., Santa Rosa—Supervs. Sonoma Co. rejected bids improving Jenner-Mendocino Highway. E. A. Peugh, co. surv. Noted Jan. 4.

Que., Verdun—Soon takes bids paving Wellington, Hickson and Regina Sts., tar macadam. $100,000. H. Hadley, city engr.

Ontario — Dept. Colonization of Roads, Provincial Government, Toronto, plans 30-35 mi. gravel road from Española to Little Current, incl. clearing, grubbing, excav., etc. $400,000. C. H. Fullerton, Parliament Bldg., Toronto, engr.

Ont., Hamilton — Plans asphalt pavement on concrete on Cumberland Ave. from Grovenor to Ottawa Sts. $3,455. Cumberland Ave. from Sherman to Gage Aves. $43,256. Avondale Ave. $5,805; concrete sidewalks and curbs on Wexford Ave. $1,673. Bayfield Ave. $1,964. Stapleton Blvd. $2,367. Mountwood and Birch Aves. $2,173. Chatham St. $662. Work involves 11,000 sq.yd. asphalt, 7,500 lin.ft. concrete curbing and 6,500 lin.ft. concrete sidewalks. E. R. Gray, city engr.

Ont., St. Catherines—Plans paving various streets. $50,000. W. P. Near, City Hall, engr.

Ont., Simcoe—Plans 14,000 sq.yd. asphalt or concrete pavement on Main St. $60,000. G. R. Marston, city engr.

BIDS DESIRED

New York — Feb. 7, by H. S. Sisson, comr. State Hy. Dept., Albany, improving highways in Columbia, Dutchess, Erie, Hamilton, Saratoga and Schuyler Counties; reconstructing highways in Fulton, Greene, Montgomery and Saratoga Counties. J. C. Finch, secy.; adv. this issue.

N. Y., Brooklyn—Jan. 24 by E. Riegelmann, boro pres., Boro Hall, grading, curbing and flagging East 7th St. from Ave. R to Ave. S, 74th St.; curbing and flagging East 38th and East 39th Sts., from Cortelyou to Clarendon Rds.; paving Maple St., Sutter Ave., 74th St. from 19th to 20th Aves., 82nd St. from Bay Parkway to 23rd Ave. and 83rd St. from 21st Ave. to Bay Parkway, all foregoing permanent asphalt.

N. Y., New York—Jan. 26, by J. Miller, pres. Manhattan Poro, Municipal Bldg., grading, curbing, laying sewers and flagging Sickles St. from Nagle to Sherman Aves., Dongan Pl. between Arden St. and Bway.; sewer in Arden St. from Dongan Pl. to Bway.; paving Ft. Washington Pl. (Magaw Pl.) from West 181st to West 183rd Sts. and West 183rd St. from Ft. Washington Pl. to Ft. Washington Ave., sheet asphalt on concrete.

Pa., New Castle—Feb. 9, at office C. E. Brown, city clk., City Hall, paving Montgomery St.; adv. this issue.

Georgia—Jan. 23, by State Hy. Dept., at Court House, Columbus, 2.61 mi. hard surfaced road from city limits to Bull Creek on Camp Benning Rd., Federal Aid Project 288, Muscogee Co., 28,956 sq.yd. Willite, sheet asphalt, vitr. brick or plain 7 in. concrete, 13,649 cu.yd. excav., 428 cu.yd. compacted clay gravel surfacing, 0.97 mi. machine grading, 5,124 mi. clay gravel shoulder construction, 1,648 lb. reinforcing, etc., also concrete steel bridge on same, 584.3 cu.yd. Class A and 849.6 cu. yd. Class B concrete, 77,054 lb. reinforcing, etc. W. C. Caye, Americus, engr.

Fla., Starke—Jan. 30, by E. S. Mathews, chn. Bradford Co. Bond Trustees, 6.3 mi. road from Lawtey to Clay Co., 7 mi. from Starke to Crossroads, 9.4 mi. from Starke to New River, 10.5 mi. Road No. 3, 3.1 mi. from Starke to Clay Co., 2.3 mi. Road No. 12, 1,200 cu.yd. clay to mile, 4,000 yd. excav. to mile, mixing, shaping and laying 9,000 sq.yd. to mile. Bids on each road separately.

Ohio—Jan. 26, by Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving roads in following counties:

Fulton Co., Sect. "Wauseon" Bryan-Wauseon Rd., 0.619 mi., rein.-con., $26,340.

Geauga Co., Sect. "K-2" Cleveland-Meadville Rd., 2.536 mi., bituminous macadam, asphalt or tar, $92,273.

Geauga Co., Sect. "A" Euclid-Chardon Rd., 4.06 mi., bituminous macadam, asphalt or tar, $110,201.

Jackson Co., Sect. "L" Jackson-Ironton Rd., 4.433 mi., rein.-con., $146,789.

Montgomery Co., Sect. "R" Dayton-Greenville Rd., 3.965 mi., Kentucky rock asphalt $139,419, rein.-con., $139,804.

Morrow Co., Sect. "L" Mt. Gilead-Mans-

ROAD WORK—OREGON

Bids were opened by State Highway Comn., Salem, Dec. 13, for grading and surfacing Goshen-Lowell section of Willamette Highway, Lane Co., (A) Warren Constr. Co., Craig Rd., Portland; (B) Washburn & Hall, 1210 Gasco Bldg., Portland; (C) Elliott, Scoggins & Parquette, 302 McKay Bldg., Portland. The unit bids were as follows:

	A	B	C
Clearing and grubbing (lump sum)	$500.00	$800.00	$800.00
64,000 cu.yd. excavation, all classes	.42	.50	.60
44,000 cu.yd. overhaul	.06	.05	.05
920 lin.ft. 12 in. plain concrete pipe	1.45	1.50	1.50
130 lin.ft. 18 in. reinforced concrete pipe	2.70	3.25	2.50
80 lin.ft. 36 in. reinforced concrete pipe	6.75	7.00	5.50
96 lin.ft. 12 in. galvanized iron pipe	1.75	1.25	1.50
40 lin.ft. 18 in. galvanized iron pipe	2.80	2.00	2.50
15 lin.ft. 24 in. galvanized iron pipe	3.50	3.00	4.00
2,000 lin.ft. 6 in. drain tile	.40	.30	.50
350 cu.yd. rock or gravel back fill	2.35	2.25	2.50
50 cu.yd. class C concrete	32.00	25.00	30.00
50 cu.yd. riprap	3.50	3.00	3.00
11,000 ft. b.m. lumber	55.00	55.00	70.00
300 lin.ft. piling	2.00	1.25	1.00
18,200 cu.yd. broken stone or gravel surface	2.25	2.37	2.74
1,750 cu.yd. gravel surface for maintenance	2.25	2.37	2.50
1,000 cu.yd. filler	.50	.50	.40
Extended totals	$82,571	$89,151	$103,091

STREET IMPROVEMENT—ST. LOUIS, MO.

Bids were opened by Bd. Pub. Serv., Jan. 2, for reconstructing Chouteau Ave. from Bway. to Jefferson Ave., (A) Independent Quarries & Constr. Co., 4875 Ashland Ave.; (B) F. A. Stiers Constr. Co., 4500 Enright Ave.; (C) Skrainka Bros. Constr. Co., Security Bldg. The unit bids were as follows:

	A	B	C
3,600 cu.yd. grading	$2.00	$2.50	$2.50
100 hrs. rolling	4.00	4.00	3.50
100 sq.yd. removing old sidewalks	.25	.50	.50
26,875 sq.yd. removing old granite blocks	.50	.40	.45
20 sq.yd. removing asphalt binder course	.50	.50	.50
10 sq.yd. removing old bitulithic	.50	.50	.50
20 sq.yd. removing old wood block	.50	.50	.50
200 sq.yd. removing old brick, etc.	.50	.50	.50
250 sq.yd. removing old concrete	2.00	1.00	.75
14,050 lin.ft. removing old curb	.50	.20	.35
11,740 lin.ft. 16 in. curb	2.00	2.10	1.85
800 lin.ft. 21 in. curb	3.00	2.60	2.41
930 lin.ft. 16 in. roundings	3.00	3.00	2.60
20 lin.ft. 21 in. roundings	3.00	3.75	3.50
230 lin.ft. reset curb	1.00	.75	2.00
30 sq.yd. vitrified brick, sand, cement, etc.	3.00	1.50	2.75
30 sq.yd. wood block pavement	4.00	1.50	3.25
30 sq.yd. refined asphalt	3.00	3.00	3.50
15 sq.yd. Warrenite bitulithic	3.00	3.00	3.50
15,900 sq.yd. recut granite, sand and grote	4.00	4.20	4.00
15,900 sq.yd. recut granite, asphalt filler	4.00	4.37	4.20
35 sq.yd. relaying granite, bed, etc.	2.00	.50	1.50
20 sq.yd. additional limestone	2.00	.50	1.00
8,000 lin.ft. expansion joints	.15	.15	.15
800 lin.ft. oak binder	.25	.20	.40
1,000 sq.ft. restoring granitoid driveways	.30	.30	.35
4,500 sq.ft. restoring sidewalks	.30	.30	.30
1,500 sq.ft. restoring brickwalks	.15	.15	.24
4,240 cu.yd. concrete	8.00	9.80	9.75
2,000 cu.ft. macadam	.08	.12	.09
25,000 ft. 2 in. plank	30.00	20.00	20.00
10 tons hydrated lime	25.00	30.00	25.00
Removing 9 trees	10.00	13.00	8.00
318 ton torpedo gravel	3.00	8.00	2.00
Extended totals	$224,649	$238,349	$232,457
Refunding 26,480 sq.yd. granite blocks	26,840	24,156	17,446
Extended grand totals	$197,917	$214,193	$215,011

Streets and Roads (Continued)

field Rd., 6.332 mi., Kentucky rock asphalt $176,973, bituminous concrete $179,877, rein.-con. $179,453.

Trumbull Co., Sect. "P" Youngstown-Conneaut Rd., 2.8 mi., brick and bituminous macadam, asphalt or tar, $141,357.

Holmes Co., Sect. "1-2" Mansfield-Millersburg Rd., 1.678 mi., grading, $17,345.

Grading approaches and building concrete sub-structure and steel superstructure bridge on Sect. "K" of Mansfield-Millersburg Rd., Holmes County, $20,697. L. C. Herrick, dir. highways.

Indiana—Jan. 30, by State Hy. Comrs., Indianapolis, paving 6.063 mi. Lincoln Highway, 16 ft., (State Project), Allen Co., 56,912 sq.yd. vitr. brick or concrete on concrete; 6.78 mi. Lincoln Highway, 16 ft., (Federal Aid Project), Whitely and Allen Counties, 61,859 sq.yd. vitr. brick or concrete on concrete; 6.47 mi. French Lick Rd., 16 ft. (State Project) Vanderburgh Co., 60,741 sq.yd. vitr. brick or concrete on concrete; 6.95 mi. Boot Jack Rd., 16 ft., (State Project), Laporte Co., 65,237 sq.yd. vitr. brick or concrete on concrete. C. Gray, State House, Indianapolis, engr.

Ind., Auburn—Feb. 7, by Auditor Dekalb Co., surfacing 14,254 ft. Edward Kehlam Rd., 16 ft., crushed stone. $26,200. J. F. McDowell, Auburn, engr.

Ind., Dearborn—Feb. 5, by Auditor Dearborn Co., graveling 31,498 ft. Jacob Hoffmeier Rd., 16 ft. $53,000. H. Fitch, Lawrenceburg, engr.. Noted Aug. 31.

Ind., Marion—Feb. 6, by Auditor Grant Co., surfacing 16,780 ft. John Doty Rd., 16 ft., crushed stone. $27,500. G. Swisher, Marion, engr.

Ind., Peru—Jan. 26, by Bd. Pub. Wks., paving 5,300 ft. 5th St., 36 ft., concrete, asphalt, wood block or brick. $96,751. E. E. Phillips, Peru, engr. Noted Jan. 11.

Ind., Wabash—Feb. 6, by Auditor Wabash Co., surfacing 15,160 ft. John P. Weist Rd., 18 ft., crushed stone. $27,000. H. D. Hartman, Wabash, engr.

Ind., Williamsport — Feb. 5, by Auditor Warren Co., grading and graveling 10,724 ft. Hamilton and Weaver Rd., 20 ft. $27,-089. J. R. Gregory, Williamsport, engr.

Ia., Douglas—Jan. 25, paving 8,790 sq. yd. and relining 3,400 ft. curb on Pearl St., etc., vitr. brick, asphalt or concrete. E. E. Spetman, City Hall, engr.

Minn., Austin—Feb. 6, by Bd. Comrs. Mower Co., loading and hauling 89,403 cu. yd. gravel over total length 68⅝ mi., summary of hauls as follows: 4,513 cu.yd., ½ mi., 7,644 cu.yd. ½ to 1 mi., 77,247 cu.yd. over mi., 134,702 cu.yd. miles, 7,400 cu.yd. stripping, Jobs 2301 to 2308 inc. A. C. White, highway engr.

Minn., Duluth—Feb. 6, by F. W. Borgen, aud. St. Louis Co., clearing, grading and installing culverts, 16,400 ft. Becks Rd. between Gary St., here, and State Rd. 2, 30 ft. $45,000. R. W. Acton, co. engr.

Kan., Atwood—Feb. 13, by Comrs. Rawlins Co., grading 11.4 mi. Kansas City-Denver Air Line Rd., 135, 28 ft. $65,000. W. B. Honska, co. engr.

Kan., Oswego—Feb. 2, Comrs. Labette Co., graveling 12.9 mi. Ozark Trail, 16 ft. $200,000. Shipped in gravel will cost $15,-000 per mi. L. H. Cunningham, co. engr.

Kan., Salina—Feb. 15, by Comrs. Saline Co., grading 14.31 mi. Bee Line Rd., 32 ft. $85,000. W. H. Cost, co. engr. Noted Dec. 7.

S. D., Platte—Jan. 30, paving Main St. between 1st St. E. and 7th St., 18,873 sq. yd. pavement, 1,415 cu.yd. excav., 4,095 lin.ft. concrete curb and gutter, also another portion of Main St. involding 7,197 sq.yd. pavement, 1,120 cu.yd. excav., 5,375 lin.ft. curb and gutter. $90,000. Smith & Reeves, Mitchell, engrs.

Mo., St. Louis — Feb. 6, by Bd. Pub. Serv., 208 City Hall, grading and paving 5,140 ft. West Florissant Ave., 50 ft., refined asphalt, $152,500. 5,600 ft. Arsenal St., 30 ft., rein.-con., $80,400, 2,250 ft. Taylor Ave., 36 ft., warrenite bitulithic, $53,-350; repaving 3,100 ft. 7th St., 36 ft., granite block, $82,700, 5,202 ft. Clayton Ave., 36 ft., warrenite bitulithic or refined asphalt, $57,200, 1,900 ft. Chouteau Ave. from Compton Ave. to Grand Blvd., 36 ft., refined asphalt, $16,400. W. W. Horner, 601 City Hall, engr. Noted Dec. 7.

Ark., Russellville—Feb. 6, by Pope Co., grading, burnt shale surfacing and bridging 51 mi. in Road Impvt. Dist. 2, 306,000 cu.yd. earth excav., 14,000 cu.yd. burnt shale surfacing, 266,000 sq.yd. road surface treatment, 58,700 cu.yd. crushed stone, 71 acres clearing, 370,000 lb. structural and 85,000 lb. reinforcing steel, 12,400 yd. concrete, etc. E. Coker, Russellville, engr.

Tex., Bay City—Matagorda Co. taking bids grading and graveling 7 mi. highway, 18 ft. $110,000. J. C. Carrington, Bay City, engr.

Tex., Silverton—Jan. 31, by Comrs. Briscoe Co., at office T. L. Anderson, co. clk., grading and building structures on 8.5 mi. Silverton-Memphis Rd., Rd. Dist. 8, 18,400 cu.yd. earth, 4,000 cu.yd. loose rock and 8,500 cu.yd. solid rock excav. 28,500 cu.yd. borrow, 25,000 lin.ft. corrugated pipe culverts, 13,000 lb. reinforcing, 130 cu.yd. Class A concrete, etc. Midwest Eng. Co., Silverton, engrs. Noted Dec. 7.

Oklahoma—Jan. 24, by E. S. Alderman, state highway engr., Oklahoma City, paving 11½ mi. Federal Aid Project 100, Okfuskee Co., 50,000 cu.yd. earth and 1,000 cu.yd. rock excav., 122,000 sq.yd. 7 in. gravel with 1½ in. asphalt wearing surface, $110,000; 7½ mi. Federal Aid Project 75, Okfuskee Co., 17,000 cu.yd. earth and 3,000 cu.yd. rock excav., 80,000 sq.yd. 7 in. gravel surfacing, $105,000; 10 mi. Federal Aid Project 76, Okfuskee Co., 50,000 cu. yd. earth and 1,500 cu.yd. rock excav., 105,000 sq.yd. 7 in. gravel surface. $150,-000; 12.2 mi. Federal Aid Project 64, Okfuskee Co., 26,000 cu.yd. earth and 3,300 cu. yd. rock excav., 125,000 sq.yd. gravel surface. $275,000. Former bids rejected. Noted Nov. 16.

New Mexico—Jan. 31, by State Hy. Dept., Santa Fe, grading, surfacing and completing all structures on 1.562 mi. Federal Aid Project 71, west of Roswell, Chaves Co., 16 ft., 20,941 cu.yd. borrow, 296 cu.yd. rubble masonry, 333.3 cu.yd. Class A and 148.2 cu.yd. Class B concrete, etc.; 16.067 mi. Federal Aid Project 82, between Hondo and Picacho, Lincoln Co., 102,504 cu.yd. Class 1, 2,020 cu.yd. Class 2 and 7,794 cu.yd. Class 3 excav., 19,511 cu.yd. borrow, 6,154 cu.yd. one course gravel surfacing, 314 cu.yd. rubble masonry, 789 cu.yd. Class A and 545.95 cu.yd. Class B concrete, 22,201 lb. reinforcing bars, 3,464 lin. ft. asphalt expansion joint, etc., also for bridge work, 647.6 cu.yd. Class A concrete, 54,860 lb. reinforcing bars, 57,448 ft. wood for superstructure, etc.; 16.989 mi. Federal Aid Project 89, between Kermit and Kenna, Roosevelt Co., 13,165 cu.yd. excav., 18,396 cu.yd. borrow, 11.85 mi. crowning and shaping, 26,525 cu.yd. one course crushed stone surfacing, 44,445 cu.yd. rubble masonry, 40.25 cu.yd. Class A and 114.8 cu.yd. Class B concrete, etc., also for bridge work, 34.02 cu.yd. Class A concrete, etc.; 10.32 mi. Federal Aid Project 92, between Meloche and Raton, Colfax Co., 18,468 cu.yd. excav., 8,486 cu.yd. borrow, 3.071 mi. crowning and shaping, 16,116 cu.yd. one course gravel surfacing, 89.57 cu.yd. Class A and 98.69 cu.yd. Class B concrete, etc., also for bridges 603.11 cu.yd. Class A concrete, 55,785 lb. reinforcing bars, 67,708 ft. timber, etc.; 8.005 mi. Federal Aid Project 93, between Meloche and Dedman, Colfax Co., 7,279 cu.yd. Class 1 and 261 cu.yd. Class 2 excav., 4.771 mi. crowning and shaping, 12,724 cu.yd. one course crushed stone, 44 cu.yd. Class B concrete, etc.; 9.927 mi. Federal Aid Project 103, between Kenna and Elkins, Chaves Co., 14,470 cu.yd. Class 1, 2,569 cu.yd. Class 2 and 226 cu.yd. Class 3 excav., 8,551 cu.yd. borrow, 3.397 mi. crowning and shaping, 15,565 cu.yd one course crushed stone surfacing, 40.68 cu.yd. Class B concrete, etc.; 7.165 mi. Federal Aid Project 104, between Hot Springs and Arrey, 30,071 cu.yd. Class 1 and 4,332 cu.yd. Class 2 excav., 8,220 cu.yd. borrow, 8,202 cu.yd. one course gravel surfacing, 409.9 cu.yd. rubble masonry, 844.3 cu.yd. Class A and 321.1 cu.yd. Class B concrete, 15,698 lb. reinforcing, 4,506 ft. asphalt expansion joint, etc., also for bridges, 55 cu.yd. Class A concrete, 4,081 lb. reinforcing, etc. All foregoing 24 ft. L. A. Gillett, state highway engr.

Calif., Oroville—Feb. 6, by Supervs. Butte Co., improving 9 mi. Oroville-Chico Rd., Route 20, Sect. B, 18,550 cu.yd. excav. unclassified, 8,920 ton broken stone surfacing, 530 ton asphalt oil Grade E, 2,100 cu.yd. bank gravel to be excavated, hauled and spread, county to furnish oil. H. H. Hume, co. road engr.

Calif., San Jose—Feb. 5, by Supervs. Santa Clara Co., improving Campbell Ave. and 1st St., in Campbell, 59,733 sq.ft. new oil macadam pavement, 41,644 sq.ft. resurfacing; King Rd., 129,120 sq.ft. oil macadam pavement; Naglee Ave., 90,902 sq.ft. oil macadam pavement. I. Ryder, co. surv.

Ontario — Feb. 12, by W. A. McLean, deputy minister of highways, Toronto, 13.6 mi. concrete pavements, 20 and 24 ft. wide, 8 in. thick as follows: 5 mi. from Brantford to Paris, Contr. 794, 7.1 mi. from Woodstock to Ingersoll, Contr. 795, 0.3 mi. Binkleys Hollow, Contr. 796, 0.1 mi. Dundas Mountain, Contr. 860, $275,000; 384 mi. asphaltic concrete pavements, 30-40 ft. wide, 6 mi. Dundas St. from Clappisons Corners to road between Lots 15 and 16 Nelson Twp. Contr. 797, 7.2 mi. Dundas St. from road between Lots 15 and 16, Nelson Twp., to 16 Mile Creek Bridge, Contr. 921, 5.5 mi. Dundas St. from end of pavement at Cooksville to west end of Toronto Twp., Contr. 863, 4.6 mi. Dundas St. from west limits Toronto Twp. to 16 Mile Creek Bridge, Contr. 948, 2.8 mi. Bloor St. from Danforth Turn easterly and along Kingston Rd. to end of concrete pavement, Contr. 864, 5.1 mi. road from Pickering to Whitby, Contr. 897, 4.4 mi. Kingston Rd. from Grand Trunk Ry. crossing to east limits of York Co., Contr. 918, 3.2 mi. Ottawa-Prescott Rd. from Merivale side road northerly, Contr. 798, $1,800,000; bituminous penetration pavement, 5.7 mi. road from Blacks Corners to Freelton, Contr. 908, $175,000; macadam roadway from 2 mi. north of Belleville, northerly 1½ mi. 20 ft. wide, Contr. 799, $20,000; macadam base course 5 mi. L'Orignal West, Contr. 800, 3.1 mi. east limit of Cornwall easterly, Contr. 801, 1.56 mi. Perth South to Scotch Line, Contr. 804, $95,000; grading 5 mi. Whitby-Lindsay Rd., Contr. 802, 4 mi. Wendover easterly, Contr. 803, 2.6 mi. Joyceville South, Contr. 805, 4 mi. road from south limit of Innisfil Twp. northerly, Contr. 806, 5.3 mi. Caledon Hill to Melville Hill, Contr. 807, 4 mi. Marden North, Contr. 808, 3.1 mi. Rockwood West, Contr. 809, 4 mi. Acton to Georgetown, Contr. 810, 3 mi. Leamington to Ruthven, Contr. 811, 6 mi. Ruthven toward Essex, Contr. 812, 4 mi. Maidstone East, Contr. 813, 2.8 mi. Ruscom East and Comber East, Contr. 814, 6 mi. west limits of Mosa easterly incl. Wardsville diversion, Contr. 815, $250,000; surface treatment of macadam roads with tar, 5.7 mi. Napanee easterly, Contr. 816, 8 mi. Kingston westerly, Contr. 817, 15 mi. Kingston easterly, Contr. 818, $25,000; concrete culverts Crosby South Twp., Contr. 819, Drummond Twp., Contr. 820, Nepean Twp., Contr. 821, Ross Twp., Contr. 822, Osnabruck Twp., Contr. 823, Lancaster Twp., Contr. 824, Sophiasburg Twp., Contr. 825, Sidney Twp., Contr. 826, $160,-000. Total cost $3,000,000. G. Hogarth, University Ave. and Dundas St., ch. engr.

BIDS RECEIVED

Florida — State Rd. Dept., Tallahassee, grading, constructing timber bridge and placing rock base on 8.75 mi. road south of Lake Stearns, Highlands Co., from McCormick & Delaney, La Belle, $67,024; placing dredged embankment of 77,000 cu. yd. on 2.65 mi. portion Rd. 125, Brevard Co., from J. D. Donahoo, 605 East 3rd St., Jacksonville, $26,810, Maule Paving Co., Ojus, $40,320. Noted Dec. 28.

South Dakota—State Hy. Dept., Pierre, received bid gravel surfacing 20 mi. Federal Aid Project 77, Meridian Highway, Yankton Co., from R. W. Wiley, Summit, $30,089.

South Dakota—State Hy. Comn., opened bids Jan. 4, grading 5.98 mi. Federal Aid Project 97, from H. Pickus Constr. Co., 2316 3rd St., Sioux City, Ia., $21,469; Steele Bros., Meckling, $23,180; W. R. Larson Constr. Co., 520 Secy. Natl. Bank Bldg., Sioux Falls, $23,619. Noted Dec. 28.

Missouri—State Hy. Dept. at div. office Bloomfield, opened bids Dec. 28, 5.176 mi. road from Dexter eastwardly, 16 ft., Federal Aid Project 118B, Stoddard Co., (1) 27,227 lin.ft. grading (2) 48,456 sq.yd. specification B gravel pavement, from Novaculite Constr. Co., Marion, Ill., (1) $0.04 per lin.ft. (2) $0.63, total $31,617; Allhand & Davis, 705 Frisco Bldg., Joplin, (1) $0.08 (2) $0.67, $34,644; Dexter Constr. Co., Dexter, (1) $0.08 (2) $0.68, $35,-128.

Missouri—State Hy. Dept. at div. office Cassville, opened bids Dec. 28, 4.571 mi. road from Cassville northward, 16 ft., Federal Aid Project 151, Barry Co., (1) 24,-138 lin.ft. grading (2) 42,910 sq.yd. classification B gravel pavement, from Allhands & Davis, 705 Frisco Bldg., Joplin, (1) $0.08 (2) $0.55, total $25,532; Gaines Bros. Co., Fairland, Okla., (1) $0.12 (2) $0.55, $26,497; Short & Bramer, Morett (1) $0.07 (2) $0.60, $27,436. Noted Dec. 21.

Missouri—State Hy. Dept. at div. office Dexter, opened bids Dec. 18, 7.723 mi. road from Dexter to Bernie, 16 ft., Federal Aid Project 211A, Stoddard Co., (1) 21,182 cu.yd. earth excav. (2) 21,205 cu.yd. borrow (3) 72,615 sq.yd. specification B gravel pavement, etc., from Dexter Constr. Co., Dexter, (1) $0.225 per cu.yd. (2) $0.225 (3) $0.50, total $59,896; Allhand & Davis, 705 Frisco Bldg., Joplin, (1) $0.26 (2) $0.26 (3) $0.55, $65,501; N. Davis, Sikeston, (1) $0.25 (2) $0.25 (3) $0.60 $67,637. Noted Dec. 14.

Streets and Roads (Continued)

Missouri—State Hy. Dept. at div. office Doniphan, opened bids Dec. 23, 2.702 mi. road from Doniphan eastwardly, 12 ft., Federal Aid Project 201, Ripley Co., (1) 13.149 cu.yd. earth excav. (2) 3,954 cu.yd. borrow (3) 19,026 sq.yd. gravel pavement, etc., from T. L. Wright Lumber Co., Doniphan, (1) $0.46 per cu.yd. (2) $0.46 (3) $0.60, total $23,790; L. B. Pulliam, Doniphan, (1) $0.43 (2) $0.43 (3) $0.75, $26,065. Noted Dec. 14.

Missouri—State Hy. Dept., at div. office Galena, opened bids Dec. 28, 5.546 mi. road from Galena northwestwardly, 24 ft., Federal Aid Project 161B, Stone Co., (1) 40,294 cu.yd. earth excav. (2) 2,209 cu. yd. rock excav. (3) 3,796 cu.yd. borrow, etc., from R. H. Sharp, Reed Springs, (1) $0.40 per cu.yd. (2) $2 (3) $0.40, total $41,172; M. A. Holman, Carterville, (1) $0.40 (2) $1.75 (3) $0.36, $43,551; Republic Constr. Co., Republic, (1) $0.395 (2) $1.75 (3) $0.38, $43,834 Noted Dec. 14.

Missouri—State Hy. Dept. at div. office Greenfield, opened bids Dec. 28, 5.516 mi. road east of Greenfield northwardly, 24 ft., Federal Aid Project 213A, Dade Co., (1) 21,546 cu.yd. earth excav. (2) 4,591 cu.yd. rock excav. (3) $5,526 cu.yd. borrow, etc., from Carterville Constr. Co., Carterville, (1) $0.50 per cu.yd. (2) $2 (3) $0.50, total $31,684; Easley Bros., Aurora, (1) $0.45 (2) $2 (3) $0.41, $33,573. Noted Dec. 21.

Missouri—State Hy. Dept. at div. office Kennett, opened bids Dec. 22, (1) 6.921 mi. road from Kennett east and west, Federal Aid Project 212, Dunklin Co. (a) 19,250 cu.yd. earth excav. (b) 47,836 cu. yd. borrow (c) 35,889 sq.yd. Portland cent concrete pavement (d) 27,913 sq.yd. specification A gravel pavement, etc. (2) 11.026 mi. road from Campbell northwestwardly, 16 ft., Federal Aid Project 221A, Dunklin Co. (a) 44,294 cu.yd. earth excav., (b) 82, 728 cu.yd. borrow (c) 102,656 sq. yd. specification A gravel pavement, etc. (3) 6.43 mi. road from Holcomb northwestwardly, 16 ft., Federal Aid Project 221B, Dunklin Co. (a) 197,424 cu.yd. earth excav. (b) 104,622 cu.yd. borrow (c) 601,538 sq. yd. gravel pavement, etc. (4) 5.96 mi. road from Kennett southwestwardly, 16 ft., Federal Aid Project 209A, Dunklin Co., (a) 13,636 cu.yd. earth excav. (b) 8,593 cu.yd. borrow (c) 31,470 sq.yd. 1 course plain concrete pavement (d) 24,436 sq.yd. specification A gravel pavement, etc. (5) 12.061 mi. road from Kennett southwestwardly, Federal Aid Project 209B, Dunklin Co., (a) 33,850 cu.yd. earth excav. (b) 15,728 cu. yd. borrow (c) 63,914 sq.yd. Portland cement concrete pavement, (d) 49,410 sq. yd. specification B gravel pavement, (e) 11,500 ft. 8 in. tile, etc. (6) 3.324 mi. road from Kennett southwestwardly, Federal Aid Project 209C, Dunklin Co., (a) 13,025 cu.yd. earth excav. (b) 7,302 cu.yd. borrow (c) 17,598 sq.yd. concrete (d) 13,605 sq. yd. specification A gravel pavement, etc., from W. A. Leach, Poplar Bluff, (1a) $0.33 per cu.yd. (1b) $0.33 (1c) $2.85 (1d) $0.85, total $155,500; M. E. Gillioz, Monett, (2a) $0.40 (2b) $0.35 (2c) $0.95, total $173,986 (3a) $0.40 (3b) $0.40 (3c) $1.40, $107,450; A. Creek, Gideon, (3a) $0.45 (3b) $0.35 (3c) $0.88, $76,859; Bennett, Robertson, Carmean, Carutherville, (4a) $0.40 (4b) $0.40 (4c) $2.89 (4d) $0.81, total $123,163, (5a) $0.40 (5b) $0.40 (5c) $2.90 (5d) $0.83 (5e) $0.50, total $263,557, (6a) $0.40 (6b) $0.40 (6c) $2.93 (6d) $0.93, total $74,787; Service Constr. Co., Poplar Bluff, (4a) $0.42 (4b) $0.40 (4c) $2.80 (4d) $0.95, $125,315 (5a) $0.40 (5b) $0.40 (5c) $2.80 (5d) $0.88 (5e) $0.40, total $260,597 (6a) $0.40 (6b) $0.40 (6c) $2.80 (6d) $0.80, total $71,905.

Missouri—State Hy. Dept., at div. office Marshall, opened bids Dec. 23, 7.702 mi. road from Marshall east and west, 24 ft., Federal Aid Project 16, Saline Co., (1) 38,314 cu.yd. earth excav. (2) 32,954 cu.yd. borrow, etc., from M. E. Gillioz, Monett, (1) $0.40 per cu.yd. (2) $0.35, total $40,370; H. H. Hanenkratt, 53rd and Brooklyn Sts., Kansas City, (1) $0.50 (2) $0.50, $49,772. Noted Dec. 14.

Missouri—State Hy. Dept. at div. office Rolla, opened bids Dec. 22, 7.195 mi. road from Newburg southwestwardly, 24 ft., State Aid Project 20.216, Phelps Co., (1) 32,545 cu.yd. earth excav. (2) 533 cu.yd. rock excav. (3) 2,844 cu.yd. borrow, etc., from Birmingham, Jones & Lenox, Rolla, (1) $0.45 (2) $2 (3) $0.45, $23,977; C. D. Via and H. E. House, Rolla, (1) $0.50 per cu.yd. (2) $2 (3) $0.40, total $26,901; M. E. Gillioz, Monett (1) $0.50 (2) $2.25 (3) $0.40, $26,389.

Missouri—State Hy. Dept., at div. office Stockton, opened bids Dec 22, 2.016 mi. road from Eldorado Springs northward, 16 ft., Federal Aid Project 215, Cedar Co., (1) 7,039 cu.yd. earth excav., (2) 2,044 cu. yd. rock excav., (3) 8,655 cu.yd. borrow, (4) 19,136 sq.yd. specification B gravel pavement, etc., from Moss & Moss, Nevada, (1) $0.45 per cu.yd. (2) $1.70 (3) $0.37 (4) $0.45, total $25,625; Allhands & Davis, 705 Frisco Bldg., Joplin, (1) $0.435 (2) $1.80 (3) $0.435 (4) $0.525, $28,060; R. R. Littrell, Springfield, (street address not available) (1) $0.35 (2) $1 (3) $0.35 (4) $0.70, $29,625.

Tex., Bonham—Fannin Co. grading and rein.-con. paving 5.66 mi. Highway 5 in Honey Grove Dist., 18 ft., 602 cu.yd. concrete, 28,573 cu.yd. roadway and 19,271 cu.yd. borrow excav., 59,490 sq.yd. concrete pavement, 203,556 lb. reinforcing steel, (1) Type A. (2) Type B, from J. C. Feild Co., Denison, (1) $186,528, (2) $174,630; Womack Constr. Co., Sherman, (1) $188,957 (2) $183,008; F. P. McElwrath, Corsicana, (1) $187,649 (2) $184,675. Engrs. est. $330,000.

Tex., Silverton—Briscoe Co. grading 22.57 mi. and gravel and caliche surfacing 4.7 mi. State Highway 5 A, Rd. Dist. 7, 18 ft., 670 cu.yd. concrete, 128,104 cu.yd. roadway 89,429 cu.yd. borrow, 4,490 cu.yd. loose and 4,490 cu.yd. solid rock excav., 8,336 cu.yd. caliche and 6,948 cu.yd. gravel surfacing, 61,615 lb. reinforcing, from McClung Constr. Co., Cleburne, $98,010; J. F. Hamer, Stop 6, Interurban, Ft. Worth, $111,311; R. C. Covington, Floydada, $111,426. Engrs. est. $115,000.

Calif., Rio Vista—City opened bids improving (1) streets in Dist. 1, 2,200 lin.ft. concrete curb, 4,400 sq.ft. concrete gutter, 30,000 sq.ft. 1½ in. warrenite on 3½ in. asphaltic concrete, 1,200 cu.yd. excav., etc., (2) streets in Dist. 2, 10,300 lin.ft. concrete curb, 21,100 sq.ft. concrete gutter, 195,000 sq.ft. 1½ in. warrenite on 3½ in. asphaltic concrete, 5,300 cu.yd. excav., etc., from Municipal Impvt. Co., 306 12th St., Oakland, (1) $17,900 (2) $98,243; A. Teichert & Son, Ochsner Bldg., Sacramento, (1) $19,916 (2) $100,165; Warren Constr. Co., Bacon Bldg., Oakland, (1) $18,570 (2) $99,835. Noted Dec. 21.

Calif., Tulare — City opened bids improving Salida Place and Tulare St., from J. A. Dowling, Bakersfield, $35,989; Valley Paving & Constr. Co., Visalia, $36,332; Clark & Henery Constr. Co., 38 South Sutter St., Stockton, $40,243. Noted Jan. 11.

CONTRACTS AWARDED

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., curbing, laying sidewalks and paving 48th St., to Cleveland Trinidad Paving Co., Flushing, $19,073; McKinley Ave. and paving Olmstead Pl., to W. P. McDonald Constr. Co., 17 West 42nd St., New York, $6,579 and $5,915 respectively; Linden St., to Welsh Bros. Contg. Co., 32 Queens St., $2,546; curbing, laying sidewalks and receiving basins in Edsall Ave., to Soviero & Britten, 10111 114th St., Richmond Hill, $3,759. Noted Jan. 11.

Pennsylvania—State Hy. Dept., Harrisburg, 21,986 ft. Route 243, Sect. 2, Industry Twp., Beaver Co., 26,776 cu.yd. excav., 45,121 sq.yd. rein.-con., to Chester General Contg. Co., P. O. Box 781, East Liverpool, O., $203,961; 23,024 ft. Applications 1092 and 1096, Farmington and Pine Grove Twps., Warren Co., 22,103 cu.yd. excav., 41,063 sq.yd. rein.-con., to F. C. Chlode, assigned to Chlode & Foley, Sheffield, $164,490. Noted Dec. 14.

Pa., Phila.—Paving Bingham St., to Ferranti & Cellessi, Phila., (street address not available), $21,999; Roosevelt Blvd. to Lombardi & Yettman, Lincoln Bldg., $153,278; Champlost Ave., to Richards-Kelley Co., 349 North 57th St., $47,037; Blakemore St., to Commercial Constr. Co., 1220 Filbert St., $21,539. Noted Jan. 4.

Virginia — State Hy. Dept., Richmond, 9.95 mi. Project 169 B, Botetourt Co., bituminous macadam, to W. W. Bosley, Roanoke, $215,643; 6.28 mi. Project 186, A, Pittsylvania Co., plain concrete, to Overstreet & Nance, Bedford, $184,528; 9.91 mi. Project 205, Spottsylvania Co., plain concrete, to Spottsylvania Constr. Co., Highland Spring, $305,572. Noted Nov. 30.

N. C., Newton — To Boyd, Higgins & Goforth, Realty Bldg., Charlotte, 1,200 cu. yd. excav., 5,625 sq.ft. concrete paving, 70 sq.yd. driveways, 5,065 ft. combined curb and gutter, etc., $24,000. Noted Nov. 23.

Fla., Dade City—Bd. Comrs. Pasco Co., let following contracts paving 32 mi. road east and west from here to Gulf, Sect. A, to J. G. Yeats Co., Port Tampa, 82,632 sq.yd., 1½ in. sheet asphalt surface at $0.85 per sq.yd., 82,632 sq.yd. 8 in loose rock base $3; Sect. B, 14.12 mi., to J. G. Yeats Co., Port Tampa, 124,260 sq.yd. ¾ penetration surface $0.28, 124,260 sq.yd. 8 in. loose rock base $3.25; bituminous macadam surfacing Sect. C, 8.48 mi., to Finley Method Co., Graham Bldg., Jacksonville, 74,620 sq.yd. surfacing $0.30; 74,620 sq. yd. 8 in. loose rock base on above, to J. G. Yeats Co., Port Tampa, $3.90. Noted Nov. 30.

Fla., Tampa — To Cone Bros., Tampa, (street address not available), paving with asphalt block and granite curbing Amelia Ave., North A, Maine and Talliaferro Sts., 13,500 sq.yd. paving, $2-$2.32; 8,700 ft. Francis and Park Aves., 7,740 lin.ft. curbing $0.60, 11,265 sq.yd. paving, $2.22-$2.24; 7,600 ft. Ridgewood and Michigan Sts., 7,600 lin. ft. curbing $0.60, 10,990 sq.yd. paving $2.10-$2.25. Noted Dec. 7.

Tennessee—State Hy. Dept., Nashville, concrete paving and bridging 2¼ mi. Federal Aid Project 84, 18 ft., to Hamilton Co., c/o E. T. Murrell, co. engr., Chattanooga.

Ohio—Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving 1.42 mi. Sect. "K" Columbus-Millersburg Rd., Licking and Knox Counties, rein.-con., to Walsh & McDaniel, Columbus (street address not available), $47,391; 2.76 mi. Sect. "A" Chagrin Falls-Cuyahoga Falls Rd., Cuyahoga Co., and 2.035 mi. Sect. "R" Oberlin-Elyria Rd., Lorain Co., both warrenite bitulithic, to Highway Constr. Co., 903 Lorain Co. Bank Bldg., Elyria, $133,425 and $94,153 respectively. Dec. 28 and Jan. 4.

O., Canton—Stark Co., paving, etc. 4 mi. Alliance-Minerva Rd., 16 ft., vitr. brick, to G. Hadley, 302 Goldberg Bldg., Market Ave. S. Canton, $153,330. Engrs. est. $161,000.

Ill., Belleville—Bd. Pub. Impvts., paving and laying sewers in St. Clair Ave. and State Sts., to A. F. Poiret, Belleville, $25,255.

Ia., Des Moines—Polk Co., grading, concrete paving and incidental work on 9.062 mi. Ames-Des Moines Rd. from Ankeny north to Polk Co. Line, Federal Aid Project 187, 25,717 cu.yd. excav., 106,326 sq.yd. concrete, to Koss Constr. Co., 2818 5th St., $277,833. Noted Jan. 4.

Kan., Independence—Comrs. Montgomery Co. paving 4.51 mi. Independence-Caney Rd., 121, Sect. A, 18 ft., bituminous macadam, to Cornelison & Kelly, Wichita, (street address not available), $92,306, engrs. est. $108,414; 4.855 mi. Independence-Caney Rd., Federal Aid Project 121, Sect. D, 18 ft., bituminous macadam, to A. G. Sherwood, Independence, $115,998, engrs. est. $139,416. Noted Dec. 21.

Kan., Kansas City—Wyandotte Co. concrete paving 1.027 mi. Golden Belt Rd., Federal Aid Project 129, Sect. A, 18 ft., to Southewestern Co., 221 Dwight Bldg., Kansas City, Mo., $31,038.

Kan., Wichita — Sedgwick Co. paving 4.813 mi. road, 18 ft., with brick, Sect. A, Federal Aid Project 130, to Stewart & Ritchey, Wichita, (street address not available) $216,836; 6.019 mi. Sect. B, 18 ft., 7 in. concrete, to Ziegler & Dalton, Junction City, $208,176; bridge over Chisholm Creek, to N. E. Marsh, Wichita, (street address not available) $93,309; bridge over Gooseberry Creek, to Cornelison & Kelly, Wichita, (street address not available) $7,662. Noted Dec. 21.

Wyoming—State Hy. Dept., Cheyenne, grading and draining 7.789 mi. Federal Aid Project 118-A, Laramie Co., to Wickham Bros. & Schweiger, Lovel, $138,869.

Missouri—State Hy. Dept. at div. office Bloomfield, 6.046 mi. road from Bloomfield north and south, 12 ft., Federal Aid Project 197A, Stoddard Co., to Service Constr. Co., Poplar Bluff, $34,759. Noted Nov. 2.

Missouri—State Hy. Dept. at div. office Carthage, 0.34 mi. road from Carthage eastward, 18 ft., Federal Aid Project 84, Jasper Co., and one 70 ft. and two 60 ft. rein.-con. arch spans, spandrel filled, 20 ft. roadway, 2 concrete piers and abutments, etc., over Spring River, on above road, to Concrete & Steel Constr. Co., 214-223 West 3rd St., Joplin, $14,021 and $19,155 respectively. Noted Dec. 21 and Jan. 11.

Missouri—State Hy. Dept. at div. office Fulton, 5.925 mi. road from Fulton northeastwardly, 12 ft., Federal Aid Project 144A, Callaway Co., 7.564 mi. road from Fulton southwestwardly, 30 ft., Federal Aid Project 97, Callaway Co., and one 30

Streets and Roads (Continued)

ft. rein.-con. deck girder and one 100 ft. steel truss spans, 20 ft. roadways, concrete substructures, on above road, to Felix Kersting Co., Jefferson City, $26,183, $75,-384 and $19,682 respectively. Noted Dec. 21.

Missouri—State Hy. Dept. at div office Marble Hill, 16.369 mi. road from Marble Hill to Patton, 12 ft., Federal Aid Project 202A and 4.943 mi. road from Marble Hill southward, 12 ft., Federal Aid Project 208A, both in Bollinger Co., to C. P. O'Reilley & Co., Wainwright Bldg., St. Louis, $126,-565 and $48,535 respectively. Noted Jan. 11.

Missouri—State Hy. Dept., at div. office Montgomery City, 4.062 mi. road from Montgomery City east and west, Federal Aid Project 141, Montgomery Co., 26,423 cu.yd. earth and 1,201 cu.yd. rock excav., 6,400 cu.yd. borrow, 29,313 sq.yd. gravel pavement, etc., to Doehla & Kolkmeyer, Jefferson City, $41,653; 2.273 mi. road from Wellsville east and west, 24 ft., State Aid Project 20.173, Montgomery Co., to C. C. Powell, Montgomery City, $5,568.

Missouri—State Hy. Dept. at div. office Poplar Bluff, 19.791 mi. road from Poplar Bluff northwestwardly, 12 ft., Federal Aid Project 207, Butler Co., to C. M. Wilson and P. S. Smith, Poplar Bluff, $138, 509. Noted Jan. 11.

Missouri—State Hy. Dept. at div. office Potosi, 3.386 mi. road from Ironton to Potosi, 24 ft., Federal Aid Project 160A, Washington Co., to St. Louis Constr. Co., 743 Frisco Bldg., St. Louis, $26,666. Noted Jan. 11.

Missouri—State Hy. Dept. at div. office St. Charles, 3.178 mi. road from St. Charles to Warrenton, 12 ft., State Aid Project 20,220, St. Charles Co., to Farrell, Dubronillet & Cushion, Linn, $26,443. Noted Nov. 2.

Missouri—State Hy. Dept. at div. office West Plaines, 4.621 mi. road from Willow Springs eastward, 12 ft., Federal Aid Project 138A, Howell Co., to Summerfield & Jones Co., Springfield (street address not available). $36,737.

Colorado—State Hy. Dept., Denver, grading 1.787 mi. Pikes Peak Ocean to Ocean Highway, State Project 694, Park Co., 18 ft., to Levy Constr. Co., 1930 Colorado Ave., Colorado Springs, $39,495. Engrs. est. $58,114.

Wash., Tacoma — Pierce Co., concrete paving 3 mi. Bond Rd. 8, to C. H. Collins, Arlington, $1.89 per sq.yd., total $57,797. Noted Dec. 21.

Calif., Arcata—Paving 33 blocks, 5 in. asphaltic concrete 2 course, to Mercer-Fraser Co., 1st and G Sts., Eureka, $84,521. Noted Jan. 11.

Calif., Fresno — Improving Divisadero, Tuolumne Sts., etc., to W. F. Hanrahan, Griffith-McKenzie Bldg., $70,849. Noted Jan. 11.

Industrial Works

PROPOSED WORK

Mass., Springfield — Standard Electric Time Co., 81 Logan St., having plans prepared by H. L. Sprague, archt., 310 Main St., 3 story 50 x 90 ft. addition to factory, 1 story 50 x 50 ft. addition to shipping room, 1 story, 30 x 50 ft. lumber storage building, brick and timber, plain foundations, Logan St. $70,000-$100,000.

Mass., Springfield—O. Jurist, Hebron St., having plans prepared by J. W. Foster, archt., 46 Narragansett St., 1 story, 112 x 133 ft. garage, brick and steel, plain foundation, Main and Marble Sts. $58,000.

Mass., Springfield—E. Radding Constr. Co., 377 Main St., having plans prepared by J. W. Foster, archt., 46 Narragansett St., 1 story, 80 x 200 ft. garage, brick and steel, plain foundation, State St. $68,000.

Mass., Worcester—G. C. Whitney Co., 67 Union St., having plans prepared by Lockwood, Greene & Co., archts. and engrs., 24 Federal St., Boston, 6 story, 60 ft. high, 55 x 60 ft. factory addition, brick and concrete. $50,000.

R. I., Newport—Amer. Cigar Co., plans 2 story, 60 x 166 ft. factory, brick and timber, Central Wharf. $50,000. Private plans.

R. I., Woonsocket—Woonsocket Machine & Press Co., 533 2nd Ave., soon lets contract 2 story, 50 x 100 ft. plant addition, brick and steel, plain foundation. $40,000. Private plans.

Conn., Bridgeport — New Haven Dairy Co., 201 Hazel St., New Haven, having plans prepared by F. E. Brown, archt., 11 Autumn St., New Haven, 3 story and basement, 75 x 85 ft. factory, rein.-con. and brick, plain foundation, Garden St. and South Ave., here. $150,000. Noted Jan. 11.

Conn., East Hartford—Noyes-Buick Co., 17 Lawton St., Boston, plans 2 story, 70 x 100 ft. distributing and repair shop, Orchard St. $50,000. Architect not announced.

N. Y., Batavia—W. N. Clark Co., Holcomb, plans large canning factory, here. $100,000. Architect not announced.

N. Y., Jamestown—Jamestown, Westfield & Northwestern R.R., plans freight house, Monroe and Isabella Ave. $30,000. G. L. Maltby, 560 West 3rd St., purch. agt. Architect not announced

N. Y., Lackawanna (Buffalo, P. O.)—Niagara, Lockport & Ontario Power Co., 700 Lafayette Bldg., Buffalo, purchased 12 acre site here, and plans power plant and transmission line. To exceed $200,000. F. D. Corey, pres.

N. Y., Lackawanna (Buffalo, P. O.)—Seneca Iron & Steel Co., 307 Erie Co. Bank Bldg., Buffalo, purchased 6 acre site here, and plans to construct plant. Architect not selected.

N. Y., New York—H. Heide, 313 Greenwich St., soon takes bids brick, steel and concrete factory, plain foundation, Vandam St. $200,000. Maynicke & Franke, 25 East 26th St., archts. and engrs.

N. Y., New York—See "Buildings."

N. Y., Watertown—See "Miscellaneous."

N. Y., Watertown—Consumers Brewing Co. plans to convert plant into cold storage plant. $40,000-$50,000. Address W. Cain, Adams. Architects not selected.

N. J., Belleville—Westinghouse Lamp Co., 60 India St., Boston, Mass., having plans prepared by Stone & Webster, Inc., archts. and engrs., 147 Mills St., Boston, concrete and steel factory, here. $750,000.

Pa., Creighton — Pittsburg Plate Glass Co., 1600 Frick Bldg., Pittsburgh, plans brick and steel plant, here. $3,000,000. Architect not selected.

Pa., Eddystone — Baldwins Locomotive Wks., 500 North Broad St., Phila., having plans prepared 1 and 2 story factory buildings, here. $3,000,000. Private plans.

Pa., Pittsburg — Red Dog Products Corp., 613 Bessemer Bldg., plans plant, Clifford St. $50,000. Private plans.

Pa., Titusville—A. W. Caflish, c/o Caflish Lumber Co., plans garage and service station, Central Ave., to exceed $40,000. Architect not announced.

Md., Orangeville (Baltimore P. O.)—Gelfand Mfg. Co., 210 South Paca St., having plans prepared by H. G. Epstein, archt., 330 15th St. N. E., Wash., D. C., 3 story, 32 x 101 ft. factory, rein.-con. and brick. $50,000.

N. C., Tuxedo—Manufacturers Power Co., Asheville, plans hydro-electric plant, here. $750,000. Tuxedo plant is first unit of system that calls for expenditure of between $3,000,000 and $4,000,000, developing 70,000 hp. Mees & Mees, Kinney Bldg., Charlotte, engrs.

La., De Quincy—See "Waterworks."

La., Rayne—See "Waterworks."

Tenn., Knoxville—Cherokee Brick Co. plans plant, 40,000 brick daily capacity. Architect not announced.

O., Ashland—Faultless Rubber Co., had plans prepared by Osborn Eng. Co., archts. and engrs., 2848 Prospect Ave., Cleveland, 1 and 2 story, 40 x 130 ft., brick, steel and concrete warehouse and factory. $50,000.

O., Cleveland—Lincoln Fireproof Storage Co., 5660 Euclid Ave., having plans prepared by Watson Eng. Co., archts., Cook Bldg., 7 story and basement, brick, steel and concrete storage warehouse. $225,000.

O., Dayton—Duro Pump & Mfg. Co., 537 East Montgomery St., having plans prepared 5 story and basement, rein.-con. and steel factory, Monument St. $175,000. Private plans.

O., Dayton — Johnson-Watson Co., 131 East 3rd St., plans 6 story, brick and rein.-con. printing plant. $500,000. Architect not selected.

Ind., English—Rice Box and Basket Co. plans plant to replace one recently destroyed by fire. $90,000. Architect not announced.

Ind., South Bend — Studebaker Corp., Main and Bronson Sts., having plans prepared by A. Kahn, archt., Marquette Bldg., Detroit, Mich., 4 story and basement, 100 x 875 ft. factory addition, rein.-con. and brick. $450,000. Noted Jan. 4.

Mich., Corunna—Detroit Weatherproof Body Co., Corunna, having plans prepared and takes bids in April, 2 story, 60 x 100 ft. concrete and brick factory, plain foundation. $150,000. Private plans.

Ill., Centralia—See "Railways."

Wis., Chilton—Hingiss & Bessler, Kiel, having plans prepared by W. F. Neumann, archt., 114 Grand Ave., Milwaukee, 1 story and basement, 60 x 150 ft. brick and concrete garage, plain foundation. $40,000.

Wis., Chippewa Falls—Chippewa Pump Co. plans 2 story, brick, rein.-con. and steel factory, plain foundation. $50,000. Architect not selected.

Wis., Ft. Atkinson—Ft. Atkinson Canning Co. having plans prepared by McMeans & Tripp, archts., Majestic Bldg., Indianapolis, Ind., 3 story, 48 x 108 ft., canning factory, 1 story boiler house, 1 story, 54 x 54 ft. processing building, one 125 ft. steel stack, etc. $100,000.

Wis., Jefferson — Ft. Atkinson Canning Co. having plans prepared by McCeans & Tripp, engrs., 110 Majestic Bldg., Indianapolis, Ind., 2 story and basement, 47 x 85 ft. warehouse, brick, tile and concrete, plain foundation. $40,000.

Wis., Milwaukee—Natl. Lead Co., 52 2nd St., having plans prepared by Leenhouts & Guthrie, archts., 424 Jefferson St., 1 and 2 story, 108 x 116 ft., brick and timber warehouse, plain foundation, Virginia St. $40,000.

Wis., Racine — Davies Shoe Mfg. Co., Northwestern and Carlisle Aves., having plans prepared by E. B. Funston Co., archts., Janes Bldg., 3 story and basement, 39 x 90 ft., brick and timber factory addition, plain foundation, Carlisle Ave. $50,000.

Wis., Sturgeon Bay—Fruit Growers Canning Co. having plans prepared by McMeans & Tripp, archts., Majestic Bldg., Indianapolis, 3 story and basement, 122 x 130 ft. warehouse, 2 story, 84 x 114 ft. boiler house and preserving building, 1 story, 48 x 98 ft. receiving building, one 125 ft. stack, etc., rein.-con. and brick. $225,000. Noted Dec. 14.

Wis., Waupun—J. S. Morris Co. plans to rebuild factory recently destroyed by fire. $40,000. Architect not selected.

Kan., Wichita — Hayes Equipment Co., 701 East Gilbert St., had plans prepared by E. Forsblom, archt., 405 Sedgwick Bldg., 1 story, 79 x 232 ft. factory, brick, plain foundation, Gilbert St. and Santa Fe Ave. $200,000.

Mo., Hannibal—Hannibal Garage & Machine Co., having plans prepared by Burgher & Burgher, archts., 308 Hannibal Trust Bldg., 2 story and basement, 65 x 142 ft., rein.-con. and steel garage and machine shop, 113 East 3rd St. $65,000.

Mo., St., Louis—A. B. Grove, archt., 314 North 4th St., soon lets contract 3 story and basement, 130 x 220 ft., rein.-con. and brick factory addition, plain foundation, 1st St., for Carr-Trombly Mfg. Co., 2nd and Branch Sts. $50,000.

Mo., St. Louis—U. S. Motor Bus Transportation Co., 911 Title Guaranty Bldg., had plans prepared by McKelvey Constr. Co., engrs., 911 Title Guaranty Bldg., and soon takes bids three 125 to 150 x 200 ft. brick and concrete garages. $300,000.

Tex., Ft. Worth—Parker Brown Co., 1302 Pacific St., making preliminary plans 3 story and basement, 75 x 150 ft. addition to factory, rein.-con. and brick, plain foundation, East Front and Oak Sts. $75,000. M. Greenspan, pres. Architect not selected.

Okla., Weatherford—Jan. 23, to vote on $114,000 bonds 1 story, 80 x 120 ft., power plant, 500 hp., and 20 ton ice plant, Bradley St. $114,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs. Noted Dec. 28.

Wash., Riverside — See "Excavation, Drainage, Irrigation."

Ore., Portland—Columbia Steel Corp., 10th and Johnson Sts., and Utah Coal and Coke Co. plans to build steel plants here and at Pittsburgh, Calif. A. M. Clark, mgr.

Calif., Los Angeles—L. J. Coburn, c/o Hamm & Grant, archts., Ferguson Bldg., having plans prepared woolen mill and office building.

Calif., Oakland—Forster & Kleiser Co. of California, 287 Valencia St., San Francisco, having plans prepared by Weeks & Day, archts., California Commercial Union Bldg., San Francisco, 1 story, rein.-con. warehouse and garage, Market and 22nd Sts., here. To exceed $50,000.

Calif., Oakland — A. P. and G. Hoffschneider, 459 21st St., plan 6 story, rein.-con., sterotyping plant, etc., 13th St. between Webster and Harrison Sts. $100,-000. Architect not selected.

Calif., Pittsburgh—See "Portland, Ore."

Calif., San Francisco—R. Simone, 728 Vallejo St., had plans prepared by W. Lowe,

Industrial Works (Continued)

archt., Monadnock Bldg., 2 story, rein.-con. and frame, garage and auto salesrooms, Vallejo St. near Stockton St.

Calif., San Francisco—J. D. and A. B. Spreckels Securities Co., (Western Sugar Refinery), 2 Pine St., had plans prepared 1 story 43 ft. high, 125 x 408 ft., concrete and steel warehouse, complete system of belt conveyors with fireproof bridges and enclosures between buildings, re-location of railroad tracks and fuel oil storage tanks (latter to be in concrete retaining walls), erection of new train sheds, etc. $244,870. Private plans.

Calif., Santa Rosa—National Ice & Cold Storage Co., Postal Telegraph Bldg., having plans prepared addition to cold storage plant, probably rein.-con. $100,000. Private plans.

Calif., Tehachapi — H. Cowell Lime & Cement Co., 2 Market St., San Francisco, plans cement plant, here. $3,000,000. W. H. George, secy. and purch. agt.

Ont., London — City plans garage and repair shop. Address G. Wenige, City Hall, mayor.

Ont., Stratford—Stratford Frames and Novelties plans plant. $50,000. Private plans.

Ont., Toronto—Barrymore Cloth Co., 1179 King St. W., plans concrete, brick and steel factory, Dufferin St. $150,000. Architect not selected.

Ont., Welland—Welland Alloy Steel Co. Ltd., plans 1 story brick and steel mill. $340,000. Private plans.

BIDS DESIRED

N. J., Trenton Junction—See "Buildings."

Ind., Indianapolis — Indianapolis Glove Co., 430 North Liberty St., taking bids 5 story and basement, 100 x 160 ft. factory, rein.-con. and brick, Liberty St. $225,000. Rubush & Hunter, Amer. Central Life Bldg., archts. Noted Dec. 21.

CONTRACTS AWARDED

N. H., Concord—Boston & Maine R.R., North Sta., Boston, 1 story, 162 x 170 ft. repair shop, brick and steel, plain foundation, at freight yards, here, to H. Wales Lines Co., 134 State St., Meriden, Conn. Engrs. est. $250,000.

N. H., Sunapee—Lake Sunapee Power Co. will build hydro electric power plant with dam and 1,500 ft. steel penstock, Sunapee Harbor, by day labor. $300,000. Private plans. Noted Oct. 19.

Mass., Ashland—Saving Spring Co., c/o E. F. Bunker, 1 and 2 story, 50 x 150 ft., brick and timber, plain foundation, Pleasant St., to Palmer Constr. Co. Inc., Palmer. Archts. est. $40,000.

Mass., Roxbury (Boston P. O.)—Homestead Garage Co., 215 Columbus Ave., will build 1 story garage and service station, 23,000 sq.ft floor space, brick and concrete, plain foundation, Humboldt Ave., by day labor. $60,000. G. N. Jacobs, 12 Bosworth St., Boston, archt.

Conn., Bridgeport—A. V. Langenegger, 395 West Morgan Ave., 3 story, factory, 170 ft. front, brick and heavy timber, plain foundation, Federal St., to Hewlett Co., 886 Main St. Archts. est. $150,000. Noted Jan. 4.

Conn., New Britain—The Stanley Wks., Myrtle St., 8 story, 60 x 100 ft. factory, rein.-con. and steel, plain foundation, Church St., to Aberthaw Constr. Co., 27 School St., Boston. Archts. est. $250,000.

Conn., New Haven — Waldorf Systems, Inc., 169 High St., Boston, 1 story and basement, 75 x 95 ft., bakery, etc., brick and concrete, plain foundation, Olive and Green Sts., here, to Clark Constr. Co., 168 Grand St., Waterbury. Archts. est. $50,000.

N. Y., Oswego—Oswego Netherlands Co., general contract 1 and 2 story, ice cream plant, to G. C. Raby Constr. Co., Oswego. Archts. est. $180,000. Noted Jan. 11.

Pa., Coraopolis—Coraopolis Ice Co. will build 1½ story, 32 x 60 ft. addition to plant, 4th and Kindell Sts., by day labor. C. R. Geisler, Ferguson Bldg., Pittsburgh, archt.

Pa., Erie—Gloekler Mfg. Co., 1127 Liberty Ave., Pittsburgh, 1 story, 60 x 300 ft. brick factory, East 12th St., to J. P. Fuhr, 3945 Howley St., Pittsburgh. Archts. est. $60,000.

Pa., Erie—M. Griswold, 12th and Raspberry Sts., 2 story and basement, 100 x 150 ft. garage, 20th and State Sts., to H. Shenk Co., 12th and Sassafras Sts. Archts. est. $40,000. Noted Dec. 28.

Pa., Erie—Henry Mayer Estate, Commerce Bldg., 2 story and basement, 50 x 110 ft. brick and steel garage, 1411-1413 State St., to N. F. Blair, Commerce Bldg. $40,000.

Pa., Phila.—Art Loom Rug Mills, 2 and 3 story, rein.-con. and brick factory, plain foundation, Hancock and Westmoreland Sts., to W. Steele & Sons, 16th and Arch Sts., $100,000.

Pa., Phila.—W. F. Reed & Sons, 12th and Snyder Aves., 5 story and basement, 65 x 70 ft. rein.-con. and brick factory, plain foundation, 12th and Jackson Sts., to W. F. Newberry Co., Otis Bldg., $200,000.

Pa., Pittsburgh—Guibert Eng. Co., 703 Diamond Bank Bldg., 1 story, 50 x 200 ft. plant, Wind Gap Rd., to Memphis Steel Constr. Co., Magee Bldg. Engrs. est. $100,000.

Md., Baltimore — Air Reduction Sales Co., 342 Madison Ave., New York City, 1 story, 74 x 122 ft. factory, brick and hollow tile, 11th and East Fayette Sts., here, to West Constr. Co., Amer. Bldg., $70,000. Noted Nov. 30.

Tenn., Chattanooga — Western Union Telegraph, 195 East Bway., New York City, 1 story, 200 x 300 ft., steel and concrete, repair shop, here, to A. F. Hahn, Chbln. Bldg., $175,000.

O., Delaware—W. H. Duffy, dir. Pub. Serv., Oak and 9th Sts., Columbus, 1 story and basement, 60 x 80 ft. power house, 25 ft. high, laundry with two 30 x 90 ft. wings, both brick and concrete, 15,000 gal. coagulating and 26,000 gal. reserve reservoirs, at Girls Industrial Home, Concord, Delaware Co., to Middle States Constr. Co., 524 East Hudson St., Columbus, $97,472. Noted Dec. 14.

Ind., Cannelton—Cannelton Sewer Pipe Co., 4 story, 75 x 130 ft. factory, rein.-con. and brick, incl. 32 kilns, 120 ft. radial stack, power plant, 1,000 ft. switching tracks, to Hoffman Constr. Co., Furniture Bldg., Evansville. Archts. est. $200,000. Noted Dec. 21.

Ind., South Bend—Superior Laundry Co., 2 story and basement, 60 x 150 ft. laundry, brick, Sycamore St., to H. A. Christman Constr. Co., 306 Notre Dame Ave. Archts. est. $40,000.

Ill., Chicago—Ford Motor Co., Highland Park, (Detroit P. O.) Mich., 1 story, 502 x 1363 ft. assembly plant, 14 ft. high, brick, steel and rein.-con., Torrence Ave., here, also 100 x 100 ft. power house, complete with boilers and accessories, to A. Brundage Co., 110 South Dearborn St. Noted Dec. 7.

Ill., Chicago—Electrical Dealers Supply Co., 121 West Randolph St., 3 story, 77 x 200 ft. factory, rein.-con., brick and steel, 2220-26 Diversey Ave., to Schramer Constr. Co., 127 North Clark St. Archts. est. $150,000. Noted Dec. 28.

Ill., Chicago—Superior Furniture Co., 3301 West 47th St., 3 story, 113 x 140 ft. factory, rein.-con., brick and steel, to Rowley Bros., 332 South La Salle St. Archts. est. $90,000.

Ill., Chicago—United Autographic Register Co., 43rd St. and Western Blvd., 2 story, 60 x 96 ft. factory addition, rein.-con., brick and steel, to E. W. Sproul Co., 2001 West Pershing Rd. Archts. est. $40,000.

Ill., Chicago—Westinghouse Electric Mfg. Co., 111 West Washington St., 7 story, 130 x 240 ft., warehouse, rein.-con., brick and steel, 2201-21 West Pershing Rd., to E. W. Sproul Co., 2001 West Pershing Rd. Archts. est. $750,000.

Wis., Appleton—Gibson Auto Exch., c/o A. Gibson, Mgr., 7 South Church St., Oshkosh, will build 1 story, 46 x 82 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation, by day labor. $50,000. Private plans.

Wis., Madison—Kennedy Dairy Co., 618 University Ave., 1 story, 50 x 75 ft. ice plant, brick, rein.-con. and steel, plain foundation, to C. B. Fritz Co., 138 North Frances St. Archts. est. $40,000. Noted July 13.

Mo., St. Louis—Bd. Pub. Serv., 208 City Hall, general contract 2 story, 54 x 225 ft. rein.-con. and brick service building, plain foundation, for St. Louis Training School for Feeble Minded, at Scott Farm, to J. A. Godfrey & Co., Wainwright Bldg., $107,433. Noted Jan. 11.

Wis., Sheboygan—City c/o J. Steimle, clk., 1 story, 76 x 108 ft., carpenter and woodworking shop; rein.-con., brick and steel, South Water St., to Nack & Booth, 1213 North 17th St. Archts. est. $40,000. Noted Dec. 14.

Wis., Watertown—Perfection Table Slide Co., c/o W. C. Schultz, mgr., 2 story, rein.-con., brick and steel factory, plain foundation, to O. L. Gaston, Watertown. $50,000.

Minn., Red Wing — Red Wing Sewer Pipe Co., will build 3 story, 52 x 272 ft. dry house, brick and concrete, by day labor. $85,000. A. F. Gauger, 302 Central Bank Bldg., St. Paul, archt. Noted Dec. 7.

Kan., Winfield—Stuber Bros. 1 story and basement, rein.-con. and brick garage, plain foundation, to P. H. Frankenfeld, Enid, Okla., $50,000.

Calif., Elmhurst — E. H. Nielson, 16 California St., San Francisco, general contract 1 and 2 story, brick warehouse, here, to West Coast Constr. Co., 519 California St., San Francisco, $135,000.

Calif., San Francisco—J. Pasqualetti, 785 Market St., 2 story and basement, 57 x 137 ft., concrete garage, McAllister St. near Fillmore St., to Amer. Concrete Co., Humboldt Bank Bldg., $40,000.

Calif., San Francisco—R. McLaren & Co., (owners and general contractors), Hearst Bldg., preparing plans and will build 5 story, 80 x 160 ft., rein.-con. warehouse, Harrison and 2nd Sts., by day labor.

Calif., San Francisco—R. McLeran & Co., (owners and general contractors), Hearst Bldg., preparing plans and will build 5 story, 200 x 200 ft., rein.-con. warehouse, 18th and Alabama Sts., by day labor.

Buildings

PROPOSED WORK

Vt., Burlington — High School — School Dept. plans 2 story and basement, brick and steel, Union St. $400,000. F. L. Austin, 240 College St., archt.

Mass., Brighton (Boston P. O.)—Apartment—Summit Realty Trust, 40 Court St., Boston, had plans prepared by Silverman, Brown & Heenan, archts., 51 Cornhill, Boston, six 3 story and basement, 60 x 80 ft., brick and steel, plain foundations, Woodstock Ave. and Warren St., here. $400,000.

Mass., Brighton (Boston P. O.)—Sales—Commonwealth Investment Co., 40 Court St., Boston, having plans prepared by Silverman, Brown & Heenan, archts., 51 Cornhill, Boston, 1 story and basement, 100 x 260 ft., brick and stone, plain foundation, Commonwealth Ave., here. $275,000.

Conn., Hartford — Business — Nirenstein & Schwarz, 1247 Main St., having plans prepared by Berenson & Moses, archts., 1047 Main St., 3 story, 60 x 120 ft., brick, stone, hollow tile and terra cotta, Elm and Main Sts. $150,000.

Conn., Hartford — Fire Headquarters — Fire Comrs. plan 3 story, brick and concrete, Ann and Pearl Sts. $200,000. Architect not selected.

Conn., Meriden — School — School Bd. plans 3 story, brick and steel, Park Ave. $300,000. W. T. Arnold, 34½ Main St., consult. archt.

Conn., New Haven — Clubhouse — Yale University plans 2 story, near Yale Bowl, Derby Ave. $200,000. Architect not announced.

Conn., New Haven — Parish House — Trinity Church Parish, c/o C. S. Palmer, archt., 114 Whitney Ave., plans 3 story and basement, 150 x 200 ft., brick and stone, Church and Wall Sts. $300,000.

N. Y., Brooklyn—Apartment—M. Jonas, c/o Gronenberg & Leuchtag, archts. and engrs., 450 4th Ave., New York, soon takes bids brick, steel and stone, plain foundation, 4th Ave. and 79th St., here. $250,000.

N. Y., Brooklyn—Theatre—M. W. Del Gaudio, archt. and engr., 160 West 45th St., New York, preparing plans brick, steel and stone, plain foundation, 2,500 seating capacity, 86th St. between 4th and 5th Aves., here. $500,000. Owner's name withheld.

N. Y., Coney Island (Brooklyn, P. O.)—Theatre—Allwell Development Co., c/o Shampan & Shampan, archts. and engrs., 188 Montague St., Brooklyn, having preliminary plans prepared, brick, steel and stone, plain foundation, on plot 244 x 650 ft., Surf Ave., here. $300,000.

N. Y., New York—Laboratory—Columbia University, 116th St. and Bway., plans brick, steel and stone, plain foundation, Bway. $500,000. N. M. Butler, pres. Architect and engineer not selected.

N. Y., New York—Sales, etc.—Studebaker Corp. of America, Main and Bronson Sts., South Bend, Ind., having plans prepared by W. S. Ferguson Co., archts. and engrs., 1900 Euclid Ave., Cleveland, 6 story and basement, 175 x 200 ft., rein.-con. and brick sales and service building, West 131st St., here. $400,000.

N. Y., Ogdensburg—School—Bd. Educ. plans new school. $150,000-$175,000. Address D. J. Chrichton.

N. Y., Roosevelt—School—Bd. Educ., soon takes bids brick, steel and stone, plain

Buildings (Continued)

foundation. Tooker & Marsh, 101 Park Ave., New York, archts. and engrs.

N. Y., Whitehall—School—Bd. Educ. soon takes bids brick, steel and stone, plain foundation. Tooker & Marsh, 101 Park Ave., New York City, archts. and engrs. Noted Sept. 14.

N. J., Newark—Museum—City having sketches made 110 x 498 ft., brick, steel and stone, plain foundation, Washington and Plan Sts. $1,000,000. Private plans.

N. J., Trenton—Apartment—C. F. Hildebrecht, West State and Chancery Sts., having plans prepared by W. Hankin, archt., 39 East State St., 8 story, brick and steel, West State St.

Pa., Allentown—Apartment—A. Potruch, 510 Main St., Bethlehem, plans 5 story, brick, Hamilton St., here. Architect not announced.

Pa., Braddock—Bank—First Natl. Bank soon takes bids brick, steel and stone, plain foundation. $200,000. W. L. Stoddart, 9 East 40th St., New York City, archt. and engr. Noted Nov. 16.

Pa., Clearfield—Lodge Home—Lodge of Elks 540, Market and 2nd Sts., takes bids in spring, 3 story and basement, 50 x 115 ft. concrete and brick, 3rd and Cherry Sts. $150,000.

Pa., Harrisburg—Lodge and Office—International Brotherhood Compensation & Relief Fund, Inc., had plans prepared by C. H. Kain, archt., 317 Chestnut St. and takes bids latter part of February, 13 story and basement, 124 x 127 ft., with 33 x 80 ft. wing, rein.-con., brick, steel and stone, 6th and Maclay Sts. $1,000,000.

Pa., Hazelton—Bank and Office—Hazelton Natl. Bank, c/o D. C. Kunkel, soon takes bids 5 story and basement, brick, steel and stone, plain foundation. $500,000. Thomas, Martin & Kirkpatrick, Otis Bldg., Phila., archts.

Pa., Jeannette—Church—Sacred Heart Catholic Church having plans prepared by C. C. Strong, archt., Union Bank Bldg., Pittsburgh, 1 story, 86 x 156 ft., 7th St. $150,000.

Pa., Johnstown—Business—P. N. Duca, East Main St., takes bids in spring, 4 story and basement, 85 x 120 ft. rein.-con., brick and steel. $150,000.

Pa., Merion—Art Museum—A. Barnes had plans prepared by Paul & Cret, archts., 1535 Chestnut St., Phila., and soon takes bids 2 story and basement, rein.-con., brick and steel, plain foundation. $3,000,000.

Pa., New Castle—Apartment—E. H. Hileman plans large apartment, Wallace and Jefferson Aves. $150,000. Architect not announced.

Pa., Oakmont—High School—School Dist. having plans prepared by W. G. Eckles Co., archts., Lawrence Savings & Trust Co., New Castle, 2 story, concrete, brick and steel. $275,000.

Pa., Phila.—Administration—Dept. Pub. Wks., City Hall, soon takes bids 2 story and basement, 180 x 220 ft. brick, steel and stone, plain foundation, Richmond and Delaware Aves. $200,000. P. B. Sinkler, 1211 Chestnut St., archt.

Pa., Phila.—Hotel—Phila. Hotel Co., c/o A. D. Brennan, c/o Raph & White, archts., Penna. Bldg., soon takes bids 20 story and basement, 84 x 219 ft. brick and stone, Broad and Locust Sts. $3,000,000.

Pa., Phila.—Store and Office—Oppenheim, Collins & Co., 1207 Chestnut St., soon takes bids 6 story, basement and sub basement, 48 x 230 ft., brick, steel and stone, plain foundation, 1126 Chestnut St. $500,000. Buckman & Kahn, 56 West 45th St., New York City, archts.

Pa., Pittsburgh—Apartment—E. J. Riffle, Oliver, Bldg., plans 5 story and basement, 85 x 85 ft. with 60 x 224 ft. and 60 x 247 ft. wings, brick, tile and steel, North Highland Ave. $1,500,000. Architect not selected.

Pa., Schuylkill (R. D. from Phoenixville)—Fair—Schuylkill Co. Argicultural Assn. plans to construct new fair buildings on 18 acre site. $150,000. Architect not announced.

Pa., Sharon — Church — Holy Trinity Lutheran Church, plans brick or stone, South Oakland Ave., to exceed $150,000. Address W. H. Brown, pastor. Architect not selected.

Md., Baltimore—College—Mayor and City Council, City Hall, plan 4 or 5 story, brick and steel, 33rd St. $1,250,000. Architect not selected.

Md., Baltimore—Office—Home Friendly Society, 1026 Linden Ave., plans 10 story, brick, Cathedral and Centre Sts. $250,000. G. A. Chase, pres. Architect not selected.

Md., Baltimore—School—Mayor and City Council had plans prepared by W. W. Emmart, archt., Union Trust Bldg., 2 story, rein.-con. and brick, Woodberry St. $400,000.

Md., Baltimore—School—Mayor and City Council having plans prepared by T. W. Pietsch, archt., Amer. Bldg., 3 story and basement, 111 x 211 ft., brick and steel, Jackson Pl., Fairmount Ave., Ann and Fayette Sts. $700,000. H. Massart, 324 North Charles St., engr.

Md., Baltimore—Store—Hutzler Bros. having plans prepared by J. E. Sperry, archt., Calvert Bldg., and F. Baldwin, associated archt., 328 North Charles St., 7 story, brick and steel, Howard and Clay Sts. $300,000. H. F. Doeleman, 507 North Charles St., engr.

D. C., Wash.—Hospital—Garfield Hospital having plans prepared by Marsh & Peters, archts., 1304 F Sts., N. W., for hospital addition. Conducting campaign for funds.

D. C., Wash.—Hotel—G. W. McCord, 101 D St., N. E., soon takes bids for hotel. $175,000. Milburn-Heister Co., 710 14th St., archts.

D. C., Wash.—Theatre—F. H. Smith Co., 1414 I Sts., N. W., plans 11 story, 160 x 256 ft., stone and steel theatre and hotel or theatre and office, 14th and F. Sts. $4,500,000.

W. Va., Morgantown—Hotel—Morgantown Hotel Co., having plans prepared by S. F. Heckert, archt., 620 Bessemer Bldg., Pittsburgh, Pa., 7 story and basement, 55 x 175 ft., brick and stone. $400,000. Noted Dec. 28.

N. C., Charlotte—Office—Anchor Mills Co., having plans prepared by Lockwood, Greene & Co., archts., Piedmont Bldg., 15 story, fireproof, North Tryon St.

Ga., Atlanta—Hotel—J. McE. Bowman, Hotel Biltmore, 43rd St., New York City, having preliminary plans prepared by Schultze & Weaver, archts. and engrs., 17 East 49th St., New York City, brick, steel and stone, plain foundation, here. $6,000,000.

La., New Orleans—Church—Church of Sacred Heart of Jesus, having plans prepared by E. Weil, archt., associated with A. Bendernagle, Whitney Central Bldg., for church, South Lopez and Canal Sts. $150,000.

Tenn., Memphis—Office—Security Bldg. Co., c/o B. A. Bogy, 46 North 2nd St., takes bids latter part January, 12 story, 75 x 85 ft., rein.-con., tile and stone, Front and Madison Sts. $1,000,000. McKim, Mead & White, 101 Park Ave., New York City, and L. C. Carlisle, Falls Bldg., Memphis, archts.

O., Canton—Store—Stern & Mann, Market Ave. N., having plans prepared by Eperson & Pond, archts., Martin Blk., 3 story, 33 x 200 ft., brick and steel addition. Plans for structural steel completed. Architects taking bids for foundation. $150,000.

O., Cleveland—Apartments—Watson Eng. Co., archts., Cook Bldg., preparing plans two 4 story, brick, steel and concrete, West 46th St. and Hyde Ave. $400,000. Owners name withheld.

O., Cleveland—Commercial—G. and E. J. Paul, 611 Fidelity Mortgage Bldg., having preliminary plans prepared by J. F. Steffens, archt., 611 Fidelity Mortgage Bld., 3 story and basement, 85 x 300 ft., brick, steel and concrete, Euclid Ave. between East 40th and East 45th Sts. $300,000.

O., Cleveland—Commercial and Theatre—H. P. Chester, 207 The Arcade, having preliminary plans prepared by W. G. Caldwell, archt., Park Bldg., 2 story, 123 x 150 ft., brick and steel, Lorain Ave. and West 118th St. $150,000.

O., Cleveland—Store—Bedell Cloak & Suit Co., 19 West 34th St., New York City, had plans prepared by G. H. Shonewald, archt., Grand Central Terminal, New York City, 6 story and basement, brick, steel and concrete, 746 Euclid Ave. $300,000.

O., Dayton—Office—Cooper Medicine Co., East 3rd St., plans 10 story, brick and rein.-con., 1st and Main Sts. $750,000. Architect not selected.

O., Geneva—High School—Bd. of Educ. plans 3 story, 20 room, brick steel and concrete. $175,000. R. H. Cowdery, pres. Architect not selected.

O., Youngstown—Hotel—E. Salow, c/o Hotel Salow, plans rebuilding hotel recently destroyed by fire. To exceed $300,000. Architect not selected.

Ind., Indianapolis — Apartment — G. J. Marrot, 18 East Washington St., plans apartment, brick, 416 North Meridian St. $500,000. Kopf & Woolling, Pythian Bldg., archts.

Ind., Indianapolis—Club—Columbia Club, Monument Circle, having revised plans prepared by Rubush & Hunter, archts., Amer. Central Life Bldg., 12 story and basement, 75 x 202 ft., brick and steel, Monument Circle. $1,000,000. Noted Aug. 16.

Ind., South Bend—Hospital—Epworth Hospital, 123 West Navarre St., having revised plans prepared by R. E. Schmidt, archt., 104 South Michigan Ave., Chicago, 5 story and basement, rein.-con. and brick, West Navarre St. $350,000. Noted Oct. 12.

Ind., South Bend — School — St. Joseph Catholic Church having plans prepared by Freyermuth & Maurer, archts., Farmers Trust Bldg., 2 story and basement, 142 x 147 ft., brick, Calvert St. $150,000. Noted Nov. 2.

Ind., South Bend—Store—Poledore Bros., 116 North Michigan St., plans 3 story and basement, 75 x 150 ft., brick, terra cotta front, Colfax St. $150,000. Architect not selected.

Ind., South Bend — Store — Robertson Bros., 127-33 South Michigan St., having plans prepared by W. M. Elwood, archt., South Bend, 8 story and basement, 100 x 150 ft., rein.-con. and brick, South Michigan St. $500,000.

Mich., Detroit—Clubhouse—Womens City Club, 141 Bagley Ave., having plans prepared by W. B. Stratton, archt., Union Trust Bldg., 6 and 9 story, 90 x 120 ft. rein.-con., brick and steel, plain foundation, Park and Elizabeth Sts. $500,000.

Mich., Detroit — Hotel — Development Corp., J. B. Book, Jr., pres., Book Bldg., having plans prepared by L. Kamper, archt., Kamper Bldg., 25 story, 100 x 150 ft. rein.-con., brick, steel and stone, Michigan Ave. and Washington Blvd.

Mich., Detroit—Hotel—E. M. Statler, Statler Hotel, Washington Blvd. and Park Ave., purchase site and having plans prepared for 18 story and basement 165 x 300 ft. rein.-con., brick, steel and stone, Woodward Ave. $9,000,000. Architects name withheld.

Mich., Detroit—Mercantile— Bedell Co., 19 West 34th St., New York City, having plans prepared 8 story and basement, 60 x 100 ft. rein.-con., brick and steel, Woodward Ave., here. $300,000. Architect's name withheld.

Mich., Detroit—Office—Episcopal Diocese of Michigan, 936 East Jefferson Ave., plans 10 story, 100 x 120 ft., Woodward Ave. Architect not selected.

Mich., Detroit—Theatre and Office—B. C. Whitney, Detroit Opera House Bldg., having plans prepared by Rapp & Rapp, archts., 190 North State St., Chicago, Ill., 8 or more stories, 94 x 165 ft. rein.-con., brick and steel, East High St. $2,000,000.

Mich., Detroit — Recreation — Recreation Dept., 504 Elmwood St., having plans prepared 1 story, 225x225 ft. and 82 x 100 ft. brick and steel recreation building incl. ice skating rink, Grand River Ave. and West Grand Blvd. $250,000. Dept. Bldgs. & Safety Eng., 555 Clinton St., engrs. and archts.

Mich., Okemos—Administration and Dormitory—Reformatory for Women, Capitol Bldg., Lansing, having plans prepared by L. W. Frye, state archt., Ann Arbor, 3 story, 44 x 82 ft. brick, plain foundation. $250,000. State may build by day labor.

Ill., Chicago—Apartment—H. Leidberg, archt., 154 West Randolph St., preparing plans 3 story, Sheridan Rd. near Grace St. $1,000,000. Owner's name withheld.

Ill., Chicago—Bank—Portage Park Natl. Bank having plans prepared by A. Schwarz, archt., 118 North La Salle St., 2 story, Irving Park Blvd. and Milwaukee Ave. $250,000.

Wis., Madison—Hotel—E. Clarenback (Hotel Madison Co.) 201 Wisconsin St. Milwaukee, having revised plans prepared by C. Barkhausen, archt., 79 Wisconsin St. Milwaukee, 6 story and basement, 66 x 120 ft., brick and concrete, plain foundation, Fairchild and West Washington Sts., here. $400,000. Noted Dec. 14.

Wis., Milwaukee—Hotel—Hotel Wisconsin Co., 172 3rd St., having plans prepared by Holabird & Roche, archts., 104 South Michigan Ave., Chicago, 12 story and basement, 50 x 150 ft., brick, steel and concrete addition, plain and wood pile foundation.

Wis., Milwaukee—School—St. Michael Congregation, c/o S. Bernard, 469 24th St., had plans prepared by Brust & Philipp, archts., 405 Bway., 2 story and basement, 60 x 150 ft., brick, tile and concrete, plain foundation, 24th St. $150,000.

Wis., Oshkosh—Store—Henderson-Hoyt Co., 85 Main St., had plans prepared by Auler & Jensen, archts., F. R. A. Bldg., 4 story and basement, L shaped, 70 x 113

Buildings (Continued)

ft. and 20 x 100 ft., brick, steel and concrete, plain foundation, Main St. and Washington Blvd. $300,000.

Wis., Wauwatosa — Grade School — Bd. Educ. plans 2 story and basement, brick and tile, Greenfield Ave. $150,000. Architect not selected.

Ia., Ames—High School—Plans election to vote on $200,000 bonds for high school. Architect not selected.

Ia., Cedar Rapids — Clubhouse — Cedar Rapids County Club, c/o M. V. Bolton, chn., 417 Cedar Rapids Savings Bank Bldg., plans 3 story and basement, brick and tile. $150,000.

Ia., Des Moines—Hospital—Des Moines General Hospital, East 12th and Des Moines Sts., having plans prepared by Berlin, Swern & Randall, archts., 19 South La Salle St., Chicago, first unit, rein.-con., brick and stone, plain foundation. $350,000.

Ia., Fairfield—School—Bd. Educ. having plans prepared by M. Geise, archt., 800½ Maige St., Quincy, Ill., for high school addition and grade school, here. $150,000. Noted Dec. 14.

Ia., Sioux City—School—Bd. Educ. plans 3 story and basement, rein.-con., brick, tile and stone, in Morningside Addition. $300,000. Architect not selected.

Kan., Kansas City—School—Bd. Educ. takes bids about Feb. 9, for Major Hudson School, 2 story and basement, 74 x 76 ft., rein.-con., brick and stone. $180,000. Rose & Peterson, 434 Brotherhood Bldg., Kansas City, archts. Noted Oct. 26.

Kan., Wichita—Jail—Sedgwick Co. takes bids in February, 3 story, 40 ft. high, 45 x 107 ft., rein.-con., pressed brick and steel, plain foundation. $175,000. W. N. Bowman, Central Savings Bank Bldg., Denver, Colo., archt.

Neb., Omaha—Arts and Science—Creighton University, 25th and California Sts., raising funds for 4 story and basement, rein.-con., brick and stone, 25th and California Sts. $300,000. J. Latenser & Sons, 732 Peters Trust Bldg., archts.

Neb., Omaha — Chemistry — Creighton University, 25th and California Sts., raising funds and having plans prepared by J. Latenser & Sons, archts., 732 Peters Trust Bldg., 4 story and basement, rein.-con., brick and stone, 25th and California Sts. $250,000.

S. D., Kimball—School—Bd. Educ. having plans prepared by King & Dixon, archts., Mitchell, 2 story and basement, 132 x 134 ft. rein.-con., brick, tile and stone. $150,000.

S. D., Vermilion—Lodge—Masonic Order, c/o Hugill & Blatherwick, archts., Boyce-Greeley Bldg., Sioux Falls, having plans prepared 4 story and basement, 80 x 125 ft. rein.-con., brick, tile and stone. $175,000.

N. D., Grand Forks—School—Bd. Educ. plans 3 story and basement, rein.-con., brick, stone and tile. $300,000. F. M. Harbach, secy. Architect not announced.

Wyo., Laramie—Gymnasium—Bd. Trustees State University, takes bids in April or May, 1 story, basement and gallery, 110 x 180 ft., rein.-con., brick and steel, rock foundation, on University campus, here. $150,000. W. Dubois, Hynds Bldg., Cheyenne, archt.

Mo., Kansas City — High School — Bd. Educ. having preliminary plans prepared by C. A. Smith, archt., 612 Finance Bldg., new high school, 48th and Pasceo Sts. $1,000,000.

Mo., Kirksville—High School—Defeated $190,000 bonds for junior high school. Noted Nov. 9.

Mo., St. Louis—Store and Apartment—T. P. Carr, Arcade Bldg., soon takes bids 2 story, 125 x 200 ft., brick, plain foundation, Dale Ave. $150,000. T. P. Barnett, Arcade Bldg., archt.

Mo., University City — Apartment — Egyptian Court Apartment Building Co., Commercial Bldg., Clayton, had plans prepared by J. W. Leigh, archt., Ry. Exch. Bldg., St. Louis, and soon takes bids 6 story, 100 x 159 ft., concrete and brick, Delmar Blvd., here. $500,000.

Mo., Vandalia—High School—Voted $50,000 bonds and soon takes bids modern high school.

Tex., Dallas — Dormitories — Buckners Orphans Home, making plans rebuilding dormitories recently destroyed by fire, four 2 story and two 3 story, brick and rein.-con., plain foundations. $500,000. Architect not announced.

Tex., Electra—High School—Plans high school. $150,000. Architect not selected.

Tex., Ft. Worth—Hospital—Ft. Worth Baptist Hospital, Pennsylvania Ave., having plans prepared by Clarkson & Gaines, archt., 1st Natl. Bank Bldg., 2 story, brick addition. $250,000.

Tex., Galveston — Bank and Office — Texas Bank & Trust Co., c/o I. H. Kempner, pres., plans 11 story, 75 x 150 ft., Market and 22nd Sts. $1,000,000. Architect not selected.

Ariz., Phoenix—Office—G. H. N. Luhrs, Commercial Hotel, soon receives bids 11 story, granite, terra cotta, tapestry brick and rein.-con., Jefferson St. and Central Ave. $500,000-$750,000. Trost & Trost, Two Republics Bldg., El Paso, Tex., archts.

Wash., Sedro Woolley—School—Stephen, Stephen & Brust, archts., New York Bldg., Seattle, preparing plans and take bids in about 30 days, 2 story, 180 x 260 ft., brick, here, for Union High School Dist. 4. $155,000.

Wash., Spokane — Hospital — Lutheran Hospital Assn. having plans prepared by Whitehouse & Price, archts., Hutton Bldg., 4 story, rein.-con. and brick, plain foundation, 4th and Spruce Sts. $175,000.

Ore., Portland — High School — School Dist. 1, having plans prepared by Houghtaling & Dougan, archts., Elks Bldg., and lets contract about March 1, Washington High School, 4 story, 160 x 175 ft., rein.-con., brick and terra cotta. $300,000-$350,000.

Ore., Portland—Office—Co.-operative Office Building Corp., M. B. McClure, pres. and mgr., 664 East 52nd St., having plans prepared by W. Bruce, archt., Portland (street address not available) 12 story, 100 x 100 ft., rein.-con., marble, tile, granite, brick and terra cotta, Bway and Yamhill Ave. $900,000.

Ore., Portland—Schools—School Dist. 1 plans to expend $2,000,000 for schools during 1923.

Ore., Portland—Store—L. Holzman, 40 3rd St., having plans prepared by Clausen & Clausen, archts., Macleay Bldg., 6 story, 50 x 100 ft., rein.-con., concrete footings.

Ore., Salem—Schools—Bd. Educ. plans 2 wing additions to high school, and new central grade school. $300,000. Architect not selected.

Calif., Bakersfield — Hotel — Colonial Picayune Hotel Co., c/o J. M. Saffell, archt., 924 19th St., having preliminary plans prepared 5 story, rein.-con. $200,000.

Calif., Los Angeles—Church—Highland Park Presbyterian Church having plans prepared by J. C. Austin, archt., Baker-Detwiler Bldg., brick, Highland Park. $175,000.

Calif., Los Angeles — Office — See "Industrial Works."

Calif., Oakland—Hospital—Alameda Co. plans election soon to vote on $1,500,000 bonds to construct new units for hospital.

Calif., Oakland — School — California School of Arts and Crafts, Inc., 2119 Allston Way, Berkeley, had plans prepared first unit, 2 story, frame and stucco, Bway. and Clifton St., here. Total $500,000. F. H. Meyer, 2119 Allston Way., Berkeley, designer.

Calif., Pomona—Bank and Office—First Natl. Bank of Pomona had plans prepared by Curlett & Beelman, archts., Union Bank Bldg., Los Angeles, 5 story and basement, fireproof. $200,000.

Calif., Sacramento — School — Roman Catholic Archbishop, 1100 Franklin St., San Francisco, having plans prepared by R. A. Herold, archt., Forum Bldg., 3 story, rein.-con., 25th and K Sts. $150,000.

Calif., San Francisco — Club House — Olympic Club, Post St. near Mason St., receiving competitive plans for clubhouse, Lakeside Golf Links. $150,000.

Calif., San Francisco—Store and Hotel—E. Tropp and W. C. Crittenden, 129 Sutter St., having plans prepared by MacDonald and Couchot, archts., 345 Pine St., 16 story and basement, 100 x 170 x 229 ft., fireproof, Market, Hyde and Fulton Sts. $2,000,000.

Calif., San Jose — Office — Commercial Building Inc., c/o Binder & Curtis, archts., 255½ South 1st St., having plans prepared 8 story, fireproof, North 1st St. $400,000.

Que., Oka—Seminary and Presbytery—Trappist Fathers having plans prepared and takes bids before Feb. 1. $300,000. Private plans.

Ont., Cornwall—School—Voted $150,000 bonds for concrete, brick and steel addition to school, for Bd. Educ. J. C. Harkness, town clk. Architect not selected.

Ont., Hamilton—Hospital—Voted $150,000 bonds for concrete, brick and steel addition to Hamilton General Hospital. Architect not selected.

Ont., London — Collegiate — Bd. Educ. having plans prepared by L. E. Carrothers, archt., c/o Bd. Educ., 2 story, brick and stone, South London. $150,000.

Ont., Toronto—Store—T. Eaton Co. Ltd., Yonge and Queen Sts., having plans prepared by Sproatt & Rolph, archts., 36 North St., 8 story and basement, 120 x 200 ft. rein.-con., brick and steel addition, Yonge St. $500,000.

Ont., Toronto—School—Bd. Educ. having plans prepared by C. Dyson, archt., 155 College St., for Runnymede School, 2 story and basement, 10 room, concrete, brick and steel. $175,000.

Ont., Toronto—School—Bd. Educ. having plans prepared by C. Dyson, archt., 155 College St., 2 story and basement, 10 room addition to Earl Haig School, concrete, brick and steel. $175,000.

Ont., Toronto—Schools—Bd. Educ., 155 College St., having plans prepared by C. Dyson, archt., 155 College St., 2 story and basement, 8 room, brick and tile, in Silverthorn Dist., $150,000; also 2 story and basement, 10 room concrete, brick and steel, North Danforth Dist., $175,000.

Ont., Waterloo—School—Separate School Bd. having plans prepared by J. M. Cowan, archt., 107 Vincent St., Toronto, 2 story and basement, 8 room, concrete, brick and steel addition. $150,000.

BIDS DESIRED

Mass., Boston — Health — Jan. 24, by Coolidge & Shattuck, archts., 122 Ames Bldg., 4 story, about 75 x 110 ft., Battery St., concrete and brick, for City (George Robert White Fund.) $150,000.

Mass., Boston—High School—Jan. 19, by Schoolhouse Comrs., City Hall, high school, concrete and brick, Dunbar Ave. $1,000,000. McLaughlin & Burr, 88 Tremont St., archts. Noted Nov. 23.

N. Y., Brooklyn—Apartments—Ft. Hamilton Land Co., c/o Gronenberg & Leuchtag, archts. and engrs., 450 4th Ave., New York, two 4 story, 100 x 100 ft., brick, steel and stone, plain foundations, 4th Ave. and 72nd St., here. $150,000 each. Work will be done by separate contracts under supervision of architects.

N. Y., New York—Apartment—Clermont Iron Wks. Co., c/o Springsteen & Goldhammer, archts. and engrs., 32 Union Sq., 6 story, brick, steel and stone, Grand Concourse. $250,000. Work will be done by separate contracts under supervision of architects.

N. Y., New York—Apartment—Lousons Constr. Co., c/o Gronenberg & Leuchtag, archts. and engrs., 450 4th Ave., brick, steel and stone, plain foundation, Grand Concourse. $1,000,000. Work will be done by separate contracts under supervision of architects.

N. Y., New York—Aparment—R. Rothbart c/o J. M. Felson, archt. and engr., 1133 Bway., 5 story, brick, steel and stone, plain foundation, Grand Concourse. $175,000. Work will be done by separate contracts under supervision of architect.

N. Y., Perry—School—Feb. 2, by Bd. Educ. Dist. 6, Towns of Perry and Castile, Perry, at office of T. H. Donnelly, secy., High School Bldg., Leicester St., altering and 2 story, 146 x 150 ft., brick addition. Gordon & Kaelber, 125 Sibley Bldg., Rochester, archts.; adv. this issue.

N. J., Trenton—High School—Feb. 5, by Committee on Buildings and Grounds of Bd. Educ. in meeting room of Bd. Administration, 9 South Stockton St., new junior high school. E. Sibley, Edgewood Lane and Bluff Rd., Palisade, archt.; adv. this issue.

N. J., Trenton Junction—School—Jan. 31, by A. H. Moses, archt., 415 Market St., Camden, group of 1 story buildings and transformer house, brick, for State School for Deaf, here. $300,000. Guilbert & Betelle, 546 Broad St., Newark, engrs.

Pa., Jenkinstown—School—Jan. 30, by Heacock & Hoakenson, archts., Bailey Bldg., Phila., 2 story and basement, 60 x 188 ft. with 35 x 64 ft. wing, brick, steel and stone plain foundation, for School Dist. $250,000.

Pa., Oil City—High School—April 1, by Bd. Educ., junior high school, brick and steel, Mylan, Harriot and Washington Aves. $500,000. E. E. Bailey, Oil City, archt.

Pa., Phila.—Church and Rectory—G. I. Lovatt, archt., 416 Walnut St., taking bids 1 story and basement, stone church and 3 story and basement, brick and stone rectory, plain foundations, 21st and Snyder Aves., for St. Edmunds Roman Catholic Church, 23rd and McKean Sts. $200,000.

Pa., Phila.—Loft—Hoffman-Henon Co., archts., Finance Bldg., taking bids 12 story

Buildings (Continued)

and basement, 90 x 188 ft., rein.-con., brick and steel, caisson foundation, 21st and Market Sts. $2,000,000. Owner's name withheld.

Pa., Red Lion—Business—March 1, by Zarfoss & Burg, 4 story and basement, 80 x 120 ft. brick, Main St. $160,000.

Md., Baltimore—Club—Jan. 30, by C. N. and N. Friz, archts., Lexington Bldg., 6 story, 68 x 110 ft., brick and terra cotta, Saratoga and St. Paul Sts., for City Club, Caswell Hotel. $650,000. Noted Dec. 28.

D. C., Wash.—School—Jan. 29, by Dist. Comrs., 509 Dist. Bldg., constructing Smothers School; adv. this issue.

La., New Orleans—Infirmary—Feb. 1, by E. Weil, archt., Whitney Central Bldg., 5 story, 50 x 296 ft. rein.-con. and tile, new clinic, maternity and ward buildings for Touro Infirmary, Prytania and Louisiana Aves. $750,000.

O., Vanlue—School—Bd. Educ. taking bids 2 story, 98 x 138 ft., brick, steel and concrete. $200,000. J. C. Treece, clk. T. D. McLaughlin, Savings Bldg., Lima, archt.

Ind., Evansville—School—Jan. 27, by St. Boniface Church, 2 story and basement, 72 x 151 ft., brick, Wabash Ave. $150,000. Clifford Shopbell & Co., Furniture Bldg., archts. Noted Jan. 4.

Mich., Albion—Hospital—Feb. 12, by J. W. Sheldon Memorial Hospital, 316 East Porter St., 4 story, 90 x 100 ft., brick, plain foundation. $150,000. A. Wood, 3513 Woodward Ave., Detroit archt. Noted Dec. 28.

Mich., Coldwater—High School—Jan. 25, by R. Leroy, archt., Pratt Bldg., Kalamazoo, brick superstructure for high school for Bd. Educ. $150,000. Noted Oct. 26.

Mich., Kalamazoo — High School — Jan. 22, by R. A. Leroy, archt., Pratt Bldg., 4 story, 114 x 173 x 173 ft. rein.-con. and brick, foundation in Westridge Ave., for Bd. Educ. $400,000.

Wis., De Forest — High School — Bd. Educ. taking bids 2 story, 81 x 114 ft., rein.-con. and brick, plain foundation. $150,000. A. E. Tenjen, clk. E. Tough, Conklin Bldg., Madison, archt.

Wis., Milwaukee—Apartment—Rosman & Wierdsma, archts., 424 Jefferson St., taking bids 3 story and basement, 42 x 216 ft., brick and concrete, plain foundation, Grand Ave. $150,000. Owner's name withheld.

Wis., Milwaukee—School, etc.—Feb. 1, by School Bd., 3 story and basement, 68 x 80 ft. addition to school, and 28 x 40 ft. boiler house, brick, tile and concrete, plain foundation, 27th Ave. $150,000. Van Ryn & De Gelleke, 114 Grand Ave., archts.

Wis., Milwaukee—Theatre and Office—Jan. 23, by M. Tullgren & Sons Co., archts., 425 East Water St., 7 story and basement, 150 x 205 ft., brick and concrete, plain foundation, Grand Ave. and 6th St., for Grand & Sixth Bldg., Inc., 425 East Water St. $1,500,000. Noted Jan. 11.

Ia., Ames—Library—Jan. 30 by Proudfoot, Bird & Rawson, archts., 810 Hubbell Bldg., Des Moines, 3 story and basement, 50 x 165 ft., with 2 wings, concrete, brick and Bedford stone, on Campus, here, for Iowa State College. $400,000. Noted Nov. 9.

Ia., Des Moines—Office and Stores—Jan. 22, by Silverberg & Lince, S and L Bldg., superstructure for 7 story and basement, 67 x 130 ft., rein.-con., brick, tile and stone, 5th and Walnut Sts., $400,000. Boyd & Moore, 1020 Grand Ave., archts. Noted Dec. 7.

Minn., Chisholm—Junior High School—Jan. 25, by N. Rich, chn. Bd. Educ., 2 and 3 story, 200 x 422 ft., rein.-con. and brick, $350,000. German & Jenssen, Exch. Bldg., Duluth, archts. and engrs.

Minn., Duluth—Home—March 15, by G. Robie, chn. of com. Knights of Columbus, No. 447, 224 West 1st St., 4 story and basement, 100 x 140 ft., rein.-con., brick and stone, 2nd Ave. W. and 2nd St. $200,000. Holstead & Sullivan, 407 Palladio Bldg., archts. Noted May 11.

Kan., Atchison—Gymnasium—E. Brielmaier & Sons Co., archts., 432 Bway., Milwaukee, taking bids and opens same about Jan. 25, 2 story, 100 x 190 ft., brick and concrete, plain foundation. $150,000.

Kan., Winfield—High School—Jan. 22, by School Bd., 4 story, 60 x 150 ft., brick and rein.-con., plain foundation. $200,000. J. M. Fuller, Winfield, archt. Noted Dec. 7.

Tex., San Antonio—Schools—Feb. 6, by Phelps & Dewees, archts., Gunter Bldg., three 2 story, and two 1 story, concrete, brick and tile elementary schools, $225,000; also 1 and 2 story, 90 x 110 ft., rein.-con. and brick, junior high schools, Clinton and Carleton Sts. $175,000, for Bd. Educ. W. E. Simpson & Co., Natl. Bank Commerce Bldg., engrs.

Colo., Denver — School, Hospital, etc. — March 1, by Regents of University of Colorado, constructing school of medicine, hospital building and nurses' home, complete incl. heating, plumbing and electrical work, 8th Ave. and Colorado Blvd. C. W. Mills, chn. building comn. Biscoe, Fischer & Fischer, 731 United States Natl. Bank Bldg., archts. Noted Sept. 7.

Calif., Alhambra—School—Jan. 25, by Trustees of Alhambra High School Dist., 2 story and basement, brick. $300,000. Hunt & Burns, Laughlin Bldg., Los Angeles, archt. Noted June 29.

Calif., Fresno—Office—R. F. Felchlin Co., archts., Bank of Italy Bldg., receiving bids 10 story, fireproof, J and Tuolumne Sts., for San Joaquin Light and Power Co., 1801 Tulare St. $600,000. Noted May 11.

Calif., Glendale — School — Jan. 25, by Trustees Glendale Union High School Dist., 2 story, administration, auditorium and classroom building, 2 story, rein.-con. science building. $500,000. J. C. Austin, Baker-Detwiler Bldg., Los Angeles, archt. Noted May 18.

Calif., San Francisco—Store and Office—A. F. Rousseau, French Bank Bldg., will build 4 story, rein.-con. and steel, Market St. near 7th St., and 4 story, rein.-con. and steel, Market St. near 8th St., by separate contracts. $165,000 each. D. C. Coleman, 110 Sutter St., archt.

Ont., Weston—Feb. 7, by Bd. Educ., 2 story and basement, 8 room, concrete, brick and steel. $150,000. S. B. Coon & Son, 4 St. Thomas St., Toronto, archts.

BIDS RECEIVED

Md., Baltimore — Engine Houses and Truck Houses—City opened bids Jan. 3, engine houses (a) 25, (b) 47, Washington Blvd. and 8th St., (c) 57, Harford Rd. and Fleetwood St., (d) 58, Pennington Ave. and Filbert St., (e) 59, Maryland and Indiana Aves., (f) engine house 56 and truck house 24, Bush and Carroll Sts., (g) engine house 55 and truck house 23, 28th St. between Oak and Maryland Aves., (h) engine and truck houses combined, (i) 5 engine houses, (j) 5 engine houses and 2 truck and engine houses (lump sum), from General Constr. Co., 226 Richmond St., (a) $44,409 (d) $44,309; R. B. Mason, 308 West Madison St., (a) $45,765 (b) $44,789 (c) $46,085 (d) $46,474 (e) $44,389 (f) $53,362 (g) $56,250 (h) $107,419 (i) $223,873 (j) $326,923; Price Constr. Co., Maryland Trust Bldg., (a) $47,000 (f) $57,340; P. C. Streett, 3407 Norwood Ave., (b) $48,000 (c) $45,160 (d) $46,290 (e) $44,000 (f) $57,660 (h) $115,827 (i) $229,250 (j) $344,600; Consolidated Eng. Co., Calvert Bldg., (b) $48,900 (c) $46,700 (e) $44,900 (i) $233,800 (j) $352,000; C. L. Stockhousen Co., Gay and Water Sts., (h) $119,480. Noted Dec. 28.

Md., Baltimore—School—Mayor and City Council, City Hall, opened bids 3 story, brick, Hawthorne Rd. and Clarendon Ave., from J. H. Miller, Inc., Eutaw and Franklin Sts. $637,700; R. B. Mason, 308 West Madison St., $654,892; Consolidated Eng. Co., Calvert Bldg., $655,373. Noted Dec. 28.

Tenn., Nashville — Capitol Annex and Soldiers Memorial—State c/o H. McAlister, chn. building commission, opened bid Jan. 10, from A. Krebs Constr. Co., Rhodes Bldg., Atlanta, Ga., $1,390,000. Archts. est. $1,400,000. Noted Dec. 7.

Calif., Sacramento — Market — L. H. Glide, c/o J. Morgan, archt., Merchants Exch. Bldg., San Francisco, opened bids steel work and foundation for 2 story and basement, 160 x 170 ft., 13th and J Sts., from K. E. Parker & Co., 519 California St., San Francisco, $97,600; Herndon & Finnegan, 1814 17th St., $100,486; W. Keating, Capitol Natl. Bank Bldg., $106,500. Noted Dec. 21.

Calif., Whittier—High School and Auditorium—Whittier High School Dist., opened bids (1) 2 story, brick high school (2) auditorium, brick, rein.-con. and tile, general contract from J. Simpson Co., 701 Antonio Ave., Los Angeles, (1) $107,890; Davies Constr. Co., I. W. Hellman Bldg., Los Angeles, (1) $107,900 (2) $198,500; Darrell Condley Co. Marsh-Strong Bldg., Los Angeles, (1) $108,850; Los Angeles Building & Contg. Co., Marsh-Strong Bldg., Los Angeles, (2) $200,600; B. D. Kronnick, 212 West 39th St., Los Angeles, (2) $205,000.

CONTRACTS AWARDED

Mass., Brookline (Boston P. O.)—Apartment—Marden & Orlando, 1505 Beacon St., will build 3 story, 75 x 150 ft., brick and steel, plain foundation, Beacon St., by day labor. $200,000. S. S. Eisenberg, 46 Cornhill, Boston, archt.

Mass., New Bedford—Bank and Office—New Bedford Safe Deposit & Trust Co., Acushnet Ave., 4 story, 60 x 100 ft. brick and concrete, plain foundation, Pleasant and William Sts., to G. Howard & Sons Co., 153 Main St., Brockton. Archts. est. $150,000.

R. I., Providence—School—Bd. Contract and Supply, 3 story and basement, 83 x 151 ft., brick and steel, plain foundation, Summit Ave., to Haley & Hart, Inc., 32 Westminster St., $217,000. Archts. est. $300,000. Noted Jan. 11.

N. Y., Binghamton—High School—Bd. Educ., general contract 2 story and basement, 157 x 178 ft., brick, to D. Kirkpatrick and F. Stento, Binghamton, $328,700; heating and ventilating work, to Johnson Heating Co., New York City (street address not available) $48,300. Noted Dec. 28.

N. Y., Brooklyn — Apartment — Holland Bros. Realty Co., c/o McCarthy & Kelley, archts. and engrs., 159 Remsen St., 4 story, brick, steel and stone, plain foundation, President St., by day labor. $175,000.

N. Y., Brooklyn—Apartment—I. Resinkoff, c/o Gronenberg & Leuchtag, archts. and engrs., 450 4th Ave., New York, 6 story, brick, steel and stone, plain foundation, Sterling Pl., here, by day labor.

N. Y., New York—Apartment—Bricken Constr. & Impvt. Co., c/o Gronenberg & Leuchtag, archts. and engrs., 450 4th Ave., brick, steel and stone, plain foundation, 342 West 86th St., by day labor.

N. Y., New York—Apartment—Cortlandt Realty & Constr. Co., c/o Springsteen & Coldhammer, archts. and engrs., 32 Union Sq., 5 story, 251 x 369 ft., brick, steel and stone, plain foundation, Grand Concourse, by day labor. $600,000.

N. Y., New York—Apartment—Estate of O. Goelet, c/o J. H. Duncan, archt. and engr., 347 5th Ave., 8 story, 84 x 151 ft., brick, steel and stone, plain foundation, 240 East 48th St., by day labor. $100,000.

N. Y., New York—Apartment—J. H. Goldblatt, 231 East 77th St., brick, steel and stone, plain foundation, 591 West End Ave., by day labor. $300,000. Sugarman, Hess & Berger, 16 East 43rd St., archts. and engrs.

N. Y., New York—Apartment—Handley Realty Corp., c/o C. B. Meyers, archt. and engr., 31 Union Sq., 6 story, 50 x 100 ft., brick, steel and stone, plain foundation, Boston Rd., by day labor. $150,000.

N. Y., New York—Apartment—C. Hansle, c/o Moore & Landseidel, archts. and engrs., 148th St. and 3rd Ave., 6 story, brick, steel and stone, plain foundation, Riverside Dr., by day labor. $250,000.

N. Y., New York—Apartment—S. and S. building Corp., c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., 5 story, brick, steel and stone, plain foundation, Huntspoint Ave., by day labor. $150,000.

N. Y., New York—Apartment—Schroeder & Koppe, c/o Rouse & Goldstone, archts. and engrs., 512 5th Ave., 15 story, 82 x 119 ft., brick, steel and stone, plain foundation, 157 East 72nd St., by day labor. $850,000.

N. J., Lakewood — School — Bd. Educ. stone, brick and steel, plain foundation, to T. O'Halleran, 41 Central Ave., Newark. Archts. est. $250,000.

N. J., South Orange—School—Bd. Educ. brick, steel and stone, plain foundation, to F. and C. Haerter, West New York. Archts. est. $250,000. Noted Oct. 12.

N. J., West Orange—School—A. Wenchsecy, Bd. Educ., 2 story, 40 x 114 ft., brick, steel and stone, plain foundation, Gregory Rd., to Equity Constr. Co., 25 West 43rd St., New York City. Archts. est. $200,000. Noted Oct. 26.

Pa., Allentown—Temple—R. G. Schmid & Co., archts., 154 West Randolph St., Chicago, 7 story, 160 x 225 ft. rein.-con., brick and steel, Linden St., to W. Gangewere Co., Allentown, $542,250, plumbing, gas and sewer work, to E. P. Saeger, Allentown, $32,600 for Masonic Temple Assn. Noted Nov. 16.

Pa., Butler—Hospital—Butler Memorial Hospital, brick, steel and stone hospital, also power house, Brady St., to W. M. Sutherland Bldg. & Constr. Co., Commerce Bldg., Erie, $414,827 and $74,763 respectively. Noted Dec. 7.

Pa., Phila.—Exchange—Bell Telephone Co., Parkway Bldg., 3 story and basement, 107 x 156 ft. brick and stone, plain foundation, Emerald and Sargent Sts., to Irwin & Leighton, 126 North 12th St. $300,000.

Pa., Phila. — Museum — University of Pennsylvania, 34th and Spruce Sts., 2 story brick and steel addition, 34th and Spruce

Buildings (Continued)

Sts., to F. M. Harris & Co., 1520 Parrish St., $300,000. Noted Dec.

Pa., Pittsburgh — Community — Kingsley Assn. Inc., 43 Fernando St., 2 story and basement, 50 x 100 ft., brick, incl. swimming pool and gymnasium, Larimer Ave., to D. T. Riffle, 1006 Forbes St. Archts. est. $150,000.

Pa., Scranton—Store—New Wall Paper Co., 122 North Washington Ave., 4 story addition, North Washington Ave., to United Fireproofing Co., 8 West 40th St., New York City.

Md., Baltimore — Apartment — Edgevale Apartments, c/o E. L. Palmer, Jr., archt., 513 North Charles St., 5 story, 180 x 320 ft., brick and steel, plain foundation, Beech Ave. and 40th St., L. L. Chambers, 36th and Roland Ave., $750,000.

Md., Baltimore—Apartment—J. P. and C. Brandau, Charles and 31st Sts., 6 story, 129 x 131 ft., rein.-con., brick and terra cotta, Charles and 31st Sts., to Consolidated Eng. Co., Calvert Bldg., $750,000.

D. C., Wash.—Showroom and Store—C. W. Semmes of Semmes Motor Co., 1132 Connecticut Ave., N. W., showroom and store at Dupont Circle, to C. H. Tompkins, 1614 Park Rd., N. W., $200,000.

D. C., Wash.—Bank—Hamilton Savings Bank, 7th and I Sts., N. W., bank building at Dupont Circle, to C. T. Tompkins, 1614 Park Rd., N. W. $200,000.

N. C., Asheville—Store—Letinskys Dept. Store, 4 story, brick, steel and stone, to W. M. Sutherland Bldg. and Constr. Co., Compton Bldg., St. Louis, Mo. Archts. est. $400,000. Noted Dec.

N. C., Winston-Salem—School—City constructing 2 grammar schools, hollow tile, to Southeastern Constr. Co., Trust Bldg., Charlotte, $151,200. Noted Nov. 9.

Fla., Jacksonville—Schools—Duval Co. School Bd., two 2 story, brick and steel, to O. P. Woodcock, 403 Main St., $696,192. Noted Nov. 30.

Fla., Orlando—Bank—Orlando Bank & Trust Co., brick, stone and steel, plain foundation, to A. Bentley & Sons Co., 201 Belmont Ave., Toledo, O. Archts. est. $250,000. Noted Oct. 26.

Ala., Albany—High School—Bd. Educ., 3 story, 80 x 300 ft., brick, plain foundation, to Batson-Cook, West Point, Ga., $135,388. Noted Dec. 7.

Tenn., Chattanooga — Office — Southern Rys. Co., Ingalls Bldg., Cincinnati, O., 3 story and basement, 70 x 182 ft., rein.-con. and brick, plain foundation, Market St., here, to McDevitt-Fleming Co., 1st Natl. Bank, $150,000.

O., Dayton—Church—Second Church of Christ Scientist, 2 story and basement, 74 x 175 ft., rein.-con. and stone, Grand and Belmont Sts., to Schenk & Williams, Mutual Home Bldg., $175,000. Archts est. $182,000. Contractor will sub-let work. Noted Aug. 10.

O., Zanesville—Hotel—O. J. Raile, pres. Zane Hotel Co., 7 story and basement, rein.-con., brick and stone, Main St., to Blanchard Building Co. and W. E. Becher, 928 Lindsey Bldg., $500,000.

Ind., Indianapolis—Apartment—H. H. Woodsmall, Fidelity Trust Bldg., 3 story and basement, 126 x 150 ft., rein.-con. and brick, North Meridian St., to L. Colvin, Bd. of Trade; percentage basis. Archts. est. $500,000. Noted Jan. 11.

Ind., Indianapolis — Physicians — E. G. Spink Co., Hume-Mansur Bldg., will build 9 story and basement, 67 x 130 ft., brick and stone, North Pennsylvania St., by day labor. $875,000. W. K. Eldridge, c/o owner, archt. Noted Jan. 11.

Mich., Grand Rapids — Office — Howe, Snow & Bertles, Grand Rapids Savings Bank Bldg., 5 story, 5 sides 100 ft. each, brick and steel addition, plain foundation, Fulton and Iowa Sts., to Owen, Ames & Kimball Co., Michigan Trust Bldg., $150,000.

Ill., Chicago—Apartment—I. Phillips, 4710 North Lawndale Ave., 3 story, 119 x 138 ft., rein.-con., brick and steel, 5416-26 Washington St., to J. Siger, 538 South Clark St. Archts. est. $200,000.

Wis., Milwaukee—Club—Amer. Luther Assn., 283 11th St., 3 story and basement, 50 x 120 ft., brick and concrete, plain foundation, 11th and State Sts., to Dahlman Constr. Co., 456 Bway. Archts. est. $175,000.

Wis., Kenosha—Courthouse, etc.—Kenosha Co. general contract 3 story and basement, 126 x 226 ft. courthouse and 2 story and basement, 67 x 138 ft., administration and jail building, concrete, brick and stone, to Hutter Constr. Co., 128 Western Ave., Fond du Lac, $695,400; heating, to Thomas Heating Co., 708 9th Ave., Racine, $57,077; plumbing, to E. J. Sullivan, 362 Park Ave., Kenosha, $55,000. Noted Jan. 4.

Minn., Aitkin—Court House—Aitkin Co., 3 story and basement, rein.-con., brick and tile, general contract to A. B. Drygas, Aitkin, $154,780. Noted Jan. 11.

Minn., St. Paul—Apartment—Standard Home Building Co., 727 Andrus Bldg., Minneapolis, will build two 3 story and basement, 70 x 117 ft., concrete, brick and stone, Marshall Ave. and Mississippi River Dr., by day labor. Taking bids on materials. $250,000. Linhoff & Zelzer, 906 Guardian Life Bldg., archts.

Mont., Butte—Hotel—New Finlen Hotel Co., Finlen Hotel, general contract 9 story and basement, rein.-con., brick, tile and stone, to A. Broadland, Missoula, $265,378. Noted Dec. 21.

Mo., Kansas City — School — Bd. Educ. general contract Hale H. Cook School, 2 story and basement, 194 x 250 ft., rein.-con., brick and steel, 73rd and Jefferson Sts., to Collins Bros., 1600 Grand St., $202,900.

Mo., St. Louis — Office — Missouri State Life Insurance Co., 1501 Locust Blvd., 5 and 10 story, 100 x 115 ft., rein.-con., brick and steel addition, to McKelvey Constr. Co., 911 Title Guaranty Bldg. Archts. est. $750,000. Noted Dec. 7.

Ariz., Mesa—Temple—Church of Jesus Christ of Latter Day Saints, J. W. Lesuer, pres., Maricopa Stake, will build 3 story, 126 x 186 ft., 52.5 ft. high, rein.-con., at East 2nd Ave., by day labor. $320,000. Young & Hansen, McKornick Bldg., Salt Lake City, Utah, archts. Noted Feb. 2.

Ore., Portland—First Natl. Bank, will build 4 story, 50 x 100 ft., rein.-con., marble and tile, concrete and solid rock footings, 6th and Alder Sts. by day labor. $350,000. Coolidge & Shattuck, 122 Ags. Bldg., Boston, Mass., archts.

Calif., Lodi—High School—Lodi Union High School Dist., group of buildings, brick, steel and concrete, to C. Mabrey Co., Ochsner Bldg., Sacramento, $216,324.

Calif., Los Angeles—Apartment—E. W. Richardson, 3 story and basement, brick, West Berendo St., to Richardson Eng. & Bldg. Co., Story Bldg., $150,000.

Calif., Los Angeles — Apartment and Bank—A. Taylor, 2 story, apartment, bank and store building, brick, 8th Ave. and Washington St., to A. Hesse, Hollingsworth Bldg., $175,000.

Calif., Los Angeles—Office—A. C. Blumenthal, F. Kahn, et al., Loew State Bldg., two 12 story, with connecting arcade, Mercantile Pl. from Bway. to Spring St., to MacDonald & Kahn, Loew State Bldg., Los Angeles, and 136 Montgomery St., San Francisco, $1,500,000. Noted Dec. 21.

Calif., San Francisco—Apartment—J. E. Levin, 1507 Folsom St., San Francisco, and S. Levin, New York City, 9 story and basement, rein.-con., Jackson and Laguna Sts., general contract to K. E. Parker Co., Clunie Bldg., $115,000; plastering, to A. Knowles, Call Bldg., $25,570. Noted Sept. 21.

BRIDGE—BURNHAM, ILL.

Following are lowest three bids opened Dec. 18, by Cook Co. Highway Dept., Chicago, for constructing superstructure of bascule bridge over Little Calumet River, here. (A) Strobel Steel Constr. Co., 53 West Jackson Blvd., Chicago, (Rall type); (B) Ketler-Elliott Constr. Co., 155 North Clark St., Chicago (Chicago type); (C) Morava Constr. Co., 122 South Michigan Ave., Chicago, (Rall type). The unit bids were as follows:

	A			B		C	
Item	Quantities		Unit Prices	Quantities	Unit Prices	Quantities	Unit Prices
Structural steel	1,155,000	lb.	$0.0703	1,270,000	$0.077	1,183,000	$0.773
Steel in trunnions	21,000	lb.	0.1416			22,400	.214
Cast steel track plates, etc.	53,100	lb.	0.161			57,300	.188
Machinery steel	160,000	lb.	0.238	194,000	.216	167,000	.24
Ordinary steel castings	8,000	lb.	0.1676			7,800	.22
Iron castings	1,000	lb.	0.15			800	.20
Bronze and babbitt	5,000	lb.	0.60			,850	.63
Reinforcing steel	21,000	lb.	.07			21,000	.07
Counterweight metal	1,000	lb.	0.06			1,000	.07
Concrete in counterweight	375	cu.yd.	16.00	400	20.10	400	21.00
Lumber	44,000	ft.b.m.	148.00	50	120.00	44,000	135.00
Class X concrete	80	cu.yd.	17.50	68	28.00	80	18.50
Class B concrete	60	cu.yd.	15.50			60	18.50
Creosoted block pavement	450	cu.yd.	4.00	500	4.40	450	4.10
Design and royalties	(lump sum)		20,000.00		20,300.00		20,000.00
Extended totals			$173,462		$178,138		$192,911

BRIDGES—MISSOURI

Bids were opened by State Highway Dept., Jefferson City, for constructing fifteen steel truss spans and seven steel girder spans over Missouri River at Lexington, Federal Aid Project 223, Lafayette and Ray Counties, from (A) Missouri Valley Bridge & Iron Co., 4th and Walnut Sts., Leavenworth, Kan.; (B) Mt. Vernon Bridge Co., Mt. Vernon, O.; (C) McClintic-Marshall Co., Oliver Bldg., Pittsburgh; (D) Kansas City Bridge Co., Kansas City, Mo. The unit bids were as follows:

	A	B	C	D
1,350,000 lb. steel cylinders	$0.075			$0.10
4,100 cu.yd. concrete in cylinders	41.00			45.00
400,000 lb. reinforcing bars	.055	.045		.06
3,500 cu.yd. concrete in pier shafts	25.50			20.00
400 cu.yd. concrete, pedestals and abutments	28.50			30.00
1,000 cu.yd. excavation	4.35			3.00
80 cu.yd. rock excavation	7.50			4.00
4,680,000 lb. metal in place-thru spans		.068	.0807	.065
1,900,000 lb. metal in place—deck spans and trestles		.615	.0833	
6,600 lin.ft. handrail			3.80	5.00
1,820 cu.yd. concrete floor slab		31.50		24.50
24,000 cu.yd. earth embankment	.75			.45
1,700 cu.yd. stone riprap	5.00			7.00
2,000 sq.yd. macadam pavement	3.00			3.00
1,600 lin.ft. wood rail on embankment	.75			.80
7,000 ft. b.m. timber in place	95.00			102.00
4,300 lin.ft. timber piling	.75			1.00
12,000 sq.ft. mattress	.22			.20
1,000 lb. wire rope	.15			.08
1,000 lb. c.i. anchors	.25			.10
Cleaning up (lump sum)	1,500.00			1,000.00
Extended totals	$439,080	$526,020	$561,026	$972,664

Federal Government Work

PROPOSED WORK

R. I., Providence—Dredging—U. S. Engineer, Providence, plans maintenance dredging in Connecticut River.

N. Y., New York—Dredging—U. S. Engineer, 2nd Dist., plans dredging in Shrewsbury River.

Pa., Phila.—Dredging—U. S. Engineer, 815 Witherspoon Bldg., plans dredging in Delaware River and Philadelphia Harbor.

D. C., Wash.—Walks—U. S. Engineer, Wash., D. C., plans concrete walks in Meridian Hill Park.

Va., Norfolk—Dredging—U. S. Engineer, Custom House, plans dredging in the Southern Branch of Elizabeth River. Noted May 4 under "Virginia."

Miss., Gulfport—Refrigerating Equipment—Spec. 4780—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to install refrigerating equipment, here.

Miss., Gulfport — Stack — Spec. 4781 — Bureau Yards & Docks, Navy Dept., Wash., D. C., plans stack, here.

Tex., Galveston—Dredging—U. S. Engineer, Galveston, plans dredging Sabine-Neches Waterway.

P. R., San Juan—Repairs—Spec. 4785—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans repairs to radio towers, here.

Federal Government (Continued)

BIDS DESIRED

N. Y., Ft. Tilden—Plotting Room, etc.—Feb. 10, by U. S. Engineer, 608 Army Bldg., New York, plotting and switchboard rooms, here; adv. this issue. Noted Dec. 28.

O., Cincinnati—Steel, etc—Fed. 12, at office U. S. Engineer, for structural steel, forgings, etc. for Dams 36 and 38, Ohio River; adv. this issue.

Mich., Battle Creek—Hospital—Feb. 16 by Director U. S. Veterans Bureau, at office Quartermaster-General, 2306 Munitions Bldg., Wash., D. C., for Neuro-Psychiatric Hospital at Camp Custer, here; adv. this issue. Noted Dec. 28.

CONTRACTS AWARDED

N. Y., Buffalo—Superstructure—U. S. Engineer, Federal Bldg., stone and concrete superstructure on breakwater in harbor, here, to Amer. Constr. Co., Marion Bldg., Cleveland, O., $447,609. This corrects report in Nov. 16 issue.

N. Y., Tupper Lake — Hospital — Spec. 4718—Bureau Yards & Docks, Navy Dept., Wash., D. C., for U. S. Veterans Hospital, here, to W. H. Sutherland Constr. Co., 408 Compton Bldg., St. Louis, Mo., $1,139,269. Award made on these items (5) (6a) (6c) (6d) (6e) (6f) unit prices (16a) (16b) (16c) (16d) (16e) (16f). Noted Jan. 11.

W. Va., Huntington—Power-House—U. S. Engineer, Huntington, power-house at Dam 30, Ohio River, to H. Campbell & Sons, Huntington, $32,000. Noted Dec. 7.

N. C., Wilmington—Barge—U. S. Engineer, Wilmington, one 60 ft. steel barge, to Wilmington Iron Works, Wilmington, $5,950. Noted Nov. 30.

Wash., Puget Sound—Pier Extension—Spec. 4707—Bureau Yards & Docks, Navy Dept., Wash., D. C., extension to Pier 4, here, to Henry & McFee, 208 Northern Life Bldg., Seattle, $395,173. Noted Jan. 4.

Miscellaneous

PROPOSED WORK

Motordrome — Agawam, Mass. — H. J. Perkins, Dwight St., Springfield, plans hard race track and grandstand to seat 10,000, Riverside Park, here. $100,000. Smith & Annable, 145 State St., Springfield, archts.

Snow Plows—Canandaigua, N. Y.—Bd. Supervs. Ontario Co. soon take bids 2 snow plows. $2,500. F. Russell, supervisor.

Transmission Line—Lackawanna (Buffalo, P. O.) N. Y.—See "Industrial Works."

Power Development—Watertown, N. Y.—Northern New York Utilities Inc., 58 Pub. Sq., plans development of South Edwards power site, incl. hydro-electric equipment, penstock, dam and power house. $500,000. Address W. P. Creager, Watertown, ch. engr.

Ornamental Lighting System—Erie, Pa.—Plans ornamental lighting system on Parade and Peach Sts., also extension to system on State St. $25,000. A. Crane, city electrician.

Shelters — Phila. Pa. — See "Streets & Roads."

Separating Grades — Detroit, Mich. — Grand Trunk Ry., Brush St. Terminal, signed agreement accepting city's plan for separating grades, incl. depression of tracks on 1½ mi. Dequindre St. from Jefferson Ave. to Erskine St. Bridges to be built over tracks at street crossing with width to provide for street widenings in future. $4,000,000. W. G. Robb, vice pres., in charge.

Street Sweeper—Lodi, Calif.—City Trustees plan to purchase street sweeper. $5,000. L. F. Barzellotti, city engr.

Train Sheds—San Francisco, Calif.—See "Industrial works."

Park—Santa Rosa, Calif.—Citizens subscribed $30,000 to purchase 30 acre site, to be improved for park purposes. L. Burbank, Santa Rosa, interested.

Electric Light System — Campbellville, Ont. — Voted $35,000 bonds for electric lighting and power distribution system. R. C. Menzies, clk. Noted Jan. 4.

Electric Light System—Wheatley, Ont.—Voted $35,000 for electric lighting and power distribution system. M. H. Chamberlain, clk. Noted Dec. 21.

Ferry Docks — Windsor, Ont. — Detroit Windsor Ferry Co., plans new docks, here. $500,000.

BIDS DESIRED

Bulkhead, etc.—Mineola, N. Y.—Jan. 29, by Bd. Supervs. Nassau Co., Court House, bulkhead and filling on Long Beach Rd. between Barnum Island Creek and Upland. Former bids rejected. W. F. Starks, co. engr.; adv. this issue. Noted Dec. 14.

Alterations—New York, N. Y.—Jan. 25, by Transit Comn., 49 Lafayette St., making alterations in Bway.-4th Ave. Rapid Transit R.R. structures at various locations to permit widening of streets, Agreement "CE."

Bulkhead Wall—New York, N. Y.—Jan. 22, by Comr. Docks & Ferries. Pier A, North River, concrete bulkhead wall along Harlem River driveway between 165th and 193rd Sts.

Gates Valves, etc.—New York, N. Y.—See "Waterworks."

Motor Trucks—Long Island City, N. Y.—Jan. 22, by M. E. Connolly, pres. Queens Boro. Queens Subway Bldg., furnishing and delivering twenty-one 3 to 3½ ton motor trucks. Former bids rejected. Noted Dec. 21.

Timber Jetties, etc.—Rockaway Beach (Far Rockaway, P. O.) N. Y.—Jan. 25, by Dept. Parks, Municipal Bldg., New York, timber jetties and bulkheads on ocean side of Jacob Riis Park, here.

Asphalt Plant—Butler, Pa.—City taking bids stationary asphalt plant.

Lumber—Phila., Pa.—Jan. 20, by T. F. Armstrong, purch. agt., City Hall, furnishing 80,000 ft. yellow pine lumber, various sizes from 2 x 6 in. to 12 x 12 in. $5,000.

Road Machinery — Phila., Pa. — Good Roads Machinery Co., Inc., Commercial Trust Bldg., taking bids various kinds of road building machinery.

Lumber—New Orleans, La.—Jan. 25, by Bd. Port Comrs., Suite 200, New Court Bldg., 180,000 ft. untreated yellow pine.

Sand—New Orleans, La.—Feb. 1, by Bd. Port Comrs., Suite 200, New Court Bldg., 50,000 to 70,000 cu.yd. Lake sand on barges at site of Claiborne Ave. landing, on Navigation Canal.

Lumber, etc. — Ayr, Ia. — Jan. 23, by Auditor Ringgold Co., furnishing 8 cars bridge lumber and 1 car piling. H. H. Howie, Mt. Ayr, engr.

Steel, Lumber, etc.—Charles City, Ia.—Jan. 24, by Auditor Floyd Co., furnishing 100,000 lb. reinforcing steel, 150,000 ft. lumber, 6,000 ft. cypress or white oak piling, 2,000 ft. circular culvert pipe. G. H. Elliott, Charles City, engr.

Lumber, etc.—Harlan, Ia.—Feb. 5, by Auditor Shelby Co., furnishing 15,000 ft. fir lumber, 12,000 ft. piling and 3,140 ft. corrugated culvert metal. F. W. Sarvis, Harlan, engr.

Lumber, etc.—Iowa City, Ia.—Jan. 31, by Auditor Johnson Co., furnishing 286,214 ft. lumber and 1,720 ft. piling. A. F. Fischer, co. engr.

Lumber, etc.—Montezuma, Ia.—Jan. 23, by Auditor Poweshiek Co., furnishing 5 cars, fir bridge lumber, (standard sawed) and 2 cars piling.

Lumber, etc.—Toledo, Ia.—Jan. 23, by Auditor Tama Co., furnishing 9 cars lumber and 8,000 ft. corrugated culvert metal.

Lumber, etc.—Vinton, Ia.—Feb. 7, by Auditor Benton Co., furnishing 60,000 ft. lumber and 4,420 ft. corrugated culvert metal. M. A. Hall, Vinton, engr.

Lumber, etc.—Waverly, Ia.—Feb. 7 by Auditor Bremer Co., 125,000 ft. lumber, 50,000 lb. reinforcing steel, 5,400 ft. corrugated culvert metal.

Flushers—Mankato, Minn.—Jan. 30, by city, 1 motor flusher, combined power flusher and gravity sprinkler, 2 motor tank capacity 1,000 to 1,500 gal. F. W. Bates, clk.

Screening Plant—Mora, Minn.—Feb. 7, by A. V. Sander, aud. Kanabec Co., screening plant, elevator, bin and screen. R. G. Streetly, Mora, engr.

Transmission Line—Kanorado, Kan.—Jan. 23, to vote on $25,000 bond issue for transmission line. W. R. Rollings & Co., 521 Railway Exch. Bldg., Kansas City, Mo., engrs.

Turbine, Generator, etc.—Arizona—Feb. 5, by Salt River Valley Water Users Assn., Salt River Valley Water Users Bldg., Phoenix, one 10,000 hp. turbine to operate under 160 ft. effective head, at 300 r.p.m., one 7,500 kva. generator, 25 cycle, delivering 2,300 volts, for installation in power house at Roosevelt Dam. $130,000-$140,000. H. Lawson, supt. power.

Water Pipe and Fittings—Redwood City, Calif.—Feb. 5, by City Trustees, furnishing water pipe and fittings for year.

Rock Crusher—Port Arthur, Ont.—H. A. MacKibbin, clk. McIntyre Twp., 616 Whalen Bldg., taking bids portable rock crusher handling about 100 ton rock per day, with screen and bin, also tractor, 20 hp. capacity.

Road Plows—Scarboro, Ont.—Jan. 22, by C. E. Fraser, twp. engr., Bank of Commerce Bldg., Stop 19, Kingston Rd., Toronto, 2 road plows.

Coal and Ash Handling Plant and Equipment—Toronto, Ont.—Jan. 22, by Chairman Toronto Transportation Comn., 35 Yonge St., complete coal and ash handling plant for general repair shops, Bathurst Ave. and Davenport Rd., incl. 2 rein.-con. bins, track hopper, apron feeder, coal crusher, elevator conveyor, flight conveyor, ash elevator, etc. $50,000. H. H. Couzens, 35 Yonge St., mgr.

BIDS RECEIVED

Heating and Ventilating Apparatus, etc. —New York, N. Y.—J. E. Douglass, acting pres. school buildings of Bd. Educ., Flatbush Ave. extension and Concord St., Brooklyn, opened bids Jan. 11, installing heating, ventilating and temperature regulating apparatus, in (1) P. S. 69, (2) P. S. 80, East 120th St. (3) P. S. 139, West 140th St., from W. J. Olvaney, 100 Charles St. (1) $37,806 (2) $55,358 (3) $64,236; E. Rutzler Co., 404 East 49th St., (1) $39,486 (3) $71,745; Austin Eng. Co., 124 West 24th St., (1) $40,592; D. J. Rice, 405 Lexington Ave., (2) $57,624 (3) $69,433; Philip & Paul, (2) $61,967. Noted Jan. 4.

Foundation — Sacramento, Calif. — See "Buildings."

CONTRACTS AWARDED

Steam Rollers — New York, N. Y. — J. Miller, pres. Manhattan Boro. Municipal Bldg., opened bids Jan. 10, furnishing and delivering three tandem steam rollers, from Galion Steam Wks. Mfg. Co., 50 Church St., $8,804; Buffalo Steam Roller Co., 150 Nassau St., $10,440. Noted Jan. 4.

Wood Paving Blocks—New York, N. Y.—J. Miller, pres. Manhattan Boro. Municipal Bldg., furnishing and delivering (1) 500,000 wood paving blocks (2) 80,000 gal. gasoline (3) 6,000 cu.yd. binder stone (4) 500,000 gal. refined asphalt (5) 15,000 cu.yd. asphalt wearing sand, from Amer. Creosoting Co., 17 Battery Pl., (1) $22,495; Standard Oil Co. of New York, 26 Bway., (2) $17,480 (4) $30,650; Tidewater Oil Sales Corp., 11 Bway., (2) $18,400; Calvin Tompkins Co., 30 Church St., (3) $11,340; Warner Quinlan Co., 79 Wall St., (4) $28,400; Z. Mahoney, 557 46th St., Brooklyn, (5) $15,300; J. T. Cunningham, (5) $15,525; C. W. Crane, 17 Battery Pl., (5) $16,200. Noted Jan. 4.

Coal Handling Equipment—Phila., Pa.—F. H. Caven, dir. pub. wks., City Hall, coal storage and locomotive crane, to J. B. McHugh, Jr., 402 Markoe St., $15,663.

Pipe—Kansas City, Kan.—For 225 ton 12 in. Class C B and S C I pipe to Amer. Cast Iron Pipe Co., 716 Scarrett Bldg., Kansas City, Mo., $51.10 per ton.

Navigation, etc.—Orange, Tex.—Orange Co. voted $750,000 for navigation improvements on Sabine River. E. S. McCarver, co. judge. Noted Dec. 7.

Tanks—Hominy, Okla.—Sinclair Crude Oil Purchasing Co., Sinclair Bldg., Tulsa, and New York City, fifteen 80,000 barrel tanks, plate tonnage involves 4,500 ton, to Chicago Bridge & Iron Wks., 30 Church St., New York City.

Undergrade Crossing — Oklahoma City, Okla.—Oklahoma Co. and Atchison, Topeka & Santa Fe R. R., constructing new undergrade crossing on Britton Rd., to Gamer Constr. Co., 1st Natl. Bank Bldg., $55,000.

Rock Crushing Plant—Los Angeles, Calif.—Minarock Products Co., 836 Ducommon St., will construct 74 x 230 ft. rock crushing plant, frame and corrugated iron, by day labor. A. G. Bailey, Junior Orpheum Bldg., archt.

Electric Light System—Brockville, Ont.—Voted $57,645 bonds for improving electric lighting system. G. K. Dewey, clk.

Transmission Lines—Niagara Falls, Ont.—Stamford Twp. voted $38,000 bonds for hydro electric transmission lines. T. R. Stokes, clk.

Electric Power Line—South Woodslee, Ont.—Council plans to extend electric power line from here to Bell River. $40,000. A. Wilson, 190 University Ave., Toronto, engr.

Telephone Extensions—Toronto, Ont.—Bell Telephone Co., 76 Adelaide St. W., plans to extend telephone lines, etc. $100,000. F. Kennedy, mgr.

Construction News

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Jan. 29	Buffalo, N. Y.	Jan. 18
Jan. 29	St. Paul, Minn.	Jan. 25
Jan. 30	Zephyrhills, Fla.	Jan. 11
Jan. 30	New York, N. Y.	Jan. 18
	Adv. Jan. 11 to 25.	
Jan. 30	Bunkie, La.	Jan. 18
Jan. 30	New York, N. Y.	Jan. 25
Jan. 30	Milwaukee, Wis.	Jan. 25
Feb. 1	Spokane, Wash.	Nov. 16
Feb. 6	Zelienople, Pa.	Jan. 25
	Adv. Jan. 25.	
Feb. 8	Alma, Kan.	Jan. 25
Feb. 14	Wellsville, O.	Jan. 25
	Adv. Jan. 25.	
Feb. 15	Cheney, Wash.	Jan. 18
Feb. 15	Fond du Lac, Wis.	Jan. 25

SEWERS

Jan. 29	Spring Lake, N. J.	Jan. 11
	Adv. Jan. 11 to 25.	
Jan. 29	Clover, S. C.	Jan. 18
Jan. 30	Johnson City, N. Y.	Jan. 25
Jan. 31	Baltimore, Md.	Jan. 25
Feb. 1	Van Buren, Ark.	Jan. 25
Feb. 2	Denver, Colo.	Jan. 18
Feb. 2	St. George, N. Y.	Jan. 25
Feb. 5	Spring Valley, N. Y.	Jan. 25
Feb. 6	Springwells, Mich.	Jan. 18
	Adv. Jan. 18 and 25.	
Feb. 6	Lyons, Ill.	Jan. 25
Feb. 6	Ogden, Utah	Jan. 25
Feb. 7	Pittsburg, Kan.	Jan. 25
Feb. 12	Elmhurst, Ill.	Jan. 25
Feb. 23	Portland, Ore.	Jan. 11
Mar. 12	New Castle, Pa.	Jan. 25
	Adv. Jan. 25.	

WASTE DISPOSAL

Mar. 1	Spokane, Wash.	Jan. 18

BRIDGES

Jan. 30	Ft. Dodge, Ia.	Jan. 18
Jan. 30	Marshalltown, Ia.	Jan. 18
Feb. 2	Missouri	Jan. 25
Feb. 7	Mermenton, La.	Jan. 11
Feb. 7	Appleton, Wis.	Jan. 11
	Adv. Jan. 11 to 25.	
Feb. 7	Bison, S. D.	Jan. 18
Feb. 7	Prineville, Ore.	Jan. 25
Feb. 14	Minnesota	Jan. 25
Feb. 14	New Orleans, La.	Jan. 18
	Adv. Jan. 18 and 25.	
Feb. 16	Pikeville, Ky.	Jan. 25
	Adv. Jan. 25.	
Feb. 19	Alabama	Jan. 25
Apr. 1	Wilkes-Barre, Pa.	Dec. 14
Sept. 1	Sydney, New South Wales, Australia	Aug. 3

EXCAVATION, DRAINAGE, IRRIGATION

Feb. 6	Terra Bella, Calif.	Jan. 18
Feb. 6	Muscatine, Ia.	Jan. 25
	Adv. Jan. 25.	
Feb. 6	Houston, Tex.	Jan. 25
Feb. 7	Shreveport, La.	Jan. 18
Feb. 7	Baltimore, Md.	Jan. 11
	Adv. Jan. 25.	
Feb. 15	Mankato, Minn.	Jan. 25
Mar. 1	Redwood Falls, Minn.	Jan. 25

STREETS AND ROADS

Jan. 29	Connecticut	Jan. 25
	Adv. Jan. 25.	
Jan. 29	St. George, N. Y.	Jan. 25
Jan. 30	Quebec	Dec. 28
Jan. 30	West Virginia	Jan. 11
Jan. 30	Zephyrhills, Fla.	Jan. 11
Jan. 30	Starke, Fla.	Jan. 18
Jan. 30	Indiana	Jan. 18
Jan. 30	Platte, S. D.	Jan. 18
Jan. 30	Emporia, Va.	Jan. 25
Jan. 30	Omaha, Neb.	Jan. 25
Jan. 31	Oklahoma	Jan. 25
Jan. 31	Cleveland, O.	Jan. 25
Jan. 31	Fond du Lac, Wis.	Jan. 25
Jan. 31	Silverton, Tex.	Jan. 18
Feb. 1	Duluth, Minn.	Jan. 25
Feb. 1	Michigan	Jan. 11
Feb. 1	North Carolina	Jan. 11
	Adv. Jan. 18 and 25.	
Feb. 1	Georgia	Jan. 18
Feb. 2	Missouri	Jan. 25
Feb. 2	Alabama	Jan. 11
Feb. 2	Oswego, Kan.	Jan. 18
Feb. 5	Harrisville, W. Va.	Jan. 11
Feb. 5	San Jose, Calif.	Jan. 18
Feb. 5	Williamsport, Ind.	Jan. 18
Feb. 5	Lawrenceburg, Ind.	Jan. 18
Feb. 5	Versailles, Ind.	Jan. 25
Feb. 5	Evansville, Ind.	Jan. 25
Feb. 5	Salem, Ind.	Jan. 25
Feb. 5	Red Oak, Ia.	Jan. 25
Feb. 5	San Diego, Calif.	Jan. 25
Feb. 6	Louisiana	Jan. 25
Feb. 6	Oroville, Calif.	Jan. 18
Feb. 6	Russellville, Ark.	Jan. 18
Feb. 6	St. Louis, Mo.	Jan. 18
Feb. 6	Wabash, Ind.	Jan. 18
Feb. 6	Marion, Ind.	Jan. 18
Feb. 6	Austin, Minn.	Jan. 18
Feb. 6	Duluth, Minn.	Jan. 18
Feb. 6	Mount Vernon, Ind.	Jan. 11
Feb. 6	Colfax, Ia.	Jan. 25
Feb. 6	Decatur, Ind.	Jan. 25
Feb. 6	Bloomington, Ind.	Jan. 25
Feb. 6	Princeton, Ind.	Jan. 25
Feb. 6	Austin, Minn.	Jan. 25
Feb. 6	Wilkes-Barre, Pa.	Jan. 25
Feb. 7	New York	Jan. 18
	Adv. Jan. 18 and 25.	
Feb. 7	Auburn, Ind.	Jan. 18
Feb. 7	Brookfield, Ill.	Jan. 25
Feb. 9	New Castle, Pa.	Jan. 18
Feb. 12	Ontario	Jan. 18
Feb. 12	Salem, N. J.	Jan. 25
	Adv. Jan. 25.	
Feb. 13	Atwood, Kan.	Jan. 18
Feb. 13	Tulsa, Okla.	Jan. 25
Feb. 13	Louisiana	Jan. 25
Feb. 14	Virginia	Jan. 25
	Adv. Jan. 25.	
Feb. 14	Henderson, Tex.	Jan. 25
Feb. 14	Canton, O.	Jan. 25
Feb. 14	Camden, Ark.	Jan. 25
	Adv. Jan. 25.	
Feb. 15	Salina, Kan.	Jan. 18
Feb. 19	Alabama	Jan. 25
Feb. 20	Waseca, Minn.	Jan. 25
Mar. 1	Marshall, Minn.	Jan. 25
Mar. 5	Hillsdale, Mich.	Jan. 25
	Adv. Jan. 25.	

INDUSTRIAL WORK

Jan. 30	Ft. Atkinson, Wis.	Jan. 25
Feb. 5	Shelbyville, Ill.	Jan. 11
Feb. 15	Cleveland, O.	Jan. 25

BUILDINGS

Jan. 28	Nashville, Tenn.	Jan. 25
Jan. 29	Columbus, O.	Jan. 11
Jan. 29	Oakland, Calif.	Jan. 11
Jan. 29	Wash., D. C.	Jan. 18
Jan. 29	Brooklyn, N. Y.	Jan. 25
Jan. 30	Lafaivre, Ont.	Jan. 11
Jan. 30	Wenatchee, Wash.	Jan. 11
Jan. 30	New York, N. Y.	Jan. 11
Jan. 30	Jenkinstown, Pa.	Jan. 18
Jan. 30	Ames, Ia.	Jan. 18
Jan. 30	Baltimore, Md.	Jan. 18
Jan. 30	Minneapolis, Minn.	Jan. 25
Jan. 30	Jackson, Mich.	Jan. 25
Jan. 31	Trenton Junction, N. J.	Jan. 18
Jan. 31	Groveport, O.	Jan. 11
Jan. 31	Brooklyn, N. Y.	Jan. 25
Feb. 1	St. Thomas, N. D.	Jan. 4
Feb. 1	Chicago, Ill.	Dec. 21
Feb. 1	Niagara Falls, N. Y.	Jan. 11
Feb. 1	Thiells, N. Y.	Jan. 11
Feb. 1	Kansas City, Mo.	Jan. 11
Feb. 1	Milwaukee, Wis.	Jan. 18
Feb. 1	New Orleans, La.	Jan. 18
Feb. 1	Pittsburgh, Pa.	Jan. 25
Feb. 1	Jeannette, Pa.	Jan. 25
Feb. 1	St. Paul, Minn.	Jan. 25
Feb. 2	Minneapolis, Minn.	Jan. 25
Feb. 2	Perry, N. Y.	Jan. 18
	Adv. Jan. 18 and 25.	
Feb. 5	Trenton, N. J.	Jan. 18
	Adv. Jan. 18 and 25.	
Feb. 5	Albany, N. Y.	Jan. 25
Feb. 6	West Springfield (Springfield P. O.), Mass.	Jan. 25
Feb. 6	New Prague, Minn.	Jan. 25
Feb. 6	San Antonio, Tex.	Jan. 18
Feb. 6	Toms River, N. J.	Jan. 25
	Adv. Jan. 25.	
Feb. 7	Weston, Ont.	Jan. 18
Feb. 8	Massillon, O.	Jan. 25
Feb. 9	Jamestown, N. Y.	Jan. 11
Feb. 10	Kenosha, Wis.	Jan. 4
Feb. 12	Albion, Mich.	Jan. 18
Feb. 13	Taft, Calif.	Jan. 25
Feb. 14	Marcy, N. Y.	Jan. 25
	Adv. Jan. 25.	
Feb. 14	Kings Park, N. Y.	Jan. 25
	Adv. Jan. 25.	
Feb. 15	St. Charles, Minn.	Jan. 11
Feb. 23	Jamestown, N. Y.	Jan. 11
Feb. 23	Jamestown, N. D.	Jan. 25
Mar. 1	Red Lion, Pa.	Jan. 18
Mar. 1	Denver, Colo.	Jan. 18
Mar. 15	Duluth, Minn.	Jan. 18
Mar. 15	Trenton, N. J.	Jan. 11
Mar. 23	Shreveport, La.	Nov. 9
Apr. 1	Oil City, Pa.	Jan. 18

FEDERAL GOVERNMENT WORK

Jan. 27	Barges—Florence, Ala.	Jan. 4
	Adv. Jan. 4 to 25.	
Jan. 29	Ward Building, etc.—Savannah, Ga.	Jan. 4
Jan. 29	Natatorium — Annapolis, Md.	Jan. 25
Jan. 30	Dredging Ladder — Cincinnati, O.	Jan. 4
	Adv. Jan. 4 to 25.	
Jan. 30	Barges—Nashville, Tenn.	Jan. 4
	Adv. Jan. 4 to 25.	
Jan. 30	Extension — New York, N. Y.	Jan. 11
Jan. 30	Houses—Ft. Benning, Ga.	Jan. 11
Jan. 31	Houses—Pittsburgh, Pa.	Jan. 4
	Adv. Jan. 4 to 25.	
Jan. 31	Quarters — Iona Island, N. Y.	Jan. 25
Feb. 1	Dredging—Galveston, Tex.	Jan. 4
	Adv. Jan. 4 to 25.	
Feb. 1	Well—Dona Ana, N. M.	Jan. 11
	Adv. Jan. 11 to 25.	
Feb. 6	Laboratory, etc. — Wash., D. C.	Jan. 25
Feb. 6	Stone—Wilmington, Del.	Jan. 25
	Adv. Jan. 25.	
Feb. 6	Alterations—Dawson Springs, Ky.	Jan. 25
Feb. 7	Detonator and Storehouse—Puget Sound, Wash.	Jan. 11
Feb. 7	Water Supply System — Tiburon, Calif.	Jan. 11
Feb. 7	Mechanical Equipment—Chelsea, N. Y.	Jan. 25
	Adv. Jan. 25.	
Feb. 7	Dredging—Phila., Pa.	Jan. 25
Feb. 7	Water Softening Machinery —San Diego, Calif.	Jan. 25
Feb. 8	Horses and Props—Cincinnati, O.	Jan. 11
	Adv. Jan. 11 to 25.	
Feb. 10	Plotting Room, etc. — Ft. Tilden, N. Y.	Jan. 18
	Adv. Jan. 18 and 25.	
Feb. 12	Steel, etc.—Cincinnati, O.	Jan. 18
	Adv. Jan. 18 and 25.	
Feb. 12	Generator—Florence, Ala.	Jan. 25
	Adv. Jan. 25.	
Feb. 13	Breakwater—Phila., Pa.	Jan. 25
	Adv. Jan. 18 and 25.	
Feb. 14	Sluice Gates — Boise, Idaho	Jan. 4
Feb. 15	Furnishing Stone, etc.—Crescent City, Calif.	Dec. 28
Feb. 15	Valves—Boise, Idaho	Jan. 4
Feb. 16	Hospital — Battle Creek, Mich.	Jan. 18
	Adv. Jan. 18 and 25.	
Feb. 17	Tanks—Florence, Ala.	Jan. 25
	Adv. Jan. 25.	
Feb. 19	Post Office—Nogales, Ariz.	Jan. 25
Feb. 21	Dredging—Galveston, Tex.	Jan. 11
Feb. 21	Castings, etc. — Florence, Ala.	Jan. 25
	Adv. Jan. 25.	
Feb. 24	Quarter-boat and Barges — Wilmington, Del.	Jan. 25
	Adv. Jan. 25.	
May 10	Post Office — Cordova, Alaska	Jan. 25

MISCELLANEOUS

Jan. 29	Bulkhead, etc. — Mineola, N. Y.	Jan. 18
	Adv. Jan. 18 and 25.	
Jan. 30	Flushers—Mankato, Minn.	Jan. 18
Jan. 30	Portland Cement—Milwaukee, Wis.	Jan. 25
Jan. 30	Core Borings—Phila., Pa.	Jan. 25
Jan. 31	Lumber, etc. — Iowa City, Ia.	Jan. 18
Jan. 31	Substructure for Pier and Bulkhead—Baltimore, Md.	Jan. 25
Jan. 31	Refined Asphalt, etc.—Brooklyn, N. Y.	Jan. 25
Feb. 1	Asphalt Road Oil, etc.—New York, N. Y.	Jan. 25
Feb. 1	Platform and Woodwork — New Orleans, La.	Jan. 25
Feb. 1	Sand—New Orleans, La.	Jan. 18
Feb. 1	Structural Steel—New York, N. Y.	Jan. 25
Feb. 2	Brick Paving Block, etc.—Jamestown, N. Y.	Jan. 25
Feb. 5	Water Pipe and Fittings — Redwood City, Calif.	Jan. 18

Bids Close		See Eng. News-Record
Feb. 5	Turbine, Generator, etc. — Arizona	Jan. 18
Feb. 5	Lumber, etc.—Harlan, Ia.	Jan. 18
Feb. 5	Rock Crusher, etc. — Knox, Ind.	Jan. 25
Feb. 6	Culvert Metal, etc.—Osage, Ia.	Jan. 25
Feb. 6	Lumber, etc. — Maquoketa, Ia.	Jan. 25
Feb. 6	Lumber, etc.—Clinton, Ia.	Jan. 25
Feb. 6	Tractor and Grader—Burke, S. D.	Jan. 25
Feb. 7	Screening Plant — Mora, Minn.	Jan. 18
Feb. 7	Motor Truck — Appleton, Wis.	Jan. 11
Feb. 7	Lumber, etc — Waverly, Ia.	Jan. 18
Feb. 7	Lumber, etc.—Vinton, Ia.	Jan. 18
Feb. 8	Lumber, etc.—Nevada, Ia.	Jan. 25
Feb. 15	Dry Dock Machinery—Esquimalt, B. C.	Jan. 4
Feb. 19	Brick—Wash., D. C.	Jan. 25

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Conn., Meriden—Health and Water Dept. plans filtration plant. $75,000. Engineer not selected.

W. Va., Huntington—Southern Point Oil Co., 1st Natl. Bank Bldg., plans 15 mi. pipe line and several pumping plants, near here. $100,000. L. H. Lipsey, pres.

Mich., Jackson—See "Sewers."

Mich., Monroe—Had plans prepared 1,155 ft. 6, 8, 10 and 12 in. c.i. mains in Winchester and Elm Sts. $15,000. Hoad, Decker, Shoecraft & Drury, 302 South State St., Ann Arbor, engrs.

Ill., McLeansboro—Making plans waterworks incl. impounding reservoir, rapid sand filter plant, dam, several miles pipe lines, new engines and generators. W. A. Fuller, 1917 Ry. Exch. Bldg., St. Louis, Mo., engr.

Wis., Dousman — Wisconsin Masonic Home making plans concrete reservoir, 30 ft. diameter, 10 ft. deep, elevated steel tank, 20,000 gal. capacity, also 1 story brick and concrete pump house. $20,000. Mead & Seastone State St., Madison, engrs. A. D. Koch, 120 Wisconsin St., Milwaukee, archt.

Wis., Milwaukee — City Council made following appropriations for water tunnels; $350,000 for concrete tunnel under Milwaukee River at bridge connecting Michigan and Sycamore Sts.; $25,000 for concrete tunnel under railroad tracks at North Ave.; $25,000 for concrete tunnel under railroad tracks at Vliet St. G. F. Staal, City Hall, engr.

Ia., Sutherland — Making plans waterworks. $20,000. W. E. Buell & Co., 205 Davidson Bldg., Sioux City, engrs.

Minn., Morristown — Having plans prepared and takes bids about March 1, waterworks system. $20,000. W. E. Buell & Co., 205 Davidson Bldg., Sioux City, Ia., engrs.

Neb., Davenport—Election soon to vote on $25,000 bonds for tank, tower, pumps, hydrants, valves, mains, etc. Prince-Nixon Eng. Co., 501 Peters Trust Bldg., Omaha, engrs.

Mo., Holden—Plans improvements to water system, incl. rebuilding present dam, increasing water supply, modern water filtration plant, new pumping station, mains and new elevated tower. **Benham Eng. Co.**, 512 Gumbel Bldg., Kansas City, engrs.

Tex., Beaumont — Soon takes bids 2 pump stations one in South Park Pl. and other French Pl. $30,000. W. L. Fulwilder, city engr.

Okla., Pauls Valley — Voted $188,000 bonds for water purification plant, pumping station and water extensions, and $53,000 bonds for power plant equipment. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs. Noted Dec. 28.

Wash., Riverside — Riverside Irrigation Dist. voted $450,000 bonds and plans irrigating 4,000 acres land by pumping run by hydro electric power developed at Okanogan River, McLaughlin Canyon, 2,800-3,000 hp. pumps, 30 ft.-100 ft. lift. N. Aall, Riverside, engr. Noted Jan. 18.

Calif., Antioch—Having plans prepared improving waterworks, incl. 500,000 gal. rein.-con. setling basin, 100,000 coagulation basin, c.i. outside piping, repairing present filtration system and installing 2 pumps. C. F. Smith, 7 Nottingham St., Berkeley, engr.

Ont., Paisley—Plans to improve and extend waterworks system. J. C. Gibson, chn. com.

Ont., Tecumseh—Plans to install filter system in waterworks plant, probably mechanical filters. $6,000. E. Dugal, town clk.

BIDS DESIRED

N. Y., New York—Jan. 30, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in West 133rd St., Central Park W, Amsterdam and 5th Aves. and Central Park.

Pa., Zellenople—Feb. 6, by Boro Council, water filtration plant. Hudson & Myron, 808 Wabash Bldg., Pittsburgh, engrs.; adv. this issue.

O., Wellsville—Feb. 14, at office of T. R. Snowden, Dir. Pub. Serv., earthen reservoir and gravity pipe lines connecting with city water works distribution system. W. J. Sherman Co., 302 Produce Exchange Bldg., Toledo, engrs.; adv. this issue.

Ill., Lyons—See "Sewers."

Wis., Fond du Lac—Feb. 15, by Water Dept., furnishing and erecting one 5 or 6,000,000 gal. pump in pumping station. J. J. Breister, supt. Private plans.

Wis., Milwaukee—Jan. 30, at office Central Bd. Purchases, three 42 in. Venturi tube meters, complete with 3 suitable register indicating-recording devices; 6 hydraulically operated 42 in. valves. G. Staal, city engr.

Kan., Alma—Feb. 8, water system incl., 30,360 ft. 2-6 in. c.i. pipe, thirty-five 4 in. hydrants 4-6 in. shoe, twenty 2-6 in. gate valves and boxes, 50,000 gal. 15 x 25 ft. circular concrete reservoir alternate bid on 50,000 gal. 40 ft. steel stand pipe, concrete curbed well, pump house and 125 g.p.m. triples motor driven pump, alternate bid on 125 g.p.m. centrifugal pump and motor; sewer system incl. 22,141 ft. 8-12 in. vitr. pipe, 13 flush tanks, appurtenances, Imhoff tank, sludge bed, dosing chamber, filter beds, etc. E. T. Archer & Co., New England Bldg., Kansas City, Mo., engrs. Noted Dec. 7.

Minn., St. Paul—Jan. 29, by H. W. Austin, city purch. agt., disc type water meters as follows: one thousand ⅝ in. with couplings, two thousand ¾ in. with spuds, couplings and connections, fifteen 1 in. with 1¼ in. meter size spuds and couplings, fifty 1½ in. with couplings, fifty 2 in. with couplings five 42 in., two 36 in., fourteen 30 in. and one 24 in. hand-operated gate valves; special castings; one 12,000 gal. steel gasoline tank, incl. pump and hoses. G. M. Shepard, city engr.

Tex., Highland Park—Taking bids main extension, well, pump equipment, etc. $125,000 bonds voted. Meyers & Noyes, Dallas Co. State Bank, Dallas, engrs. Noted Dec. 28.

Okla., Oklahoma City—J. H. Patterson, purch. agt., receiving bids 320 ton c.i. pipe for city waterworks.

N. M., Artesia—See "Sewers."

BIDS RECEIVED

N. Y., New York—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., opened bids Jan. 16, mains in Ave. A, 1st and 2nd Aves., East 42nd, East 51st, East 62nd, East 69th, East 74th, East 78 and East 81st Sts., from Beaver Eng. & Contg. Co., 57 Chamber St., $134,738; Paladino Contg. Co., 437 East 120th St., $169,000; F. L. Paino, 572 1st St., Brooklyn, $175,000. Noted Jan. 11.

O., Akron—Furnishing (1) c.i. pipe and (2) special fittings from Natl. Cast Iron Pipe & Fdry. Co., 122 South Michigan Ave., Chicago, (1) $24,418, (2) $4,514; Hammond Byed Iron Co., Anniston, Ala., (1) $23,398, (2) $4,929; U. S. Cast Iron Pipe & Fdry. Co., 122 South Michigan Ave., Chicago, (1) $24,859, (2) $4,978. Noted Dec. 14.

O., Cleveland—Opened bids Jan. 12 at office of Commissioner Purchases & Supplies, City Hall, constructing 2 concrete intake tunnels, 500 ft., 10,300 cu.ft. cement grout, 28,000 sq.ft. steel sheet piling, 110,000 lb. reinforcing, etc., from P. F. Connolly Co., Commonwealth Bldg., $221,153; Stange and Walsh, Baldwin Rd., $278,000, Hunkin-Conkey Constr. Co., Century Bldg., $302,000. Noted Dec. 21.

Calif., Blythe—Palo Verde D. D., opened bids constructing portion of drainage system, (1) 2,400 ft. piling (2) 97,000 ft. lumber (3) 900 ft. flume (4) 200 ft. culvert (5) 120 yd. concrete (6) 1,500 ft. paving (7) 2,250 lb. steel (8) 540,000 yd. excav., from P. B. Engh, Pacific Electric Bldg., Los Angeles, (1) $1.50 (2) $105, (3) $4.75 (4) $46.50 (5) $35 (6) $0.40 (7) $0.08 (8) $0.14; T. Maddock, 306 East McDowell Rd., Phoenix, Ariz., (1) $1.25 (2) $90 (3) $6.50 (4) $9.50 (5) $30 (6) $0.35 (7) $0.07 (8) $0.194; C. Thompson, Blythe, (1) $1 (2) $115 (3) $4.17 (4) $7.60 (5) [illegible] (6) $0.16 (7) $0.06 (8) $0.165; Foley Bros. & Foley Monrovia, (1) $3.25 (2) $100 (3) $5.[illegible] $14 (5) $45 (6) $0.65 (7) $0.11 (8) $0.152

CONTRACTS AWARDED

La., Houma—Mayor and Bd. Aldermen, waterworks system incl. structure, pipe laying, filtration plant and power house, to Merkel Constr. Co., 1733 Walnut St., Kansas City, Mo., $110,000, two 300 hp. crude oil engines, with electrical equipment, to McIntosh-Seymour Corp., Auburn, N. Y., $55,200. Noted Nov. 23.

Wis., Ft. Atkinson—Improvements and additions to waterworks system, to Harris Air Pipe Co., 832 South Dearborn St., Chicago. Engrs. est. $15,000.

S. D., Rapids City—Waterworks reservoir, Contr. 1, to Concrete Eng. Co., Rapid City, $37,752; laying pipe, Contr. 2, to A. A. Dobson Co., 809 First Natl. Bank Bldg., Lincoln, Neb., $26,753; c.i. pipe, Contr. 3, to DuLamel Co., Rapid City, $89,505; lead and jute, Contr. 4, and hydrants and valves, Contr. 5, to Hendrie & Bolthoff Co., 1639 17th St., Denver, Colo., $6,119 and $6,354 respectively. Noted Dec. 21.

Tex., Hamilton — Water reservoir incl. 50,000 cu.yd. earth fill, 300 cu.yd. mass concrete 1,000 cu.yd. rubble masonry, to D. F. Brooks, Denison, $27,434. Engrs. est. $25,000.

Okla., Ponca City—Furnishing and erecting 500,000 gal. water tank and tower, to Chicago Bridge & Iron Wks., 608 South Dearborn St., Chicago, Ill. Noted Nov. 23.

Sewers

PROPOSED WORK

N. Y., Brighton—Towns of Brighton and Pittsford having plans prepared 40 mi. sewers and sewage disposal plant. $1,265,000. W. S. Lozier, 321 Cutler Bldg., Rochester, engr.

N. Y., Buffalo—See "Miscellaneous."

N. Y., Jamestown—See "Miscellaneous."

N. J., Trenton—Soon takes bids sewage disposal plant. $1,250,000. G. A. Johnson, 150 Nassau St., New York City, engr. Noted Nov. 16.

Mich., Jackson—Having plans prepared for sewage disposal plant, intercepting relief sewers and water systems: $350,000. Hoad, Decker, Shoecraft & Drury, 302 South State St., Ann Arbor, engrs.

Wis., Milwaukee—Sewerage Comn., 508 Market St., making plans outfall to main sewage disposal plant, incl. 160 ft. rein.-con. tunnel on pile foundation; 200 x 225 ft. filter house, 60 ft. high, 120 x 180 ft. dryer house, 50 ft. high, 73 x 104 ft. fire screen house, 50 ft. high, filter house and fire screen house to be equipped with traveling cranes, all to be brick, concrete and steel, in connection with sewage disposal plant on Jones Island. T. C. Hatton, 508 Market St., ch. engr.

Wis., Milwaukee—Plans to expend $1,700,000 for extensions to sewers throughout city. G. F. Staal, City Hall, engr.

Wis., Woodville—Making plans sanitary sewerage system. $30,000. Druar & Milinowski, 500 Globe Bldg., St. Paul, Minn., engrs.

Ia., Clinton — Making plans and will probably take bids about Feb. 15, for sewer extensions. $40,000. B. R. Anderson, city engr.

Ia., Sutherland—Making plans sewerage system and disposal plant. $30,000. W. E. Buell & Co., 205 Davidson Bldg., Sioux City, engrs.

Minn., Morristown—Having plans prepared and takes bids about March 1, sanitary sewerage system and disposal plant. $35,000. W. E. Buell & Co., 205 Davidson Bldg., Sioux City, Ia., engrs.

Kan., Lakin—Defeated $33,000 bond issue for new sewerage system. Another election to be called later. E. T. Archer & Co., 609 New England Bldg., Kansas City, Mo., archts.

Ark., Camden—See "Streets and Roads."

Tex., Brownsville — City Comn. soon takes bids complete sewage disposal plant. $75,000. H. E. Snow, city engr.

Okla., Roosevelt — V. V. Long & Co., engrs., 1300 Colcord Bldg., Oklahoma City, submitted report recommending improvements, incl. new water supply and raising dam. $37,000.

Calif., Hollister—Having plans prepared sewage disposal plant. $25,000. C. F. Smith, 7 Nottingham St., Berkeley, engr.

Que., Montreal—Plans 290 ft. brick outlet, 6 ft. diam., for Nicolet St. Sewer. $32,000. H. A. Tetreault, chn. pub. wks.

Ont., Galt—Plans sanitary sewer in Forbes St. and Waterloo Ave., $22,165, sanitary and storm sewer in Elgin St., $3,745. Work involves about 9,000 ft. 8 in. vitr. pipe. D. T. Black, city engr.

Sewers (Continued)

Ont., Sandwich—Having plans prepared sewage disposal plant. $150,000. McMoll & Patterson, Gas Bldg., Windsor, engrs.

BIDS DESIRED

N. Y., Johnson City—Jan. 30, by Bd. Trustees, W. C. Lewis, clk., sewers in Lester, Rutland, and Downs Aves., Stella, Rogers, Morton, Martha and Hiram Sts. $25,000.

N. Y., Spring Valley—Feb. 5, by City Clerk, 15 mi. sewers and disposal plant. $200,000. W. S. Coulter, 114 Liberty St., New York City, engr. Noted Aug. 17.

N. Y., St. George—Feb. 2, by J. A. Lynch, pres. Richmond Boro, Boro Hall, sanitary sewer in Duer Lane from Forest to Woodstock Aves., Woodstock Ave. from Duer Lane to Castleton Ave.; extending existing sewers in Forest Ave. and Silver Lake Rd. to proposed sewer in Duer Lane, 40 ft. long.

Pa., New Castle—March 12, at office C. E. Brown, city clk., extending main sewer in 7th Ward. Fuller & McClintock, 170 Bway., New York City, consult. engrs.; adv. this issue.

Md., Baltimore—Jan. 31, by Bd. of Awards, City Hall, sanitary sewers in Dist. G-14, Sanitary Contr. 196, 22,491 lin.ft. 8-18 in. vitr. pipe, 12,984 lin.ft. house connections, 106 manholes, Dist. 11, Sanitary Contr. 197, 14,162 lin.ft. 8-24 in. vitr. pipe, 5,686 lin.ft. house connections, 88 manholes. C. F. Goob, City Hall, highways engr.

Ill., Elmhurst—Feb. 12, for sewers and disposal plant. $150,000. E. Hancock, 2047 Ogden Ave., Chicago, engr. Noted Oct. 19.

Ill., Lyons—Feb. 6, for sewer and waterworks extensions. $110,000. E. Hancock, 2047 Ogden Ave., Chicago, engr. Noted Dec. 28.

Kan., Alma—See "Waterworks."

Kan., Pittsburgh — Feb. 7, intercepting sewers, sewage pumping station and sewage disposal works, incl. 3,720 ft. 6-18 in. vitr. pipe, 8,150 cu.yd. excav. for sewage disposal works, 22,932 ft. 8 in. split tile underdrains in sprinkling filter, 10,500 cu. yd. crushed stone filtering material in sprinkling and sludge filters, etc. Black & Veatch, Mutual Bldg., Kansas City, Mo., engrs. Noted Dec. 7.

Ark., Van Buren—Feb. 1, at office of C. M. Wofford, secy., Bd. Impvt., Sewere Dist. 4, sanitary sewerage system incl. 23,990 ft. 6-12 in. vitr. pipe, excavating and refilling 8,870 ft. trench less than 4 ft. deep, 10,870 ft. 4-6 ft., 2,520 ft. 6-8 ft., 1,280 ft. 8-10 ft., 350 ft. 10-12 ft., 100 ft. 12-14 ft., 1,500 cu.yd. rock excav. in trench, 39 manholes, 9 cleanouts and 28 lamp holes. W. L. Winters, Ft. Smith, engr.

Okla., Tulsa—See "Streets & Roads."

N. Mex., Artesia — Jan. 30, sanitary sewerage system, improving water distributing system and paving 6 blocks on Main St., incl. 21,326 ft. cut from 0-6 ft., 7,222 ft. 6-8 ft., 9,710 ft. 8-10 ft. and 385 ft. 10-12 ft., 11,476 lin.ft. 6 in., 21,012 ft. 8 in., 2,475 ft. 10 in., and 3,656 ft. 12 in. vitr. pipe, 10 flush tanks, 99 manholes, 990 ft. ¾ in. galvinized w.i. pipe, disposal plant with septic tank, sludge bed, grit retainer, etc.; 1,025 ft. 6 in. and 6,970 ft. 4 in. c.i. water mains, 3,675 lb. c.i. specials, etc.; 13,742 sq.yd. 6 in. plain concrete paving, 2,290 cu.yd. excav., 13,742 sq.yd. finishing and rolling, 3,135 ft. 6 in. concrete curb, etc. E. Stone, clk. E. T. Archer & Co., New England Bldg., Kansas City, Mo., engrs.

Utah, Ogden—Feb. 6, by City Comn., sanitary sewers in Dist. 147, 8-12 in. vitr. clay pipe. $50,000. W. S. Craven, city engr. Noted Jan. 4.

BIDS RECEIVED

N. Y., Buffalo—Comr. Pub. Wks., 5 and 4½ ft. sewer in 2,500 ft. Starin Ave., from Dark & Co., 654 Main St., amco block $51,-226; Y. M. Fahning, 460 Leroy Ave., amco block, $52,000, Empire Eng. Co., River Rd. and East Ave., North Tonawanda, amco block, $61,000, rein.-con. pipe, $61,000. Noted Jan. 4.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., opened bids Jan. 16, storm water sewer and appurtenances in 25th St., etc., from F. L. Paino, 572 1st St., Brooklyn, $589,855; Necaro Co. Inc., 97 Court St., Brooklyn, $710,282; Awixa Corp., $711,680. Noted Jan. 11.

Mich., Detroit—Opened bids (1) 7,263 ft. Butternut St. Arm Clark Ave. Sewer, (2) 6,813 ft. Buchanan Ave. Arm Clark Ave. Sewer, both brick, monolithic concrete or segment block, from J. A. Mercier, 216 Hammond Bldg., (1) $190,324 (2) $202,-471; J. Porath, 745 Griswold St., (1) $256,-510; W. Blanck & Co., 823 Ford Bldg., (1) $257,027; G. R. Cooke, 1260 Penobscot Bldg., (2) $194,449; Jeynes & Affeld, 1208 Ford Bldg., (2) $227,386. Noted Jan. 11.

CONTRACTS AWARDED

Fla., Sanford — Sanitary and storm sewers, vitr. clay and segmental block, to Donahoo & Guest, Sanford, $26,524. Noted Dec. 7.

Okla., Oklahoma City—For 13,000 ft. 15-72 in. sewers, to Municipal Excavator Co., 200 East Main St., $41,656.

Waste Disposal

PROPOSED WORK

Pa., Allentown—M. W. Grosse, mayor, rejected bids received Dec. 18, garbage incinerator. $100,000. H. F. Bascom, city engr. Noted Dec. 28.

Bridges

PROPOSED WORK

Md., Mount Washington (Baltimore P. O.)—Mayor and City Council of Baltimore plan ornamental bridges, Southern Ave., here. C. F. Goob, City Hall, highway engr.

Fla., Sebring—Highlands Co. plans election to vote on $50,000 bonds for steel span bridge. W. C. Peacock, Sebring, engr. Noted Oct. 12.

Tenn., Chattanooga—City, Hamilton Co. and State having surveys made concrete and steel viaduct, concrete foundation, over Southern R.R. tracks, East 11th St. to Highland Park. $175,000-$200,000. R. Hooke, city engr.

Tennessee—State Hy. Dept., Nashville, plans concrete and steel span bridge, over Turnbull Creek, Cheatham Co. $25,000 or $30,000. D. Q. McComb, Nashville, ch. engr.

Wisconsin—State Hy. Comn., Madison, takes bids about March 1, for Madison Street Bridge, in Eau Claire, to have one 130 ft., two 120 ft. and two 115 ft. spans, 36 ft. roadway and two 8 ft. sidewalks. $240,000. W. C. Buetow, Madison, bridge engr.

Wis., Ladysmith — See "Streets and Roads."

Wis., Wausau — Making plans 210 ft. rein.-con. bridge, on West Washington St. over the slough, concrete piers and abutments, concrete pavement, also 2 concrete retaining walls, 100 ft. and 80 ft. long, 16 ft. high and 4 ft. at bottom. $50,000. B. C. Gowen, City Hall, engr.

Tex., Bellville—See "Streets and Roads."

Mo., St. Joseph — Having preliminary plans prepared 330 ft. rein.-con. and steel viaduct across 6th St. W. K. Seitz, city engr.

Wash., Easton—Kittitas Co. (Ellensburg) having plans prepared bridge over Yakima River, here. $25,000-$30,000. Address County Engineer, Ellensburg.

Wash., Yakima—City and Yakima Co. having plans prepared and takes bids in spring, 400 ft. viaduct over tracks of Northern Pacific R.R. and Oregon, Washington R.R. & Navigation Co., on Lennox Ave. $27,000. C. F. Wilson, City Hall, city engr. O. E. Brashears, Courthouse, co. engr.

California — Rodeo — Vallejo Ferry Co., foot of Hyde St., San Francisco, plans 3,200 ft. suspension bridge, 135 ft. above water line, over Carquinez Straits, from Contra Costa Co. (Martinez) and Solano Co. (Fairfield). $5,000,000. O. J. Hanford, O. Klatt and H. Steas, dirs.

BIDS DESIRED

Connecticut—See "Streets and Roads."

Virgina—See "Streets and Roads."

Alabama — Feb. 19, by W. S. Keller, state highway engr., Montgomery, 511 ft. bridges on Centerville-Woodstock Rd., Bibb Co., one 80 ft. arch, remainder deck girder type concrete bridges, 1,316 cu.yd. concrete, 26,360 lb. structural and 182,994 lb. reinforcing steel, 368 cu.yd. wet, 254 cu.yd. dry and 335 cu.yd. rock excav., etc.; 716 ft. bridges over Patsaliga Creek, on Mt. Pleasant-Brantley Rd., Crenshaw Co., one 120 ft. steel span on concrete piers, remainder treated timber on treated timber piles, 213 cu.yd. concrete, 5,360 lb. reinforcing, 13,657 lin.ft. treated timber piles, 640 lin.ft. untreated timber foundation piles, 1,432 sq.yd. 1½ in. cold mix bituminous surfacing. Noted Jan. 18.

Ky., Pikeville—Feb. 16, by Fiscal Court of Pike Co., highway bridge across Tug Fork of Big Sandy River, near Edgarton, W. Va., and Freeburn, Ky. J. S. Bentley, co. road engr.; adv. this issue.

Minnesota—Feb. 14, by State Hy. Dept., St. Paul, Bridge 3753 on State Project 1-33, steel girder, 580 ft., in Northfield, Rice Co., $30,000; Bridge 3886, State Project 3-37, Federal Aid Project 239, 162 ft., steel girder, in Kellog, $20,000; Bridge 3940, State Project 1-39, 230 ft. steel and rein.-con., over Chicago, Rock Island & Pacific R.R. tracks, in Owatonna, Steele Co., $25,000. J. T. Ellison, ch. bridge engr., 1246 University Ave., St. Paul. Noted Nov. 23.

Missouri — Feb. 2, by State Highway Dept., Jefferson City, five 30 ft. I beam spans, 20 ft. roadway over Squaw Creek on Sta. 549 plus 87, on road from Mound City to Rock Port, State Project Route 1, Sect. 13, Holt Co.; one 120 ft., two 76 ft. steel spans, fourteen 25 ft. I beam spans, 2 rein.-con. piers, over Castor River Diversion Channel, on Sta. 738 plus 00, on road from Marble Hill to Advance, State Route 51, Sect. 24, Bollinger Co.; three 30 ft. I beam spans, and one 70 ft. steel truss span, 20 ft. roadway, over drainage ditches, on road from Hayti to Arkansas state line, State Project 9, Sects. 149 and 151, Pemiscot Co.; one 40 ft. rein.-con. deck girder span, one 50 ft. steel truss span, and one 20 ft. rein.-con. slab span, 6 rein.-con. abutments, 20 ft. roadway over Stahl Creek, on road from Phelps to Halltown, Route 14, Sect. 7, Lawrence Co.; one 80 ft. steel truss span, four 20 ft. rein.-con slab spans, 2 concrete piers, 20 ft. roadway over Palmer Creek, on Sta. 194 plus 70, on road from Brunswick to Keytesville, State Project Route 10, Sect. 24, Chariton Co.; one 140 ft. steel truss span, 2 rein.-con. abutments, 20 ft. roadway, over North Fork of South Robins River, on Sta. 575 plus 00, on road from Edina to Memphis, State Project Route 15, Sect. 11, Knox Co.; one 40 ft. rein.-con. deck girder span, 2 rein.-con. abutments, 20 ft. roadway, over Butte Creek, on Sta. 568 plus 00, on road from Steelville to Cherryville, State Project Route 19, Sect. 4, Crawford Co.; one 80 ft. steel truss span, 2 rein.-con. abutments, 20 ft. roadway, over Bear Creek, on Sta. 564 plus 00, on road from Springfield to St. Louis, State Project Route 13, Sect. 36, Laclede Co.; one 50 ft. steel truss span, 2 rein.-con. abutments and 2 rein.-con. piers, over Dry Fork Stahl Creek, on Sta. 448 plus 30, on road from Phelps to Halltown, State Project Route 14, Sect. 6, Lawrence Co.; one 30 ft. rein.-con. deck girder span, 2 rein.-con. abutments, 20 ft. roadway, over Little Bear Creek, on Sta. 438 plus 60, on road from Springfield to St. Louis, State Project 14, Sect. 36, Laclede Co.; one 60 ft. steel truss span, 2 rein.-con. abutments, 20 ft. roadway, over Hubble Creek, on Sta. 8 plus 20, on road from Piedmont to Bollinger Co. line, State Project Route 34, Sect. 13, Wayne Co.; five 80 ft. spandrel filled spans, 4 rein.-con. abutments, 4 concrete piers, 1,665 cu.yd. concrete surfacing, over Roubidoux Creek, on Sta. 861 plus 35, on road from St. Louis to Springfield, State Project Route 14, Sect. 42, Pulaski Co.; one 100 ft. steel truss span, 2 rein.-con. abutments, 20 ft. roadway, over Salt Creek on Sta. 390 plus 00, on road from Malta Bend to Marshall, State Project Route 20, Sect. 22, Saline Co.; one 60 ft. steel truss span, 2 rein.-con. abutments, 20 ft. roadway, on Sta. 273 plus 55, over Crooked Creek, on road from Troy to Wentzville, State Project Route 9, Sect. 24, Lincoln Co.; one 60 ft., one 160 ft. and one 80 ft. steel truss spans, 2 rein.-con. abutments, 20 ft. roadway over Grand-Glaize River, on Sta. 145 plus 00, on road from Jefferson to Linn Creek, State Project Route 15, Sect. 63, Camden Co.; four 30 ft. rein.-con. deck girder spans, 2 rein.-con. abutments, 3 rein.-con. piers, 20 ft. roadway, over Cowskin Creek, on Sta. 836 plus 00, on road from Ozark to Ava, State Project Route 40, Sect. 20, Douglas Co.; one 100 ft. steel truss span, 2 rein.-con. abutments, 20 ft. roadway, over North Cut Drainage Ditch, on Sta. 556 plus 45, on road from Benton to Charleston, State Project Route 55, Sect. 6, Scott Co.; one 20 ft. rein.-con. slab span, 2 rein.-con. abutments, 20 ft. roadway, over Peters Creek, on Sta. 92 plus 45, on road from Piedmont to Bollinger Co. line, State Project Route 34, Sect. 13, Wayne Co.; ten 40 ft., and twelve 20 ft. I beam spans, one 140 ft., one 100 ft. and two 50 ft. steel truss spans, one 20 ft. rein.-con. slab span, over Grand River, on road from Stanberry to Albany, State Project Route 4, Sect. 18, Gentry Co. B. H. Piepmeier, ch. engr.

Ore., Prineville—Feb. 7, by County Court Crook Co., for steel bridge across Crooked River, on Market Rd. 6, approximately 50 mi. from here. A. W. Battle, clk.

BIDS RECEIVED

Missouri—State Hy. Dept. at div. office Carrollton and Lexington, one 20 ft. steel beam, one 82 ft. and one 80 ft. steel girder, one 145 ft. deck truss, two 420 ft. and three 255 ft. steel truss spans, 2 concrete abutments, 6 rein.-con. piers, etc., over Missouri River, on road from Carrollton to Lexington, Federal Aid Project 220, Carroll and Lafayette Counties, (1) substructure (2) superstructure (3) furnishing material for superstructure, from Missouri Valley Bridge & Iron Co., 4th and Walnut Sts., Leavenworth, Kan., (1) $252,879; Kansas City Bridge Co., 510 Orear-Leslie

Bridges (Continued)

Bldg., Kansas City. (1) $307,483 (2) $162,-692 (3) $207,252; Foundation Co., 209 South La Salle St., Chicago. (1) $307,851; Wisconsin Bridge & Iron Co., North Milwaukee, Wis., (2) $88,378 (3) $190,695; Mt. Vernon Bridge Co., Mt. Vernon, O., (2) $133,477 (3) $194,558. Noted Oct. 19.

Missouri—State Hy. Dept. at div. offices Marshall and Fayette, opened bids Dec. 16, thirty-five 20 ft. and one 36 ft. timber, one 248 ft., two 316 ft., one 224 ft. and one 344 ft. steel truss spans, 6 rein.-con. piers, 20 ft. roadway, etc., over Missouri River, on road through Saline and Howard Counties. (1) substructure (2) superstructure, from Union Bridge & Constr. Co., 903 Sharp Bldg., Kansas City, (1) $297,003; Kansas City Bridge Co., 510 Orear-Leslie Bldg., Kansas City, (1) $304,208 (2) $334,-175; Missouri Valley Bridge & Iron Co., 4th and Walnut Sts., Leavenworth, Kan., (1) $304,290; Mt. Vernon Bridge Co., Mt. Vernon, O., (2) $269,310. Noted Nov. 30.

CONTRACTS AWARDED

Tenn., Clarksville — State Hy. Dept., Nashville, 752 ft. bridge over Cumberland River, here, 13 spans, 4 river piers, to Gould Contg. Co., 1214 Independent Life Bldg., Nashville. Engrs. est. $200,000.

Tenn., Nashville—Meridian St. Viaduct, concrete work, to Foster & Creighton, 4th and 1st Natl. Bank Bldg., $206,000; Church St. Viaduct, concrete and concrete and steel truss, to Gould Contg. Co., 1214 Independent Life Bldg., $200,000. Noted Oct. 19.

Missouri—See "Streets and Roads."

Missouri—State Hy. Dept. at div. office Fredericktown, one 35 ft. rein.-con. deck girder, two 50 ft. and one 140 ft. steel truss spans, 20 ft. roadways, concrete abutments, on road from Fredericktown westward, Federal Aid Project 203A, Madison Co., to M. E. Gillioz, Monett, $44,434.

Missouri—State Hy. Dept. Jefferson City, four 60 ft. steel truss, one 50 ft. steel I-Beam, one 50 ft. I-Beam and two 80 ft. skewed steel truss spans, on road from Charleston to Wolf Island, Federal Aid Project 198B, Mississippi Co., to R. F. Williams, Wyatt, $50,166. Noted Jan. 11.

Missouri—State Hy. Dept., at div. office Marble Hill, deck girder and steel truss bridge on road from Marble Hill to Patton, Federal Aid Project 202 A, Bollinger Co., to C. P. O'Reilley & Co., Wainwright Bldg., St. Louis, $38,041. Noted Jan. 11.

Missouri—State Hy. Dept. at div. office Neosho, one 30 ft. rein.-con. deck girder, one 80 ft. and two 50 ft. steel truss and four 20 ft. rein.-con. slab spans, 20 ft. roadways, concrete substructures, on road from Neosho to Granby, Federal Aid Project 155, Newton Co., to Concrete Steel Constr. Co., 214-223 West 3rd St., Joplin, $28,114. Noted Jan. 11.

Missouri—State Hy. Dept. at div. office Platte City, one 70 ft. and one 30 ft. rein.-con. arch span-spandrel filled, 20 ft. and 34 ft. roadways respectively, on road from Parkville southeasterly, Federal Aid Project 48B, Platte Co., to T. A. Woods Constr. Co., Smithville, $26,239. Noted Jan. 11.

Calif., Redwood City—See "Miscellaneous."

Ont., Prairie Siding—Kent Co., bridge, to Strauss Bascule Bridge Co., 225 North Michigan Ave., Chicago, Ill. $150,000. Noted Dec. 28.

Dams

PROPOSED WORK

Wis., Brokaw—Wausau Paper Mills Co. making plans 500 ft. rein.-con. dam, 16 ft. head, 11 steel tainter gates, gate hoist and earth fill. $25,000. L. A. De Guere, Wisconsin Rapids, engr.

Mo., Holden—See "Waterworks."

Wash., Walla Walla—D. L. Callierate, Burbank, engr., preparing plans and takes bids in Spring temporary removable wing dam on Snake River at Five Mile, for Snake River Irrigation Dist. $42,000. Noted Jan. 18.

Railways

PROPOSED WORK

Massachusetts — See "Buildings" under Springfield.

New York—Elmira Water, Light & R.R. Co., Elmira, plans double track on South Main St. and Pennsylvania Ave. lines. $25,000.

Pennsylvania—Buffalo & Lake Erie Traction Co. having preliminary plans made for extending car line on State St. to Cooper Rd., Erie and east on Cooper Rd. to Wesleyville, to exceed $150,000. A. Meyers, genl. mgr. in charge.

Excavation, Drainage, Irrigation

PROPOSED WORK

N. C., Winston—Salem-Forsyth Co. D. D. No. 2, takes bids in about 30 days, 14 mi. ditching, floating dredge can be used. $70,000. W. D. Alexander, 207 Monroe Rd., Charlotte, engr.

Wis., Manawa — Waupaca Co. Farm Drainage Bd., making plans 4 mi. open ditch drainage and tile drainage in D. D. 8. $25,000. L. M. Schindler, 721 Clark St., Appleton, engr.

Calif., Alpaugh—Alpaugh Irrigation Dist. plans election to vote on $85,000 bonds, concrete lining main canal and laterals, also other improvements.

BIDS DESIRED

Ia., Muscatine—Feb. 6, by F. W. Johnston, aud. Muscatine Co. for Bd. Supervs. Muscatine Co. for ditch improvements in Sub Dists. 1 and 3 of D. D. 2. C. H. Young, Central States Eng. Co., ch. engr.; adv. this issue.

Minn., Mankato—Feb. 15, by C. L. Kennedy, aud. Blue Earth Co., Judicial Ditch 36, 11,200 lin.ft. open ditch, 155,930 cu.yd. excav., 141,855 lin.ft. 6-34 in. tile, $151,930; Judicial Ditch 40, 31,145 lin.ft. 8-27 in. tile, $27,917; Judicial Ditch 43, 28,950 lin.ft. 8-32 in. tile, $25,578; Judicial Ditch 45, 47,100 lin.ft. 8-30 in. tile, $38,250. P. F. Comstock, Mankato, engr.

Minn., Redwood Falls—March 1, by L. P. Larson, aud. Redwood Co., County Ditch 52, 182,570 lin.ft. 6-36 in. tile. $133,000. B. J. Reynolds, Redwood Falls, engr.

Tex., Houston—Feb. 6, by F. E. Ebersole, Court House, comr. D. D. 4, Harris Co., ditchwork between Strang and La Porte. To exceed $25,000. Howe & Wise, First Natl. Bank, engrs.

Tex., Houston—Houston Port Dist. taking bids and opens same about Feb. 1, dredging ship channel Hunting Bayou to Clinton. 30 ft. C. Crotty, asst. port dir. J. C. McVea, city engr.

Streets and Roads

PROPOSED WORK

Conn., Meriden—Having plans prepared resurfacing North Colony St. and Cooke Ave., asphalt on present concrete. $25,000. C. P. Prann, city engr.

New York—H. S. Sisson, comr. State Hy. Dept., Albany, received no bids Jan. 12, reconstructing 1.5 mi. Repair Constr. 3047 Highway 541 Mayfield-Northville, Part 2, Fulton Co. $48,284. Noted Jan. 4.

Pa., Corry—Plans paving Mott St., and repaving West Washington St. $25,000. Engineer not announced.

Pa., Erie—Takes bids in February or March asphalt pavement on State St. from Cooper Rd. to 41st St. $49,700. F. G. Lynch, city engr.

Pa., Mercer—Mercer Co. plans 1 mi. concrete on Freebles Corners-Stambaugh Ave. Rd. $40,000. F. Graham, Grove City, co. engr.

N. C., Greenville—Pitt Co. plans paving with concrete or some other type of hard surface, 6.4 mi. road from Section House north of House Sta. to Stokes. $180,000. J. B. Harding, Greenville, engr.

Alabama—State Hy. Dept., Montgomery, having plans prepared grading and gravel surfacing 23.649 mi. road from Tuscaloosa Co. line to Reform and Carrolton, Pickens Co. W. S. Keller, state highway engr.

Fla., Bradentown—Manatee Co. election Feb. 6, to vote on $55,000 bonds paving with shell 15 mi. roads on Terra Ceia Island. R. H. Roesch, chn. Bd. Co. Comn.

Fla., Punta Gorda—Plans paving, curbing and guttering, alternate proposals, 1½ mi. various streets, $25,000; paving with sheet or block asphalt also curbing and guttering 1 mi. Olympia Ave., 13,000 sq.yd. paving, 5,000 lin.ft. concrete curbing and gutter, $25,000. C. M. Price, city mgr.

Fla., Sebring—Highlands Co. plans election to vote on $100,000 bonds grading, clay surfacing, and 5 to 10 mi. fill, on 30 mi. road from De Soto City to Bessenger; $25,000 surfacing with 5 or 6 in. rock 5 mi. road from Sebring via O'Berrys to Hardee Co. line; $200,000 for 23 mi. road from Lake Annie to Kissimmee River, conglomerate to be dredged from canal; $300,000 asphalt surfacing on 6 in. compacted rock base 45 mi. road from Polk to Glades Co. via Avon Park, Sebring, etc. W. C. Peacock, Sebring, engr. Noted Oct. 12.

O., Akron—S. Porter, clk., Summit Co., takes bids in February, grading and paving, 2.64 mi. Vaughn Twinsburg Rd. 111, Sects. B 2 and C, 16 ft., bituminous macadam, $88,000; grading and improving with bituminous macadam, rein.-con. or bituminous concrete 1.31 mi. Granger Ghent Rd. 79, Sect. A-2, 16 ft., $28,162; grading and improving with brick and gravel 1.42 mi. Akron-Northampton Rd. [illegible] Sect. A-1, $52,000; grading and improving with bituminous concrete 1.07, South Main St. 58, Sect. C-1, 18 ft., $47,700; grading and improving with bituminous macadam 1.26 mi. Hammonds Corners-Ira 46, Sect. A-2, 16 ft., $39,500. J. Weaver, Court House, engr.

O., Cleveland — Takes bids in spring grading, draining, curbing and paving brick or asphalt on concrete, West 48th St. from Memphis to Ardmore Aves., West 48th and West 49th Sts. from Memphis Ave. to Park Drive, West 71st and West 73rd Sts. from Franklin to Walford Aves., West 97th St. from Almira to Walford Aves., West 100th St. from Lorain to Walford Aves., West 115 and West 116th Sts. from Madison to Locust Aves., Forest Court from East 33rd to East 34th Sts., Frankfort Ave. from West 3rd St. to Public Square, Moore Court from West 23rd to West 24th Sts. $200,000. H. Hoffman, City Hall, engr.

Ind., Portland — Jay Co. plans paving 6,879 ft. Daniel Campbell Rd., 16 ft. 12-231 sq.yd. concrete. $30,583. H. Teeters, Portland, engr.

Ind., Rochester—Fulton Co. plans grading and graveling 14,635 ft. Otto Haimbaugh Rd., 18 ft. $25,000. C. R. Miller, Rochester, engr.

Mich., Detroit — Making plans grading and paving with 3½ in. sheet asphalt on 8 in. concrete, 4,000 sq.yd. Louisiana Ave. from John R St. to Omira Ave., 26 ft. wide, $21,420, 1,800 sq.yd. 52nd St. from Conrad to Michigan Aves., 26 ft., $9,250, 4,400 sq. yd. Robinwood Ave. from Woodward to Charleston Aves., $23,760. J. W. Reid, city engr.

Wis., Beloit—Making preliminary plans paving 3-4 mi. various streets, 30 ft., concrete and asphalt. $100,000-$150,000. G. E. Heebink, City Hall, engr.

Wis., Ladysmith—Rusk Co. appropriated $58,960 for county and state aid road and bridge construction. P. Koehler, comr.

Wis., Madison — Plans paving various streets, 25-30 ft., concrete and asphalt, $50,000-$100,000. H. C. Buser, clk. Engineer not selected.

Wis., Ripon—City Council plans to issue $40,000 bonds to pave Scott, Blossom and West Fond du Lac Sts. from Blackburn to Watson Sts., Blackburn St. from East Fond du Lac to Jackson Sts., also sections of State Trunk Highways lying within city limits.

Ia., Council Bluffs—Pottawattamie Co. plans to improve Pioneer Trail-River to River Rd. and White Pole Rd. $200,000. H. H. Dean, Council Bluffs, engr.

Ia., Des Moines—Plans repairing and replacing many old pavements, and paving several city streets. $400,000. K. C. Kastberg, city engr.

Minn., Hibbing—Plans paving 20 to 30 blocks, $60,000-$90,000. W. Fergolle, city engr.

Kan., Hiawatha—Brown Co. had plans prepared for earth road on 9.788 mi. Pikes Peak Highway, 32 ft. E. C. L. Wagoner, 609 Kemper Bldg., Kansas City, Mo., engr.

Kan., Kinsley—Edwards Co., plans sand clay road on 6.504 mi. Federal Aid Project 15, 18 ft., 25,000 cu.yd. earth excav., 12,000 yd. sand clay, 10,800 lb. reinforcing, 208 ft. 24 in. corrugated pipe. E. B. Johnson, Kinsley, engr.

Neb., York—York Co. plans paving 35 blocks, Dist. 21. Scott & Scott, Lincoln, engrs.

South Dakota—State Hy. Dept., Pierre, takes bids in spring, grading and gravel surfacing 6.25 mi. Federal Aid Project 137, Lake Co. $41,707. F. D. Hudgins, ch. engr.

South Dakota—State Hy. Dept., Pierre, takes bids in spring, grading and gravel surfacing 8.5 mi. Federal Aid Project 136, Hamlin Co., $48,894, 7 mi. Federal Aid Project 133, Miner Co., $34,376, 11.2 mi. Federal Aid Project 126, Kingsbury Co. $80,779, grading 5.8 mi. Federal Aid Project 139, Grant Co., $23,211. F. D. Hudgins, ch. engr.

Tex., Anson—Jones Co. election March 3, to vote on $200,000 bond issue improving roads in Stamford Precinct, incl. Stamford-Lueders and Stamford-Anson Rds. J. F. Lindsey, co. judge.

Tex., Bellville—Austin Co. election about Feb. 1, to vote on $100,000 bonds to construct roads, and highway 3C, and bridges. W. I. Hill, co. judge.

Tex., Cameron—Milam Co. election Feb. 13 to vote on $100,000 bond issue grading, raising, levelling, rock base and Uvalde asphalt topping certain streets connecting with out-leading county roads. J. B. Clark, mayor.

Tex., San Antonio—Bexar Co. plans grading, raising, levelling, etc., 7 mi. Project 264 on State Highway 2 from Leon Creek to Artesian Belt Ry., 16 ft. $119,000. R. E. Killmer, co. engr.

Tex., Uvalde—Uvalde Co. plans grading gravel bituminous surfacing, etc., 6 mi.

Streets and Roads (Continued)

various roads, 16 ft. $136,000. M. B. Hodges, co. engr.

Okla., Purcell—Plans paving 40 blocks. Benham Eng. Co., 512 Gumbel Bldg., Kansas City, Mo., and Insurance Bldg., Oklahoma City, Okla., engrs.

Ore., Oregon City—Clackamas Co. opens bids about Feb. 15, 22.55 mi. paving, 7 separate contracts, concrete and bitulithic. $300,000. D. T. Meldrum, co. surv.

Calif., Beaumont—Voted $52,000 bonds for paving main streets.

Calif., Hanford—City plans resurfacing various streets in business district. $45,000. B. Duffield, city engr.

Calif., Huntington Beach—City Bd. of Trustees plan election to vote on $300,000 bonds for paving 3 mi. Ocean Blvd., incl. ornamental electric lights.

Calif., Newport Beach—Having plans prepared concrete paving various streets, probably 5 and 8 in. thick. $125,000. P. E. Kressly, H. W. Hellman Bldg., Los Angeles, engr.

Calif., San Diego—Common Council plans improving 2nd and A Sts., 119,674 sq.ft. 2 in. asphalt, 1 in. binder course on 4 in. Portland cement concrete, 550 lin.ft. cement curb, 2,264 sq.ft. cement sidewalk, etc. F. A. Rodes, city engr.

Calif., San Diego—Had plans prepared improving 14th St. between C and Imperial Sts., 161,910 sq.ft. 1½ in. asphalt on 4 in. cement concrete base with 1 in. binder course, 269 lin.ft. cement concrete curbs, etc.; 65th St. between Klauber and 69th Sts., 2,773 cu.yd. earth excav., 2,935 cu.yd. earth embankment, 161,361 sq.ft. bituminous macadam. F. A. Rhodes, city engr.

Quebec—Canadian Pacific Ry., Windsor St., Montreal, plans new road from present terminus at Waltham, through Waltham, Chichester and Sheen Twps., across Ottawa River to junction at or near Chalk River, also from point at or near Tuffnell, in or near Twp. 30, Range 10, then northwesterly, northerly and westerly to crossing of North Saskatchewan River in or about Twp. 49, Range 14, then in westerly direction to city of Prince Albert, Sask., then from point at or near Theodore in Twp. 28, Range 6, in general westerly direction to point between Goran and Lanigan on Pheasant Hills Branch of railroad in Saskatchewan. J. M. R. Fairbairn, Montreal, ch. engr.

Ont., Toronto—See "Miscellaneous."

Ont., Windsor—Plans paving work. $100,000. H. W. Wilson, mayor, chn. com.

B. C., Golden—Dept. Pub. Wks., Victoria, having surveys made and takes bids end of February, grading and surfacing 20 mi. Golden-Leanchoit Rd., 16 ft., gravel or macadam. $234,000. P. Phillip, Dept. Pub. Wks., Victoria, engr.

BIDS DESIRED

Connecticut—Jan. 29, by C. J. Bennett, state highway comr., 12 Washington St., Hartford, paving 24,880 lin.ft. Naugatuck-New Haven Rd.; 36,650 lin.ft. Clifton-Killingworth Rd., 20,600 lin.ft. Town St. in East Haddam; 19,470 lin.ft. Shore Rd. in Guilford; 4,000 lin.ft. South Main St. in Manchester; 17,870 lin.ft. River Rd. in Rocky Hill; 14,400 lin.ft. Thomaston-Waterbury Rd. in Thomaston; substructure and approaches for steel truss bridge over Little River on River Rd. and 1 through truss steel superstructure, 154 ft. span, in Cromwell and Middleton; substructure and retaining walls for steel truss bridge over West River on Shore Rd., and 1 steel truss superstructure, 80 ft. span, in Guilford; adv. this issue.

N. J., Salem—Feb. 12, by Road Com. of Bd. Freeholders, Salem Co., Pennsville-Salem Rd., Sects. 2 and 3, in Lower Penns Neck Twp., bituminous macadam. H. B. Keasbey, Salem, co. engr.; adv. this issue.

N. Y., St. George — Jan. 29, by J. A. Lynch, pres. Richmond Boro, Boro Hall, grading and bituminous macadam paving New York Ave. (Kingsley Ave.), from point 280.3 ft. east of east house line of New York Ave. to point 803.77 ft. west of northwest corner of Manor Rd.

Pa., Wilkes-Barre — Feb. 6, by F. H. Gates, city clk., repairing asphalt pavements. $25,000. B. K. Finch, city engr.

Virginia—Feb. 14, by State Hy. Comn., Richmond, 5.2 mi. Project 48-C, Route 14, incl. 2 bridges, 2.8 mi. Project 107, Route 23, 2.75 mi. Project 136-A, Route 17, 0.8 mi. Project 135-C, Route 17, 6.13 mi. Project F-178, Route 1, 7.52 mi. Project 141-B, Route 18, 0.93 mi. Project S-158, Route 1, Bridge over Sandy River, Project 186-B, Route 12, 11.07 mi. Project 192-C, Route 3, bridges over Marland and Christian Creeks, 6 mi. Project F-221, Route 4, 7.86 mi. Project F-246, Route 12-Y, 3.02 mi. Project S-268 A and B, Route 4X, 0.65 mi. Project F-225 B, Route 1, bridge over Spotsylvania Power Co.'s canal, Project S-225 B, Route 1, 1.98 mi. Project S-256, Route 11, alternate bids for surface treated macadam. H. G. Shirley, Richmond, highway comr.; adv. this issue.

Va., Emporia—Jan. 30, by E. E. Eanes, mayor, paving 40,000 sq.yd. various streets, sheet asphalt and bitulithic concrete. R. D. Gladding, Wilson, N. C., engr.

Alabama—Feb. 19, by W. S. Keller, state highway engr., Montgomery, grading and surfacing with gravel or chert 19.97 mi. road from Centerville to Woodstock, Bibb Co. 56 acres clearing, 174,388 cu.yd. common and 13,334 cu.yd. solid rock excav., 63,150 sta.yd. overhaul on excav., 48,000 cu. yd. gravel or chert surfacing, 1,027 cu.yd. concrete, 2,369 lin.ft. 15-24 in. pipe, 71,889 lb. reinforcing, etc.; grading and surfacing with gravel and sand clay, 20.4 mi. road from Mt. Pleasant to Brantley, Crenshaw Co., 11 acres clearing, 187,538 cu.yd. common and 400 cu.yd. solid rock excav., 23,903 sta.yd. overhaul on excav., 4,501 cu. yd. gravel and 65,326 cu.yd. sand clay surfacing, 3,163 lin.ft. 15-24 in. pipe, 562 cu.yd. concrete, 30,924 lb. reinforcing, etc. Noted Oct. 5.

Louisiana—Feb. 6, by State Hy. Comn., Reymond Bldg., Baton Rouge, grading and gravel surfacing 10 mi. Ruston-Melville Highway, Sect. A, Lincoln Parish. Separate bids will be taken for 10,000 cu.yd. washed gravel and 10,000 cu.yd. sand clay gravel, not less than 40% stone. J. M. Fourmy, ch. engr.

Louisiana—Feb. 13, by State Hy. Comn., Reymond Bldg., Baton Rouge, grading and shell surfacing 6½ mi. New Orleans-Mississippi Highway, from Slidell to West Rigolets, Federal Aid Project 106, Sect. A, St. Tammany Parish. J. M. Fourmy, ch. engr.

O., Canton—Feb. 14, by Stark Co., grading and paving, etc., 5.3 mi. Sect. B, I. C. H. 511, Canton-Richville-Navarre Rd., 18 ft., 43,882 cu.yd. earth excav., 56,383 sq.yd. paving, bituminous concrete $251,846, monolithic brick, $264,996, brick-concrete base $270,882; 1.72 mi. Sect. "B" Canton-Sherman-Church Rd., 16 ft., 13,110 cu.yd. unclassified earth excav., 16,655 sq.yd. paving, bituminous macadam $53,990, monolithic brick $77,807, concrete base-brick $83,432. G. L. Sickafoose, co. surv.

O., Cleveland — Jan. 31, at office of Commr. Purchases and Supplies, Room 219 City Hall, paving Ada Ave. N. E., from Linn Drive N. E. to Lakeview Rd. N. E.; Arbor Rd. N. E. from St. Clair Ave. N. E. to Taft Ave. N. E.; Elk Ave. N. E. from East 106th St. to East 107th St.; Gray Ave. N. E. from East 118th St. to Eddy Rd. N. E.; Gruss Ave. N. E. from East 124th St. to Cleveland Rd.; Iroquois Ave. N. E. from Paxton Rd. N. E. to East 128th St.; Oakview Ave. N. E. from Eddy Rd. N. E. to Dundee Drive N. E.; East 117th St. from Sellers Ave. N. E. to 270 ft. southerly; East 124th St. from Locke Ave. N. E. to Taft Ave. N. E.; East 127th St. from Penobscot Ave. N. E. to N. L. C. S. Realty Sub. 4; East 129th St. from Arlington Ave. N. E. to Iroquois Ave. N. E.; East 130th St. from Woodside Ave. N. E. to Iroquois Ave. N. E. R. Hoffman, City Hall, engr. Noted Jan. 11.

Ind., Bloomington—Feb. 6, by Auditor Monroe Co., grading and graveling 3 mi. Gordon Rd., 16 ft., $26,000; 2.9 mi. Byers Rd., 16 ft., $25,500; 3.2 mi. Carmichael Rd., 16 ft., $27,200. H. Chestnut, Bloomington, engr. Noted Jan. 18.

Ind., Decatur—Feb. 6, by Auditor Adams Co., grading and graveling 2.95 mi. Mazelin Rd., 16 ft. $26,000. D. Boch, Decatur, engr. Noted Jan. 18.

Ind., Evansville—Feb. 5, by Auditor Vanderburgh Co., paving 16,400 ft. Green River Rd., 16 ft., crushed stone. $27,706. R. W. Messinger, Evansville, engr. Noted Jan. 18.

Ind., Princeton—Feb. 6, by Auditor Gibson Co., paving crushed stone, 40,112 ft. Graper Rd., $73,893, and 5 mi. H. W. Barrett Rd., $49,174, both 16 ft. H. C. Morrison, Princeton, engr. Noted Jan. 18.

Ind., Versailles—Feb. 5, by Auditor Ripley Co., paving 9,061 ft. John Bland Rd., 16 ft., waterbound macadam. $37,000. O. W. Pegee, Versailles, engr. Noted Jan. 18.

Ind., Salem—Feb. 5, by Auditor Washington Co., grading and graveling 16,253 ft. Little York Rd., 16 ft. $27,106. J. C. Prow, Salem, engr. Noted Jan. 18.

Mich., Hillsdale—March 5, at office W. J. LaBarre, city clk., paving parts of Railroad and Union Sts.; adv. this issue.

Ill., Brookfield—Feb. 7, for concrete paving. $50,000. E. Hancock, 2047 Ogden Ave., Chicago, engr.

Wis., Fond du Lac—Jan. 31, by Fond du Lac Co. State Road & Bridge Comn., concrete surfacing, etc., 5.1 mi. Ladoga-Brandon-Ripon Rd., incl., 47,890 sq.yd. concrete surfacing, 21,373 cu.yd. earth, 1,000 cu.yd. loose and 100 cu.yd. solid rock excav., 356.6 cu.yd. concrete in culverts and bridges, 146,304 lb. reinforcing, etc.; 5.01 mi. Fond du Lac-Calumetville Rd., 53,000 sq.yd. concrete surfacing, 20,210 cu.yd. earth, 400 cu.yd. loose, 100 cu.yd. solid and 397 cu.yd. borrow excav., 526.3 cu.yd. concrete in culverts and bridges, 4,174 lb. reinforcing, etc. Wisconsin Highway Comn., Madison, engrs.

Ia., Colfax—Feb. 6, grading and paving 22,447 sq.yd. 3 in. vertical fibre brick, 2 in. asphalt, 3 in. tarvia or 2 in. bituminous concrete on 5 in. base, or 6 or 7 in. plain concrete, 16,898 lin.ft. curb and gutter, etc. Cost to exceed $50,000. E. T. Archer & Co., 609 New England Bldg., Kansas City, Mo., engrs. Noted Dec. 14.

Ia., Red Oak—Feb. 5, grading and paving, etc., various streets, 86,000 sq.yd. vitr. brick, monolithic brick, bituminous concrete or vibrolithic and plain concrete. To exceed $200,000. C. D. Forsbeck, Red Oak, engr.

Minn., Austin—Feb. 6, by C. M. Hubbard, aud. Mower Co., gravel surfacing 17 mi. Job 2301, 22,101 cu.yd. gravel; 10.5 mi. Job 2302, 13,525 cu.yd. gravel; Job 2304, 16,898 cu.yd. gravel; 12 mi. Job 2308, 15,859 cu.yd. gravel. $55,000. A. C. White, Austin, engr. Noted Jan. 18.

Minn., Duluth—Feb. 1, by B. Farrell, city comr., paving 11,200 ft. Commerce and Railroad Sts., 30 ft., concrete on crushed rock. $30,000. E. K. Coe, City Hall, city engr.

Minn., Marshall — March 1, by R. D. Houdersheldt, aud. Lyon Co., grading 26 mi. Job 2301, State Rd. 5, monolithic and portable culverts; grading 2 mi. Job 2206, State Rd. 3, portable culverts; grading 13 mi. Job 2205, State Rd. 6, monolithic and portable culverts; regraveling 9 mi. State Rd. 4. $65,000. C. W. Anderson, Marshall, engr.

Minn., Waseca—Feb. 20, by H. A. Panzram, aud. Waseca Co., 11.6 mi. Job 2301, State Aid Rd. 4, 70,500 cu.yd. excav., 770 lin.ft. corrugated metal culverts, 750 lin.ft. sectional concrete culverts; 4 mi. Job 2302, State Aid Rd. 8, 28,000 cu.yd. excav., 520 ft. corrugated metal culverts, 440 lin.ft. sectional concrete culverts; 4 mi. Job 2303, State Aid Rd. 15, 54,000 cu.yd. excav., 720 lin.ft. corrugated metal culverts, 680 lin.ft. sectional concrete culverts; 7 mi. Job 2304, State Aid Rd. 16, 60,000 cu.yd. excav., 960 lin.ft. corrugated metal culverts, 1,000 lin.ft. sectional concrete culverts; 7 mi. Job 2305, State Aid Rd. 13, 67,200 cu.yd. excav., clearing 1,190 trees, grubbing 1,890 stumps, 150 lin.ft. corrugated metal culverts, 935 lin.ft. concrete culverts. $60,000. D. E. Davison, Waseca, engr.

Neb., Omaha—Jan. 30, by C. F. Bossie, city clk., paving and curbing Dist. 1267, Miami St. from 16th to 19th Sts.; Dist. 1749, Nicholas St. from 20th to 24th Sts.; Dist. 1803, 50th St. from north line of Nicholas St. to north line Western Ave.; Dist. 1921, 55th St. from south line Harney to Howard Sts.; Dist. 1927, 51st St. from Western Ave. to Hamilton St.; Dist. 2001, 23rd St. from Sprague to Sahler Sts.; Dist. 2019, Boyd St. from 33rd to 36th Sts.; Dist. 2042, 50th Ave. from Nicholas to Hamilton Sts.; Dist. 2053, 46th St. from Cuming to Hamilton Sts.; Dist. 2117, Podick Ave. from 20th to 36th Sts.; Dist. 2122, Franklin St., from 33rd to 36th Sts.; Dist. 2151, 32nd St. from Decatur to Parker Sts.; Dist. 2153, 21st St. from Ames Ave. to point 297 ft. north of Ames Ave.; Dist. 2197, Seward St. from 38th St. to J. A. Creighton Blvd.; Dist. 2209, 50th St. from Howard to Jackson St., Jackson St. from 55th St. to east line Edgewood Addition, Emile and Jones from 56th St. to east line Edgewood Addition; Dist. 2210, 31st Ave. from Belvedere Blvd. to Ida St.; Dist. 2219, Pacific St. from 45th to 48th Sts., Pierce, Poppleton and Williams Sts. from 45th to 48th Sts., Woolworth Ave. from 46th to 48th Sts., 46th St. and 46th Ave. from Poppleton to Woolworth Aves.; Dist. 2225, 23rd St. from Pratt to Sprague Sts.; Dist. 2231, 46th Ave. from Pacific St. to Poppleton Ave.; Dist. 2236, Western Ave., Nicholas, Izard and Cuming Sts. from Happy Hollow Blvd. to 56th St., 56th St. from Cumming St. to Western Ave.; Dist. 2239, 22nd St. from Laird to Sprague Sts.; Dist. 2240, Lake St. from 50th to 51st Sts.; Dist. 2244, Western Ave. from 51st to 52nd Sts.; Dist. 2245, Lafayette Ave. from 51st to 52nd Sts.; Dist. 2246, Hamilton St. from 51st to 52nd Sts.; Dist. 2264, 28th Ave. from Fowler to Larimore Aves.; repaving Dist. 1748, Nicholas St. from 16th to 20th Sts.; paving Dist. 1812, Alley between Sherman Ave. and 17th St. from Nicholas St. to Block B Horbachs 1st Addition; Dist. 2181, Alley between 41st and 42nd Sts. from Harney St. to Dewey Ave.; Dist. 2232, Alley between Pacific and Pierce Sts. from 45th to 46th Aves.; Dist. 2233, Alley between Poppleton Ave. and William St., from 45th to 46th Sts.; resurfacing Dist. 2260, Maple St. from point 103 ft. of 62nd to 66th Sts.; Dist. 2262, Bristol St. from 24th to 30th Sts.; Dist. 2293, Spencer St. from 16th to 24th Sts.; Dist. 2295, Lake St. from 14th to 16th Sts.; Dist. 2296, 30th St. from south line

Streets and Roads (Continued)

of Bristol St. to Ames Ave. Bids taken on vitr. brick, wood block, asphalt, concrete and bituminous concrete. H. Beal, city engr.

Missouri—Feb. 2, by State Hy. Dept., Jefferson City, grading 3.379 mi. road west of Odessa, 34 ft., State Project Route 2, Sect. 8, Lafayette Co., 54,572 cu.yd. earth and 2,768 cu.yd. rock excav., 464 cu.yd. concrete, etc.; 4.794 mi. road from Carthage east, 34 ft., State Project Route 14, Sect. 3, Jasper Co., 31,500 cu.yd. earth excav., 349 cu.yd. concrete, etc.; 2.897 mi. road from Jasper Co. Line east, 34 ft., State Project Route 14, Sect. 8, Lawrence Co., 30,500 cu.yd. earth excav., 130 cu.yd. concrete, etc.; 4.938 mi. road on Jasper Co. line east, 34 ft., State Project Route 14, Sect. 7, Lawrence Co., 46,175 cu.yd. earth excav., 240 cu.yd. concrete, etc.; 4.986 mi. road on Jasper Co. line east, 34 ft., State Project Route 14, Sect. 6, Lawrence Co., 38,000 cu.yd. excav., 225 cu.yd. concrete, etc.; 4.962 mi. road Jasper Co. line east, 34 ft., State Project Route 14, Sect. 5, Lawrence Co., 31,065 cu.yd. excav., 257 cu.yd. concrete, etc.; 3.5 mi. road from Edina to Memphis, 30 ft., State Project Route 15, Sect. 11, Knox Co., 50,200 cu.yd. excav., 199 cu.yd. concrete, etc.; 3.5 mi. road from Stanberry to Albany, 34 ft., State Project Route 4, Sect. 8, Gentry Co., 50,000 cu.yd. excav., 370 cu.yd. concrete, etc.; 2.548 mi. road from Mound City to Rockport, 30 ft., State Project Route 1, Sect. 14, Holt Co., 19,565 cu.yd. excav., 173 cu.yd. concrete, 150 ft. creosoted wood trestle; 4.452 mi. road from Mound City to Rockport, 30 ft., State Project Route 1, Sect. 13, Holt Co., 40,971 cu.yd. excav., 399 cu.yd. concrete, etc.; 2.5 mi. road east and west of Zebra, 24 ft., State Project Route 15, Sect. 53, Camden Co., 10,000 cu. yd. earth and 2,000 cu.yd. rock excav.; 4.318 mi. road from Brunswick to Keytesville, 30 ft., State Project Route 10, Sect. 24, Chariton Co., 41,600 cu.yd. excav., 61 cu.yd. concrete, etc.; 4.318 mi. road from Brunswick east, 30 ft., State Project Route 10, Sect. 25, Chariton Co., 17,025 cu.yd. excav., 60 cu.yd. concrete, etc.; 1.259 mi. road from Waynesville southeast, 34 ft., State Project Route 14, Sect. 42, Pulaski Co., 32,448 cu.yd. earth and 92 cu.yd. rock excav., 138 cu.yd. concrete, etc.; 3 mi. road from Marble Hill south, 24 ft., State Project Route 31, Sect. 24, Bollinger Co., 20,000 cu.yd. excav., etc.; 2.789 mi. road on Laclede Co. line east, 34 ft., State Project Route 14, Sect. 40, Pulaski Co., 17,180 cu. yd. earth and 1,354 cu.yd. rock excav., 28 cu.yd. concrete, etc.; 0.25 mi. road from Ava west, 24 ft., State Project Route 40, Sect. 20, Douglas Co., 4,000 cu.yd. excav., etc.; 3.03 mi. road from Laclede Co. line east, 34 ft., State Project Route 14, Sect. 39, Pulaski Co., 16,356 cu.yd. earth and 268 cu.yd. rock excav., 29 cu.yd. concrete, etc.; 0.665 mi. road from Steele south, 34 ft., State Project Route 9, Sect. 149, Pemiscot Co., 2,631 cu.yd. excav., 15 cu.yd. concrete, etc.; 3.562 mi. road from Hayti south, 34 ft., State Project Route 9, Sect. 147, Pemiscot Co., 35,722 cu.yd. excav., 70 cu.yd. concrete, etc.; 4.702 mi. road east of Silvia, 30 ft., State Project Route 34, Sect. 13, Wayne Co., 41,200 cu.yd. earth and 13,215 cu.yd. gravel, etc.; 3.238 mi. road from Hayti south, 34 ft., State Project Route 9, Sect. 146, Pemiscot Co., 36,440 cu.yd. earth and 62 cu.yd. concrete, etc.; 0.568 mi. road northwest of Lebanon, 34 ft., State Project Route 14, Sect. 36, Laclede Co., 10,932 cu. yd. excav., 31 cu.yd. concrete, etc.; grading and surfacing 3.7 mi. road from Rolla, southward, 12 ft., State Project Route 7, Sect. 65, Phelps Co., 12,376 cu.yd. earth and 2,331 cu.yd. rock excav., 46 cu.yd. concrete, 6,971 cu.yd. gravel, etc.; 3.833 mi. road from Forsyth south, 12 ft., State Project Route 78, Sect. 3, Taney Co., 2,742 cu. yd. earth and 20 cu.yd. rock excav., 8,152 cu.yd. gravel, etc.; 3.238 mi. road from Stone Co. line south, 12 ft., State Project Route 3, Sect. 113, Taney Co., 23,531 cu.yd. excav., 6,292 cu.yd. gravel, etc.; 3.087 mi. road from Stone Co. line south, 12 ft., State Project Route 3, Sect. 112, Taney Co., 20,352 cu.yd. excav., 5,922 cu.yd. gravel, etc.; 0.274 mi. road from Troy to Wentzville, 16 ft., State Project Route 9, Sect. 52, Lincoln Co., 10,981 cu.yd. excav., 755 sq.yd. gravel, etc.; 3.428 mi. road south of Diehlstadt, 16 ft., State Project Route 55, Sect. 6, Scott Co., 23,048 cu.yd. excav., 44 cu.yd. concrete, etc.; 0.928 mi. road north of Diehlstadt, 16 ft., State Project Route 55, Sect. 4, Scott Co., 4,300 cu.yd. excav., 2,200 cu.yd. gravel, etc.; 5 mi. road south of Steelville, 16 ft., State Project Route 19, Sect. 4, 6,423 cu.yd. earth, 11,930 cu.yd. gravel, etc.; 1.3 mi. road from Hannibal northwest, 18 ft., State Project Route 9, Sect. 26, 7,720 cu.yd. earth and 1,850 cu.yd. rock excav., 11,428 sq.yd. concrete, etc.; 0.786 mi. road from Novinger east, 18 ft., State Project Route 6, Sect. 41, 12,634 cu.yd. excav., 58 cu.yd. concrete, 8,300 sq.yd. concrete pavement, etc.; 4.964 mi. road from Hamilton west, 18 ft., State Project Route 8, Sect. 12, 66,797 cu.yd. concrete in culverts, 52,196 sq. yd. concrete or asphaltic concrete, etc.; 4.904 mi. road from Hamilton west, 18 ft., State Project Route 8, Sect. 12, 70,443 cu. yd. excav., 356 cu.yd. concrete, 51,560 sq. yd. asphaltic concrete, etc.; 2.244 mi. road west of Manchester, 18 ft., State Project Route 14, Sect. 77, St. Louis Co., 58,889 cu. yd. excav., 548 cu.yd. concrete, 52,020 sq.yd. asphaltic concrete, etc.; 4.943 mi. road west of Manchester, 18 ft., State Project Route 14, Sect. 76, St. Louis Co., 58,889 cu. yd. excav., 548 cu.yd. concrete, 52,020 sq. yd. asphaltic concrete, etc.; 4.974 mi. road Kansas City east on Sinabae Rd., 18 ft., State Project Route 2, Sect. 6, 77,015 cu.yd. excav., 630 cu.yd. concrete, 52,182 sq.yd. asphaltic concrete, etc.; 0.568 mi. road from Moberly east, 18 ft., State Project Route 10, Sect. 37, Randolph Co., 7,527 cu. yd. earth excav., 121 cu.yd. concrete, 6,000 sq.yd. brick pavement, etc.; 4.942 mi. road from Kansas City east on Sinabae Rd., 18 ft., State Project Route 2, Sect. 5, Jackson Co., 24,053 cu.yd. earth, 184 cu.yd. concrete, 52,190 sq.yd. asphaltic concrete, etc.; 4.345 mi. road from Kansas City east on Sinabae Rd., 18 ft., State Project Route 2, Sect. 4, Jackson Co., 82,525 cu.yd. earth and 5,716 cu.yd. rock excav., 45,290 sq.yd. asphaltic concrete, etc.; 4.109 mi. road from Kansas City east on Sinabae Rd., 18 ft., State Project Route 2, Sect. 3, Jackson Co., 29,016 cu.yd. excav., 399 cu.yd. concrete, 42,408 sq.yd. concrete, brick, rock asphalt or asphalt, etc. B. H. Piepmeier, state highway engr. Noted Jan. 18.

Ark., Camden—Feb. 14, by Bd. Comrs. Paving Dist. 2, c/o D. V. Snow, secy., paving, concrete curbing, grading and laying storm sewers in various streets. E. F. Peterson, Texarkana, engr. Adv. this issue.

Tex., Henderson—Feb. 14, by J. T. Watson, judge Rusk Co., gravel and clay surfacing 14.93 mi. State Highway 26, 12 ft., 9,516 cu.yd. clay and 26,261 cu.yd. gravel to be furnished by county. $49,035. D. L. Hogan, resident engr.

Tex., Highland Park—Taking bids paving various streets, $75,000 bonds voted; paving roads, walks and bridges in Davis Park, $25,000 bonds voted. Meyers & Noyes, Dallas Co. State Bank, Dallas, engrs. Noted Dec. 28.

Oklahoma—Jan. 31, by State Hy. Dept., Oklahoma City, constructing 1.63 mi. road from 1 mi. north of Bristow and extending north, Federal Aid Project 88, Creek Co., 5,197 cu.yd. earth, 100 cu.yd. loose rock and 50 cu.yd. solid rock excav., 5,468 cu.yd. excav. overhaul, 4,558 cu.yd. borrow, 58 cu.yd. concrete, 2,669 lb. reinforcing, 120 sq.yd. creosoted wood blocks, 17,304 sq.yd. 7 in. plain cement concrete pavement, 18 ft. wide, etc.; 17.435 mi. road, Sect. A, from end of Federal Aid Project 96 to bridge over South Canadian River, Federal Aid Project 51 C, Sect. B, from Sect. F-F of Federal Aid Project 18, to bridge over Arkansas River, Federal Aid Project 51 B, and approach on East side, same being Federal Aid Project 97, Muskogee Co., 69,598 cu.yd. earth and 250 cu.yd. solid rock excav., 30,720 cu.yd. borrow, 1,219 cu.yd. concrete, 80,888 lb. reinforcing, 143,500 lb. fabricated steel, 942 lin.ft. 18 in. and 230 lin.ft. 24 in. vitr. clay pipe, 184,073 sq.yd. 9 in. gravel, measured loose, 18 ft. wide, etc.; 2.272 mi. road from Warner to beginning of Federal Aid Project 97 A, same being Federal Aid Project 96, Muskogee Co., 9,260 cu.yd. earth excav., 246 cu.yd. borrow, 120 cu.yd. concrete, 6,085 lb. reinforcing, 23,800 sq.yd. 9 in. gravel, measured loose, 18 ft. wide, etc. M. L. Cunningham, state highway engr.

Okla., Tulsa—Feb. 13, by M. Schultz, city engr., paving and storm sewers in 12 districts, 57,388 sq.yd. asphalt.

N. M., Artesia—See "Sewers."

Calif., San Diego—Feb. 5, by A. H. Wright, city clk., improving Imperial Ave. and 14 other streets, 15,352 cu.yd. earth excav., 8,993 cu.yd. earth embankment, 20,663 lin.ft. cement curb, 101,100 sq.ft. cement sidewalk, 2,115 sq.ft. cement gutters, 432 lin.ft. 12 in., 880 lin.ft. 15 in. and 178 lin.ft. 24 in. pipe, etc. F. A. Rhodes, city engr. Noted Jan. 11.

BIDS RECEIVED

New York—H. S. Sisson, comr. State Hy. Dept., Albany, opened bids Jan. 12, improving (1) 2.11 mi. Highway 1654 Alfred-Alfred Sta., Allegany Co., engrs. est. $71,793 (2) 1.97 mi. Highway 1657 Leon-Markham-Fayton, Part 3, Cattaraugus Co., engrs. est. $80,784 (3) $7.63 mi. Highway 8149 Little Valley-Randolph Parts 1 and 2, Cattaraugus Co., engrs. est. $349,119 (4) 2.75 mi. Highway 8124 Madison-Bridgewater, Part 2, Oneida Co., engrs. est. $103,241, from Dale Eng. Co., Mann Bldg., Utica. (1) $64,455; Ribstein-Holter Co., Inc., Rochester (street address not available) (1) $6[illegible]67; Rossney Contg. Corp., 73 West Eagle St., Buffalo (1) $70,395; W. C. Pickard, Tonawanda (2) $74,356; Cold Spring Constr. Co., Ellicott Sq., Buffalo, (2) $75,546; Burd Conser Co., Cresson, Pa., (2) $75,989; (3) $329,162; F. W. Knickenberg, 702 Michigan Av., Buffalo (3) $318,285; Morgan & Beck, Olean, (3) $323,904; H. W. Batchelder, Herkimer, (4) $102,741. Noted Jan. 4.

Wis., Racine—Racine Co. concrete surfacing, etc., Union Grove—12th St. Rd., (a) 9,916 cu.yd. earth excav., (b) 37,000 sq.yd. 18 ft. concrete surfacing, (c) 37.8 cu.yd. concrete in culverts, (d) 43.2 cu.yd. concrete in bridges, (e) 89,450 lb. reinforcing from E. G. Russell, Kenosha (street address not available), (a) $0.[illegible], (b) $1.[illegible], (c) $20, (d) $22, (e) $0.04, etc.; L. L. Tidall, Waterford, (a) $0.80, (b) $1.39, (c) $25, (d) $25, (e) $0.06, etc.; J. Weiler & Son, 878 Franklin Pl., Milwaukee, (a) $0.[illegible], (b) $1.42, (c) $25, (d) $28, (e) $0.05, etc. Noted Jan. 11.

Missouri—State Hy. Dept. at div. office Columbia, opened bids Dec. 15, 6.429 mi. road from Columbia eastward, State Aid Project 20.127, Boone Co., 41,621 cu.yd. earth excav., 3,951 cu.yd. borrow, 186.8 cu.yd. concrete masonry, etc., from E. A. Stoner, Chamois, $23,785; A. G. Brown, Jefferson City, $24,245; Haller & Davis, Boonville, $25,216. Noted Nov. 2.

Missouri—State Hy. Dept., at div. office Harrisonville, 4.11 mi. road from Pleasant Hill eastward, State Aid Project 20.172, Cass Co., from Woodsmall & Woodsmall, Marshall, $23,033; Natl. Constr. Co., Kansas City (street address not available), $22,271; Graham & Dillion, Pleasant Hill, $21,432. Noted Dec. 21.

Missouri—State Hy. Dept. at div. office New London, opened bids Dec. 23, 5.498 mi. road from New London southwestward, 12 and 16 ft. wide, State Aid Project 20.166, Ralls Co., (1) 2,085 cu.yd. additional material for base course (2) 18,773 sq.yd. gravel pavement (3) 24,896 sq.yd. gravel pavement, etc., from F. F. O'Dell, Farmington, (1) $3.30 per cu.yd. (2) $0.38 (3) $0.42 total, $28,776; M. B. Meyer & Son, Perry, (1) $4.25, (2) $0.53, (3) $0.56, $39,039.

Tex., La Grange—Fayette Co. (a) grading and gravel surfacing, (b) rein.-con. drainage structures, on 8.03 mi. Highway 3-A, Federal Aid Project 319, 18 ft., from C.-M. Kelly & Co., 503 Barrett Pl., San Antonio, (a and b) $56,414; McClung Constr. Co., Cleburne, (a and b) $58,131; Smith, Starkey & Brown, Stewart Bldg., Houston, (a) $44,644; L. Robertson, Schulenburg, (b) $13,949. Engrs. est. $71,372.

Tex., Tyler—Smith Co. grading, gravel surfacing and 1½ in. bituminous topping 8.8 mi. State Highway 31, Chandler Rd., Federal Aid Project 316, 18 ft., 978 cu.yd. concrete, 94,755 cu.yd. earth excav., 25,000 sq. yd. bituminous macadam, 6,984 cu.yd. gravelly clay, 16,754 cu.yd. shipped gravel, 112,417 lb. reinforcing, from Scarborough, Davis & Jackson, Gaston Bldg., Dallas, $83,534, not incl. materials; Smith Co., c/o D. R. Pendleton, co. judge, Tyler, $120,433; J. Thompson, San Augustine, $128,369. Engrs. est. $132,500.

Tex., Wichita Falls—Wichita Co. grading and gravel surfacing 5 mi. Park-Jonesdale Rd., 16 ft., from L. E. Whitham & Co., Wichita Falls, $47,356; B. O. Gilstrap, Iowa Park, $53,157; C. W. Burgess, 501 Dallas Co. State Bank Bldg., Dallas, $57,758. Engrs. est. $50,000.

Calif., Los Angeles — Improving Crenshaw St. between Washington and Adams Sts., (1) 262,466 ft. grading (2) 103,360 ft. concrete pavement (3) 107,717 ft. warrenite-bitulithic pavement (4) 1,384 ft. grading and oiling (5) 2,359 ft. curb (6) 6,737 ft. gutter (7) 51,389 ft. bituminous macadam surface, etc., from G. R. Curtis, 2440 East 26th St., (1) $0.06 (2) $0.26 (3) $0.309 (4) $0.10 (5) $0.75 (6) $0.33 (7) $0.13; G. H. Oswald, 366 East 58th St., (1) $0.0675 (2) $0.2675 (3) $0.32 (4) $0.12 (5) $0.70 (6) $0.33 (7) $0.135; Warren Constr. Co., Citizens Natl. Bank Bldg., (1) $0.07 (2) $0.27 (3) $0.30 (4) $0.10 (5) $0.70 (6) $0.35 (7) $0.15.

Calif., Merced — Supervs. Merced Co. opened bids Jan. 15, paving 13.4 mi. Los Palos and Volta Rds., from W. Hanrahan, Griffith-McKenzie Bldg., Fresno, $331,000; Valley Paving & Constr. Co., Visalia, $348,500; A. Teichert & Sons, Ochsner Bldg., Sacramento, $351,900. Noted Jan. 4.

Calif., San Diego—Opened bids improving Ivy St. between Balboa Park and India Sts., (1) 76,098 ft. 4 in. cement concrete pavement (2) 63,035 ft. 1½ in. asphaltic concrete on 2½ in. bituminous (3) 314 ft. concrete curb (4) 1,809 ft. sidewalk (5) 147 cu.yd. excav. (6) 1,036 yd. embankment, from California Constr. Co., Granger Bldg., (1) $0.20 (2) $0.174 (3) $0.75 (4) $0.22 (5) $0.80 (6) $0.70; Griffith Co., 20 14th St., (1) $0.23 (2) $0.195 (3) $0.75 (4) $0.22 (5) $1.60 (6) $0.10. Noted Dec. 28.

Streets and Roads (Continued)

CONTRACTS AWARDED

New York—H. S. Sisson, comr. State Hy. Dept., Albany, improving 2.89 mi. Highway 5689 Meyers-King Ferry, Cayuga and Tompkins Counties also 5.22 mi. Highway 8147 Hammondsport-Branchport, Part 2, Steuben Co., to Burd Constr. Co., Cresson, Pa., $95,711 and $250,155 respectively, engrs. est. $104,774 and $281,545 respectively; 0.41 mi. Highway 5688 Bristol Center-Bloomfield, Part 1-B, Ontario Co., to W. M. Bronk, Hudson Falls, $20,056, engrs. est. $20,161; 4.89 mi.Highways 8148 and 1644 Johnsonville-Buskirk, Parts 1 and 2, Rensselaer Co., to S. B. Van Wagenen, Inc., Rondout, $167,512, engrs. est. $172,329; 3.69 mi. Highway 1660 Mt. Ivy-Haverstraw, Rockland Co., to Colonial Contg. Co., Carlstadt, N. J., $146,993, engrs. est. $159,682; 5.51 mi. Highway 602 Bearsville-Willow, Ulster Co., to M. C. Tryon, Herkimer (street address not available) $169,537, engrs. est. $183,395; reconstructing 2.42 mi. Repair Contr. 3043 Highway 477, Valley Falls-Johnsonvill, Rensselaer Co., to Belmar Contg. Co., Inc., Troy (street address not available) $79,324, engrs. est. $80,502. Noted Jan. 4.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, improving Bay Parkway from 59th to 78th Sts., to Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., $112,-224. Noted Jan. 11.

Pennsylvania—State Hy. Dept., Harrisburg, 6,094 ft. Application 2255, Hempfield Twp. and Greenville Boro., 16 ft., Mercer Co., 10,916 sy.yd. rein.-con. and 3,994 cu.yd. unclassified excav., and 13,704 ft. Route 82, Sect. B, Hempfield and Sugar Grove Twps., Greenfield Boro., 18 ft., Mercer Co., 27,735 sy.yd. rein.-con., to M. Bennett & Sons, Indiana, $45,656 and $132,400 respectively. Noted Dec. 14.

Pa., Ebensburg—Comrs. Cambria Co. 15,568 ft. brick highway between Cresson and Lilly, to Leechburg Constr. Co., Leechburg, $135,920.

Fla., Brooksville — Hernando Co. constructing 20 mi. road, in Jeny Kilpatrick Special Road & Bridge Dist., to Mickler & McLeod, Stovall Bldg., Tampa, (use clay when found near road), clay in place $1.40 per cu.yd., Ocala limestone in place $3.50, Ocala limestone $4, rolling road $0.05 per sq. yd., reshaping old road $0.05 per sq.yd., laying 24 in. galvanized iron pipe $4, 18 in. $2.25, 12 in. $1.50, concrete $28, excav. $0.35, clearing $60 per acre, etc.

Fla., Bushnell—Sumter Co., paving with asphalt penetration 12 mi. road from Wildwood to Lake Co., 16 ft., to Finley Method Co., Graham Bldg., Jacksonville.

Fla., Gainesville—Bd. Trustees, Special Rd. and Bridge Dist. 1, Alachua Co., (a) scarifying, (b) resurfacing 80,000 sq.yd. Gainesville-Archer Rd., to Finley Method Co., Graham Bldg., Jacksonville, (a) $0.05 per sq.yd., (b) $0.27 per sq.yd. Noted Nov. 23.

Fla., Jacksonville—To J. Y. Wilson, Clark Bldg., paving Clay, Jefferson, Adams and Cleveland Sts., 300 lin.ft. granite curbing, 3,760 lin.ft. concrete gutter, 9,821 sq.yd. vitr. brick, 1,512 sq.yd. concrete base, 7,441 sq.yd. rock base, $33,893, College and Gilmore Sts., 5,701 lin.ft. concrete curbing and gutter, 6,889 sq.yd. asphaltic concrete on concrete base, $25,738, Cedar St., 4,462 lin. ft. granite curbing, 6,351 sq.yd. 2 in. asphaltic concrete on 6 in. concrete, $25,468, Swift, 10th and 26th Sts., 4,458 lin.ft. concrete curbing, 13,089 sq.yd. bituminous macadam on 6 in. concrete, $31,724, Silver and 6th Sts., 5,957 lin.ft. concrete curbing, 11,-049 sq.yd. bituminous macadam on 6 in. concrete, $27,270, 9th, Oak, Palmetto and 7th Sts., 6,674 lin ft. concrete curbing, 11,-029. sq.yd. bituminous macadam on 6 in. concrete, $30,260, Eagle, Hershell and King Sts., 5,000 lin.ft. concrete curbing and gutter, 5,261 sq.yd. asphaltic concrete on concrete, $25,572, Park St., from Margaret to King Sts., 7,732 lin.ft. concrete curbing and gutter, 11,864 sq.yd. asphaltic concrete on concrete, $42,371, Park St. from King to McDuff Sts., 5,706 lin.ft. concrete curbing and gutter, 9,004 sq.yd. asphaltic concrete on concrete, $33,771, Hubbard, James, Lafayette and Market Sts., 6,739 lin.ft. concrete curbing, 10,472 sq.yd. bituminous macadam on 6 in. concrete, $28,491, Ashley, Beaver, 18th, 5th and 4th Sts., 5,845 lin.ft. concrete curbing, 9,948 sq.yd. bituminous macadam on 6 in. concrete, $30,608, 8th St., 8,922 lin.ft. granite curbing, 12,560 sq.yd. vitr. brick on rock, $50,518; to F. W. Long & Co., Realty Bldg., St. Johns Ave., 9,106 lin.ft. concrete curbing, 11,624 sq.yd. bituminous macadam on 6 in. lime rock, $32,-160; to Adams-Evans & Co., Atlantic Bank Bldg., resurfacing Laura, Asheley, Duval, Julia and Forsythe Sts., 33,574 sq.yd. 1½ in. sheet asphalt, $42,093. Noted Dec. 7.

Fla., Palatka—Comrs. Putnam Co. grading and surfacing 22 mi. Florahome Rd., 16 ft., 12,820 cu.yd. sand clay and 54,000 cu. yd. excav., to H. A. Curry, Bradentown, $62,605. Noted Dec. 21.

Fla., Tampa—Tampa Bay Land Co., 2 mi. shell roads, 12 ft., to Cone Bros., Tampa, $1.64 per cu.yd.

Tennessee—State Hy. Dept., Nashville, grading and surfacing with 8 in. cement concrete 9½ mi. road from Humbolt to Trenton, Gibson Co., 18 ft., to Givens, Hobbs & Co., Marten, $302,870; bridges over 20 ft. span, on above project, to Little & Dean, Paris, $9,980.

Ohio—Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving 2.52 mi. Sect. A and B Solon, Willoughby and Chagrin Falls-Cuyahoga Falls Rd., Cuyahoga Co., warrenite bitulithic, to Freshwater Constr. Co., Natl. Bldg., Cleveland, $159,900; 1.49 mi. Sect. I, 2.7 mi. Sect. J, 3.44 mi. Sect. K, 1.7 mi. Sect. L and 1.39 mi. Sect. M Cleveland-Massillon Rd., Summit Co., brick, to T. E. McShaffrey Constr. Co., Forge St., Akron, $75,912, $113,938, $155,762, $72,412 and $72,093 respectively. Noted Jan. 11.

Wis., Wauwatosa—Grading 13,000 cu.yd. Wells St., to Bartel Bros., 957 9th Ave., Milwaukee, $0.44 per cu.yd.; 7,500 cu.yd. on 54th St. to S. P. Croft, 587 49th St., Milwaukee, $0.40. Noted Jan. 4.

Ia., Elkader—Paving 21,650 sq.yd. part brick, part concrete, 11,000 ft. concrete curb, to J. C. McKusick, 3916 Richfield Rd., Minneapolis, Minn., $85,000. Noted Dec. 28.

Ia., Iowa City — Johnson Co. grading 9.073 mi. primary road from North Liberty north, 105,796 cu.yd. excav., to E. W. Kolterman, Omaha, Neb. (street address not available). $25,391. Engrs. est. $25,400. Noted Dec. 21.

South Dakota—State Hy. Dept., Pierre, grading 13.2 mi. Federal Aid Project 65, Yankton Co. incl. 127,610 cu.yd. excav., to Yankton Co., Yankton, $49,735; 5.98 mi. Federal Aid Project 97, Clay Co., to H. Pickus Constr. Co., 2316 3rd St., Sioux City, Ia., $21,469; gravel surfacing 19.95 mi. Federal Aid Project 77, Yankton Co., to Tobin & Maloney, Madison, $30,137. Noted Dec. 28 and Jan. 18.

Missouri—State Hy. Dept. at div. office Cassville, 4.571 mi. road from Cassville northward, 16 ft., Federal Aid Project 151, Barry Co., to Allhands & Davis, 705 Frisco Bldg., Joplin, $25,532. Noted Jan. 18.

Missouri—State Hy. Dept. at div. office Fredericktown, 6.519 mi. road from Fredericktown westward, 12 ft., Federal Aid Project 203A, Madison Co., to M. E. Gilliozz, Monett, $79,739. Noted Jan. 11.

Missouri—State Hy. Dept. at div. office Ironton, 7.197 mi. road from Bruel east and west, 12 ft., Federal Aid Project 193A, Iron Co., also one 100 ft. steel truss, one 50 ft. rein.-con. arch spandrel filled, one 20 ft. rein.-con. slab and one 30 ft. rein.-con. deck girder spans, on above road, to J. P. Sparks, Kirkwood, $60,472 and $19,-171 respectively. Noted Dec. 14.

Missouri—State Hy. Dept., Jefferson City road from Gainesville eastward, Federal Aid Project 111C, Ozark Co., 8,230 cu.yd. earth and 2,604 cu.yd. rock excav., 3,460 cu.yd. borrow, etc., to Pioneer Constr. Co., 101 New York Life Bldg., Kansas City, $56,693.

Missouri—State Hy. Dept. at div. office Neosho, 4.854 mi. road from Neosho to Granby, 24 ft., Federal Aid Project 155, Newton Co., to Kelley & Underwood, Granby, $24,588. Noted Jan. 11.

Missouri—State Hy. Dept. at div. office Platte City, 4.703 mi. road from Parkville southeastward, 24 ft., Federal Aid Project 48B, Platte Co., to T. A. Woods Constr. Co., Smithville, $54,530. Noted Jan. 11.

Missouri—State Hy. Dept. at div. office Rolla, 3.693 mi. road from Rolla southward, 12 ft., Federal Aid Project 110A, Phelps Co., also one 85 ft. steel truss and one 25 ft. rein.-con. deck girder spans on above road, to M. E. Gilliozz, Monett, $33,014 and $13,347 respectively.

Missouri—State Hy. Dept. at div. office Stockton, 2.016 mi. road from Eldorado Springs northward, 16 ft., Federal Aid Project 215, Cedar Co., to Moss & Moss, Nevada, $25,625. Noted Jan. 18.

Tex., Austin—Travis Co. improving 5.6 mi. State Highway 3 A, Garfield Rd., 16 ft., concrete work to Austin Bros. Bridge Co., Coombs St., Dallas, $27,858; grading and graveling to L. F. McMillen, 4213 Avenue D, $22,431. Noted Dec. 21.

Tex., Bonham—Fannin Co. grading and rein.-con. paving 5.66 mi. Highway 5 in Honey Grove Dist., 18 ft., 602 cu.yd. concrete, 28,513 cu.yd. roadway and 1,927 cu. yd. borrow excav., 59,490 sq.yd. concrete pavement, 203,556 lb. reinforcing, to J. C. Field & Co., Denison, $174,630. Engrs. est. $330,000.

Tex., Clarksville—Red River Co. grading, gravel surfacing 9.63 mi. State Highway 5, Job 194C, Federal Aid Project 311, State Aid Project 330, to Cocke & Turner, Marshall, 13.19 acres clearing $20, 13.19 acres grubbing $40, 41,207 cu.yd. earth roadway excav. 23,347 cu.yd. earth borrow excav. $0.15, 15,112 cu.yd. gravel hauled first quarter mile $0.40, 802 cu.yd. gravel hauled 2nd quarter mile $0.07, 782 cu.yd. gravel hauled 3rd quarter mile $0.14, 782 cu.yd. gravel hauled 4th quarter mile $0.21, 782 cu.yd. gravel hauled 5th quarter mi. $0.28, 782 cu.yd. gravel hauled 6th quarter mi. $0.35, 782 cu.yd. gravel hauled 7th quarter mile $0.42, 10,061 cu.yd. gravel hauled 8th quarter mile $0.49, 105,679 cu.yd. gravel hauled additional quarter mile $0.05, etc., total $37,833.

Tex., Ft. Worth—Tarrant Co. grading and gravel surfacing 6½ mi. Mansfield Webb Rd., 14 ft., and 3 mi. Grapevine Coppell Rd., 14 ft., to Tarrant Co., Court House, $30,000 and $25,000 respectively.

Tex., Houston—Paving 8,000 sq.yd. Hathaway Ave. and Baldwin St., 2 in. asphalt top on 6 in. concrete, to Uvalde Rock Asphalt Co., City Natl. Bank Bldg., San Antonio. Engrs. est. $32,000.

Tex., Richmond—Bend Co. grading and surfacing 10.41 mi. State Highway 19, Federal Aid Project 318, to Hayden & Austin, 727 Kress Bldg., Houston, $123,910. Noted Nov. 16.

Tex., Silverton — Briscoe Co. grading 22.57 mi. and gravel and caliche surfacing 4.7 mi. State Highway 5-A, Rd. Dist. 7, to McClung Constr. Co., Cleburne, $98,010; 8,336 cu.yd. caliche and 6,948 cu.yd. gravel surfacing, etc., furnished by county $3,057. Engrs. est. $111,173, incl. 10% for engineering and contingencies. Noted Jan. 18.

Calif., Modesto—Supervs. Stanislaus Co., paving 7 mi. West Side Highway to county line, 5 in. portland cement in center, 7 in. concrete edges, to N. M. Ball, Porterville, $138,912; 3.5 mi. Escalon-Oakdale Rd. between Burnett Station and San Joaquin Co. line, asphaltic concrete, to A. Teichert & Son, Ochsner Bldg., Sacramento, $61,732. Noted Dec. 28.

Industrial Works

PROPOSED WORK

Me., South Portland—Maine Central R.R., Portland, having plans prepared by B. T. Wheeler, engr., c/o owners, 1 and 2 story car repair shop, at terminal, here. $1,000,000.

R. I., Pawtucket — Perry & Whipple, archts. and engrs., Hospital Trust Bldg., Providence, soon lets contract 1 story and high basement, 40 x 90 ft. and 45 x 60 ft. mill addition, brick and timber, plain foundation, Pawtucket Ave., here, for Tubular Woven Fabric Co., Pawtucket Ave. $35,000-$40,000.

N. Y., New York—E. M. H. Wright, c/o J. De Hart, archt. and engr., 1039 Fox St., soon receives bids 1 story, 200 x 260 ft., brick, steel and concrete garage, 56th St. and Ave. A. $50,000.

N. Y., New York—F. L. Smithe Machine Co., 11th Ave. and 21st St., soon takes bids 5 story, 127 x 215 ft., brick, steel and concrete machine shop, plain foundation, 12th Ave. and 44th St. W. M. Cory, 30 Church St., archt. and engr.

Pa., Phila.—F. W. Easby, engr., Crozier Bldg., soon takes bids 3 story and basement and 1 story rein.-con. and brick buildings plain foundations, for plant, 68th and Greenway Aves., for Beswick & Clay Co., 25th and Callowhill Sts. $500,000.

Pa., Phila.—F. W. Easby, engr., Crozier Bldg., soon takes bids 1 story, 200 x 473 ft. rein.-con., brick and steel warehouse, Atlantic and F Sts., for Penn Door & Sash Co., Atlantic and F Sts. $65,000.

Minn., St. Paul—Ford Motor Co., Highland Park, Detroit, Mich., having preliminary sketches made by A. H. Stem, archt., 601 Endicott Bldg., plant compressing several buildings, incl. power house, St. Catherine and Cleveland Aves. $10,000,000.

Tex., Beaumont — See "Miscellaneous" under Wharf.

Tex., Breckenridge—Great Texas Oil & Refinery Co. plans four 2 story buildings, brick and steel, plain foundations, storage capacity 200,000 bbl., daily capacity refinery 5,000 bbl. $1,200,000.

Tex., Corsicana—Amer. Well & Prospecting Co., 301-323 North 7th St., making plans and soon takes bids for foundry. $100,000. J. E. Rittershacker, genl. mgr.

Tex., Houston—D. D. Pittman, archt., Prince Theatre Bldg., takes bids in April, 8 story and basement, ice plant and warehouse, concrete, steel and brick, plain foundation, for Southern Texas Cold-Storage & Warehouse Co., Houston, (street address not available). $1,080,000.

Ont., Ottawa—Standard Bread Co., Ltd., Hillson Ave., takes bids in spring, rein.-con. and brick bakery, Hillson Ave. $150,000. S. Comber, Standley St., Montreal, archt.

Industrial Works (Continued)

BIDS DESIRED

N. Y., Brooklyn—Jan. 31, by R. G. Cory, archt. and engr., 30 Church St., New York, for brick, steel and rein.-con. factory, Lorraine St., here, for Gerstendorfer Bros., 231 East 42nd St., New York. $500,000.

Pa., Ambridge—C. Kristufek, 300 Park Ave., taking bids 1 story, 42 x 70 ft., 30 x 50 ft., 24 x 50 ft. and 24 x 140 ft. plant, 23rd and Cass Aves. $50,000. Private plans.

Pa., New Kinsington—New Kensington Ice Co., taking bids 1 story, 40 x 70 ft. brick and steel plant, 2nd Ave. and 7th St. $50,000. Private plans.

Pa., Phila.—C. E. Wunder, archt., 1415 Locust St., taking bids 7 story and basement, 95 x 276 ft. rein.-con. and brick factory, Water, Swanson and South Sts., for Amer. Bag & Paper Co., 2nd and Vine Sts. $600,000.

Pa., Pittsburgh—C. P. Hitchins, archt., Citizens Bank Bldg., taking bids 1 story and basement, 40 x 50 ft. garage and sales building, Bigelow Blvd., for N. S. Auto Parts Co., c/o archt.

Pa., Pittsburgh—Linde Air Products Co., 30 East 42nd St., New York City, taking bids and opens same about Jan. 25, 1 and 2 story, 101 x 161 ft. main building, 1 story, 14 x 20 ft. cylinder building, 1 story, 26 x 52 ft. oil storage building, Westfall St., here. Private plans.

Pa., Pittsburgh—B. H. Prack, archt. and engr., Keystone Bldg., taking bids 5 story and basement, 80 x 300 ft., brick and steel plant, Susquehanna Ave., for Pittsburgh Meter Co., East Pittsburgh.

Pa., Pittsburgh—B. H. Prack, archt. and engr., Keystone Bldg., will build 1 story and mezzanine, 80 x 200 ft. brick factory, Fulton and Page Sts., for B. P. Tracey, 901 Pennsylvania Ave. $50,000. Work will be done by separate contracts.

Pa., Reading—Ballinger & Co., archts., 12th and Chestnut St., Phila., taking bids 7 story and basement, 80 x 250 ft. rein.-con. and brick factory, for Reading Hardware Co., 6th St., $250,000.

W. Va., Charleston—Kanawha Mfg. Co., receiving bids 1 and 2 story, manufacturing plant, Ruffner Ave. Warne, Tucker & Patterson, Charleston, archts.

O., Cleveland — Feb. 15, by Clover Meadow Creamery Co., c/o J. S. Kofron, mgr., 1823 East 55th St., 1 story, 80 x 92 ft. brick and steel garage, East 57th St. and Belvidere Ave. $40,000. Private plans.

O., Cleveland—W. Rosensweig, Society for Savings Bldg., taking bids 1 story, 88 x 100 ft., brick and steel garage, 3834 Prospect Ave. $40,000. A. F. Janowitz, Permanent Bldg., archt.

Ill., Chicago—D. S. Klafter, archt., 64 West Randolph St., receiving bids 1 story, 125 x 150 ft., rein.-con., brick and steel garage, Lawrence and North Kentucky Sts., for B. Schwartz, c/o architect. $50,000.

Ill., Chicago — P. Foote, 7900 Stony Island Ave., receiving bids 1 story, 50 x 125 ft., rein.-con., brick and steel, salesroom and garage, Stony Island Ave. and 79th St. $40,000. Kocher & Larson, 6250 South Halsted St., archts.

Ill., Chicago—C. O. Kuehne, archt., 1572 North Halsted St., receiving bids 1 story, 100 x 125 ft., factory addition, brick and timber, 869 Weed St., for A. Hausske & Co. $45,000.

Wis., Ft. Atkinson—Jan. 30, by Ft. Atkinson Canning Co., 3 story and basement, 50 x 135 ft., main building, 1 story and basement, 42 x 150 ft. warehouse, 1 story 50 x 50 ft. cooking room, 1 story, 30 x 40 ft. power house, all rein.-con. and brick, 1 story 50 x 84 ft. corn husking and vinery, brick and timber. $150,000. McMeans & Tripp, Majestic Bldg., Indianapolis, Ind., engrs.

Wis., Milwaukee—Berthelet Pipe & Supply Co., 4th and Montana Aves., taking bids and opens same about Jan. 30, 1 story, 68 x 120 ft., concrete warehouse, plain foundation, Montana Ave. $40,000. Private plans.

Wis., Oshkosh—Badger Lumber & Mfg. Co., Marion and Jay Sts., c/o E. E. Meelens, mgr., taking bids 1 story, 168 x 300 ft., brick, rein.-con., factory. $50,000. Private plans.

Wis., Port Edwards—Nekoosa-Edwards Paper Co. taking bids and opens same Jan. 30, 2 story and basement, 158 x 188 ft., brick and concrete, paper mill addition, plain foundation. $150,000. E. P. Gleason, c/o owner, engr.

Wis., Sheboygan — Northern Furniture Co., South Water and New Jersey Sts., c/o C. Quimby, secy., taking bids 2 story, 185 x 200 ft., brick, rein.-con. and steel factory, plain foundation. $75,000. W. C. Weeks, 720 Ontario St., archt. Noted Jan. 11.

Neb., Omaha—See "Buildings."

Calif., Los Angeles—J. and D. Parkinson, archts., Title Insurance Bldg., receiving bids 2 story, rein.-con. and brick, auto assembling and plant addition, Santa Fe Ave. and East 17th St., for Ford Motor Car Co.

Calif., San Francisco — O'Brien Bros., archts., 240 Montgomery St., receiving bids 2 story, 120 x 192 ft., rein.-con. garage, Fell and Gough Sts., for L. R. Lurie Co., Mills Bldg. $100,000 or more. Pacific Telephone & Telegraph Co., 222 Grant Ave. lessees. Noted Jan. 4.

CONTRACTS AWARDED

R. I., Shannock—Columbia Narrow Fabric Co., 1 story, 60 x 180 ft. weave shed, brick and timber, plain foundation, to Eastern Constr. Co., 660 Winter St., Woonsocket. Archts. est. $45,000.

Conn., New Haven — H. M. Hodges & Bro., 290 York St., 5 story, 40 x 60 ft. warehouse, brick and timber, plain foundation, York St., to S. C. Russell, 185 Church St. Archts. est. $40,000. Noted Jan. 11.

N. Y., Tonawanda—Amer. Kardex Co., Main St., will build 2 story, 50 x 160 ft., brick addition to factory, by day labor. L. Eggert, 35 Elmwood Ave., archt. Noted Jan. 4.

N. J., Camden—Victor Talking Machine Co., Front and Cooper Sts., 2 story, 90 x 230 ft. addition to existing building, and new 8 story, 70 x 435 ft. manufacturing plant, rein.-con., brick and steel, plain foundation, to Stone & Webster, 120 Bway., New York City. Archts. est. $1,300,000.

Pa., Pittsburgh—J. M. McCollum, archt., Berger Bldg., 3 story, 23 x 50 ft. addition to plant, 2nd Ave. and Grant St., to Miller Constr. Co., Empire Bldg., for Smith Bros. Co. Inc., 409 Grant St. Archts. est. $70,000. Noted Dec. 21.

N. C., Morganton—Drexell Furniture Co., 2 story, 75 x 200 ft., furniture factory addition, mill construction, to Elliott Bldg. Co., Hickory. $50,000.

Tenn., Nashville — Phillips & Butteroff Mfg. Co., 3rd Ave. N., 3 story, concrete and steel warehouse, to Gould Constr. Co., Independent Life Bldg., $70,000. Noted Dec. 7.

Ind., Sullivan — Vigo Mining Co., Ross Dispensary Bldg., Terre Haute, will build 1 story, 50 x 80 ft. power plant, brick, near here, by day labor. $75,000. Shourds-Stoner Co., Tribune Bldg., Terre Haute, archts. Noted Oct. 19, under Terre Haute.

Ill., Chicago—Garfield Sanitary Felt Co., 1132-36 North Cherry St., 2 story, 80 x 140 ft. factory, brick and timber, to R. Starke & Son, 5205 South Sangamon St. Archts. est. $50,000.

Wis., Milwaukee—J. Wilging & Co., 1612 Teutonia Ave., 3 story and part basement, 60 x 120 ft., woodworking plant, brick and timber, plain foundation, 30th St., to P. Hirt, 1717 Vliet St. Archts. est. $30,000. Noted Nov. 2.

Wis., Random Lake—Krier Preserving Co., Belgium, 2 story and basement, 50 x 240 ft. and 1 story, 60 x 100 ft. canning plant, brick and timber, here, to West Bend Constr. Co., West Bend. Archts. est. $100,000.

Okla., Harrah—Oklahoma Gas & Electric Co., Insurance Bldg., Oklahoma City, will build 22,500 hp. power plant with steam turbine, generating units and 150 mi. high tension transmission lines to connect present system, here, by day labor. $3,000,000. Byllesby Eng. & Management Corp., 208 South La Salle St., Chicago, Ill., engrs.

Calif., San Francisco—Paige Co. of Northern California, 1665 Van Ness Ave., steel and concrete addition to garage and salesroom, Van Ness Ave. and Sacramento St., to Barrett & Hilp, Sharon Bldg., $60,000.

Calif., San Francisco—Stevenson Garage, Inc., c/o A. S. Bugbee, archt., 26 Montgomery St., 2 story and basement, rein.-con. garage and service station, Stevenson St., to Cahill Bros., 110 Sutter St., $50,000. Noted Dec. 28.

Ont., Toronto — Howard Furnace Co., 881 Yonge St., 2 story, 40 x 100 ft., brick and steel factory, concrete foundation, to E. J. Elliott, 279 Main St.; structural steel, to Hepburn & Discher, Van Horne Ave. Archts. total est. $50,000.

Buildings

PROPOSED WORK

Mass., Boston — Theatre and Hotel — Olympia Theatres Inc., 142 Berkeley St., having plans prepared by G. N. Meserve, archt., 200 Devonshire St., and takes bids in 30 to 60 days, 12 story, 200 x 300 ft. with 275 ft. tower, concrete, steel, brick and stone, Tremont, Hollis, Dillaway and Dore Sts. $8,500,000.

Mass., Springfield—Station—Boston & Albany R.R., South Station, Boston, having plans prepared by M. B. Freeman, ch. engr., South Station, Boston, 2 story, 150 x 200 ft. passenger station, baggage building, mail distributing building, and relocation of tracks in station, Lyman St., here. $4,000,000.

N. Y., Cortland—High School Bd. Educ. soon takes bids brick, steel and stone addition to high school, plain foundation. $400,000. G. W. Conable, 45 West 21st St. New York City, archt. and engr. Noted May 11.

N. Y., Ithaca—Bank and Office—Ithaca Savings Bank soon lets contract 5 story and mezzanine, 80 x 106 ft., brick, steel and stone, plain foundation, North Tioga and East Senaca Sts. $350,000. Gibb & Waltz, 108 North Tioga St., archts. and engrs. Noted Nov. 2.

N. Y., New York—Armory—Armory Bd. City Hall, rejected bids opened Nov. 27, reconstructing Squadron A, 95th St. Noted Dec. 7.

N. Y., New York—Business—Columbia University, 116th St. and Bway., soon lets contract 5 story, brick, steel and stone, plain foundation, 116th St. McKim, Mead & White, 101 Park Ave., archts. and engrs.

N. Y., New York—Gymnasium—Fordham University having plans prepared by E. G. Perrott, archt., Boyerton Bldg., Phila., Pa., 2 story, cut stone, gymnasium and pool, on campus. $200,000.

N. Y., New York—Hotel—Libbys Hotel & Bath Corp., 126 Delancey St., having plans prepared by Gronenberg & Leuchtag, archts. and engrs., 450 4th Ave., 15 story, brick, steel and stone, plain foundation, Delancey and Chrystie Sts. $2,600,000.

Pa., Phila.—Apartment—Lincoln Drive Apt. Assn., c/o L. H. Cahan, Walnut and Broad Sts., soon takes bids 14 story and basement, 52 x 208 ft. with 44 x 56 ft. and 52 x 300 ft. wings, rein.-con., brick and steel, plain foundation, Lincoln Dr. and Johnson St. $2,500,000. Kennedy & Johnson, Harrison Bldg., archts.

Pa., Phila.—Office—Presbyterian Ministers Fund, c/o M. C. Liggott, Commonwealth Bldg., soon takes bids 4 story and basement, 44 x 145 ft. stone, 1805-07 Walnut St. $150,000. P. A. Davis, 1716 Sansom St., archt.

Pa., St. Marys—Memorial—Chamber of Commerce having plans prepared by Howard & Hatcher, archts., Dubois, 2 story and basement, brick. $400,000.

Va., Richmond—Apartment—Washington Bldg. Corp., c/o Landen & Phillips, archts., Amer. Natl. Bank Bldg., soon lets contract 3 story, 46 x 118 x 237 ft., Maplewood and Rosewood Sts. $300,000.

Va., Richmond—Bank and Office—Clinton & Russell, engrs. and archts., 100 Maiden Lane, New York City, soon let contract 7 story, brick, steel and stone, Broad St., here, for Life Insurance Co. of Virginia, 10th and Capitol Sts.

W. Va., Huntington—Office—W. Lewis, 817 4th Ave., plans 9 story, 9th St. $160,000. Architect not selected.

W. Va., Morgantown—Store and Office—F. Cox, Chadwick Bldg., having plans prepared by J. H. Allen, archt., Chadwick Bldg., 6 story and basement, 83 x 104 ft., brick, stone and steel. $200,000.

W. Va., Wheeling—Cathedral—Catholic Diocese, c/o J. J. Swint, bishop, having plans prepared by E. J. Weber, archt., 5418 Stanton St., Pittsburgh, Pa., 1 story and basement. $500,000.

W. Va., White Sulphur Springs—Hotel—Lincoln Hotel Corp., c/o C. D. McLane, archt., 127 North Dearborn St., Chicago, having plans prepared 8 story and basement, 125 x 135 ft., rein.-con., brick and steel. $500,000.

N. C., Kinston—Schools—City voted $300,000 bonds for new schools. Noted Nov. 16.

Ga., Atlanta—Office—W. B. Wood, Archt. and engr., 816 Commonwealth Ave. N. W., Wash., D. C., soon lets contract 10 story, brick, steel and stone, plain foundation, for Glenn Estate, c/o architect. $1,000,000.

Fla., Orlando—Schools—Voted $150,000 bonds for schools. F. H. Tremble, Orlando, archt.

Ala., Birmingham—Office—Birmingham Chamber of Commerce having plans prepared by Martin & Miller, archts., Birmingham (street address not available), 4 story, 100 x 140 ft., rein.-con., 19th St. and 6th Ave. N. $177,000.

Ala., Birmingham—Store—Burger Dry Goods Co., 2013 2nd Ave. N., plans 7 story, 140 x 150 ft., 4th and 20th Sts. $750,000-$1,000,000. Architect not selected.

Miss., Meridian—Mosque-Hamasa Temple, takes bids about Feb. 14, 125 x 185 ft., steel and brick, 8th St. and 24th Ave. $150,000. E. Weil, Whitney Annex, New Orleans, La., archt.

Tenn., Chattanooga — Nurses Home — Erlanger Hospital, 4th St., plans 4 story, rein.

Buildings (Continued)

con. and brick, to join hospital. $200,000 bond issue proposed. C. M. Preston, pres. hospital board.

Tenn., Chattanooga — Office — Provident Life & Accident Insurance Co., Broad St., plans 8-10 story, 120 ft. front, rein.-con. and steel, Broad St. $300,000. R. J. Maclellan, pres. Architect not selected.

Ky., Louisville — College — Sisters of Nazareth plan college, Bardstown Rd. and Tyler Lane. $200,000. Architect not selected.

O., Cleveland—Apartment—M. Margolin, 548 East 112th St., having plans prepared by M. Weis, archt., 617 Union Bldg., 3 story and basement, brick and timber, 1944 East 75th St. $170,000.

O., Girard—High School—Bd. Educ. plans new brick high school. $150,000. Architect not selected.

O., Lakewood (Cleveland P. O.)—Apartment—J. T. Fritsche, 552 Leader-News Bldg., had plans prepared 4 story and basement, 96 x 120 ft., brick and timber, 1222 Clifton Blvd. $200,000. Private plans.

O., Oxford—Library—Trustees Miami University rejected bids opened Jan. 15, 2 story and basement, 72 x 100 ft., brick and concrete, campus. Will readvertise. F. L. Packard, New Hayden Bldg., Columbus, archt. Noted Jan. 4.

O., Youngstown — Church — St. Lukes Lutheran Church, c/o W. J. Kratz, pastor, 911 Oak Hill Ave., takes bids about April 1, 81 x 166 ft., Oak Hill Ave. $150,000. R. Zenk, Youngstown (street address not available), archt.

Ind., Ft. Wayne—Office—Wayne Pharmacial, 200 West Berry St., having plans prepared by G. L. Ohmart Co., archts. and engrs., 216-19 Utility Bldg., 5 story, 60 x 150 ft. rein.-con., brick and stone, Pennsylvania and Erving Sts. $250,000. Noted Sept. 7.

Ind., Hammond—Bank and Office—First Natl. Bank plans 8 story and basement, brick, Hohman St. $500,000. Architect not selected.

Ind., South Bend—Store and Apartment—Elliott & Elliott, 621 J. M. S. Bldg., plans 2 story and basement, 98 x 143 ft., rein.-con. and brick, Lafayette St. $150,000. Private plans.

Mich., Detroit—Hospital—Womans Hospital & Infants Home, Forest Ave. and Beaubien St., having plans completed by A. Kahn, archt., 1000 Marquette Bldg., 10 story, rein.-con., brick and steel, Forest Ave. and Brush St. $1,000,000.

Mich., Detroit — Hotel — J. P. Jogerst, archt., 1921 Ford Bldg., preparing plans 12 story and basement, 90 x 95 ft. rein.-con., brick and steel, plain foundation, $800,000. Owner's name withheld.

Mich., Detroit—School—Bd. Educ., 1354 Bway. Ave., having plans prepared by Malcomson, Higginbotham & Palmer, archts., 405 Moffat Bldg., 2 story and basement, 126 x 155 ft., rein.-con., brick and steel, plain foundation, Stanton and McGraw Aves. $275,000.

Mich., Dowagiac — High School — Bd. Educ. having plans prepared by Perkins, Fellows & Hamilton, archts., 814 Tower Court, Chicago, 4 story, 30 room, rein.-con., brick and stone, plain foundation, Parsonage St. Election in spring to vote on $300,000 bonds.

Mich., Owosso—Temple—B. P. O. E. having plans prepared by Verner, Wilhelm & Molby, archts., 602 Book Bldg., Detroit, 3 story and basement, 89 x 124 ft., brick and steel, plain foundation. $175,000.

Mich., Trenton—High School—R. Leroy, archt., Pratt Bldg., Kalamazoo, preparing plans and takes bids latter part of February, 2 story and basement, 155 x 190 ft. rein.-con. and brick, plain foundation, here, for Bd. Educ. $150,000.

Ill., Chicago—Apartment—Olsen & Urbain, archts., 155 North Clark St., preparing plans 3 story, rein.-con., brick and steel, Montrose St. near Western Ave. $150,000. Owner's name withheld.

Ill., Chicago—Apartment—I. M. Sevin, c/o Rissman & Hirschfield, archts., 155 North Clark St., having plans prepared 3 story, 125 x 201 ft., rein.-con., brick and steel, Pratt Blvd. near Clark St. $300,000. D. S. Klafter, 64 West Randolph St., associated archt.

Ill., Chicago—Home—Guardian Angel German Catholic Orphans Society, c/o H. J. Gaul, archt., 111 West Washington St., having plans prepared 3 story, 171 x 201 ft., rein.-con., brick and steel, Ridge and Thorne Sts. $250,000.

Ill., Chicago—Hotel—H. Emerman, c/o B. L. Steif, archt., 64 West Randolph St., having plans prepared 10 story, 115 x 130 ft., rein.-con., brick and steel, 914-20 Wilson Ave. $2,000,000. Noted April 6

Ill., Chicago—Hotel—A. Johnson, c/o J. Nyden, archt., 190 North State St., having plans prepared 12 story, Pine Grove and Diversey Blvd. $2,000,000.

Ill., Chicago—Hotel—Palmer House Hotel Co., c/o Holabird & Roche, archts., 104 South Michigan Ave., having plans prepared 23 story, 248 x 254 ft., rein.-con., brick and steel, Monroe St. between State St. and Wabash Ave. $12,000,000.

Ill., Chicago—Office and Hotel—S. Isaacson, c/o R. F. France, archt., 155 North Clark St., having plans prepared 3 story, 115 x 280 ft., rein.-con., brick and steel, Bway. and Barry St. $400,000.

Ill., Chicago—Store and Office—I. M. Mills, c/o D. S. Klafter, archt., 64 West Randolph St., having plans prepared 3 story, 150 x 207 ft., rein.-con., brick and steel, Milwaukee and Crawford Aves., $275,000.

Ill., Chicago — Theatre — Brunhild & Young, c/o Newhouse & Bernham, archts., 4630 Prairie Ave., plans 3 story, 100 x 175 ft., rein.-con., brick and steel, 6906-16 North Clark St. $500,000.

Ill., Chicago—Theatre, Store and Office—Peters & Horwitz, 10 South La Salle St., plans 240 x 490 ft., rein.-con., brick and steel, Robey St. and Belle Plaine Ave. $1,200,000. Architect's name withheld.

Wis., Manitowoc—Hotel—New Williams House, c/o W. Seibel, proprietor, South 8th St., having plans prepared by C. Barkhausen, archt., 79 Wisconsin St., remodeling and addition to hotel, brick and concrete, plain foundation. $150,000.

Wis., Milwaukee—Nurses Home—Milwaukee Hospital, 2,200 Cedar St., having plans prepared by Clas, Shepherd & Clas, archts., 445 Milwaukee St., 3 story and basement, L shaped, 62 x 90 ft., brick and concrete, plan foundation, Cedar St. $150,000.

Wis., Milwaukee—Store—E. Schuster & Co., 12th and Vliet Sts., having plans prepared by Brust & Philipp, archts., 405 Bway., 3 story and basement, 150 x 300 ft., brick and concrete addition, plain foundation, Vliet St. $300,000.

Ia., Cedar Falls—High School—J. G. Ralston, archt., Waterloo, takes bids about Feb. 1, 3 story and basement, 116 x 146 ft., brick and stone, here, for Bd. Educ. $150,000. Noted July 13.

Ia., Des Moines—Schools—March 12, to vote on $2,630,000 bonds for new schools and additions to old ones. G. L. Garton, secy. Bd. Educ.

Ia., Wapello—School—Bd. Educ. having plans prepared by Keffer & Jones, archts., 204 Masonic Temple Bldg., Des Moines, for school, here. $150,000 bonds voted for project. Noted Jan. 4.

Minn., Duluth—City Hall—City Comrs. having plans prepared by German & Jenssen, archts., Exchange Bldg., 4 story and basement, 250 x 300 ft., brick and stone, 1st St. between 4th and 5th Aves. $1,000,000. Noted April 6.

Minn., Minneapolis—Office—Yeates & Son, 520 1st Natl.-Soo Line Bldg., having plans prepared by Long & Thorshov, archts., 1028 Andrus Bldg., 3 story and basement, 90 x 104 ft., rein.-con., brick and tile, Nicollet Ave. and 9th St. $150,000.

Minn., St. Paul—Store and Office—Barrett & Zimmerman, Prior and University Aves., having plans prepared 3 story and basement, 165 x 180 x 230 ft., brick, concrete and tile, Prior and University Aves. $150,000. S. Jacobson, 401 Endicott Bldg., archt.

Neb., Omaha—Store and Office—C. A. and R. C. Cook, of Chicago, c/o George & Co., 902 City Natl. Bank Bldg., plans to rebuild, probably 3 story and basement, 16th to 17th Sts $1,000,000. Private.

Mo., Clayton—School—John Burroughs Country Day School, c/o L. Egan, 12th and Locust Sts., St. Louis, having plans prepared by Le Beaume & Klein, archts., Chemical Bldg., St. Louis, 3 story, rein.-con. and brick, plain foundation, Price and Denny Rds., here. $500,000.

Mo., Kansas City—Dance Halls—See "Miscellaneous."

Mo., Kansas City—Office—Kansas City Life Insurance Co., Rialto Bldg., plans 3 story and basement, rein.-con., steel and stone, Bway. and Armour Blvd. $500,000. Architect not selected.

Mo., Kansas City—Office—Lumberman Building Co., 412 Scarritt Bldg., having plans prepared by W. S. Ferguson & Co., archts., 1900 Euclid Ave., Cleveland, O. and opens bids about Feb. 15, 10 story and basement, 102 x 115 ft., rein.-con., brick and steel, 24th and Grand Aves. $800,000.

Mo., St. Joseph—Hospital—W. Boschen, archt., Tootle Lacy Bldg., soon lets contract 7 story and basement 120 x 180 ft., rein.-con., brick, steel and stone, for Methodist Hospital Assn. $750,000. Noted Oct. 26.

Mo., University City—Store and Apartment—Limits Realty Co., c/o Weisels Gerhart Realty Co., 8th and Chestnut Sts., St. Louis, plans 5 story, 110 x 200 ft., rein.-con., brick and steel, plain foundation, Delmar Blvd. and Limits Ave., here. $200,000. Architect not selected.

Tex., Dallas—Museum and Art Gallery—Texas Museum Natl. History Assn., c/o E. Sewell, genl. dir., 1322 North Haskell Ave., had plans prepared by Lang & Witchell, archts., Amer. Exch. Natl. Bldg., 2 story (1st unit), Fair Park. $40,000. Ultimate cost $100,000-$200,000.

Tex., Galveston — Bank and Office — Texas Bank & Trust Co., c/o I. H. Kempner, pres., having plans prepared by A. C. Blossom, archt., 680 5th Ave., New York City, and Sanguinet, Staats & Hedrick, associated archts., 1st Natl. Bank Bldg., Ft. Worth, 11 story, 85 x 120 ft., concrete, steel and brick, containing 176 offices, stores, banking room, etc. $800,000.

Tex., Temple—High School—City election soon to vote on $225,000 bond issue for high school. Address J. B. Daniel, c/o Bd. Educ.

Colo., Denver—Schools—Denver School Dist., Commonwealth Bldg., having plans prepared by Fisher & Fisher, archts., U. S. Natl. Bank Bldg., West Side High School $1,500,000; H. W. Edwards, archt., 1172 Stout St., South Side High School, $1,500,000; G. H. Williamson, archt., Majestic Bldg., East Denver High School, adjoining City Park Esplanade, $1,800,000; Merrill, Burnham & Hoyt, archts., Colorado Natl. Bank Bldg., Lake Junior High School, $750,000; W. N. Bowman, archt., Central Savings Bank Bldg., Mitchell Junior High School, $1,000,000; L. E. Varian, archt., Gas & Electric Bldg., addition to University Park School, $100,000; Marean & Norton, archts., Chamber of Commerce Bldg., Globeville School, $44,000; M. S. Fallis, archt., Ideal Bldg., Garden Place School, $175,000; W. Redding & Sons, archts., Colorado Theatre Bldg., annex to Perry School, $100,000; H. J. Manning, archt., Majestic Bldg., Fairmont School, $200,000; E. W. Huntington, archt., 312 17th St., addition to school in Berkley Dist., $66,000; Montjoy & Frewen, archts., Chamber of Commerce Bldg., Ebert School, $310,000; R. K. Fuller, archt., Foster Bldg., Edison School, $250,000. Noted Oct. 26.

Wash., Seattle—Theatre—Ackerman & Harris, Palace Hip Theatre, Empress Bldg., plan theatre. $750,000. J. Miller, mgr. Architect not announced.

Ore., Portland—High School—Bd. Educ. having plans prepared by W. C. Knighton, archt., U. S. Natl. Bank Bldg., for U. S. Grant High School, rein.-con., $332,000. Noted Oct. 26.

Ore., Portland—School—Bd. Educ., opens bids about Feb. 15, for 2 story, 90 x 360 ft., brick and concrete, Holladay School in School Dist. 1. $225,000. A. E. Doyle, Worcester Bldg., archt.

Calif., Berkeley—Library—W. H. Ratcliff, Jr., archt., 1st Natl. Bank Bldg., soon takes bids first unit of 1 story, concrete and stone, Le Conte Ave., for Pacific School of Religion, c/o archt. $100,000. Total cost $1,000,000.

Calif., Long Beach—Church—Congregational Church of Long Beach, having plans prepared by H. M. Patterson, archts., Johnson Bldg., Los Angeles, brick additions, Cedar Ave. $200,000.

Calif., Los Angeles — Apartment — C. Isaacs, c/o Walker & Eisen, archts., Pacific Finance Bldg., having plans prepared 4 story and basement, 120 x 150 ft., brick or concrete, 8th and Catalina Sts. $150,000.

Calif., Los Angeles—Hotel—Hart Bros., c/o Rosslyn Hotel, 453 South Main St., soon takes bids 12 story, fireproof, Main and 5th Sts. J. and D. Parkinson, Title Insurance Bldg., archts.

Calif., Mountain View—High School—Mountain View High School Dist. soon takes bids 2 story, rein.-con. $150,000. W. H. Weeks, 369 Pine St., San Francisco, archt. Noted Oct. 5.

Calif., San Francisco—Apartment—O. R. Thayer, archt., 110 Sutter St., preparing plans 6 story and basement, brick and concrete, Sutter St. $175,000. Owner's name withheld.

Calif., San Rafael—Office—See "Industrial Works."

Calif., Santa Rosa—Hotel and Apartment—Santa Rosa Hotel Corp., represented by Dunn-Hurst & Martin, Insurance Exch. Bldg., San Francisco, having plans pre-

Buildings (Continued)

pared by W. O. Lewis, archt., 1207 High St., Alameda, 6 story, concrete. $500,000. Ellery, Frost & Patton, Merchants Natl. Bank Bldg., San Francisco, engrs. Noted Jan. 11

Ont., London—Exhibition—Western Fair Bd., E. S. Little, chn. Bldg. Com., having plans prepared and takes bids end of March, 2 story and basement, 200 x 300 ft. brick and steel, Queens Park. $175,000.

Ont., Ottawa—Office—Dominion Government, Dept. Pub. Wks., having plans prepared by R. A. Wright, archt., and soon takes bids, rein.-con., brick, steel and stone, Wellington St. $2,500,000.

B. C., Penticton—Court House—Provincial Government, Victoria, plans 2 or 3 story, rein.-con., brick and stone. $150,000. P. Philip, engr., and H. Whittaker, archt., both at Dept. Pub. Wks., Victoria. $150,00.

BIDS DESIRED

Mass., West Springfield (Springfield P. O.)—High School—Feb. 6, by A. L. Pease, chn. com. for town, 3 story, 100 x 250 ft., brick, plain foundation. $285,000. C. G. Loring, 7 Water St., Boston, archt. Noted Nov. 9.

N. Y., Albany—School—Feb. 5, by Bd. Contract & Supply, P. S. 4, 2 story and basement, 68 x 198 ft. with 45 x 59 ft. wing, Madison Ave. and Ontario St. M. T. Reynolds, 100 State St., archt.

N. Y., Brooklyn—Apartment—Gronenberg & Leuchtag, archts. and engrs., 450 4th Ave., New York City, 6 story, 100 x 200 ft., brick, steel and stone, plain foundation, Brooklyn Ave. $300,000. Owner's name withheld. Work will be done by separate contracts under supervision of architects.

N. Y., Brooklyn—Apartment—Gronenberg & Leuchtag, archts. and engrs., 450 4th Ave., New York City, 6 story, 150 x 200 ft., brick, steel and stone, plain foundation, St. Marks Ave., here. $450,000. Owner's name withheld. Work will be done by separate contracts under supervision of architects.

N. Y., Brooklyn—Apartments—V. Steinfold, c/o Slee & Bryson, archts. and engrs., 154 Montague St., two 6 story, 85 x 100 ft., brick, steel and stone, plain foundations, St. Johns Pl. $250,000 each. Work will be done by separate contracts under supervision of architects.

N. Y., Brooklyn—School—Jan. 29, by C. B. J. Snyder, archt. and engr., Flatbush Ave. extension and Concord St., brick, steel and stone addition, to P. S. 6, plain foundation, Warren St. near Smith St., for Bd. Educ., 500 Park Ave., New York. $175,000.

N. Y., Kings Park—Home—Feb. 14, by State Hospital Comn., Albany, addition to Employees Home, etc., at Kings Park State Hospital, here. L. F. Pilcher, Albany, state archt.; adv. this issue.

N. Y., Marcy—Hospital—Feb. 14, by State Hospital Comn., Albany, farm colony building for 125 patients, at Utica State Hospital, Marcy Div., here. L. F. Pilcher, Albany, state archt.; adv. this issue.

N. Y., New York—Apartment—F. M. S. Building Co., c/o G. F. Pelham, archt. and engr., 200 West 72nd St., brick, steel and stone, 188th St. and St. Nicholas Ave. $250,000. Work will be done by separate contracts under supervision of architect. M. Goodman, pres.

N. J., Bloomfield — Community and School—Sacred Heart Parish, 76 Broad St., taking bids and opens same about Feb. 15, 125 x 150 ft., brick, steel and stone, plain foundation. $200,000. T. M. Donavan, pastor. Elliott, Lynch & McKenna, 347 5th Ave., New York City, archts. and engrs.

N. J., Camden—Lockey & Hettle, archts., 5 Hudson St., receiving bids 4 story and basement, 69 x 100 ft., Bway. and Stevens St., for Y. M. C. A. $300,000. Noted Dec. 7

N. J., Toms River—Detention—Feb. 6, by Bd. Freeholders Ocean Co., Court House, brick and concrete detention building for witnesses, also remodeling wardens dwelling. P. P. Elkinton, archt. and engr.; adv this issue.

Pa., Charleroi—High School—Bd. Educ. and J. C. Brenton, archt., Charleroi, taking bids and opens same about Feb. 1, 2 story and basement, 116 x 179 ft. $150,000.

Pa., Erie—Y.W.C.A., 134 East 44th St., New York City, taking bids and opens same about Feb. 15, 3 story, brick, steel and stone, plain foundation, West 7th St., here. $200,000. W. F. Thompson, 342 Madison Ave., New York City, archt. Noted Jan. 11.

Pa., Jeannette—Church—Feb. 1, by C. G. Strong, archt., Union Bank Bldg., Pittsburgh, 1 story and balcony, 86 x 156 ft., rein.-con. and tile, 7th St. for Sacred Heart Catholic Church. $150,000. Noted Jan. 18.

Pa., Monaca—High School—Bd. Educ. taking bids 2 story and basement, 127 x 132 ft. brick and stone, Indiana Ave. $150,000. J. H. Phillips, P. O. Box 977, Pittsburgh, archt.

Pa., Phila.—Apartment—W. A. Young, archt., 320 South Iseminger St., taking bids 4 story and basement, 150 x 150 ft. brick and stone, 63rd and City Line Aves., for J. Bobb, 6250 Ludlow St. $350,000. Noted Jan. 4.

Pa., Pittsburgh—High School—Feb. 1, by Bd. Educ., Fulton Bldg., 3 story and basement, 148 x 302 ft. addition to Peabody High School, Margaretta and Beatty Sts. $500,000. E. B. Lee, Chamber of Commerce Bldg., archt.

Tenn., Nashville—War Memorial and Capitol Annex—Jan. 28, by H. McAllister, chn., State Capitol, for soldiers war memorial, etc. $1,400,000. Former bids rejected. McKim, Mead & White, 101 Park Ave., New York City, archts., and E. Daugherty, Stahlman Bldg., archt. Noted Jan. 18.

O., Cleveland—Apartments—A. and S. Realty Co., c/o Abrams & Stein, Society for Savings Bldg., taking bids and opens same about Feb. 5, two 3 story and basement, 86 x 96 ft., brick and timber, Euclid Blvd. $175,000. A. F. Janowitz, Permanent Bldg., archt.

O., Cleveland — Store — Retail Stores Building Co., c/o W. S. Ferguson Co., archts., 1900 Euclid Ave., taking bids 3 store and basement, 130 x 130 ft., brick, steel and concrete, East 12th St. and Chester Ave. $200,000.

O., Massillon — High School—Feb. 8 (change of date), by Bd. Educ., remodeling and 2 story and basement, 160 x 171 ft. addition to Washington High School, rein.-con. and brick. $300,000. O. D. Howard, 8 East Broad St., Columbus, archt. Noted Jan. 11.

Mich., Jackson—Hotel—Jan. 30, by J. Kavanaugh, 1202 East Main St., 8 story and basement, 50 x 70 ft. concrete, brick and steel, plain foundation, Francis St. $200,000. E. Bailey Co., Oil City, Pa., archts.

Ill., Chicago—Apartment—R. W. Matteson & Co., 140 South Dearborn St., receiving bids 3 story and basement, 125 x 200 ft., rein.-con., brick and steel, George and Mildred Sts. $400,000. P. F. Olsen, 127 North Dearborn St., archt. Noted Jan. 4.

Ill., Chicago—Bank, Office, etc.—Z. E. Smith, archt., 305 East 55th St., receiving bids 3 story, 125 x 200 ft., rein.-con., brick and steel, 79th St. and Cottage Grove Ave., for C. Spangenberg, 6823 Stony Island Ave. $250,000.

Ill., Chicago—Office—C. A. Eckstrom, archt., 5 North La Salle St., receiving bids 5 story, 97 x 162 ft., rein.-con., brick and steel addition, Wabash and Washington Sts., for Wabash & Washington Trust Co., c/o architect. $400,000.

Ill., Chicago—Store and Office—Kocher & Larsen, archts., 6520 South Halstead St., receiving bids 2 story, 104 x 107 ft., rein.-con., brick and steel, 848-854 West 63rd St., for J. A. Martin, 1501 West 71st St. $150,000.

Ill., Chicago—Store and Office—See-Moon & Co., 919 West Randolph St., receiving bids 2 story, 101 x 150 ft., rein.-con., brick and steel, Randolph and Morgan Sts. $150,000. Leichenko & Esser, 38 South Dearborn St., archt.

Ill., Chicago—Temple and Community House—Newhouse & Bernham, archts., 4630 Prairie Ave., receiving bids 3 story, 125 x 200 ft., rein.-con., brick and steel, Drexel Blvd. and 50th St., for Kehilath Anshe Mayriv Congregation, c/o architects. $800,000. Noted Dec. 4.

Ill., Naperville — Church — H. J. Gaul, archt., 111 West Washington St., Chicago, receiving bids 1 story, rein.-con., brick and steel, here, for Saints Peter and Paul Catholic Parish. $150,000. Noted Jan. 11.

Wis., Milwaukee—Store—M. Tullgren & Sons Co., archts., 425 East Water St., taktaking bids and opens same about Jan. 29, 2 story and basement, 120 x 120 ft., brick and concrete, plain foundation. $150,000. Owner's name withheld.

Wis., Sheboygan—Store—W. C. Weeks, archt., 720 Ontario Ave., taking bids 4 story, 110 x 120 ft., brick, rein.-con. and steel, plain foundation, for H. C. Prange Co., 731 North 8th St. $175,000. Noted Nov. 2.

Wis., Whitefish Bay—Apartment—E. R. Tompkins, 445 Milwaukee St., taking bids 3 story and basement, 50 x 72 ft. and 24 x 115 ft., brick, tile and concrete, plain foundation, Newhall St. $150,000. Clas, Shepherd & Clas, 445 Milwaukee St., Milwaukee, archts.

Minn., Minneapolis—Church—School and Rectory—Jan. 30, by Church of the Annunciation, c/o F. Lang, 5101 Nicollet Ave., 2 and 3 story and basement, 39 x 104 x 169 ft. church-school, and 2 story and basement, 19 x 50 x 60 ft. rectory, brick and tile, 50th St. and Lyndale Ave. S. $150,000. Damon, O'Meara & Hills, 1123 Merchants Natl. Bank Bldg., St. Paul, archts. Noted Nov. 23.

Minn., Minneapolis—School—Feb. 2, by Church of the Holy Name, and P. M. Cunningham, 3633 11th Ave. S., story and basement, 36 x 104 ft. with two 28 x 32 ft. wings, brick, concrete and tile, 12th Ave. S. and East 37th St. $150,000. Damon, O'Meara & Hills, 1123 Merchants Natl. Bank Bldg., St. Paul, archts.

Minn., New Prague—School—Feb. 6, by Bd. Educ., 2 story and basement, rein.-con., brick and tile. $150,000. F. E. Reimer, clk. Toltz, King & Day, 1110 Pioneer Bldg., St. Paul, archts.

Minn., St. Paul — Church-School and Rectory—Feb. 1, by Church of the Nativity, c/o T. Moore, 2031 Lincoln Ave., 60 x 142 ft. church-school with two 34 x 87 ft. wings, and 2½ story and basement, 50 x 60 ft. rectory, brick, concrete and tile, Stanford and Prior Aves. $150,000. Damon, O'Meara & Hills, 1123 Merchants Natl. Bank Bldg., archts. Noted Dec. 21.

Neb., Omaha — Hospital — Lincoln City Hospital Assn., c/o J. L. Teeters, chn., 1812 D St., Lincoln, receiving bids brick, stone and rein.-con. hospital, and power house, 17th and Sewel Sts. Davis & Wilson, 515 Security Bldg., Lincoln, archts. O. H. Bartine, Aeolian Bldg., New York City, consult. archt.

N. D., Jamestown—High School—Feb. 23, by Bd. Educ., superstructure for 3 story and basement, 150 x 180 ft., rein.-con., brick, tile and stone, $250,000. Shannon, Boyd & Boyd, Jamestown, archts. Noted Nov. 2.

Colo., Denver — Hall — H. J. Manning, archt., Majestic Bldg., taking bids and opens same about Feb. 1, 4 story and basement, 60 x 175 ft., brick, stone and tile, for Regis College, West 50th Ave. and Lowell Blvd. $250,000.

Colo., Denver—Hospital, etc.—Fisher & Fisher, archts., U. S. Natl. Bank Bldg., taking bids and opens same March 1, 5 units incl. hospital, administration, medical school, outside patients and nurses home, 8th St. and Colorado Blvd., for State of Colorado, c/o C. W. Mills, chn. Bldg. Comn. $1,000,000.

Calif., Taft—High School—Feb. 13, by Trustees Taft Union High School Dist., group rein.-con. buildings, incl. auditorium, gymnasium, science, domestic science, shop, and addition to present structures. To exceed $200,000. W. H. Weeks, 369 Pine St., San Francisco, archt. Noted July 20.

BIDS RECEIVED

Md., Baltimore—School—Mayor and City Council opened bids, 3 story, 145 x 264 ft., rein.-con. and brick, plain foundation, Granada and Oakford Aves., from Price Constr. Co., Maryland Trust Bldg., $456,000; P. C. Streett, 3407 Norwood Ave., $475,000; Consolidated Eng. Co., Calvert Bldg., $482,500. Noted Jan. 11.

D. C., Wash.—Hotel—Powhatan Hotel Co., 18th St. and Pennsylvania Ave. N. W., received bid 10 story addition, from Boyle-Robertson Constr. Co., Evans Bldg. Archts. est. $500,000. Noted Jan. 11.

O., Wooster—High School—Bd. Educ. opened bids Jan. 15, 2 story and basement, 95 x 188 ft., 62 x 81 ft. and 24 x 80 ft., brick, concrete and terra cotta, from J. I. Barnes, South Bend, Ind. (street address not available) $327,215; R. H. Evans & Co., Ferry Bldg., Columbus, $339,950; R. G. Whitter, Cleveland (street address not available) $342,000. Noted Jan. 4.

Minn., Mankato—School—State Bd. of Control, St. Paul, opened bids Jan. 15, general contract 3 story and basement, rein.-con. brick and tile, State Teachers College, here, from J. B. Nelson Constr. Co., Mankato, $256,980; E. Bjorklund, 485 Endicott Bldg., St. Paul, $264,435; J. A. McDonald, 750 Builders Exch., Minneapolis, $267,893. Noted Jan. 11.

CONTRACTS AWARDED

N. Y., Binghamton—Store—Hills, McLean & Haskin, 89 Court St., 3 story, 60 x 250 ft., brick addition, Commercial St., to Mitchell Constr. Co., 332 Water St. Archts. est. $165,000.

N. Y., Brooklyn—Apartment—J. Gottlieb, c/o Cohn Bros., archts. and engrs., 361 Stone Ave., 110 x 140 ft., brick, steel and stone, plain foundation, Ocean Ave., by day labor. $200,000.

N. Y., Brooklyn—Apartment—Nugent Constr. Co., c/o Gronenberg & Leuchtag, archts. and engrs., 450 4th Ave., New York City, 6 story, 50 x 100 ft., brick, steel and stone, plain foundation, 94th St., here, by day labor. $200,000.

N. Y., New York—Apartment—Dermark Corp., c/o M. Freehof, archt. and engr., 135 East 43rd St., 5 story, 100 x 100 ft., brick, steel and stone, plain foundation, Harrison

Buildings (Continued)

Ave., by day labor. Archts. est. $200,000. S. Fessler, pres.

N. Y., New York—Apartment—Brandt Building Corp., c/o Springsteen & Goldhammer, archts. and engrs., 32 Union Sq., 6 story, 160 x 200 ft., brick, steel and stone, plain foundation, 174th St. and Bway., by day labor. $400,000.

N. Y., New York—Apartment—Harman Realty Co., c/o Goldner & Goldner, archts. and engrs., 47 West 42nd St., 6 story, brick, steel and stone, plain foundation, Walton Ave., by day labor. Archts. est. $175,000.

N. Y., New York—Apartment—H. J. M. Building Co., c/o Springsteen & Goldhammer, 32 Union Square, archts. and engrs., 5 story, brick, steel and stone, plain foundation, Grand Concourse, by day labor. Archts. est. $250,000.

N. Y., New York—Apartment—H. M. K. Realty Co., c/o Springsteen & Goldhammer, archts. and engrs., 32 Union Square, brick, steel and stone, plain foundation, Grand Ave., by day labor. Archts. est. $175,000.

N. Y., New York—Apartment—Joint Ownership Constr. Co., c/o Rouse & Goldstone, archts. and engrs., 512 5th Ave., 14 story, brick, steel and stone, plain foundation, Lexington Ave., by day labor. $500,000. F. Culver, pres.

N. Y., New York—Apartment—Kaufman & Massimino, c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., 5 story, 75 x 115 ft., brick, steel and stone, plain foundation, Sherman Ave., by day labor. Archts. est. $150,000.

N. Y., New York—Apartment—Langsen Realty Co., c/o Goldner & Goldner, archts. and engrs., 47 West 42nd St., 6 story, 100 x 100 ft., brick, steel and stone, East 181st St. by day labor. Archts. est. $300,000. S. Langenthal, pres.

N. Y., New York—Apartment—Trio Holding Co., Inc., c/o C. B. Meyers, archt. and engr., 32 Union Square, 6 story, brick, steel and stone, plain foundation, Haven Ave., by day labor. Archts. est. $150,000. J. H. Springer, pres.

N. Y., New York—Studio and Apartment—Joint Ownership Constr. Co. Inc., 342 Madison Ave., 15 story, 110 x 111 ft., brick, steel and stone, plain foundation, 424 East 57th St., to Hegeman-Harris Co. Inc., 185 Madison Ave. Archts. est. $1,750,000.

Pa., Phila. — Apartments — B. Mercer, archt., 3602 Market St., two 4 story and basement, 42 x 56 ft. brick, steel and stone, plain foundations, 63rd and Jefferson Sts., to Kaplan, Shatler & Presser, Inc., 3602 Market St., $150,000. Owner's name withheld.

Pa., Phila. — Sales and Office — A. J. Sauer & Co., archts. Denckla Bldg., 15 story and basement, 1312-14 Chestnut St., to Hughes-Foulkrod Co., Commonwealth Bldg., for Cunningham Piano Co., 12th and Chestnut Sts., $1,000,000. Noted Jan. 11.

Pa., Titusville—Theatre—Morosco Holding Co., 25 West 43rd St., New York City, 1 and 2 story, 85 x 100 ft., West Spring St., here, to E. Margolies, 19 East 33rd St., New York City. Archts. est. $175,000. Contract to F. C. Danner, New Kensington, abandoned. Noted Sept. 7.

Md., Baltimore—Engine Houses and Truck Houses—Mayor and City Council, to P. C. Streett, 3407 Norwood Ave., engine house 59, Maryland and Indiana Aves., Westport, $44,000; to R. B. Mason, 308 West Madison St., engine house 57, Harford Rd. and Fleetwood Ave., $41,985, engine house 47, Washington Blvd. and 8th St., $44,789, engine house 56 and truck house 24, Bush and Carroll Sts., $53,362; to General Contg. Co., 226 Richmond St., engine house 58, Pennington Ave. and Filbert St., $43,618, engine house 25, $42,679. Bids rejected on engine house 55 and truck house 23. Noted Jan. 18.

Md., Baltimore — School — Mayor and City Council, 3 story, brick, Hawthorne Rd. and Clarendon Ave., to J. H. Miller Inc., Eutaw and Franklin Sts., $1,124,420. Noted Jan. 18.

W. Va., Wayne—High School—Bd. Educ. of Wayne Co., 2 story and basement, 108 x 128 ft., to King Lumber Co., Charlottesville, Va. Archts. est. $150,000. Noted Feb. 9.

Ga., Atlanta—High School—Bd. Educ. 3 story, concrete and brick, plain foundation, to McDevitt-Fleming Co., 1st Natl. Bank Bldg., Chattanooga Tenn. $200,000.

La., Baton Rouge—Engineering—R. L. Himes secy. Bldg. Com. Louisiana State University, engineering building, heating, piping, tunnels, and cottage for professor, to Caldwell Bros., 859 Carondelet St., New Orleans, $167,432. Noted Jan. 4.

O., Cleveland—Church—W. C. Jansen, archt., 402 Electric Bldg., superstructure for 1 story, 100 x 200 ft., brick and steel, East 109th St. and St. Clair Ave., to Alexander Bros., Williamson Bldg., for St. Aloysius Roman Catholic Church, 10932 St. Clair Ave. Archts. est. $300,000. Noted Jan. 4.

O., Cleveland — Display and Sales — Walker & Weeks, archts., 1900 Euclid Ave., 4 story, 60 x 125 ft., brick, steel and concrete, 7023 Euclid Ave., to Crowell & Little Constr. Co., 3751 Prospect Ave., for Schwegler & Co., 6501 Euclid Ave. Archts. est. $200,000. Noted Dec. 14.

O., Cleveland—School—Bd. Educ., East 6th St. and Rockwell Ave., general contract, 2 story and basement, 65 x 70 x 187 x 191 ft., brick, steel and concrete addition, East 79th St. and Hough Ave., to Camp Constr. Co., Newman-Stern Bldg., $361,500; heating and ventilating apparatus, to J. Roemer Heating Co., 1808 East 22nd St., $69,750. Noted Jan. 11.

O., Dayton—Office and Store—E. E. Urban Co., 716 Forest Ave., 16 story, 60 x 65 ft. with 6 story tower, rein.-con. and brick, South Market St., to F. J. Hughes Co., 406 U. B. Bldg., $400,000.

Ind., Indianapolis—Apartment—W. F. Myers, 726 Pythian Bldg., 3 story and basement, 65 x 132 ft., brick, Woodruff Pl., to State Constr. Co., Pythian Bldg., cost plus percentage basis. Archts. est. $150,000. Noted Jan. 11.

Ind., Indianapolis—Bank and Office—Meyer-Kiser Bank, 136 East Washington St., 11 story and basement, 60 x 200 ft., rein.-con. and brick, steel frame, East Washington St., to Bedford Stone & Constr. Co., Fletcher Trust Bldg. Archts. est. $1,000,000. Noted Jan. 4.

Mich., Detroit — Apartment — Citizens Building & Realty Co., 816 Smith Bldg., 7 story and basement, 50 x 150 ft. rein.-con., brick and steel, Woodward and Peterboro Aves., to R. Appelman, 5820 Van Court Ave. Archts. est. $1,250,000.

Mich., Detroit — Hotel — Development Corp., J. B. Book, Jr., pres., Book Bldg., 25 story, brick, steel and stone, plain foundation, Michigan Ave. and Washington Blvd., to Lynch Constr. Co., 52 Vanderbilt Ave., New York City. Archts. est. $5,000,000.

Mich., Detroit—School—Bd. Educ., 1354 Bway. Ave., 2 story and basement, 48 ft. high, 110 x 145 ft., rein.-con., brick and steel, plain foundation, Kirby Ave., to Brayton Eng. Co., 907 Kresge Bldg., $263,909. Noted Dec. 21.

Ill., Chicago—Apartment — A. Knight, 3731 North Dearborn St., 3 story and basement, 100 x 120 ft., rein.-con., brick and steel, 5208 Belden St., to J. Anderson & Son, 5717 Winthrop Ave. Archts. est. $200,000.

Ill., Chicago—Apartment, Hotel and Store—W. F. Peterson, 118 North La Salle St., 3 and 4 story, 150 x 156 ft., rein.-con., brick and steel, 300-12 Central Ave., to Anderson & Winblad, 118 North La Salle St. Archts. est. $250,000.

Ill., Chicago—School—Bd. Educ., 650 South Clark St., 3 story, 208 x 266 ft., rein.-con., brick and steel, 4400-58 Sacramento Ave., to A. and E. Anderson Co., 19 South La Salle St. Archts. est. $650,000.

Ill., Chicago — School — Bd. Educ., 650 South Clark St., 3 story and basement, 92 x 108 ft., rein.-con., brick and steel addition, 16th St. and South Avers Ave. to G. Kehl & Sons, 1225 North Maplewood Ave. Archts. est. $500,000.

Ill., Chicago—Store and Office—J. F. Vakoun & Son, 541 Diversey Parkway, 2 story, 100 x 125 ft., rein.-con., brick and steel, 545-55 Diversey Parkway, to Anderson & Winblad, 6235 South Michigan Ave. Archts. est. $150,000.

Ill., Evanston—Hotel—V. C. Carlson, 701 Church St., 7 story, 140 x 270 ft., rein.-con., brick and steel, Orrington Ave. and Church St., by day labor. $2,000,000. J. A. Scanlon, c/o owner, architect. Noted Aug. 24 under "Chicago."

Wis., Beloit—Office—Beloit Water, Gas & Electric Co., 429 East Grand Ave., general contract, 3 story and basement, (ultimately 7 story), 80 x 136 ft., brick, steel and concrete, plain foundation, to J. Schneiberg, 945 Bluff St.; structural steel, to Worden-Allen Co., Port Washington Rd., Milwaukee. Archts. est. $150,000. Noted Oct. 5.

Ia., Monticello—High and Grade School—School Bd., general contract 3 story and basement, 102 x 215 ft., rein.-con., brick and Bedford stone, to Lauritzen Constr. Co., Waterloo, $148,639. Noted Dec. 21.

Kan., Salina—College—Kansas Wesleyan College, 3 story, brick, plain foundation, to Eberhardt Constr. Co., Salina, $200,000. Lorentz, Schmidt & Co., 516 4th Natl. Bank Bldg., Wichita, archts. preparing plans.

Neb., Lincoln — Bank and Office — A. Moorman & Co., archts., Chamber of Commerce Bldg., St. Paul Minn., will build 7 story and basement, 25 x 142 ft., brick, concrete, stone and terra cotta, here, for Natl. Bank of Commerce, by day labor. $250,000.

Mo., St. Louis—Store and Office—T. P. Saum, 4425 Shaw Ave., 2 and 3 story, 125 x 145 ft., brick and terra cotta, McPherson and DeBaliviere Aves., to Saum Architects, 713A Chestnut St., $150,000.

Calif., Sacramento—Market—L. Glide, c/o J. Morgan, archt., Merchants Exch. Bldg., San Francisco, steel work and foundation for 2 story and basement, 160 x 170 ft., 13th and J Sts., to K. E. Parker, Clunie Bldg., San Francisco, $97,600. Noted Jan. 18.

Calif., San Francisco—Apartment—L. B. Ham, 105 Montgomery St., will build 6 story and basement, brick and steel, Northeast Sutter and Leavenworth Sts., by day labor under supervision of W. Wethered, engr., 755 Mission St. $150,000.

Calif., San Francisco — Market and Apartment—Gaffney & Luce, c/o Daylight Market, 6 story and basement, rein.-con., Market and Gough Sts., to G. P. W. Jensen, 320 Market St., $198,000. Noted Dec. 28.

Calif., Santa Ana—Bank and Office—First Natl. Bank of Santa Ana, 6 story and basement, brick and steel, to E. C. English, Citizens Natl. Bank Bldg., Los Angeles, $425,000.

Federal Government Work

PROPOSED WORK

N. Y., New York—Dredging—U. S. Engineer, 1st Dist., plans dredging and rock removal in East River.

Pa., Phila.—Fuel Oil—U. S. Engineer, 815 Witherspoon Bldg., rejected bids opened Dec. 26, furnishing 37,000 bbl. fuel oil. Noted Jan. 4.

Mo., St. Louis—Oil Burning Equipment—U. S. Engineer, St. Louis, plans to purchase fuel oil burning equipment.

Ore., Portland—Scows—U. S. Engineer, 1st Dist., rejected bids opened Dec. 26 for 2 dump scows. Noted Dec. 14.

BIDS DESIRED

N. Y., Chelsea—Mechanical Equipment—Feb. 7, by Treas. Dept., Wash., D. C., mechanical equipment for administration building, mess hall, etc., U. S. Veterans Hospital, here. J. A. Wetmore, acting superv. archt.; adv. this issue.

N. Y., Iona Island—Quarters—Spec. 4743—Jan. 31 by Bureau Yards & Docks, Navy Dept., Wash., D. C., 1 double set quarters, here. Noted Oct. 12.

Pa., Phila.—Breakwater—Feb. 13, by Supt. Lighthouses, Phila., stone and rein.-con. breakwater at Harbor of Refuge Light Station, Delaware Bay, Del.; adv. this issue.

Pa., Phila.—Dredging—Spec. 4730—Feb. 7, by Bureau Yards & Docks, Navy Dept., Wash., D. C., dredging bulkheads, here.

Del., Wilmington — Quarter-Boat and Barges—Feb. 24, at Office U. S. Engineer, Wilmington, for 1 steel quarter-boat and 2 steel barges; adv. this issue.

Del., Wilmington—Stone—Feb. 6, at Office U. S. Engineer, Wilmington, furnishing and delivering stone for jetty repairs, at mouth of Broadkill River.; adv. this issue.

Md., Annapolis—Natatorium—Spec. 4751—Jan. 29 (change of date), by Bureau Yards & Docks, Navy Dept., Wash., D. C., 1 story, 89 x 289 ft., rein.-con., brick, steel and granite natatorium, here. L. E. Gregory, ch. of bureau. Noted Jan. 11.

D. C. Wash—Laboratory etc.—Feb. 6 at Office of Chief Clerk, Interior Dept., construction complete of laboratory and isolation buildings at St. Elizabeths Hospital, here. F. M. Goodwin, asst. secy. Noted Nov. 2.

Ala., Florence—Castings, etc.—Feb. 21, at Office U. S. Engineer, Florence, for furnishing castings and other parts for regulating gates of Wilson Dam; adv. this issue. Noted Dec. 28.

Ala., Florence—Generator—Feb. 12, at Office U. S. Engineer, Florence, furnishing and delivering 1 electric generator; adv. this issue.

Ala., Florence—Tanks—Feb. 17, at Office U. S. Engineer, Florence, furnishing displacement tanks for regulating gates of Wilson Dam; adv. this issue.

Ariz., Nogales—Post Office—Feb. 19, by Treas. Dept., Wash., D. C., for U. S. Post Office and Custom House, here. J. A. Wetmore, acting superv. archt.

Ky., Dawson Springs—Alterations—Feb. 6, by Treas. Dept., Wash., D. C., for alterations to U. S. Veterans Hospital, here. J. A. Wetmore, acting superv. archt.

Calif., San Diego—Water-Softening Machinery—Spec. 4768—Feb. 7, by Bureau Yards & Docks, Navy Dept., Wash., D. C., water softening machinery, here. Noted Dec. 21.

Alaska, Cordova—Post Office—May 10, by Treas. Dept., Wash., D. C., for U. S. Post Office, here. J. A. Wetmore, acting superv. archt.

BIDS RECEIVED

Pa., Phila.—Dredging—U. S. Engineer, 815 Witherspoon Bldg., received only bid

Federal Government Work (Continued)

Jan. 17, dredging in Delaware River between here and Trenton, N. J., 49,500 cu.yd. excav. with maximum allowable overdepth of 48,800 cu.yd., from Canal Constr. Co., Inc., 1202 North Amer. Bldg., $0.93 per cu.yd. Noted Dec. 28.

Tenn., Nashville—Hull—U. S. Engineer, Custom House, received only bid Jan. 16 for steel hull for floating dredge "Wautauga" from C. Ward Eng. Co., Charleston, W. Va., $60,574. Noted Dec. 21.

Wash., Smith Island—Sheds, Filters, etc. —Spec. 4752—Bureau Yards & Docks, Navy Dept., Wash., D. C., for rain sheds, filters, cisterns, fuel shed and walk, at Naval Radio Compass Stations, here and at New Dungeness, (1) work complete, from Olympic Pile Driving Co., Tyler St. Docks, Ft. Townsend, (1) $9,000 (2) $5,000 (3) $4,000; O. G. Walker, 2701 North 21st St., Tacoma, (1) $9,150 (2) $5,161 (3) $3,989.

Wash., Tacoma—Hospital—Director, U. S. Veterans Bureau, in office Quartermaster General, 2306 Munitions Bldg., Wash., D. C., for Neuro-Psychiatric Hospital, at American Lake, here (1) work complete, from Sound Constr. & Eng. Co., Inc., 109 Lowman Bldg., Seattle, (1) $1,376,264 (2) $21,000 (3) $225,700 (4) $83,900 (5) $81,300 (6) $52,600 (7) $78,000 (8) $75,800 (9) $47,500 (10) $17,300 (11) $23,200 (12) $27,800 (13) $30,900 (14) $35,100 (15) $14,100 (16) $33,100 (17) $36,100 (18) $6,000 (19) $13,-500 (20) $8,000 (21) $6,000 (22) $1,000 (23) $21,600 (24) $4,500 (25) $1,400 (27) $150 (28) unit prices (a) $2.50 per sq.yd. (b) $2.16 (c) $0.75 (d) $0.75 (e) $2.80 (f) $2 (g) $2 (h) $10 (i) $11 (j) $66 (l) $36 (m) $0.45 (n) $0.65 (o) $0.20 (365 days); Hurley-Mason Co., Gasco Bldg., Portland, Ore., (1) $1,397,000 (2) $21,000 (3) $220,000 (4) $88,500 (5) $83,600 (6) $53,000 (7) $74,900 (8) $77,700 (9) $45,800 (10) $14,600 (11) $22,300 (12) $20,300 (13) $29,500 (14) $36,400 (15) $14,100 (16) $36,600 (17) $57,500 (18) $5,000 (19) $3,000 (20) $10,700 (21) $9,000 (22) $10,-000 (23) $24,000 (25) $1,500 (26) $600 (27) $140 (28) unit prices (a) $2.30 (b) $2 (c) $1 (d) $0.70 (e) $2.50 (f) $1.90 (g) $1.80 (h) $12 (i) $20 (j) $61 (k) $110 (l) $52 (m) $0.60 (n) $0.90 (o) $0.25 (260 days); A. W. Quist Co., Hoge Bldg., Seattle, (1) $1,374,104 (letter received adding $12,-000) (2) $22,000 (3) $235,571 (4) $91,560 (5) $76,731 (6) $54,364 (7) $79,996 (8) $84,693 (9) $46,927 (10) $15,335 (11) $24,-560 (12) $21,663 (13) $30,946 (14) $39,183 (15) $13,600 (16) $34,390 (17) $57,780 (18) $6,000 (19) $14,947 (20) $12,176 (21) $9,500 (22) $7,000 (23) $14,000 (24) deduct $500 (25) deduct $500 (26) $500 (27) $140 (28) unit prices (a) $1.90 (b) $1.90 (c) $0.60 (d) $2.25 (e) $1.65 (f) $1.80 (g) $10.35 (h) $20 (i) $60 (j) $120 (k) $38 (l) $0.45 (m) $0.70 (n) $0.20 (300 days). Noted Dec. 14.

Ore., Astoria—Piers—Spec. 4615—Bureau Yards & Docks, Navy Dept., Wash., D. C., for piers, here, (1) work complete, from Gilpin Constr. Co., foot of 14th St., (1) $128,500 (180 days) (2) $7,300 (3) $28,500 (4) $0.28 (5) $0.20 (425 days) (6) $0.20 (425 days); J. H. Tillman, Seaside (1) $142,497 (360 days) (2) $7,900 (3) $36,000 (4) $0.20 (5) $0.48 (6) $0.48; H. Wakela, 253 Alameda Ave., (1) $485,581 (2) $11,302 (3) $85,000 (4) add $0.34 deduct $0.16 (5) $0.28 (6) $0.28. Noted Dec. 28.

Calif., San Diego—Garage, Fence, etc. —Spec. 4741—Bureau Yards & Dock, Navy Dept., Wash., D. C., garage, fence and pavement, at Naval Base Supply Depot, here, from Cornell & Rauch, National City, $12,925 (110 days) telegraphic modification add $1,000; F. Doran, 345 Spreckles Bldg., $18,000 (110 days) telegraphic modification $15,300; W. E. Kier Constr. Co., 813 First Natl. Bank Bldg., $15,654 telegraphic modification add $500. Noted Dec. 28.

CONTRACTS AWARDED

N. Y., Tupper Lake—Drainage System, etc.—Spec. 4723—Bureau Yards & Docks, Navy Dept., Wash., D. C., water drainage and sewerage systems, at U. S. Veterans Hospital, here, to H. W. Bachelder & Co., Herkimer, Items 1 and 2 $65,500 (210 days). Noted Jan. 11.

N. Y., Tupper Lake—Equipment, etc.—Spec. 4720—Bureau Yards & Docks, Navy Dept., Wash., D. C., refrigerating equipment, etc., at U. S. Veterans Hospital, here, to Wittenmeier Mchy. Co., 850 North Spaulding Ave., Chicago, $24,570 (190 days). Noted Jan. 4.

N. Y., Tupper Lake—Lighting and Electrical Systems, etc.—Spec. 4718—Bureau Yards & Docks, Navy Dept., Wash., D. C., lighting and electrical distribution systems, at U. S. Veterans Hospital, here, to Strang Electric Co., 214 South 7th St., Phila., Pa., Items (13) (14a) (14b) (14c) (14d) (14e) (14f) and (17) $48,662; heating, steam distributing system, boiler house equipment, etc. in above, to Shevlin Eng. Co., 259 West 34th St., New York, Items (11) (12a) (12b) 12c) (12d) (12e) (12f) and (15) $171,868. Noted Jan. 11.

N. Y., Tupper Lake—Radial Brick Stack —Spec. 4722—Bureau Yards & Docks, Navy Dept., Wash., D. C., for radial brick stack, at U. S. Veterans Hospital, here, to Ballard, Sprague & Co., Inc., 200 5th Ave., New York, $9,470 (250 days). Noted Jan. 4.

N. Y., Tupper Lake—Roads, etc.—Spec. 4727—Bureau Yards & Docks, Navy Dept., Wash., D. C., for roads and sidewalks, etc., at U. S. Veterans Hospital, here, to Newport Contg. and Eng. Co., Law Bldg., Newport News, Va., Items 1 and 2 $58,468. Noted Jan. 11.

Ala., Florence—Cement—U. S. Engineer, Florence, furnishing 400,000 bbl. Portland cement, to Gulf States Portland Cement Co., Demopolis, $288,840; Atlas Portland Cement Co., 134 South La Salle St., Chicago, Ill., $710,000; Dixie Portland Cement Co., James Bldg., Chattanooga, Tenn., $146,850. Noted Dec. 7.

Mich., Detroit—Dredging—U. S. Engineer, 337 Federal Bldg., dredging and rock removal in Livingstone Channel, Detroit River, 323,000 cu.yd. earth excav. with possible over depth of 16,000 cu.yd. and 175,-000 cu.yd. rock with possible over depth of 86,000 cu.yd., to M. Sullivan Dredging Co., 853 Iroquois Ave. $774,000. Noted Dec. 28.

Miscellaneous

PROPOSED WORK

Transmission Line — Batavia, N. Y. — Genesee Light & Power Co. plans transmission line from here to Leroy. $25,000. Taking bids for frequency changers, etc.

Dock Wall, etc.—Buffalo, N. Y.—Bd. Pub. Wks., Municipal Bldg., making plans 1,100 ft. dock wall for Bird Island Pier improvement, incl. crib work, and 1,100 ft. 8½ ft. rein.-con. sewer. $350,000. G. H. Norton, city engr.

High Tension Line—Akron, O.—Northern Ohio Traction & Light Co., Terminal Bldg., and Ceveland Illuminating Co., soon takes bids high tension electric circuit from here to Cleveland to be on towers and in conduit. $700,000. W. G. Tighe, Akron, engr.

Road Machinery, etc.—Ladysmith, Wis.—Rusk Co. voted $5,000 bonds to purchase road machinery, incl. patrol graders. P. Koehler, comr.

Passenger Switching Yards, etc.—Madison, Wis.—Chicago & North Western Ry., c/o A. W. Bowers, Div. Agt., South Madison St., plans additions to switching yards, constructing brick and steel roundhouse incl. equipment. $250,000. Engineer not selected.

Street Lighting — Milwaukee, Wis. — Plans to expend $100,000 for extensions to street lighting system. G. Staal, City Hall, engr.

Retaining Walls — Wausau, Wis. — See "Bridges."

Lighting System—Sioux City, Ia.—Plans new lighting system for downtown district. L. Hintgen, city engr.

Arena—Minneapolis, Minn.—Minneapolis Arena Co. Inc., 317 McKnight Bldg., plans 2 story and basement, 40 x 160 ft., and 1 story, 160 x 222 ft., rein.-con. and tile, 13th Ave. and Lake St. $240,000. I. Z. Wright, secy. Architect not selected.

Road Oil, etc.—Minneapolis, Minn.—F. S. Cram, city purch. agt., soon takes bids 1,500,000 gal. Mexican road oil for city streets, and 125,000 bbl. cement. N. W. Elsberg, city engr.

Band Pavilion, etc.—Kansas City, Mo.—Fairyland Amusement Co., 118 East 10th St., having preliminary plans prepared for band pavilion, dance halls, bathing beach, towers, show spaces and cafe, 75th St. and Prospect Ave., earth and rock excav., rein.-con. and wood piling. $800,000. Tuttle-Ayers-Woodward Eng. Co., 606 Interstate Bldg., archts.

Wharf, etc. — Beaumont, Tex. — City Comn., c/o G. J. Roark, city mgr., soon takes bids 15,000 ft. new wharf and 5 warehouses. $400,000. W. L. Fulwieler, city engr.

Grain Elevator—Houston, Tex.—Making plans grain elevator on Ship Channel. $1,-000,000. J. C. McVea, city engr.

Stadium—San Marcos, Tex.—San Marcos Baptist Academy plans athletic stadium. $30,000. R. H. Hunt & Co., Southwestern Life Bldg., Dallas, engrs.

Electric Light System—Bridgeburg, Ont. —Plans 8 mi. hydroelectric lighting and power distribution system from here to Stevensville. $50,000. Engineer not selected.

Transmission Line, Gas Holder, etc.—Pendleton, Ore.—Pacific Power & Light Co., Gasco Bldg., Portland, appropriated $450,-000 for high tension line between here and Pasco, $10,000 gas holder and $7,500 new lines and repairs, here. G. W. Talbot, pres.

Electrolier System—Berkeley, Calif.—Takes bids about Feb. 1, installing 132 electroliers in University and San Pablo Aves. Former contract rescinded. Noted Dec. 28.

Electric Lights — Huntington Beach, Calif.—See "Streets and Roads."

Pier—San Diego, Calif.—Election probably March 20, to vote on $500,000 bonds for completion of mole type Pier No. 2.

Stone Crushing Equipment—Montreal, Que.—Montreal Quarry, Ltd., 800 Bellechasse St., soon takes bids stone crushing equipment and drills.

Electric Light System—Moncton, Ont.—Plans electric lighting and power distribution system. $30,000. Engineer not selected.

Lowering Tracks—Toronto, Ont.—Plans elimination of boulevard on St. Clair Ave. W., by lowering street railway tracks, removing curb and paving between 2 side pavements, incl. 3½ mi. road and pavement. $600,000. R. C. Harris, city engr.

BIDS DESIRED

Refined Asphalt, etc.—Brooklyn, N. Y.—Jan. 31, by E. Riegelmann, boro pres., Boro Hall, furnishing and delivering 400,000 gal. refined asphalt in liquid form, 4,500 cu.yd. binder stone, 2,000 net ton limestone or other suitable inorganic dust, 10,000 cu.yd. asphalt sand, 8,000 bbl. Portland cement, 50,000 asphalt paving blocks 2½ in. deep, 50,000 grade 1 granite paving blocks 7 in. deep, 50,000 wood paving blocks, 5,000 cu.yd. steam cinders, 300,000 gal. asphalt road oil delivered by rail to any or all railroad stations in Boro of Brooklyn, 1,800 cu.yd. 1½ in. broken stone and 700 cu.yd. broken stone screenings.

Asphalt Road Oil, etc.—New York, N. Y.—Feb. 1, by H. Bruckner, pres., Bronx Boro, 3rd and Tremont Aves., furnishing and delivering 600,000 gal. asphalt road oil, 200,000 gal. tar road oil, 50,000 gal. bituminous road surfacing material (for hot use), 800 ton asphaltic cement, 6,000 cu.yd. 1½ in. and 500 cu. yd. ¾ in. broken trap rock stone and 3,000 cu. yd. broken trap rock stone screenings, 60 ton paving pitch, 8,000 cu.yd. asphalt wearing surface sand, 4,000 cu.yd. binder stone, 1,000 ton limestone dust or other suitable inorganic dust, 4,000 bbl. portland cement, 6,000 cu.yd. sand grits special, 3,000 cu.yd. hard coal clean steam boiler ashes, 1,000 cu.yd. fine sand, spruce lumber, cypress, whitewood, white pine, quarter sawn white oak, plain sawn white oak, hickory and long leaf yellow pine lumber.

Brick Paving Blocks, etc.—Jamestown, N. Y.—Feb. 2, by Bd. Estimate & Review, City Bldg., furnishing Hillside vitr. brick paving blocks, standards 1 and 2, in quantities as shall be ordered from time to time; also Portland cement and sewer pipe in such quantities as ordered by Board until Dec. 31. To exceed $15,000. L. G. Bergman, city engr.

Structural Steel, New York, N. Y.—Feb. 1, by Transit Comn., 49 Lafayette St., furnishing and erecting structural steel for 3rd addition to shops at Lenox Ave. and 148th St.

Air Compressor, etc.—Ambridge, Pa.—C. Kristufek, 300 Park Ave., taking bids air compressor, conveying, hoisting, woodworking, transmission and cement block machinery.

Core Borings—Phila., Pa.—Jan. 30, at office W. S. Twining, dir. Dept. City Transit, 1211 Chestnut St., core borings in Broad St. between Arch St. and Olney Ave., Contr. 5.

Sub-Structure for Pier and Bulkhead—Baltimore, Md.—Jan. 31, by L. P. Kimball, ch. engr., B. & O. Bldg., substructure for Pier 7 and bulkhead, 1 story, 250 ft. long, concrete, 80,000 cu.yd. dredging, 30,000 cu.yd. sand fill, 5,000 cu.yd. old rip rap, 1,000 cu.yd. new rip rap, Locust Point. Private plans.

Brick—Wash., D. C.—Feb. 19, by Dist. Comrs., 509 Dist. Bldg., furnishing and delivering 500,000 red face or pressed bricks on site of Langley and MacFarland Junior High Schools. C. Rudolph, F. Oyster and C. Keller, comrs.

Platform and Wookwork, etc.—New Orleans, La. — Feb. 1, by Bd. Port Comrs., 200 New Court Bldg., open platform at foot of Barracks St., $25,000, also woodwork for new shed and warehouse at 7th St. wharf. $20,000.

Rock Crusher, etc.—Knox, Ind.—Feb. 5, by Comrs. Starke Co., 1 portable rock crusher, 1 portable gravel screen, 1 light weight road grader (about 1,500 lb.).

Air Life Equipment, etc.—Madison, Wis. —Taking bids air lift equipment and pump complete with Booster tank for city water supply. E. E. Parker, City Hall, engr.

Portland Cement—Milwaukee, Wis.—Jan. 30, by Central Bd. Purchases, City Hall, 10,000 bbl. Portland Cement for use of various departments. G. Staal, City Hall, engr.

Miscellaneous (Continued)

Lumber, etc.—Clinton, Ia.—Feb. 6, by Auditor Clinton Co., furnishing 175,000 ft. lumber and 4,000 ft. corrugated culvert metal, f.o.b. Clinton Co. E. B. Lorenzen, Clinton, engr.

Lumber and Culvert Metal—Maquoketa, Ia.—Feb. 6, by Auditor Jackson Co., furnishing 5 cars bridge lumber and 5,100 ft. corrugated culvert metal. F. M. Thul, Maquoketa, engr.

Lumber, etc.—Nevada, Ia.—Feb. 8, by Auditor Story Co., furnishing 129,000 ft. fir lumber and 4,608 ft. corrugated culvert metal, f.o.b. Story Co. S. Steigerwalt, Nevada, engr.

Culvert Metal, Lumber, etc.—Osage, Ia.—Feb. 6, by Auditor Mitchell Co., furnishing corrugated culvert metal, 8,000 lb. reinforcing, cement, 14,348 ft. lumber and 1,500 ft. piling. $5,000. C. P. Goplereed, Osage, engr.

Tractor and Grader—Burke, S. D.—Feb. 6, by Gregory Co., one tractor, 15 hp. on draw bar, (caterpillar, crawler or track laying type), one grader, one 12 ft. blade grader.

White Way—Dallas, Tex.—City Comn. taking bids for white way on Pacific Ave., incl. 109 standards, 15½ ft. high. G. D. Fairtrace, city engr.

BIDS RECEIVED

Transmission Line Conductors — San Francisco, Calif.—Bd. Pub. Wks., opened bids Jan. 10, transmission line conductors for Moccasin Creek Power Plant, Hetch Hetchy Project, (1) price per lb. (2) lbs. per mile, from Anaconda Copper Mining Co., Anaconda, Mont., represented by Pacific States Electric Co., 575 Mission St., Proposition B (1) $0.18775 (2) 7,339, Proposition C (1) $0.1865 (2) 5,796, Proposition D (1) $0.1968 (2) 4,076, Proposition E (1) $0.18775 (2) 6,931, Proposition F (1) $0.178 (2) 4,700, Proposition G (1) $0.179 (2) 7,339, Proposition H (1) $0.179 (2) 6,931, credit for return of reels $15 on each proposition; Aluminum Co. of America, Rialto Bldg., Proposition A (1) $0.215 (2) 3,284, credit for return of reels $12, Proposition A, steel rein. aluminum cable; Proposition B, all copper stranded cable; Proposition C, hemp cored copper cable; Propositions D, E and F are intended to cover any form of cable not included in A, B and C. Noted Jan. 4.

CONTRACTS AWARDED

Steam Rollers—New York, N. Y.—J. Miller, pres. Manhattan Boro, Municipal Bldg., furnishing and delivering 3 tandem steam rollers, to Galion Steam Wks. Mfg. Co., 50 Church St., $8,804. Noted Jan. 18.

Wood Paving Blocks—New York, N. Y.—J. Miller, pres. Manhattan Boro, Municipal Bldg., furnishing and delivering 500,000 wood paving blocks, to Amer. Creosoting Co., 17 Battery Pl., $22,495; 80,000 gal. gasoline, to Standard Oil Co. of New York, 26 Bway., $17,480; 6,000 cu.yd. binder stone, to Calvin Tompkins Co., 30 Church St., $11,340; 500,000 gal. refined asphalt, to Warner-Quinlan Co., 79 Wall St., $28,400; 15,000 cu.yd. asphalt wearing surface sand, to Z. Mahoney, 557 46th St., Brooklyn, $15,300. Noted Jan. 18.

Steel Tipple, Rock Dumps, etc.—Bakerton (Elmora P. O.), Pa.—Sterling Coal Co., steel tipple, rock dump, picking table and screen, to Roberts & Schaffer Co., 400 North Michigan Ave., Chicago, $125,000, also fan, to Jeffrey Mfg. Co., East 1st Ave., Columbus, O.

Structural Steel—New Orleans, La.—Bd. Port Comrs., Suite 201 New Court Bldg., furnishing and erecting steel for Market St. shed, to Converse Bridge Co., Anderson St., Chattanooga, Tenn., $30,000. Noted Dec. 21.

Concrete Bins—Carthage, Mo.—Cowgill & Hill, thirty 1 story, 40 x 85 ft. concrete bins, West 3rd St., to Southwestern Eng. Co., Woodruff Bldg., Springfield, $95,000.

Transmission Line—Harrah, Okla.—See "Industrial Works."

Levee and Bridge—Redwood City, Calif.—San Mateo Co. constructing levee and bridge over Bean Hollow, to A. Mattson, San Bruno, $26,300. Noted Jan. 11.

Foundation — Sacramento, Calif. — See "Buildings."

Steel Pipe, etc.—Terra Bella, Calif.—Terra Bella Irrigation Dist., furnishing riveted steel water pipe, f.o.b. Ultra on or before Feb. 1, as follows: 700 ft. 4 in., 6,700 ft. 6 in., 700 ft. 7 in. and 2,700 ft. 8 in., to Montague Pipe & Steel Co., Hobart Bldg., San Francisco, $5,400. Noted Jan. 18.

Grain Elevator—Goderich, Ont.—Goderich Elevator & Transit Co., J. I. A. Hunt, 85 Horton St., London, 1,000,000 bu. grain elevator, steel and cement on waterfront, to J. H. Tromanhauser, Confederation Life Bldg., Toronto. $250,000 Noted Jan. 11.

OFFICIAL PROPOSALS

Bids: Feb. 5.

Junior High School Building

Trenton, N. J.

Sealed proposals for the complete construction of a new Junior High School Building will be received by the committee on Buildings and Grounds of the Board of Education of Trenton, in the County of Mercer, at the meeting room of the Board in the Administration Building No. 9 South Stockton Street, Trenton, New Jersey, at 8:30 o'clock p.m., eastern standard time, on Monday the 5th day of February, 1923, at which place and time all bids received will be unsealed and contents publicly announced. No bids will be received previous to the time designated, and none will be received thereafter.

All bids shall be presented to the committee at the place and time mentioned by the parties bidding, or their agents, when called for by the chairman of the committee.

Bids for the general construction, for the heating and ventilating, for the plumbing, and for the electrical work, will be taken separately.

A certified check for not less than five (5%) per cent of the amount of the bid must accompany each proposal, made payable to the Board of Education of the City of Trenton, to be treated as liquidated damages in case the bidder receiving the award shall fail to execute a contract and furnish the required bond, within ten days after notification of the acceptance of their bid.

The Board of Education reserves the right to reject any or all bids, or to waive defects or informalities in any bid if it be deemed to the interest of the city so to do.

Copies of the plans and specifications will be on file at the office of the Secretary of the Board of Education, in the Administration Building, for the purpose of estimating.

A limited number of copies of the plans and specifications will be loaned to the prospective bidders on deposit of a certified check drawn to the order of the Board of Education, Trenton, New Jersey, in the sum of $25.00.

These plans and specifications may be obtained by application to the Architect Ernest Sibley, Edgewood Lane and Bluff Road, Palisade, New Jersey, or from J. Osborne Hunt, Associate Architect Hunt Building, 219 East Hanover Street, Trenton, New Jersey. Deposits will be forfeited unless plans and specifications are returned to the Architects within ten days after bids are opened.

(Signed) ROBERT C. BELLVILLE,
Secretary.

For the Board of Education, City of Trenton, New Jersey.

Bids: Feb. 14.

Scherzer Rolling Lift Bridge

New Orleans, La.

Proposal No. 202. City of New Orleans, Louisiana, Department of Public Finances, Purchasing Division, Room 24, City Hall. Sealed proposals will be received at this office until the hour of 11 o'clock a.m., Wednesday, February 14th, 1923, for furnishing and erecting a Scherzer Rolling Lift Bridge over the New Orleans Navigation Canal on the axis of Broad street, in the City of New Orleans, in accordance with plans and specifications on file in this office, complete set of which will be furnished on receipt of a deposit of $5.00, which deposit will be returned when the plans and specifications are returned in good order to this office.

Deposit ten per cent of amount of bid. Cash, Bid Bond or Certified check enclosed with bid.

Bond fifty per cent of contract price.

Contract before the City Notary at bidders expense.

Bidders must have paid their City License in order that their bid may be accepted.

The City reserves the right to reject any and all bids.

R. M. MURPHY,
Commissioner of Public Finances.

January 15th, 1923.

Bids: Feb. 14.

Street Improvements

Camden, Arkansas.

Sealed proposals will be received by the Board of Commissioners, of Camden Paving District No. 2, care of D. V. Snow, Secretary, Camden, Arkansas, until 10 a.m. February 14, 1923, immediately after which hour, said proposals will be publicly opened and read at the City Hall.

The approximate quantities of the principal items of work to be done in the District are as follows:

1,700 lin.ft. of vitrified clay pipe storm sewers 10" to 27" in diameter.
5,500 cu.yd. of grading.
9,400 lin.ft. of concrete curb.
17,600 sq.yd. of pavement.

Alternate bids will be received on reinforced concrete pavement and asphaltic concrete (Topeka Mix), wearing surface on concrete base.

All work will be paid for in cash on periodic estimates of work done and materials furnished.

Certified check or bidders bond for at least 3% of amount of total bid will be required.

Plans and specifications are on file at the office of the Engineer, State Nat. Bk. Bldg., Texarkana, Ark.-Tex., and with the Chairman of the Board of Commissioners at Camden, Arkansas.

Specifications may be secured from the Engineer upon deposit of $2.00, of which amount $1.00 will be refunded upon the return to him of the said specifications.

The right is reserved to reject any or all bids.

E. W. COPELAND,
Chairman.
D. V. SNOW,
S. T. TYSON,
Board of Commissioners,
Camden Paving District No. 2.
E. F. PETERSEN, Engineer,
Texarkana, Ark.-Tex.

Bids: Feb. 2.

High School Building

Perry, N. Y.

Sealed bids will be received by the Board of Education, District No. 6, Towns of Perry and Castile, Perry, N. Y., at the office of the Secretary, T. H. Donnelly, High School building on Leicester street, on or before 12 o'clock, noon, Eastern Standard Time, Feb. 2nd, 1923, for making the proposed alterations in the old building, and the construction of a two-story brick addition 146 x 150 feet, according to plans and specifications prepared by Gordon & Kaelber, Architects, 125 Sibley Building, Rochester, N. Y.

The plans and specifications may be inspected at the office of said architects or said secretary of the Board of Education, and obtained together with bidding sheets at the office of said architects.

Each bid shall be accompanied by a certified check amounting to 5% of the amount of the bid. If the bid is accepted a contract will be entered into within 30 days. The performance of said contract shall be properly secured by the United States Government bonds or surety bonds duly approved by the Board of Education.

The Board of Education may, at its discretion, reject all bids as the interests of the District may appear.

Bids will be received on the following types of work:

No. 1. Mason, Steel and Iron, Tile and Marble work.
No. 2. Carpenter work and Hardware.
No. 3. Painting and Finishing.
No. 4. Roofing and Metal work.
No. 5. Electrical work.
No. 6. Sprinkler System.
No. 7. Heating and Ventilating.
No. 8. Plumbing.

If any contractor prefers to submit a general bid on the first six types of work listed above, the Board will receive and consider it.

By order of the Board of Education.

G. L. PECK.
W. D. OLMSTED.
MRS. ANNA SMITH.
MRS. THEO CALKINS.
DR. C. R. BROWN.
W. W. McMAHAN.
W. A. AUSTIN.

Jan. 10, 1923.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ADVERTISEMENTS ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE.

OFFICIAL PROPOSALS

Bids: Feb. 16.

Highway Bridge

Pikeville, Ky.

Sealed proposals will be received by the Fiscal Court of Pike County, Kentucky, at the office of the County Judge at Pikeville, Kentucky, on Friday February 16th, 12 a.m. for the construction and erection of a highway bridge across the Tug Fork of Big Sandy River near Edgarton, West Virginia, and Freeburn, Ky. This bridge to be constucted jointly by Pike County, Kentucky and Mingo County, West Virginia. The required length is approximately 300 feet and two 150 spans are proposed. Clear width of roadway 16 feet and either three of four inch wood floor. This bridge to be designed by the contractor in accordance with situation plan and profile and other information to be furnished by the County Road Engineer of Pike County and to comply with specifications furnished by him.

Plans for this bridge are to be submitted at the above mentioned time and place together with bids and are to be subject to the approval of the County Road Engineer. To insure an economical design, as cuch latitude as possible will be given to the bidders as to type of bridge, span length etc., so long as requirements as to river channel etc., are complied with. The loading, stresses, quality, of materials etc., must conform to the requirements of the Kentucky State Highway Department standards for specification for bridges. This will be a ten ton capacity bridge. Prospective bidders are asked to submit bids on both concrete and steel structures.

Situation plans, profiles, specifications etc, will be sent to any one interested upon request by J. S. Bentley. County Road Engineer, room 208 Hughes Building, Pikeville, Kentucky. A change of $3.00 for each set of blue prints and specifications to cover cost of blue printing, typing, etc. will be made. All bids must be accompanied by a certified check for $2,500.00 payable to the Treasurer of Pike County, Kentucky, to insure that bidder will enter into proper contract. Checks of unsuccessful bidders will be returned as soon as contract is awarded.

The Fiscal Court reserves the right to reject any and all bids.

By order of the Fiscal Court of Pike County, Ky.

J. S. BENTLEY,
County Road Engineer.
W. E. FLANNARY, County Judge.

Bids: Jan. 29.

Road Improvement

Mineola, L. I., N. Y.

Sealed proposals will be received by the Board of Supervisors of Nassau County, in its Chambers, in the Court House at Mineola, Long Island, on Monday, January 29, 1923, at 11 a.m. for the Improvement of the Long Beach Road between Barnum Island Creek and the Upland by the construction of bulk head and filling.

Plans and specifications may be seen at the office of W. Fred Starks, County Engineer, at Mineola, Long Island.

Each bid must be accompanied by a certified check on a solvent bank in the sum of three per cent of the amount of the total contract, made payable to the County of Nassau.

The Board of Supervisors reserves the right to reject any or all bids, waive any informality in the bids, and to accept the bid which it deems most favorable to the interest of the County.

By order of the Board of Supervisors.
By JESSE MERRITT,
Clerk.
Dated at Mineola, L. I., January 11, 1923.

OFFICIAL PROPOSALS

Bids: Feb. 6.

Sewer Arms

Springwells, Mich.

Sealed bids will be received up to 8 p.m., Feb. 6, 1923, by the Village Clerk at the Village Hall, Springwells, Michigan, for the construction Sewer Arms Sections No. 25 to Section No. 35.

The work is divided into eleven sections containing approximately 33,000 ft. of 20" to 120" sewer. Sewers may be built in open cut or tunnel with brick, concrete, reinforced concrete pipe for sizes over 24". Sizes 24" and under may be built of Double Strength Vitrified Pipe.

Plans and specifications are on file at the office of the Village Clerk and copies may be secured from the office of Clarence W. Hubbell, Consulting Engineer, 2348 Penobscot Bldg., Detroit. A deposit of $10.00 will be required for the plans and specifications which will be refunded upon their return in good order on or before Feb. 16, 1923.

A certified check made payable to the Village of Springwells for the sum of $2,500.00 must accompany each bid on each Section. Contractors may bid on any or all Sections. In case of failure or neglect to enter into contract and furnish the required bonds within the time specified the certified check shall be forfeited to the Village of Springwells as liquidated damages.

No proposals will be received unless made on the blanks furnished and delivered to the Village Clerk on or before 8 p.m., Feb. 6, 1923.

The Village reserves the right to reject any or all bids.

By order of the Village Council.
B. P. ESPER,
Village Clerk.

Bids: Feb. 7.

Bridges

Appleton, Wisc.

Sealed bids will be received by the undersigned, city clerk of the city of Appleton, Wisconsin, up to 4:00 o'clock P.M., February 7th, 1923, for furnishing all labor and material and constructing according to plans and specifications, bridges across the Fox River at Lawe street and Cherry street.

The Lawe-st bridge over the Fox River will be of reinforced concrete, resting on steel cylinder piers sunk to bed rock and on the footings for columns on shore. It provides for a twenty-foot roadway and six foot sidewalk. The Cherry street bridge over the Fox river, will be of steel girder type, resting on concrete piers, sunk to bed rock and the footings for abutments on shore. It provides for a thirty-two foot roadway and a seven foot sidewalk. Plans and specifications are on file and may be examined in the office of E. L. Williams, city clerk, and O. F. Weissgerber, city engineer and in the office of Harrington, Howard & Ash, consulting engineers, Kansas City, Mo.

Copies of the plans and specifications may be secured from the consulting engineers by depositing $25.00, these plans are to be returned upon request, at which time a refund of $15.00 will be made. A bond in the full amount of the contract will be required.

A certified check in the sum of not less than 5% of the total bid, made payable to the city clerk, must accompany each bid.

Council reserves the right to reject any or all bids.

Dated January 4th, 1923.
BY ORDER OF THE COMMON COUNCIL E. L. Williams, City Clerk.

OFFICIAL PROPOSALS

Bids: Feb. 6.

Building Construction and Remodelling

Toms River, N. J.

Sealed bids will be received at the Court House on or before 12 o'clock noon on Tuesday, February 6th, 1923, by the Board of Chosen Freeholders of Ocean County, State of New Jersey, for the Erection and Completion of a New Brick and Concrete Detention Building for Witnesses and the complete remodeling of Wardens Dwelling, at Toms River, N. J., including all labor and material required for the following work.

Item No. 1. General Construction and Completion of Building.
Item No. 2. Steel Work in Detention Quarters.
Item No. 3. Plumbing and Drainage.
Item No. 4. Heating System.
Item No. 5. Electrical Wiring.
Item No. 6. Lighting Fixtures.

The work to be done according to plans, specifications of P. P. Elkinton, Architect and Engineer and under his personal supervision.

Bids will be opened publicly on Tuesday, February 6th, 1923, at the Freeholders Room, Court House, Toms River, N. J.

All bids must be sealed and addressed to the Board of Chosen Freeholders of the County of Ocean, State of New Jersey, marked on envelope "Proposal for work on Detention Rooms and Warden Dwelling" Item No.

Each bidder must enclose with estimate a certified check in sum of 10% of the amount of his bid as a guarantee that he will accept and carry out his proposal if contract is awarded to him.

Certified checks will be returned to the unsuccessful bidders after contracts are awarded.

Plans and specifications can be obtained at the office of the Architect, P. P. Elkinton, Toms River, N. J.

A deposit of $15.00 will be required on all plans and specifications taken out of the Office to be refunded when plans and specifications are returned to the Architect.

The right is reserved to reject any or all bids.

By order of the Board of Chosen Freeholders of the County of Ocean.
D. O. PARKER, Clerk.

Bids: Feb. 7.

Dredging and Fill

McCOMAS CONTRACT No. 1

Baltimore, Md.

Proposals for dredging and making fill at the proposed McComas Street Bulkhead, Baltimore, will be received until 11 o'clock a.m., February 7th, 1923. Approximate quantity of dredging 1,300,000 cubic yards.

Proposals must be in duplicate, addressed to the Board of Awards, and sent to the City Register's Office, City Hall, Baltimore, accompanied by a certified check of the bidder for $5,000 on a Clearing House Bank, drawn to the order of the Mayor and City Council of Baltimore.

The right is reserved to reject any or all bids.

A bond in the amount of the contract price will be required for the proper performance of the contract.

Specifications may be obtained at the office of the Harbor Board, Recreation Pier, Broadway.

BANCROFT HILL,
Harbor Engineer.
APPROVED:
A. E. CHRISTHILF,
Chief Engineer.

APPROVED:
WM. F. BROENING,
President Board of Awards.
FRANK DRISCOLL,
Asst. City Solicitor.

Construction News

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Feb. 6	Zelienople, Pa.	Jan. 25
Feb. 6	Whiteville, N. C.	Feb. 1
Feb. 8	Alma, Kan.	Jan. 25
Feb. 9	Guthrie, Okla.	Feb. 1
Feb. 10	Buffalo, N. Y. Adv. Feb. 1.	Feb. 1
Feb. 12	Willoughby, O.	Feb. 1
Feb. 12	Springfield, Mass. Adv. Feb. 1.	Feb. 1
Feb. 12	Milwaukee, Wis.	Feb. 1
Feb. 13	St. Henry, O.	Feb. 1
Feb. 13	De Beque, Colo.	Feb. 1
Feb. 14	Wellsville, O. Adv. Jan. 25 and Feb. 1.	Jan. 25
Feb. 14	Vorheesville, N. Y. Adv. Feb. 1.	Feb. 1
Feb. 15	Cheney, Wash.	Jan. 18
Feb. 15	Fond du Lac, Wis.	Jan. 25
Feb. 15	Aberdeen, Wash.	Feb. 1
Feb. 16	Gloucester, N. J. Adv. Feb. 1.	Feb. 1
Feb. 19	Carlyle, Ill. Adv. Feb. 1.	Feb. 1
Feb. 27	Canton, Ill. Adv. Feb. 1.	Feb. 1
Mar. 6	Toronto, Ont.	Feb. 1
Mar. 7	Rawlins, Wyo. Adv. Feb. 1.	Feb. 1

SEWERS

Feb. 5	Spring Valley, N. Y.	Jan. 25
Feb. 6	Springwells, Mich.	Jan. 18
Feb. 6	Lyons, Ill.	Jan. 25
Feb. 6	Ogden, Utah	Jan. 25
Feb. 6	New York, N. Y.	Feb. 1
Feb. 6	Denver, Colo.	Feb. 1
Feb. 7	Pittsburg, Kan.	Jan. 25
Feb. 8	Lodi, Calif.	Feb. 1
Feb. 8	Long Island City, N. Y.	Feb. 1
Feb. 12	Elmhurst, Ill.	Jan. 25
Feb. 12	Akron, O.	Feb. 1
Feb. 13	St. Louis, Mo.	Feb. 1
Feb. 23	Portland, Ore.	Jan. 11
Feb. 23	Scottsville, N. Y. Adv. Feb. 1.	Feb. 1
Feb. 24	Cuba, N. Y. Adv. Feb. 1.	Feb. 1
Mar. 12	New Castle, Pa. Adv. Jan. 25 and Feb. 1.	Jan. 25

WASTE DISPOSAL

Feb. 26	Tulsa, Okla. Adv. Feb. 1.	Feb. 1
Mar. 1	Spokane, Wash.	Jan. 18

BRIDGES

Feb. 5	Webb, Miss.	Feb. 1
Feb. 6	Green River, Wyo.	Feb. 1
Feb. 7	Mermenton, La.	Jan. 11
Feb. 7	Appleton, Wis.	Jan. 11
Feb. 7	Bison, S. D.	Jan. 18
Feb. 7	Prineville, Ore.	Jan. 25
Feb. 14	Minnesota	Jan. 25
Feb. 14	New Orleans, La.	Jan. 18
Feb. 16	Pikeville, Ky. Adv. Jan. 25 and Feb. 1.	Jan. 25
Feb. 19	Alabama	Jan. 25
Feb. 19	Seattle, Wash.	Feb. 1
Apr. 1	Wilkes-Barre, Pa.	Dec. 14
Sept. 1	Sydney, New South Wales, Australia	Aug. 3

DAMS

Feb. 20	Quebec, Que.	Feb. 1
Feb. 28	Illinois Adv. Feb. 1.	Feb. 1

EXCAVATION, DRAINAGE, IRRIGATION

Feb. 5	Los Angeles, Calif.	Feb. 1
Feb. 6	Terra Bella, Calif.	Jan. 18
Feb. 6	Muscatine, Ia. Adv. Jan. 25 and Feb. 1.	Jan. 25
Feb. 6	Houston, Tex.	Jan. 25
Feb. 6	Paradise, Calif.	Feb. 1
Feb. 7	Shreveport, La.	Jan. 18
Feb. 7	Baltimore, Md. Adv. Jan. 25 and Feb. 1.	Jan. 11
Feb. 14	Webster City, Ia.	Feb. 1
Feb. 15	Mankato, Minn.	Jan. 25
Mar. 1	Redwood Falls, Minn.	Jan. 25

STREETS AND ROADS

Feb. 5	Harrisville, W. Va.	Jan. 11
Feb. 5	San Jose, Calif.	Jan. 18
Feb. 5	Williamsport, Ind.	Jan. 18
Feb. 5	Lawrenceburg, Ind.	Jan. 18
Feb. 5	Versailles, Ind.	Jan. 25
Feb. 5	Evansville, Ind.	Jan. 25
Feb. 5	Salem, Ind.	Jan. 25
Feb. 5	Red Oak, Ia.	Jan. 25
Feb. 5	San Diego, Calif.	Jan. 25
Feb. 5	St. Petersburg, Fla.	Feb. 1
Feb. 6	Louisiana	Jan. 25
Feb. 6	Oroville, Calif.	Jan. 18
Feb. 6	Russellville, Ark.	Jan. 18
Feb. 6	St. Louis, Mo.	Jan. 18
Feb. 6	Wabash, Ind.	Jan. 18
Feb. 6	Marion, Ind.	Jan. 18
Feb. 6	Austin, Minn.	Jan. 18
Feb. 6	Duluth, Minn.	Jan. 18
Feb. 6	Mount Vernon, Ind.	Jan. 11
Feb. 6	Colfax, Ia.	Jan. 25
Feb. 6	Decatur, Ind.	Jan. 25
Feb. 6	Bloomington, Ind.	Jan. 25
Feb. 6	Princeton, Ind.	Jan. 25
Feb. 6	Austin, Minn.	Jan. 25
Feb. 6	Wilkes-Barre, Pa.	Jan. 25
Feb. 6	Santa Cruz, Calif.	Feb. 1
Feb. 6	Stockton, Calif.	Feb. 1
Feb. 6	Fresno, Calif.	Feb. 1
Feb. 6	Kelso, Wash.	Feb. 1
Feb. 6	Florida	Feb. 1
Feb. 7	New York Adv. Jan. 18 to Feb. 1.	Jan. 18
Feb. 7	Auburn, Ind.	Jan. 18
Feb. 7	Brookfield, Ill.	Jan. 25
Feb. 7	Wisconsin	Feb. 1
Feb. 7	Oregon	Feb. 1
Feb. 7	Madison, Fla.	Feb. 1
Feb. 7	Elkhorn, Wis.	Feb. 1
Feb. 8	Darlington, S. C.	Feb. 1
Feb. 8	Kalamazoo, Mich.	Feb. 1
Feb. 8	New York, N. Y.	Feb. 1
Feb. 8	Brooklyn, N. Y.	Feb. 1
Feb. 8	Long Island City, N. Y.	Feb. 1
Feb. 9	New Castle, Pa. Adv. Jan. 18 and Feb. 1.	Jan. 18
Feb. 9	Tennessee	Feb. 1
Feb. 9	Kaufman, Tex.	Feb. 1
Feb. 9	Ohio	Feb. 1
Feb. 12	Ontario	Jan. 18
Feb. 12	Salem, N. J. Adv. Jan. 25 and Feb. 1.	Jan. 25
Feb. 12	Duluth, Minn.	Feb. 1
Feb. 13	Atwood, Kan.	Jan. 18
Feb. 13	Tulsa, Okla.	Jan. 25
Feb. 13	Louisiana	Jan. 25
Feb. 13	Bexley (Columbus P. O.), O.	Feb. 1
Feb. 13	Kingstree, S. C.	Feb. 1
Feb. 13	San Diego, Calif.	Feb. 1
Feb. 13	Los Angeles, Calif.	Feb. 1
Feb. 14	Virginia	Jan. 25
Feb. 14	Henderson, Tex.	Jan. 25
Feb. 14	Canton, O.	Jan. 25
Feb. 14	Camden, Ark. Adv. Jan. 25 and Feb. 1.	Jan. 25
Feb. 14	Oklahoma	Feb. 1
Feb. 14	Florida	Feb. 1
Feb. 15	Salina, Kan.	Jan. 18
Feb. 15	Sioux City, Ia.	Feb. 1
Feb. 15	New Richmond, Wis.	Feb. 1
Feb. 19	Alabama	Jan. 25
Feb. 20	Waseca, Minn.	Jan. 25
Feb. 20	Charleston, S. C. Adv. Feb. 1.	Feb. 1
Feb. 26	Ontario	Feb. 1
Mar. 1	Marshall, Minn.	Jan. 25
Mar. 5	Hillsdale, Mich.	Jan. 25
Apr. 3	Amsterdam, N. Y.	Feb. 1
Apr. 23	Spokane, Wash.	Feb. 1

INDUSTRIAL WORK

Feb. 5	Shelbyville, Ill.	Jan. 11
Feb. 5	Minneapolis, Minn.	Feb. 1
Feb. 8	Phila., Pa.	Feb. 1
Feb. 10	Birmingham, Ala.	Feb. 1
Feb. 13	Oakland, Calif.	Feb. 1
Feb. 15	Cleveland, O.	Jan. 25
Feb. 23	St. Louis, Mo.	Feb. 1
Feb. 24	Columbus, Miss.	Feb. 1

BUILDINGS

Feb. 5	Trenton, N. J.	Jan. 18
Feb. 5	Albany, N. Y.	Jan. 25
Feb. 5	Mason City, Ia.	Feb. 1
Feb. 5	Bridgeport, Pa.	Feb. 1
Feb. 5	Lock Haven, Pa.	Feb. 1
Feb. 5	Akron, O.	Feb. 1
Feb. 6	West Springfield (Springfield P. O.), Mass.	Jan. 25
Feb. 6	New Prague, Minn.	Jan. 25
Feb. 6	San Antonio, Tex.	Jan. 18
Feb. 6	Toms River, N. J. Adv. Jan. 25 and Feb. 1.	Jan. 25
Feb. 7	Weston, Ont.	Jan. 18
Feb. 7	Columbus, O.	Feb. 1
Feb. 8	Massillon, O.	Jan. 25
Feb. 8	Phila., Pa.	Feb. 1
Feb. 9	Jamestown, N. Y.	Jan. 11
Feb. 10	Kenosha, Wis.	Jan. 4
Feb. 10	Evanston, Ill.	Feb. 1
Feb. 12	Albion, Mich.	Jan. 18
Feb. 12	Warren, O.	Feb. 1
Feb. 12	Massillon, O.	Feb. 1
Feb. 13	Taft, Calif.	Jan. 25
Feb. 13	Grand Rapids, Mich.	Feb. 1
Feb. 13	Oakland, Calif.	Feb. 1
Feb. 14	Marcy, N. Y. Adv. Jan. 25 and Feb. 1.	Jan. 25
Feb. 14	Kings Park, N. Y. Adv. Jan. 25 and Feb. 1.	Jan. 25
Feb. 14	Cleveland Heights (Warrensville P. O.), O.	Feb. 1
Feb. 15	St. Charles, Minn.	Jan. 11
Feb. 15	Greenville, O.	Feb. 1
Feb. 15	Minneapolis, Minn.	Feb. 1
Feb. 15	Williamson, W. Va.	Feb. 1
Feb. 16	East Boston (Boston P. O.), Mass.	Feb. 1
Feb. 17	Upper Arlington (Columbus P. O.), O.	Feb. 1
Feb. 19	Trafford, Pa.	Feb. 1
Feb. 21	Jamestown, N. Y.	Feb. 1
Feb. 21	Cleveland Heights (Warrensville P. O.), O.	Feb. 1
Feb. 23	Jamestown, N. Y.	Jan. 11
Feb. 23	Jamestown, N. D.	Jan. 25
Feb. 23	Roxbury (Boston P. O.), Mass.	Feb. 1
Feb. 26	Attica, N. Y.	Feb. 1
Feb. 26	Whitehall, N. Y.	Feb. 1
Feb. 27	Roosevelt, N. Y.	Feb. 1
Mar. 1	Red Lion, Pa.	Jan. 18
Mar. 1	Denver, Colo.	Jan. 18
Mar. 15	Duluth, Minn.	Jan. 18
Mar. 15	Trenton, N. J.	Jan. 11
Mar. 23	Shreveport, La.	Nov. 9
Apr. 1	Oil City, Pa.	Jan. 18

FEDERAL GOVERNMENT WORK

Feb. 6	Laboratory, etc. — Wash., D. C.	Jan. 25
Feb. 6	Stone—Wilmington, Del. Adv. Jan. 25 and Feb. 1.	Jan. 25
Feb. 6	Alterations—Dawson Springs, Ky.	Jan. 25
Feb. 7	Detonator and Storehouse—Puget Sound, Wash.	Jan. 11
Feb. 7	Water Supply System — Tiburon, Calif.	Jan. 11
Feb. 7	Mechanical Equipment—Chelsea, N. Y.	Jan. 25
Feb. 7	Dredging—Phila., Pa.	Jan. 25
Feb. 7	Water Softening Machinery —San Diego, Calif.	Jan. 25
Feb. 7	Dredging—Norfolk, Va.	Feb. 1
Feb. 8	Horses and Props—Cincinnati, O. Adv. Jan. 11 to Feb. 1.	Jan. 11
Feb. 10	Plotting Room, etc. — Ft. Tilden, N. Y. Adv. Jan. 18 to Feb. 1.	Jan. 18
Feb. 12	Steel, etc.—Cincinnati, O. Adv. Jan. 18 to Feb. 1.	Jan. 18
Feb. 12	Generator—Florence, Ala. Adv. Jan. 25 and Feb. 1.	Jan. 25
Feb. 13	Breakwater—Phila., Pa.	Jan. 25
Feb. 14	Sluice Gates — Boise, Idaho	Jan. 4
Feb. 14	Roads—California	Feb. 1
Feb. 15	Furnishing Stone, etc.—Crescent City, Calif.	Dec. 28
Feb. 15	Valves—Boise, Idaho	Jan. 4
Feb. 16	Hospital — Battle Creek, Mich. Adv. Jan. 18 to Feb. 1.	Jan. 18
Feb. 17	Tanks—Florence, Ala. Adv. Jan. 25 and Feb. 1.	Jan. 25
Feb. 19	Post Office—Nogales, Ariz.	Jan. 25
Feb. 21	Dredging—Galveston, Tex.	Jan. 11
Feb. 21	Castings, etc. — Florence, Ala. Adv. Jan. 25 and Feb. 1.	Jan. 25
Feb. 21	Refrigerating Equipment — Gulfport, Miss.	Feb. 1
Feb. 24	Quarter-boat and Barges — Wilmington, Del. Adv. Jan. 25 and Feb. 1.	Jan. 25
Feb. 26	Hospital—Gulfport, Miss.	Feb. 1

Bids Close		See Eng. News-Record
Feb. 28	Extension — Mare Island, Calif.	Feb. 1
Mar. 2	Stone—Eureka, Calif.	Feb. 1
May 10	Post Office — Cordova, Alaska	Jan. 25

MISCELLANEOUS

Feb. 5	Water Pipe and Fittings — Redwood City, Calif.	Jan. 18
Feb. 5	Turbine, Generator, etc. — Arizona	Jan. 18
Feb. 5	Lumber, etc.—Harlan, Ia.	Jan. 18
Feb. 5	Rock Crusher, etc. — Knox, Ind.	Jan. 25
Feb. 5	Lumber and Steel—Fairfield, Ia.	Feb. 1
Feb. 5	Motor Street Flusher — San Francisco, Calif.	Feb. 1
Feb. 5	Bridge Lumber—Minneapolis, Minn.	Feb. 1
Feb. 5	Plumbing and Drainage — Brooklyn, N. Y.	Feb. 1
Feb. 5	Fire Alarm System—New York, N. Y.	Feb. 1
Feb. 6	Culvert Metal, etc.—Osage, Ia.	Jan. 25
Feb. 6	Lumber, etc. — Maquoketa, Ia.	Jan. 25
Feb. 6	Lumber, etc.—Clinton, Ia.	Jan. 25
Feb. 6	Tractor and Grader—Burke, S. D.	Jan. 25
Feb. 6	Lumber, Steel, etc.—Newton, Ia.	Feb. 1
Feb. 6	Bridge Lumber, etc.—Eldora, Ia.	Feb. 1
Feb. 6	Truck Tractors—Minneapolis, Minn.	Feb. 1
Feb. 6	Caterpillar Tractor, etc. — Rochester, Minn.	Feb. 1
Feb. 6	Lumber, etc. — Burlington, Ia.	Feb. 1
Feb. 6	Tractor—Onida, S. D.	Feb. 1
Feb. 6	Supplies—Phila., Pa.	Feb. 1
Feb. 7	Screening Plant — Mora, Minn.	Jan. 18
Feb. 7	Motor Truck — Appleton, Wis.	Jan. 11
Feb. 7	Lumber, etc — Waverly, Ia.	Jan. 18
Feb. 7	Lumber, etc.—Vinton, Ia.	Jan. 18
Feb. 7	Lumber and Steel — West Union, Ia.	Feb. 1
Feb. 7	Lumber—Minot, N. D.	Feb. 1
Feb. 7	Portland Cement, etc. — New York, N. Y.	Feb. 1
Feb. 8	Park—Astoria, N. Y.	Feb. 1
Feb. 8	Lumber, etc.—Nevada, Ia.	Jan. 25
Feb. 8	Pipe, Piling, etc. — Cresco, Ia.	Feb. 1
Feb. 8	Steam or Motor Roller—Flemington, N. J. Adv. Feb. 1.	Feb. 1
Feb. 8	Coffee Conveyors, etc. — New Orleans, La.	Feb. 1
Feb. 9	Lumber, Piling, etc.—Garner, Ia.	Feb. 1
Feb. 9	Lumber, etc. — Sigourney, Ia.	Feb. 1
Feb. 9	Power and Lighting Systems, etc.—Phila., Pa.	Feb. 1
Feb. 13	Bridge Lumber—New Hampton, Ia.	Feb. 1
Feb. 14	Road Grader — Biwabik, Minn.	Feb. 1
Feb. 15	Dry Dock Machinery—Esquimalt, B. C.	Jan. 4
Feb. 15	Road Oil—Urbana, Ill.	Feb. 1
Feb. 19	Brick—Wash., D. C.	Jan. 25
Feb. 19	Steel Dump Hoist—San Jose, Calif.	Feb. 1
Feb. 20	Terra Cotta Pipe Drains, etc. —Charleston, S. C. Adv. Feb. 1.	Feb. 1
Feb. 22	Wharf—Grand River, Que.	Feb. 1

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Ohio—W. H. Duffy, dir. Pub. Serv., Columbus, soon takes bids two 500 gal. per minute vertical motor driven centrifugal pumps and one 500 gal. per minute duplex steam pump for water works at Girls' Industrial Home, Concord, Delaware Co.

O., Cleveland — S. K. Kleinman Realty Co. had plans prepared 1½ mi. 6 and 8 in. c.i. mains. $28,000. V. D. Croft, 621 Engineers' Bldg., engr.

Ia., Cedar Rapids—Mound Farm Realty Co., Cedar Rapids, having plans prepared 1½ mi. mains and sewers, also 20 blocks concrete sidewalks. T. R. Warriner, Klinger Bldg., engr.

Mo., Kirksville—Feb. 9, to vote on $325,000 bonds for extending waterworks. Black & Veatch, Mutual Bldg., Kansas City, engrs. Noted Dec. 7.

Tex., Bowie — Voted $22,000 bonds for waterworks improvements. Address Mayor.

Tex., Dawson—Planning waterworks improvements. $45,000 available. J. H. McCulloch, mayor. Municipal Eng. Co., Dallas, consult. engrs.

Tex., Quanah—Planning extensive waterworks improvements. $98,000 available. Elrod Eng. Co., Interurban Bldg., Dallas, genl. and consult. engrs.

Okla., Okmulgee — April 4, to vote on $150,000 bonds for waterworks improvements. T. B. Embree, Okmulgee, engr.

Okla., Depew — Having plans prepared pumping station, water mains and sewerage system. $50,000 bonds sold. Gantt & Baker, 1st Natl. Bank Bldg., Oklahoma City, engrs.

Calif., Oakdale—Oakdale and South San Joaquin Irrigation Dists., plan election to vote on $3,750,000 bonds for Melones Reservoir and power house.

Ont., Belleville—Having plans prepared filtration system. $150,000. Gore, Nasmith & Storrie, Confederation Life Bldg., Toronto, engrs.

BIDS DESIRED

Mass., Springfield—Feb. 12, by Bd. Water Comrs., Municipal Bldg., brass corporations, inverted key sidewalk cocks, tee handle M. & F. cocks, inverted key stop and waste cocks, and compression bibbs with hose spouts. H. M. King, supt.; adv. this issue.

N. Y., Binghamton—Bd. Contr. & Supply, taking bids 1,000 ft. 4 in. and 4,000 ft. 6 in. c.i. pipe. $5,000.

N. Y., Scottsville—See "Sewers."

N. Y., Buffalo—Feb. 10, by A. W. Kreinheder, comr. Pub. Wks., Municipal Bldg., furnishing c.i. pipe, specials, hydrants and valves, f.o.b. Buffalo; adv. this issue.

N. Y., Voorheesville—Feb. 14, by Bd. Village Trustees, Hose House. 3½ mi. c.i. mains, appurtenances and concrete reservoir. W. W. Chadsey, 434 State St., Schenectady, engr.; adv. this issue. Noted Sept. 21.

N. J., Gloucester—Feb. 16, by City Council, City Hall, 3,000,000 gal. rapid sand filtration plant, etc. Remington & Vosbury, 601 Market St., Camden, engrs.; adv. this issue.

N. C., Whiteville — Feb. 6, furnishing material and equipment for waterworks and electric light improvements, it is intended to build one plant, bids received will determine whether this will be operated by steam, Diesel or Semi-Diesel engines. Waterworks system includes one 500 gal. per minute centrifugal pump with base for direct connection to 60 hp. motor, one 500 gal. per minute centrifugal pump with base for direct connection to gas engine, one 200 gal. per minute centrifugal pump with base for direct connection to 20 hp. motor, one 60 hp. high voltage, high speed, slip ring motor, one 20 hp. low voltage, high speed, motor, one 60,000 gal. tank, 75 ft. tower, 18,178 ft. 6-8 in. B & S Class B pipe, 13,600 ft. 1½ in. galvanized pipe, etc. J. B. McCrary Co., 3rd Natl. Bank Bldg., Atlanta, Ga., engrs. Noted Nov. 23.

O., St. Henry—Feb. 13, by A. J. Davis, clk. Bd. Trustees of Pub. Affairs, furnishing and laying 16,795 lin.ft. 4-8 in. c.i. pipe, 12,500 lb. c.i. specials, etc. G. Champe, 610 Nasby Bldg., Toledo, civil engr.

O., Willoughby—Feb. 12, substructure for 17 x 28 ft. pumphouse and two 210 gal. per minute centrifugal pumps. $15,000. R. E. Garvin, Davis & Farley Bldg., Cleveland, engrs.

Ill., Canton—Feb. 27, by Fire and Water Com., drilling well, etc. E. F. Motsinger, city engr.; adv. this issue.

Ill., Carlyle—Feb. 19, at office City Clerk, material and labor for complete filtration plant. Dawson & Walraven, Springfield, engrs.; adv. this issue.

Wis., Milwaukee—Feb. 12, at office Central Bd. Purchases, 100 ton special castings, consisting of 3 Ways, 4 Ways, curves, etc., 4-16 in. diameter, for Class C water pipe; 3,000 ton 6-16 in. Class C water pipe. G. Staal, city engr.

Wyo., Rawlins—March 7, waterworks system. Weiland Eng. Co., 721 Thatcher Bldg., Pueblo, Colo., engrs.; adv. this issue.

Okla., Guthrie—Feb. 9, by G. ... Anderson, city clk., extensions to waterworks, incl. 12,300 lin.ft. 4-6 in. c.i. mains, one 1,500 gal. per minute marine engine pump unit installed, 100 cu.yd. loose rock and 100 cu.yd. solid rock; sewer extensions incl. 192 lin.ft. 12-16 in. c.i. sewers, 8,300 lin.ft. V.S. or concrete pipe, 100 cu.yd. loose rock and 800 cu.yd. solid rock excav., 10,000 lb. steel 1 beam sewer bridge, etc. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs. Noted Dec. 28.

Colo., De Beque — Feb. 13, by City Council, Pueblo, improving water system, here. $35,000. Weiland Eng. Co., 717 Thatcher Bldg., Pueblo, engrs.

Wash., Aberdeen — Feb. 15, by City Council, laying 5,000 ft. 16 in. c.i. mains. A. H. Blood, Aberdeen, engr.

Ont., Toronto—March 6, by C. A. Maguire, mayor, chn. Bd. Control, 36 and 42 in. stop valves, Tender 38, 36 in. check valves, Tender 39.

BIDS RECEIVED

O., Sandusky—Erie Co., 23,600 ft. 4 and 6 in. c.i. mains in Co. Sewer Dist. 2, from Homeberger & Wager Eng. & Constr. Co., Sandusky, $66,112; United Eng. & Constr. Co., Sandusky, $67,132.

Wis., Milwaukee—Central Bd. Purchases opened bids Jan. 25, (1) two hundred 6 in. gate valves (2) one hundred 8 in. gate valves (3) twenty-five 12 in. gate valves (4) twelve 16 in. gate valves (5) twenty five 2 in. special or tapping valves (6) fifteen 3 in. special or tapping valves (7) twenty 6 in. special or tapping valves, from Chapman Valve Mfg. Co., Indian Orchard, Mass., (1) $21.50 (2) $38.75 (3) $77 (4) $150 (5) $44 (6) $17.30 (7) $30.60, Nelson Valve Mfg. Co., Wyndmoor, Phila., (1) $28 (2) $46 (3) $90 (4) $175 (5) $17.26 (6) $22.96 (7) $37.07, B. Hoffman Mfg. Co., 257 6th St., (1) $21.06; furnishing (1) one thousand five hundred ¾ in. corporation cocks (2) two thousand ¾ in. corporation cocks (3) one thousand five hundred ¾ in. curb cocks (4) one thousand five hundred 1 in. curb cocks (5) one thousand five hundred ¾ in. meter cocks (6) one thousand five hundred ¾ in. meter cocks (7) three thousand ¾ in. meter couplings (8) three thousand ¾ in. meter couplings, from H. Mueller Mfg. Co., 512 Cerro Gordo St., Decatur, Ill., (1) $0.71 (2) $0.92 (3) $0.79 (4) $1.10 (5) $0.59 (6) $0.78 (7) $0.14 (8) $0.24, Glauber Co., Cincinnati, O. (street address not available) (1) $0.75 (2) $1.02 (3) $0.87 (4) $1.32 (5) $0.60 (6) $0.82 (7) $0.14 (8) $0.24, Randle-Spence Mfg. Co., 55 4th St., (1) $0.76 (2) $0.95 (3) $0.82 (4) $1.15 (5) $0.64 (6) $0.84 (7) $0.16 (8) $0.25; 200 fire hydrants, from R. D. Wood, 2100 Locust St., Phila., $76.75, A. P. Smith Co., Norman St., East Orange, N. J., $82.40. Noted Jan. 18.

Wis., Milwaukee—Sewerage Comn. opened bids Jan. 26, 1,725 ton Class A water pipe and special castings, from U. S. Cast Iron Pipe & Fdry. Co., 122 South Michigan Ave., Chicago, (Item 1) $55.95 per ton (2) $97.65 (3) $80,95 (4) $134 or (5) $145 (6) $235; sluice gates, valves, etc., (1) one 6 x 6 sluice gate (2) two 6 x 6 sluice gates, (3) sixteen 4 x 4 sluice gates (4) ten 8 in. circular sluice gates (5) two 60 in. gate valves (6) one 54 in. gate valve (7) one 48 in. gate valve (8) one 24 in. gate valve (9) one 12 in. gate valve with indicator (10) twenty-six 12 in. gate valves, chain operated (11) one 8 in. gate valve, chain operated (12) eleven 8 in. gate valves, beveled gears (13) four 8 in. gate valves (14) four 6 in. gate valves, from Ludlow Valve Mfg. Co., Ft. Adams St., Troy, N. Y., (1) $1.145 (2) $2,182 each (3) $1,535 (4) $55 (5) $1,975 (6) $1,470 (7) $1,080 (8) $230 (9) $75.50 (10) $56.50 (11) $32.50 (12) $49 (13) $38.50 (14) $20; Chapman Valve Mfg. Co., Indian Orchard, Mass., (1) $1,285 (2) $1,995 (3) $1,390 (4) $44.75 (5) $1,551 (6) $1,181 (7) $835 (8) $196 (9) $69 (10) $49 (11) $35.40 (12) $58 (13) $42.80 (14) $19.30; Kennery Valve Mfg. Co., East Water St., Elmira, N. Y., (5) $2,524.25 (6) $2,123.73 (7) $1,040 (8) $212.45 (9) $100 (10) $81.03 (11) $45.58 (12) $47.56 (13) $47.05 (14) $26.70. Noted Jan. 18.

CONTRACTS AWARDED

N. Y., New York—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in Ave. A, 1st and 2nd Aves., East 42nd and East 81st Sts., to Beaver Eng. & Contg. Co., 57 Chambers St., $134,738. Engrs. est. $135,000. Noted Jan. 25.

Fla., Plant City—See "Sewers."

O., Cleveland—For 500 ft. concrete inlet and outlet tunnel, 3,696 cu.yd. concrete, 5,400 cu.yd. earth excav. and 110,000 lb. reinforcing, to P. F. Connolly, Commonwealth Bldg., $221,153. Noted Jan. 25.

Waterworks (Continued)

Minn., St. Paul — H. W. Austin, city purch. agt. for Water Dept., c.i. pipe specials, to Natl. Cast Iron Pipe Co., Tarrant City, Birmingham, Ala.; thirty coils 3 in., one thousand 1 in., two hundred and fifty 1 in., and one hundred and twenty five 1½ in. extra strong lead pipe, to United Lead Co., 102 Fairfield Ave., W., $28,000; 2,250 corporation cocks, 190 curb cocks, 200 brass soldering nipples, 150 brass gate valves, to H. Mueller Mfg. Co., 434 West Cerro Gordo St., Decatur, Ill., $5,047. Noted Jan. 11.

Kan., Quinter — Waterworks system, to Reed & Wheelock, Clay Center, 2 in. galvanized pipe $0.43, 4 in. c.i. pipe $0.95, 6 in. c.i. pipe $1.30, fire hydrant $50, tower and tank $4,900, concrete $8, pump house and derricks $700, total $30,007.

S. D., White Lake—See "Sewers."

Tex., Dallas—City Comn., two 2,000,000 gal. steel and concrete standpipes, 60 x 100 ft., one in Lakewood other in Belmont, to Chicago Bridge & Iron Wks., Praetorian Bldg., $51,300 and $51,900 respectively. Engrs. est. $40,000-$50,000 each. Noted Jan. 11.

Tex., Highland Park—Well, pumps, etc., to R. H. Dearing & Sons, Sumpter Bldg., Dallas, $100,000. Noted Jan. 25.

Okla., Oklahoma City—For 500 ton 6 in., 10 ton 4 in. and 10 ton 3 in. c.i. pipe, to National Cast Iron Pipe Co., Tarrant City, Birmingham, Ala., 6 in. at $43 per ton f.o.b. Birmingham; one 8,400 gal. per minute centrifugal pump, to N. S. Sherman Machine & Iron Wks., East Main St., Oklahoma City, one 5,600 gal. per minute centrifugal pump, to Allis-Chalmers Mfg. Co., West Allis, Wis.

Okla., Tyrone — Waterworks improvements, incl. drilling and casing two 12 in. wells, constructing two pump houses and derricks, two 60 to 75 gal. per minute deep well pumps, two 250 gal. per minute motor driven centrifugal fire pumps complete with motors and controls, 150,000 gal. rein.-con. reservoir, one 30,000 gal. steel water tank on 80 ft. tower, rein.-con. and tile power house, cooling tower with concrete basin, machinery, tank and tower foundations, two panel switchboard, 924 ft. 8 in., 1,488 ft. 6 in., and 15,456 ft. 4 in. Class B c.i. pipe, 3,663 ft. 2 in. galvanized pipe, 10,500 lb. c.i. specials, etc., to Ajax Constr. Co., 1825 West Main St., Oklahoma City, $61,534. Engr. est. $70,000. Noted Nov. 30.

Utah, Provo—State Water Comn., Salt Lake City, plans pipe line from Slate Canyon to Mental Hospital, here. $40,000. R. E. Caldwell, state engr.

Sewers

PROPOSED WORK

Mass., West Springfield—Plans large sewer, Merrick section. $100,000. Steele Bros., Elm St., engrs.

N. Y., Endicott—Endicott Johnson Corp., 108 East Main St., plans trunk outfall sewer in West Endicott for factory and home development. $200,000. Hoadley & Giles, c/o owner, engrs.

N. Y., Oneida—Plans prepared and takes bids about May 1, sewage disposal plant, incl. Imhoff tanks, pumping plant, 1,350 lin. ft. 24 in. trunk sewer, etc. $60,000. J. M. Hutton, city engr.

Pa., Erie—Plans 20,000 lin.ft. 10 in. sewer in Frontier Pl., 19,000 lin.ft. 10 in. sewer in Lakeside Ave. and 13,000 lin.ft. 12-36 in. tile in Ferncliff Ave. F. G. Lynch, city engr.

N. C., Raleigh — City plans installing 2,482 openings or new connections and additional mains in Hayes-Barton and Oberlin sections. $93,000. J. B. Bray, comr. Pub. Wks.

Fla., Miami—City plans election to vote on $75,000 bonds for storm sewers, $100,000 bonds for sanitary sewers. C. W. Murray, city engr.

O., Akron—W. F. Peters, dir. Pub. Serv. takes bids in February or March for 3,000 ft. of 8-30 in. vitr. clay sewers in Evers, Weaver and Spaulding Sts., $25,000; 2,000 ft. of 15-24 in. vitr. clay sewer in Garry Rd., $10,000; 6,000 ft. of 8-27 in. vitr. clay, segmental block or brick sewer in Case Ave., $25,000; 3,000 ft. of 114 in. segmental block of brick for Willow Run 3 sewer, $185,000; 4,600 ft. of 30-54 in. segmental block or brick for Forest Hill trunk sewer, $95,000; 3,000 ft. of 42-66 in. segmental block or brick for Carpenter Heights trunk sewer, $80,000. J. E. Root, Delaware Bldg., engr.

O., Wapakoneta — Takes bids about March 15, for sewerage system, 8-30 in. pipe and segmental block. $126,000. J. H. Meyer, Wapakoneta, engr.

Wis., Cashton—Making plans sewerage system incl. at least 2 disposal plants. $35,000. W. G. Kirchoffer, Dean Bldg., Madison, engr.

Ia., Cedar Rapids—See "Waterworks."

Mo., Harrisonville—Voted $60,000 bonds sanitary sewerage system. W. R. Rollins & Co., 521 Ry. Exch. Bldg., Kansas City, engrs. Noted Dec. 21.

Tex., Nacona—City Comn. soon takes bids sanitary sewers in various streets. $50,000. Elrod Eng. Co., 3206 Elm St., Dallas, engrs.

Tex., Rosenberg—Citizens voted $50,000 bond issue for sanitary sewer improvements, incl. sewage disposal plant. E. E. Sands, City Hall, Houston, consult. engr.

Okla., Depew—See "Waterworks."

Okla., Guthrie—See "Waterworks."

Utah, Ogden — City Comn. takes bids early in spring, 8-16 in. vitr. clay sanitary sewers in vicinity of Five Points Dist. $75,000. W. S. Craven, city engr.

Calif., Centerville—Union Sanitary Dist. soon takes bids 52,000 lin.ft. of 6-14 in. ironstone vitr. sewer pipe. $75,000 bonds voted. G. Posey, Courthouse, Oakland, engr. Noted Jan. 4.

BIDS DESIRED

N. Y., Cuba—Feb. 24, by Bd. Village Trustees, sewerage system and sewage disposal works. Hopkins & Field, 349 Cutler Bldg., Rochester, engrs.; adv. this issue.

N. Y., Long Island City—Feb. 8, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sewers in Hemlock Pl. from Collins to Clermont Aves., Clermont Ave. from Hemlock Pl. to Hebbard Ave., 2nd Ward, Justice St. from Toledo to Chicago Sts., 2nd Ward, 89th St. (Ocean View Ave.) from 102nd Rd. (Huntington St.) to point 330 ft. south of Liberty Ave., Liberty Ave. from 89th to 90th St. (Gherardi Ave.), 90th St. from Liberty Ave. to point 350 ft. south of Liberty Ave., 4th Ward, 92nd St. (Bigelow Pl.) from Atlantic Ave. northside to 92nd Ave. (Hopkins Ct.), 92nd Ave. from 92nd St. to Woodhaven Blvd., 4th Ward, 114th St. (Stoothoff Ave.) from Liberty Ave. to point 550 ft. south of Liberty Ave., 4th Ward, 115th St. (Hamilton Ave.) from Liberty to Roanoke Aves., 4th Ward.

N. Y., New York—Feb. 6, by H. Bruckner, pres. Bronx Boro, Tremont and 3rd Aves., sewers across Bronx Parkway, in Williamsbridge Rd., Odell St., Edenwald, Barkley and Hobart Aves.

N. Y., Scottsville—Feb. 23, by Bd. Village Trustees, sewerage system, disposal works and waterworks system. Hopkins & Field, 349 Cutler Bldg., Rochester, engrs.; adv. this issue. Noted June 29.

O., Akron—Feb. 12, by W. F. Peters, dir. Pub. Serv., vitr. pipe and trunk sewer improvements in West Market St. $31,690, Bye St. Storm Sewer (Contr. 1) $70,350, Bye St. Storm Sewer (Contr. 2) $63,800, Lucy Robert and Duane Sts. $18,050, North St. $13,950. J. E. Root, Delaware Bldg., engr.

Mo., St. Louis — Feb. 13, by Bd. Pub. Serv., City Hall, district sewer in Manchester Sewer Dist. 2, 6,000 cu.yd. excav., 300 cu.ft. "B" concrete, 2,600 cu.ft. brick masonry, 5,320 lin.ft. 8-30 in. vitr. pipe, 11,400 lb. cast and 1,250 lb. wrought iron, etc., $22,500; in Harlem Creek Sewer Dist. 19, 1,700 cu.yd. excav., 1,015 cu.ft. brick masonry, 100 cu.ft. concrete, 1,528 lin.ft. 8-18 in. vitr. pipe, etc., $3,750; Harlem Creek Dist. Sewer 20, 6,225 cu.yd. excav., 300 cu.ft. gravel, 2,800 cu.ft. brick masonry, 5,825 lin.ft. 8-27 in. pipe, 11,624 lb. cast and 1,105 lb. wrought iron, etc., $19,500; Glaise Creek Sewer Dist. 20, 3,710 cu.yd. excav., 300 cu.yd. Class "C" concrete, 2,915 cu.ft. brick masonry, 300 cu.ft. gravel, 5,500 lin.ft. 10-24 in. vitr. pipe, etc., $12,500; Glaise Creek Sewer Dist. 23, 545 cu.yd. excav., 245 cu.ft. brick masonry, 1,065 lin. ft. vitr. pipe, etc., $3,050. W. W. Horner, city engr.

Tex., Houston—City Comn. taking bids storm sewers in Westheimer Ave. $60,000. J. C. McVea, city engr.

Col., Denver—Feb. 6, at office Dept. Impvts. and Parks, sanitary sewers with necessary manholes, etc., in Eastern Capitol Hill Special Sanitary Sewer Dist. $2,000,000. W. B. Lowry, mgr.

Calif., Lodi—Feb. 8, by City Council, activated sludge plant, pump house, concrete foundations, etc., in connection with sewerage disposal plant. $75,000. L. F. Barzellotti, city engr. C. F. Smith, 7 Nottingham St., Berkeley, engr.

Wash., Kelso—See "Streets and Roads."

BIDS RECEIVED

Pa., Phila.—Opened bids Jan. 17, sewer in Delaware Ave. from Snyder to Bigler Sts., from W. H. Garson, 5033 Brown St., $13,993, Lombardi & Co., Inc., Lincoln Bldg., $15,613, J. J. McHugh, 1617 Race St., $20,565; drainage ditches in 40th Ward, from Lombardi & Co., Inc., Lincoln Bldg., $128,544, Lombardi & Yettman, Lincoln Bldg., $147,880, C. A. Conman, Mud Puddle Lane and Pennsylvania R.R., $187,652. Noted Jan. 11.

O., Sandusky—Erie Co., 16,915 ft. 6-15 in. vitr. tile sewer in Co. Sewer Dist. 2, from Homberger & Wager Eng. & Constr. Co., Sandusky, $29,493; United Eng. & Constr. Co., Sandusky, $29,774.

Calif., Lodi—City Trustees, machinery for sewerage disposal plant, centrifugal pumps, from United Iron Wks., 580 2nd St., Oakland, furnishing equipment alone $2,857, equipment and installation $3,385, equipment and installation without wiring $3,185; electric motors, from Fairbanks-Morse Co., 651 Mission St., San Francisco, $3,236; air compressors, from Halloran & Golcher, Sharon Bldg., San Francisco, $7,270; water systems, from Lodi Implement Co., Lodi, $1,045; flow meters, from General Electric Co., Rialto Bldg., San Francisco, $1,460; filtrous plates, from General Filtration Co., 325 Cutler Bldg., Rochester, N. Y., $4,380; fine screens and clarifiers, from Dorr Co., 101 Park Ave., New York City, $4,570 and $6,620 respectively. Noted Jan. 4.

CONTRACTS AWARDED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, sewer in Lenox Rd., to A. Mannino, 263 86th St., 96% of engrs. est. ($7,219); Hegeman Ave., Bristol, 40th and East 10th St., to B. Peconi & Son, 570 18th St., 99% of engrs. est. ($2,264), 105% ($1,269) 102% ($4,571) and 101% ($3,348) respectively; Malta St. and Vandervoort Ave., to G. L. Schrade, 693 Flatbush Ave., 83% of engrs. est. ($2,917) and 108% ($2,631) respectively. Noted Jan. 11.

N. C., Charlotte—Bd. Comrs., 8 mi. sewer and drains, to Tucker & Lexton, Realty Bldg., $66,566. Noted Jan. 11.

Fla., Plant City—City will extend sewerage system and water mains, by day labor. $36,000. E. N. Stanley, city engr. Noted Dec. 7.

S. D., White Lake—Sanitary sewerage system, incl. 15,755 lin.ft. 8-12 in vitr. tile pipe, disposal plant, to O. N. Gjellefald, Forest City, Ia., $24,000; waterworks system incl. 12,510 lin.ft. 4-8 in. c.i. pipe, 50,000 gal. elevated tank on 100 ft. tower, pumping station, and 100,000 gal. rein.-con. reservoir, to J. S. Harrington, 3001 Mason St., Omaha, Neb. Noted Jan. 4.

Mo., Hamilton—New sanitary sewerage system, 54,383 ft. trenching and backfilling, 54,293 ft. 8-12 in. vitr. and 88 ft. 8 and 10 in. c.i. pipe, etc., to C. H. Everett, Hutchinson, Kan., $93,000. Noted Dec. 7.

Waste Disposal

PROPOSED WORK

N. Y., Carthage—Plans garbage reduction plant. C. F. Adams, pres. village bd.

Fla., Miami — Plan to vote on $35,000 bonds to purchase new incinerator. C. W. Murray, Miami, engr.

BIDS DESIRED

Okla., Tulsa—Feb. 26, by Bd. Comrs., garbage and refuse destructor. C. Schultz, city engr.; adv. this issue.

CONTRACTS AWARDED

N. Y., New York—Dept. Plants & Structures, Municipal Bldg., equipping and completing destructor station, 56th St. and 12th Ave., for Dept. Street Cleaning, to Kelly & Kelley, 35 12th St., Long Island City.

Bridges

PROPOSED WORK

Pa., Allentown—City, Lehigh Co., and Phila. & Reading R.R., Reading Terminal, Phila., plans rein.-con. bridge, incl. three 75 ft. arch spans and two 35 ft. cantilever arches, 30 ft. driveway, two 6 ft. sidewalks, over tracks of Phila. & Reading R.R., Cum-

Bridges (Continued)

berland St. Cost between $150,000 and $200,000. H. F. Bascom, city engr., S. T. Wagner, ch. engr.

Tennessee—See "Streets and Roads."

Ohio—See "Streets and Roads."

Kan., Wellington — Comrs. Sumner Co. soon take bids 300 ft., deck girder bridge over Ninnescah River, Project 35, six 50 ft. spans, 20 ft. roadway, $30,000; 300 ft. deck girder bridge over Chicaskia River, Federal Aid Project 35, six 50 ft. spans, 20 ft. roadway, $30,000; deck girder bridge with two 45 ft. spans, $10,000. J. W. Mavity, Wellington, engr.

California—Private Corporation now being formed and having plans prepared by J. B. Leonard, engr., 57 Post St., San Francisco, and L. P. Hobart, archt., Crocker Bldg., San Francisco, steel and concrete bridge at Little Coyote Point, between San Mateo and Alameda Counties, $10,000,000.

Ont., Toronto—Provincial Dept. Pub. Highways, University Ave. and Dundae St., having surveys made 750 ft. steel plate girder bridge, 40 ft. roadway, steel towers, concrete floor, footings and abutments, over Humber River on Bloor St. $200,000. G. Hogarth, ch. engr.

BIDS DESIRED

Miss., Webb—Feb. 5, by Bd. Supervs. Tallahatchie Co. (Sumner), steel bridge, three 80 ft. spans, concrete floors, piers and abutments, over Cassidy Bayou, here. H. L. French, Sumner, engr.

Tennessee—See "Streets and Roads."

S. C., Darlington — See "Streets and Roads."

S. C., Kingstree — See "Streets and Roads."

Wyo., Green River—Feb. 6, by State Hy. Dept., Cheyenne, 286 ft. steel truss bridge, 3 spans, cantilever arch, concrete abutments, here. $34,000. R. J. Templeton, Rock Springs, engr.

Wash., Seattle—Feb. 19, by Comrs. King Co., 160 ft. steel span bridge over Tolt River, at Carnation, curved chord Pratt design; 140 ft. bridge, with 300 ft. timber approach, over Cedar River, Maple Valley. $26,000. T. R. Beeman, 7807 Woodland Park, engr.

BIDS RECEIVED

Ohio—See "Streets and Roads."

S. C., Converse—State Hy. Comn., at office Spartanburg Co. Highway Comn., Spartanburg, constructing bridge over Pacolet River, on State Highway 8, here, from W. M. Orr, Hendersonville, N. C., $73,051; P. S. Minus, Spartanburg, $73,542; General Road and Drainage Co., Liberty Bank Bldg., Columbia, $73,841. Noted April 13.

CONTRACTS AWARDED

Me., Sullivan—State Hy. Dept., Augusta, substructure for 971 ft. concrete bridge, 21 ft. wide, 2 abutments, 5 concrete and cut granite piers, over Taunton River between here and Hancock, 16,000 cu.yd. earth approach and fill, to J. H. Kerr, Rumford, $266,663. Engrs. est. $300,000.

N. H., Haverhill—States of New Hampshire and Vermont, bridge over Connecticut River between here and Newberry, to Boston Bridge Wks., 47 Winter St., Boston, Mass., $61,700. Noted Dec. 7.

Mass., Cambridge — Bridge over Broad Canal on 1st St., single leaf movable draw span, 51½ ft. long, 54 ft. wide, to Boston Bridge Wks. Inc., 47 Winter St., Boston, $47,487. Noted Dec. 28.

S. C., Orangeburg—Orangeburg Co., 21 ft. concrete bridge, 54 ft. approach, 34 ft. wide, 24 ft. driveway, to Kershaw Contg. Co., Woodward Bldg., Birmingham, Ala., $41,636.

North Carolina—State Hy. Dept., Raleigh, constructing rein.-con. bridges and culverts on State Project 256, between Fort Barnwell and La Grange, Lenoir Co., to Engelhardt & Kuehn, Camp Bragg, $57,683. Noted Nov. 30, under Streets and Roads.

Missouri—See "Streets and Roads."

Missouri—State Hy. Dept. at div. office Carrollton and Lexington, substructures for one 20 ft. steel beam, one 82 ft. and one 80 ft. steel girder, one 145 ft. deck truss, two 420 ft. and three 255 ft. steel truss spans, 2 concrete abutments, 6 rein.-con. piers, etc., over Missouri River, on road from Carrollton to Lexington, Federal Aid Project 220, Carroll and Lafayette Counties, to Missouri Valley Bridge & Iron Co., 4th and Walnut Sts., Leavenworth, Kan., $252,819; furnishing material for superstructures and erecting superstructures, to Wisconsin Bridge & Iron Co., North Milwaukee, Wis., $190,695 and $88,378 respectively. Noted Jan. 25.

Missouri — State Hy. Dept., Jefferson City, one 80 ft., one 60 ft. and one 50 ft. steel truss and four 20 ft. rein.-con. approach slab spans, 8 rein.-con. pile bents, 6 rein.-con. piers and 20 ft. roadway, on road north of Chillicothe, State Project Route 3, Sect. 16, Livingston Co., to Concrete & Steel Constr. Co., 214-223 West 3rd St., Joplin, $48,712. Noted Jan. 18.

Missouri—State Hy. Dept., at div. office Marshall, one 90 ft. and two 60 ft. rein.-con. open spandrel arch spans, 20 ft. roadways, 2 concrete piers, etc., over Salt Fork River, on road from Marshall east and west, Federal Aid Project 16, Saline Co., to M. E. Gillioz, Monett, $46,276. Noted Jan. 18.

Missouri—State Hy. Dept. at div. office Marshall and Fayette, substructures for thirty-five 20 ft. and one 36 ft. timber, one 248 ft., two 316 ft., one 224 ft. and one 344 ft. steel truss spans, 6 rein.-con. piers, 20 ft. roadway, etc., over Missouri River, on road through Saline and Howard Counties, Federal Aid Project 217, to Union Bridge & Constr. Co., 903 Sharp Bldg., Kansas City, $297,003; superstructures, to Mt. Vernon Bridge Co., Mt. Vernon, O., $269,310. Noted Jan. 25.

Missouri—State Hy. Dept., at div. office Platte City, three 20 ft. and one 60 ft. steel truss spans, 20 ft. roadways, concrete substructure, over Platte River, on road from Platte City to Tracy, Federal Aid Project 93, Platte Co., to Missouri Valley Bridge & Iron Co., 4th and Walnut Sts., Leavenworth, Kan., $43,749. Noted Jan. 18.

Dams

BIDS DESIRED

Illinois—Feb. 28, at office C. R. Miller, dir. Dept. Pub. Wks. and Buildings, Div. Waterways, Springfield, Starved Rock lock and dam, La Salle Co., Illinois Waterway Contr. 2. W. L. Sackett, supt. waterways, M. G. Barnes, ch. engr.; adv. this issue.

Que., Quebec—Feb. 20, by O. Lefebvre, ch. engr. Quebec Streams Comn., 59 Notre Dame St. E., storage dams at Lake Kenogami.

Railways

PROPOSED WORK

New York — Jamestown, Westfield & Northwestern R.R. Co., 560 West 3rd St., Jamestown, plans new loop through village of Bemus Point from point outside north village line to point outside south village line, $25,000. Work will also incl. new station. G. L. Maltby, Jamestown, genl. supt. and purch. agt.

Florida—City of Miami plans election to vote on $400,000 bonds for extending street railway lines to suburbs, etc. C. W. Murray, Miami, city engr.

Ohio — Youngstown Municipal Ry., Youngstown, plans rebuilding Albert St. car line. $46,000. A. Stewart, supt.

Excavation, Drainage, Irrigation

PROPOSED WORK

Fla., Miami—Plans election to vote on vote on $100,000 bonds dredging bay channel, mostly rock. C. W. Murray, City Hall, engr.

Ia., Marion—W. H. Gearhart, engr. Linn Co., making plans and takes bids early in spring, 18,000 ft. 8, 10 and 12 in. tile.

BIDS DESIRED

Ia., Webster City—Feb. 14, by Auditor Hamilton Co., 165,000 cu.yd. excav., Squaw Creek D.D. 47.

Calif., Los Angeles—Feb. 5, by Bd. Pub. Wks., grading site for proposed outfall treatment plant, 700,000 cu.yd. sand excav. To exceed $130,000.

Calif., Paradise—Feb. 6, by G. C. Bille, secy. Paradise Irrigation Dist., (1) enlarging and modifying 13,000 ft. open ditch (2) lining 117,000 sq.ft. ditch with 1 in. rein. gunite (3) 2,400 cu.yd. excav. of regulating forebay (4) lining 24,000 sq.ft. of bay with 1 in. rein. gunite (5) hauling materials from Magalia to job (6) furnishing 2,100 bbl. cement (7) furnishing 600 tons sand (8) 138,000 sq.ft. chicken wire 1½ in. mesh, No. 19 gage, alternative bids on items 2 and 4 for 2 in. cement plaster, no reinforcing. Bids may be submitted as a whole or segregated. L. M. Edwards, Paradise, engr.

CONTRACTS AWARDED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, dredging Fresh Creek from head of Fresh Creek Basin to channel of Jamaica Bay, to Wilm & Quinlivan, 2 Rector St., New York, $0.5803 per cu.yd. Engrs. est. $0.60 per cu.yd. Noted Jan. 11.

Ia., Audubon—Audubon Co. takes bids about March, East Nishnabotna River D.D. 4, 12 mi. main canals, 700,000 cu.yd. excav., 6 laterals 5 mi., 250,000 cu.yd. excav. $75,000. A. J. Van Size, Atlantic, engr.

Calif., Blythe—Palo Verde D.D., constructing drainage ditches, to Foley Bros. & Foley, Monrovia, $117,427. Noted Jan. 25.

Streets and Roads

PROPOSED WORK

N. Y., Geneseo—Plans paving, curbing and guttering 2nd St. $27,000. E. M. De Muhn, Geneseo, engr.

N. Y., Penn Yan—Plans paving Lake and Liberty Sta. $35,000, also Clinton St., $25,000, brick and stone. Engineer not announced.

N. Y., Rochester—Plans laying walks and grading Laney, Azeala and Meadow Brook Rds., $38,000; extending Farleigh, Canton, Sunset, Pigeon, Ellsinore Sts., $9,000; paving Reis St. asphalt, $11,000, Ellicott St., asphalt, $13,000 and Chase St., asphalt block, $12,000. C. A. Poole, city engr.

Pa., Altoona — Plans laying sidewalks, $25,000. C. E. Rhodes, mayor.

Pa., Erie—Following townships in Erie Co. plan road bond issues for highway construction, McKean Twp. $40,000, Washington Twp. $40,000, LeBoeuf Twp. $33,218, Middleboro Twp. $8,000. F. F. Hill, co. engr.

Pa., Sharon—Plans paving and improving 1,000 ft. Idaho St. $25,000. L. E. Burnside, city engr.

W. Va., Huntington—City Comrs. plan 2 mi. concrete boulevard from Forrest Park to Ritter Park. $75,000. A. B. Maupin, city engr.

N. C., Asheville — G. Roberts, mayor takes bids end of February surfacing Virginia Ave., Hazzard, Hanover and Michigan Sts., et al., 50,000 sq.yd. asphalt on concrete.

N. C., Raleigh—Plans 60,000 ft. curbs and gutters in Cameron Park and West Raleigh. $70,000. J. B. Bray, comr. Pub. Wks.

Fla., Winter Garden—Voted $175,000 bonds paving various roads, probably brick. J. B. McCrary Eng. Co., 3rd Natl. Bank Bldg., Atlanta, Ga., probable engrs.

Tennessee—State Hy. Dept., Nashville, making plans, grading, surfacing and bridging 12 mi. Federal Aid Highway 69 from Jackson to Haywood Co. line, 18 ft., Madison Co. D. Q. McComb, Nashville, ch. engr.

Ky., Flemingsburg—Fleming Co. election Feb. 24, to vote on $225,000 bonds for road work.

O., Marietta—Plans widening and resurfacing Front and Greene Sts., asphalt, $47,168. C. A. Stone, city engr.

Ill., Cerro Gordo—Plans grading, curbing and paving 3 blocks Main St., 40 ft., 7,600 sq.yd. concrete, 3,000 ft. concrete curb and gutter. $30,000. Marr, Green & Co., 400 North Michigan Ave., Chicago, engrs.

Ill., Mattoon — Plans grading, paving, curbing and laying sewers in De Witt St. from 10th to 33rd Sts., 30 ft., 25,100 sq.yd. concrete. $92,000. J. Goetz Mattoon engr.

Ill., Urbana — Champaign Co. election Feb. 27 to vote on $2,500,000 bonds for 172 mi. concrete roads, 10 ft. R. F. Fisher, co. supt. highways.

Wis., Kenosha—Takes bids about middle of February, paving, etc., Pleasant, West, Erie, Pearl, 3rd, South, Superior, Lester and Bond Sts., Marion, Sellick, Alleman, Tanck, Lyman and Florence Aves., Linderman Court, and Pleasant Pl., 110,000 sq.yd. rein.-con., sheet asphalt, vertical fibre brick

Streets and Roads (Continued)

or asphaltic concrete, 73,500 lin.ft. combination concrete curb and gutter, 55,600 cu.yd. earth excav. $450,000. R. M. Smith, City Hall, engr.

Wis., Madison—Bd. Pub. Wks. plans paving following streets: Doty St. from King to Hamilton Sts., wood block, $50,146; Webster St. from Washington to Hamilton Sts., wood block, $23,563; Blair St. from Washington Ave. to Railroad Sts., wood block, $13,008; Clymer Pl. from Mills to Brooks Sts., concrete, $3,049; Bascom St. from Forest to Clark Sts., asphalt, $3,562; Clark St. from Chamberlain to Van Hise Sts., asphalt, $6,618; Eton Ridge from Allen & Virginia Terrace, asphalt, $13,405; Dayton St. from 50th to North Sts., concrete, $15,679; Sheridan St. from Fair Oaks to Garrison Sts., concrete, $6,400; Beuna Vista St. from Fair Oaks to Garrison Sts., concrete, $7,049; Baltzell St. from Monroe to Gregory Sts., concrete, $7,933; Corry St. from Chicago Minnesota & St. Paul R.R. tracks to North Western R.R. tracks, asphalt, $9,299; Talmadge St. from St. Paul St. to Chicago & North Western R.R. tracks, asphalt, $12,407; Ohio St. from Atwood St. to Chicago & North Western R.R. tracks, asphalt, $19,170; McKinley St. from Highland to Farley Sts., asphalt, $20,075; Vroman St. from Highland to Farley Sts., asphalt, $17,675; Fair Oaks St. from Chicago & North Western R.R. tracks to Milwaukee St., concrete, $38,607; Bryan St. from Fair Oaks to Milwaukee Sts., concrete, $8,945; Highland St. from University to Regent Sts., concrete, $20,922; Upham St. from 50th to North Sts., concrete, $25,377; Lakeland St. from Elmside to Welch Sts., asphalt, $12,000; Virginia Terrace from Rugby to Illinois Central R.R. tracks, concrete, $11,902. E. E. Parker, city engr.

Wis., Prairie Du Chien—Crawford Co. appropriated $64,080 for county and state aid road and bridge construction; also $19,045 for county aid bridge work. J. N. Campbell, comr.

Wis., Ripon — Plans paving Blackburn, Scott, Fond du Lac and Blossom Sts., 25 ft., concrete. $40,000 bonds voted. F. A. Preston, clk. Engineer not selected.

Wis., Wausau—Had plans prepared paving 3rd Ave., Forest, Bridge, Luebner, Division and 2nd Sts., concrete, vitr. brick, asphalt macadam or sheet asphalt. $50,000. B. C. Gowen, City Hall, engr.

Ia., Bettendorf—Making plans brick paving 15 blocks, Washington Ave. $76,000. N. H. Tunnicliffe, city engr.

Ia., Cedar Rapids—Takes bids early in spring paving 32 blocks, vitr. brick, vertical fibre brick, asphalt, concrete or asphaltic concrete. T. F. McCauley, Cedar Rapids, engr.

Ia., Cedar Rapids—See "Waterworks."

Ia., Manning—Making plans paving about 12 blocks. $60,000. H. H. Claussen, clk.

Ia., Storm Lake — Making plans and takes bids early in spring 96 blocks paving. V. Flindt, Storm Lake, engr.

Kan., Seneca — Nemaha Co. had plans prepared 6.226 mi. earth road on Capital Route, 30 in. E. C. L. Wagoner, 609 Kemper Bldg., Kansas City, Mo., engr.

S. D., Pierre—Soon takes bids paving Pierre and Dakota Sts., incl. 20,900 sq.yd. asphalt, 26,150 sq.yd. concrete, 25,850 sq.yd. vibrolithic concrete, 20,900 sq.yd. bithulithic, 20,900 sq.yd. asphaltic concrete, 6,150 lin.ft. concrete curb and gutter. T. H. Johnson, Sioux City, Ia., engr.

S. D., Sioux Falls—Plans paving Dakota Ave. to west side of West Ave., 17,600 sq. yd. portland cement concrete, bituminous concrete or sheet asphalt. $45,000. W. C. Leyse, city aud.

Mo., Kansas City—Preparing plans widening ¾ mi. Linwood Blvd., from 75 to 100 ft.; widening from 40 to 60 ft., and 8 x 20 in. concrete curbing on ⅝ mi. Pasceo St. F. Gaberman, City Hall, engr.

Mo., Maplewood — Plans paving 3 mi. Railroad St., Cambridge, Oxford, Commonwealth, Manhattan and Sutton Aves., 24 ft., with 7 in. rein.-con. $175,000. A. H. Beard, 616 Title Guaranty Bldg., St. Louis, engr.

Tex., Commerce—City Comrs. plan to expend $100,000 for street paving and improvements. W. F. Cornelius, mayor.

Tex., Glen Rose — Somervell Co. voted $175,000 bonds for road improvements. H. C. Cox, co. engr. Noted Jan. 4.

Tex., Mercedes—City Council, c/o J. E. Haynes, mayor, soon takes bids paving various streets. $40,000. H. E. Bennett, city engr.

Tex., Richmond — Attorney General's Dept., Austin, approved $260,000 bond issue for highway improvements. Plans being prepared. C. H. Kendall, Sugarland, co. engr.

Tex., Uvalde—Uvalde Co. plans grading, gravel surfacing and bituminous topping 7.8 mi. San Antonio-Del Rio Highway, 18 ft. $76,500. M. B. Hodges, co. engr.

Okla., Chickasha—Take bids about March 1, paving 30 blocks, asphalt or concrete. J. C. Milliken, Chickasha, engr.

Utah—State Rd. Dept., Salt Lake City, takes bids early in spring, grading and gravel surfacing 19 mi. road from Chicken Creek to Millard Co. line, 18 ft., Juab Co. $120,000. H. C. Means, state road engr.

Calif., Sanger—Takes bids about Feb. 15, improving various streets, 283,005 sq.ft. grading, 272,104 sq.ft. 1½ in. warrenite bituminous on 3 in. asphaltic concrete, 5,645 lin.ft. curbs, 10,900 sq.ft. gutters, etc. R. C. Phillips, Sanger, engr.

Ontario—Dept. Colonization Rds., Provincial Government, Parliament Bldgs., Toronto, plans to gravel surface 35 mi. road between Powassan and Loring. $100,000. C. H. Fullerton, ch. engr.

Ontario — Provincial Dept. Highways, University Ave. and Dundas St., Toronto, plans to macadamize 25 mi. road between Severn and Bracebridge, $250,000. Town of Orillia plans to have Provincial Dept. Highways, take over 30 mi. road between Atherley and Penetanguishene, and convert same into trunk road, gravel or macadam, $300,000.

Ont., Kingston—Frontenac Co. soon takes bids building causeway over Collins Bay. $55,000.

Ont., Ottawa—Suburban Rd. Comn. takes bids in early spring, 1½ mi. asphalt pavement on Montreal Rd. from Cummings Bridge easterly. $30,000. A. K. Hay, Wellington St., engr.

Ont., Toronto—Plans paving Front St. between Spadina Ave. and Bathurst St., 7,000 sq.yd. asphalt on concrete, with concrete curbs and gutters. $50,000. R. C. Harris, city engr.

Ont., Toronto—Yonge St. Improvement Assn. plans to widen 25 mi. Yonge St. from 66 ft. to 105 ft., between York Mills and Holland Landing. J. Walton, Mayor of Aurora, is pres. $750,000 up.

B. C., Vancouver—Takes bids early in April, surfacing various streets with bituminous macadam. $300,000. F. L. Fellowes, city engr.

BIDS DESIRED

N. Y., Amsterdam—April 3, by A. W. Smith, city clk., 7,000 sq.yd. rein.-con. and 4,500 sq.yd. sheet asphalt pavements. $40,000. J. Labishiner, city engr.

N. Y., Brooklyn—Feb. 8, by Dept. Parks, Municipal Bldg., New York, improving Bay Parkway, here. Noted Jan. 11.

N. Y., Long Island City—Feb. 8, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., grading, curbing and laying sidewalks on 4th St. from Polk to Stryker Aves., 50th St. from Jackson to Polk Aves., 2nd Ward, 116th St. from Liberty to Jerome Aves., 4th Ave. from Jamaica to Grand Aves., 42nd St. from Polk to Roosevelt Aves., 103rd Ave. between Rockaway Blvd. and 97th St.; grading and laying sidewalks on southwesterly side of Burling Ave. from Delaware Pl. to Franconia Ave., 3rd Ward, Lewis St. from Hillside to Jamaica Aves., 4th Ward; grading Tieman Ave. from point 50 ft. north of Nichols to Opdyke Sts., Nichols St. from 51st St. to point 100 ft. east of Tieman Ave.; paving 116th St. from Liberty to Jerome Aves.; receiving basins on west corners of 103rd and Liberty Aves.

N. Y., New York — Feb. 8, by Dept. Parks, Municipal Bldg., repaving Split Rock Rd., heavy traffic asphalt on concrete, Bronx Boro.

S. C., Charleston—Feb. 20, by Street Dept., 200,000-300,000 sq.yd. sheet asphalt pavement. J. H. Dingle, city engr.; adv. this issue.

S. C., Darlington—Feb. 8, by Darlington Co., constructing 3.5 mi. State Route 41 from survey sta. 154-00 to sta. 543-00, 23,034 cu.yd. common excav., 8,476 cu.yd. sand clay surfacing, 246 lin. ft. rein.-con. pipe, 63 cu.yd. plain and rein.-con., 2,962 lb. reinforcing; also 3 creosoted timber bridges, eighteen 14 ft. and two 14 ft. spans on above road. W. S. Lewis, Darlington, engr.

S. C., Kingstree—Feb. 13, by Williamsburg Co., constructing 12.2 mi. State Route 41 from survey sta. 60-00 to sta. 733-00, 71,075 cu.yd. common excav., 30,046 cu.yd. sand clay surfacing; also 2 rein.-con. bridges of three 22 ft. spans and one triple 10 x 10 ft. rein.-con. box culvert, on above road, and 110 cu.yd. dry and 470 cu.yd. wet excav., 297 cu.yd. concrete, 46,506 lb. reinforcing, 264 sq.yd. paving. J. B. Mayes, Kingstree, engr.

Florida—Feb. 6, by State Rd. Dept., Tallahassee, clearing, grading and surfacing 3.967 mi. Rd. 5 from Bradentown to Sarasota Co. line, Project 570, Manatee Co., alternate bids on 2½ in. penetration macadam on 8 in. rock, 2½ in. sheet asphalt with binder course on 8 in. rock, 6-8-6 in. plain concrete. W. F. Cocke, state highway engr.

Florida—Feb. 14, by State Rd. Dept., Tallahassee, constructing drainage structures on 11.63 mi. portion Rd. 2, from Project 27 to Alachua Co. line, Project 505, Columbia Co.; clearing, grading and paving 5 mi. Rd. 1, from Pensacola to Nunez Ferry, Project 35, Escambia Co., alternate bids on 3 in. bituminous macadam on No. 1 and 2 base, or 3 in. sheet asphalt with binder course on No. 1 or 2 base, or 6-8-6 in. plain concrete. W. F. Cocke, state highway engr.

Fla., Madison—Feb. 7, by Comrs. Madison Co., constructing 19.38 mi. Rds. 4 and 6, 25,640 cu.yd. earth excav., 29,335 cu.yd. sand clay, $45,000; 28 mi. Rd., 1, 30,860 cu.yd. earth excav., 39,345 cu.yd. sand clay, $60,000; 12.94 mi. Rd. 3, 26,650 cu.yd. earth excav., 21,125 cu.yd. sand clay, $30,000. C. S. Wadsworth, Madison, engr.

Fla., St. Petersburg — Feb. 5, by City Comn., 45,000 sq.yd. concrete sidewalks. $25,000. E. C. Garvin, St. Petersburg, engr. Noted Feb. 9.

Tennessee—Feb. 9, by State Dept. Hys., Nashville, roadway and bridges 2.64 mi. Federal Aid Project 5, between point north of Nolichucky River and point near Caney Branch, Greene Co., 3,568 cu.yd. common and 189 cu.yd. solid rock excav., 23,227 sq.yd. 6 in. stone base course, 24,477 sq.yd. 2½ in. waterbound macadam surface course, 95.42 cu.yd. concrete, etc. D. Q. McComb, Nashville ch. engr.

Ohio—Feb. 9, by Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving roads in following counties:

Crawford Co., Sect. "G" Bucyrus-Crestline Rd., 1.69 mi., bituminous macadam, asphalt or tar, $57,690.

Cuyahoga Co., Sects. "A" "B-1" Solon-Willoughby and Chagrin Falls-Cuyahoga Falls Rd., 2.52 mi., brick, $168,888; reinforced con., $136,200; bituminous concrete and brick, $158,745; warrenite bitulithic and brick, $164,525.

Geagua Co., Sect. "J" Chagrin Falls-Greenville Rd., 2.182 mi., brick, $43,086.

Meigs Co., Sect. "M" Pomeroy-Athens Rd., 4.009 mi., rein.-con., $123,068.

Mercer Co., Sect. "H-2" Celina-Greenville Rd., 4.28 mi., rein.-con., $130,702.

Sandusky Co., Sect. "S-2" Lima-Sandusky Rd., 2,349 mi. brick, $106,187; sheet asphalt, $106,598.

Huron Co., Sects. "J" "K-1" Bellevue-Norwalk Rd., two rein.-con. bridges, $17,193.

Lorain Co., Sects. "D" "E" Cleveland-Elyria Rd., extension and wings of 16 ft. culvert, $1,149. L. C. Herrick, dir. highways.

O., Bexley (Columbus P. O.)—Feb. 13, by S. W. Roderick, village clk., grading, laying 8 in. mains, making necessary sewer connections and paving 2,200 ft. Ardmore Rd. from Broad St. to Maryland Ave., 24 ft., asphalt, $45,000; 2,200 ft. Cassingham Rd. from Broad St. to Maryland Ave., 24 ft., asphalt, $45,000; 2,000 ft. Fair Ave. from Drexel Ave. to Belgard Lane, 36 ft. roadway with 18 ft. parkway between 2 sides, asphalt $60,000; 550 ft. Seneca Pl. from Dawson to Cassidy Aves., 24 ft., asphalt, $8,000. Jennings-Lawrence Co., Hartman Bldg., Columbus, engrs. Noted Dec. 28.

Mich., Kalamazoo—Feb. 8, by Kalamazoo Co. Rd. Comn., grading and gravel surfacing 7 mi. roads, 9 ft. wide, also 1½ mi. Assessment Dist. Rd. 41, asphalt, concrete or bituminous concrete.

Wisconsin—Feb. 7, by Wood Co. State Road and Bridge Com. at office of State Hy. Comn., Citizens Natl. Bank Bldg., Wisconsin Rapids, improving 1 mi. Portage Rd., Town of Grand Rapids, 1,815 cu.yd. earth excav., 9,244 sq.yd. 16 ft. concrete surfacing, etc.; 2.41 mi. Seneca Corners-Wisconsin Rapids Rd., in Seneca and Wisconsin Rapids, 8,000 cu.yd. earth excav., 21,200 lb. steel in plate girder bridge, 25,680 sq.yd.

Streets and Roads (Continued)

18 ft. concrete surfacing ,etc.; 1 mi. Babcock-Pittsville Rd. in Remington, 2,795 cu. yd. earth excav., 9,931 sq.yd. 16 ft. concrete surfacing, etc.; 2.38 mi. Wisconsin-Rapids-Sherry Rd. in Sigel and Sherry, 4,998 cu.yd. earth excav., 22,400 cu.yd. 16 ft. concrete, etc.; 1 mi. Arpin-Bethel Rd. in Arpin, 3,190 cu.yd. earth excav., 9,945 sq.yd. 16 ft. concrete surfacing, etc.; 1 mi. Rudolph-Wisconsin Rapids Rd., Rudolph, Rudolph, 2,053 cu.yd. earth excav., 9,422 sq.yd. 16 ft. concrete surfacing, etc.; 1 mi. Nekoosa-Necadah Rd. in Port Edwards, 2,137 cu.yd. earth excav., 9,700 sq.yd. 16 ft. concrete surfacing; 0.81 mi. Marshfield-Stratford Rd. in Marshfield, 1,980 cu.yd. earth excav., 9,668 sq.yd. 18 ft. concrete surfacing, etc. E. Morris, Wisconsin Rapids, comr.

Wisconsin — Feb. 7, by Marathon Co. State Road and Bridge Com. at office of State Hy. Comn., Citizen's Natl. Bank Bldg., Wisconsin Rapids, grading and surfacing 2.03 mi. Marshfield-Stratford Rd., Town of McMillan, 6,000 cu.yd. earth excav., 81.5 cu.yd. concrete in culverts and bridge, 21,613 sq.yd. 18 ft. concrete surfacing, etc. J. H. Vogt, Wausau, co. highway comr.

Wis., Elkhorn—Feb. 7, by H. J. Peters, highway comr. of Walworth Co., concrete surfacing, etc., 3.8 mi., Whitewater-Elkhorn Rd., incl. 14,739 cu.yd. earth, 1,873 cu.yd. borrow and 666 cu.yd. ditch excav., 106.17 cu.yd. concrete in culverts and bridges, 40,200 sq.yd. 18 ft. concrete surfacing, 13,400 bbl. cement in place, 115,660 lb. reinforcing; 5 mi. Elkhorn-Burlington Rd., 11,519 cu.yd. earth excav., 58.94 cu. yd. concrete in culverts and bridges, 123-725 lb. reinforcing, 52,746 sq.yd. concrete surfacing, etc. Wisconsin Highway Comn., Madison, engrs.

Wis., New Richmond—Feb. 15, by J. E. Hughes, city clk., paving 18,000 sq.yd. various streets, bids on 3 types incl. concrete. J. W. Shaffer & Co., New York Life Bldg., Minneapolis, Minn., engrs.

Ia., Sioux City — Feb. 15, by Auditor Woodbury Co., grading and paving 17.21 mi. Correctionville-Cushing Rd., and Sioux City-Smithland Rd., Federal Aid Project 2, 95,000 cu.yd. excav., 187,913 sq.yd. concrete, etc.; 8 mi. primary road from Salix southeast, 58,772 cu.yd. excav., 84,556 sq.yd. concrete. Iowa Hy. Comn., Ames, engrs.

Minn., Duluth—Feb. 12, by B. Farrell, city comr., paving one course concrete on crushed rock, 3,162 ft. 4th St. from 37th to 44th Aves. W., 24 ft., 7,220 sq.yd. concrete, 31,595 sq.ft. concrete sidewalk, $47,202; 2,796 ft. Warden St. from 59th to 65th Aves. W., 30 ft., 7,000 sq.yd. concrete, 17,000 sq.yd. cement sidewalk, $28,765. E. K. Coe, city engr.

Tex., Kaufman—Feb. 9, by W. P. Williams, judge Kaufman Co. grading, gravel surfacing and bridging 10.74 mi. State Highway 40, from Big Bushy Creek to Dallas Co. line, 16 ft., 203.4 cu.yd. concrete, 22,693 cu.yd. roadway and 142,194 cu.yd. borrow excav., 22,022 cu.yd. gravel surfacing, 16,851 lb. reinforcing. $135,400. B. F. Williams, Kaufman, engr.

Oklahoma—Feb. 14, by State Hy. Dept., Oklahoma City, constructing 6 mi. Federal Aid Project 20, Sects. CD, DE and EF, Kay Co., 26,656 cu.yd. earth excav., 7,296 cu.yd. borrow, 40 cu.yd. concrete, 1,800 lb. reinforcing, 800 lin.ft. 24 in. vitr. pipe, 63,674 sq.yd. concrete paving, Bates type. M. L. Cunningham, state highway engr.

Oregon—Feb. 7, by State Hy. Comn., Salem, grading 3 mi. Oregon-Cass Rd. and 12 mi. Tyde Valley Rd., Josephine Co., 8 mi. Allen Ranch Sect., near Bend, Deschutes Co., 2 mi. Dyke Sect., near Coquille, Coos Co., and 1.4 mi. Nimrod-Elko Sect., Morrow Co.; grading and surfacing 10.8 mi. Klamath-Keno Sect., Klamath Co., 1.5 mi. Tumalo Sect. near Bend, Deschutes Co., 4.8 mi. Cline Falls-Redmond Sect., Des Chutes Co., 6.1 mi. Port Oxford-Six Rivers Sect., Coos Co.; surfacing 9.7 mi. Hadin Creek-Co. Line, Jackson Co., 12 mi. Hepner-Jones Hill Sect., Morrow Co.; resurfacing 4.9 mi. Eugene-Goshen Sect., Lane Co. and overhead crossing fill, near Rhinehart, Union Co.

Wash., Kelso—Feb. 6, by M. J. Lord, city clk., grading and paving various streets, involving 9,200 cu.yd. earth excav., 1,000 cu.yd. gravel, 26,650 sq.ft. concrete sidewalk, 1,450 lin.ft. concrete curb and gutter, 11,350 ft. b.m. lumber, 1,230 ft. sewer pipe.

Wash., Spokane—April 23, by city, paving 2 mi. North West Boulevard extension, concrete. $50,000. A. Butler, City Hall, engr. Noted Jan. 11.

Calif., Fresno — Feb. 6, by Supervs. Fresno Co., constructing 6.3 mi. asphaltic concrete road near Reedley; 3.2 mi. asphaltic concrete road near Clovis. C. P. Jensen, Cory Bldg., engr.

Calif., Los Angeles—Feb. 13, by Supervs. Los Angeles Co., improving 2.7 mi. Anaheim-Telegraph Rd., 3,535 cu.yd. excav., 5,070 cu.yd. shaping roadbed, 3,927 ton 2 in. asphaltic concrete, 5,889 ton 3 in. asphaltic concrete, 1,210 cu.yd. 6 in. granite sub-base, etc.

Calif., San Diego—Feb. 13, by A. H. Wright, city clk., paving Silverado St., Ivanhoe Ave., Ivanhoe Ave. east, Torrey Rd., 192,017 sq.ft. 5 in. portland cement concrete, 1,140 lin.ft. cement curb, 5,746 sq.ft. cement sidewalk, 590 lin.ft. 6 in. cement sewer pipe, etc. F. A. Rhodes, city engr. Noted Jan. 4.

Calif., Santa Cruz—Feb. 6, by City Council, improving Woodrow Ave. between Errett Ave. and Cliff Dr., 43,065 sq.ft. 5 in. concrete pavement, 43,065 sq.ft. grading to sub-grade, 199 lin.ft. 24 in. vitr. clay pipe, etc. J. K. James, city engr. Noted Jan. 11.

Calif., Stockton—Feb. 6, by Supervs. San Joaquin Co., improving French Camp Rd., 3,300 cu.yd. grading, 10,600 ton crushed rock, base course, 4,260 ton crushed rock, top course, 1,980 ton dressing for oil, 1,640 bbl. asphaltic oil. F. E. Quail, co. surv.

Ontario — Feb. 26, by W. A. McLean, deputy minister of highways, Toronto, 10.5 mi. concrete pavements, 40 ft. wide, as follows, 3.7 mi. westerly from pavement west of Chatham, Contr. 827, 2 mi. from Clappison's Corners to Bridge 3, Contr. 828, 0.54 mi. Manotick, Contr. 829, 0.7 mi. North Gower, Contr. 839, 1 mi. Kemptville, Contr. 840, 0.65 mi. Spencerville, Contr. 841, 1.75 mi. from Dougal to Howard Aves., Contr. 915, $700,000; 13 mi. asphaltic concrete pavements, 30-40 wide, 3.6 mi. from Stratford easterly, Contr. 830, 2.43 mi. from Port Credit to Cooksville, Contr. 831, 6.9 mi. Yonge St. from Thornhill to north limits of Vaughan Twp., Contr. 919, $1,000,000; 4.3 mi. macadam road, 0.3 mi. in west limits of Morrisburg, Contr. 832, 4 mi. from Rideau N. E., Contr. 833, $80,000; macadam base course 5.7 mi. from Caledonia northerly, Contr. 834, $60,000; grading 87 mi., 8 mi. from Plantagenet easterly, Contr. 835, 6 mi. Haleys Deviation, Contr. 838, 5 mi. Whitby-Lindsay, Contr. 842, 5 mi. Whitby-Lindsay, Contr. 843, 3.9 mi. Goderich East, Contr. 845, 6 mi. from Seaforth to Mitchell, Contr. 846, 5 mi. Kincardine Twp., Contr. 847, 5.2 mi. Beachburg West, Contr. 922, 4 mi. Smith Falls N.W., Contr. 923, 1.9 mi. Brampton S., Contr. 870, 10.4 mi. Brampton northerly, Contr. 924, 3 mi. from point 1 mi. west of Hurontario St., Brampton, westerly, Contr. 925, 2.9 mi. from Oldcastle to Dougal Rd., Contr. 926, 4 mi. from point 4 mi. south of Guelph, southerly, Contr. 927, 2.5 mi. from west limits of East Williams easterly, Contr. 928, 2.5 mi. Plympton-Sarnia Rd., from Lots 9-15, Contr. 929, 4.2 mi. Greenock and Kinloss Twps., Contr. 930, 1.5 mi. from point 2 mi. west of Arthur westerly, 1.8 mi. Arthur Twp., Contr. 931, 3 mi. from Aylmer easterly, Contr. 932, $450,000; surface treating 22 mi. macadam roads with tar, 12.3 mi. from point 3.2 mi. west of Cornwall to Lancaster, Contr. 849, 4.7 mi. Barriefield N. easterly, Contr. 850, 5 mi. from Orillia towards Washago, Contr. 851, $220,000; concrete culverts in Ekfrid Twp., Contr. 852, Mosa, Contr. 854, Gosfield South and Raleigh, Contr. 854, Eramosa Contr. 855, Warwick, Contr. 856, Caradoc, Contr. 857, Minto, Arthur, Peel and Maryborough, Contr. 858, Minto and Howick, Contr. 859, $160,000. Total cost $2,700,000. G. Hogarth, Parliament Bldgs., Toronto, ch. engr.

BIDS RECEIVED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, opened bids Jan. 24, grading, curbing and flagging (1) East 78th St. (2) East 38th St. (3) East 39th St. (4) Sutter Ave., paving (5) Maple St. (6) Sutter Ave. (7) 74th St. (8) 82nd St. (9) 83rd St. permanent asphalt on 6 in. concrete from T. B. Scott, 671 Halsey St., (1) $5,006 (2) $1,526 (3) $1,387 (4) $1,208; F. Persicano, 350 Fulton St., (1) $5,054 (2) $1,582 (3) $1,442; Simonelli & Son, (1) $5,296 (2) $1,961 (3) $1,788 (4) $1,536; Cleveland Trinidad Paving Co., Flushing, (5) $20,242 (6) $2,390; Cranford Co., 52 9th St., (5) $20,683 (6) $2,460 (7) $7,063 (8) $6,893 (9) $7,258; Borough Asphalt Co., 1301 Metropolitan Ave., (5) $21,294 (6) $2,234 (7) $6,942 (8) $6,771 (9) $7,135; Uvalde Asphalt Paving Co., 1 Bway., New York City, (7) $7,536 (8) $7,325 (9) $7,760. Noted Jan. 18.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., opened bids Jan. 26, grading, curbing and flagging (1) Sickles St. (2) Dongan Pl., paving (3) Ft. Washington Pl., permanent asphalt on concrete, from T. Di Roma, 33 Evelyn Pl., (1) $42,344 (2) $34,503; M. Del Balso, Northern Ave., (1) $51,099; F. Gasparine, (1) $55,173 (2) $32,258; Burnside Contg. Co., 270 Burnside Ave., (2) $36,993; C. D. Beckwith, 2187 Bway., (3) $8,140; Asphalt Constr. Co., 208 Bway., (3) $8,960; Brusstar Constr. Co., Harlem River and 150th St., (3) $11,262. Noted Jan. 18.

Ohio—Dept. Highways and Pub. Wks., Columbus, opened bids Jan. 26, grading, bridging and paving roads with (a) reinforced concrete, (b) asphaltic macadam, oil (c) asphaltic macadam, lake (d) tar macadam (e) Kentucky rock asphalt (f) bituminous concrete (g) bituminous macadam, asphalt and brick (h) bituminous macadam, tar and brick, in following counties: **Fulton Co., Sect. "Wauseon" Bryan-Wauseon Rd.**, 0.619 mi., from Lynn Constr. Co., Paulding (a) $25,338; La Boiteaux & Hayes, Toledo (street address not available) (a) $25,691. **Geagua Co., Sect. "K-2" Cleveland-Meadville Rd.**, 2.537 mi., from Central Paving Co., Hamilton (street address not available) (b) $79,816 (c) $85,454 (d) $80,085; C. M. Gray, Waterville, (b) $78,910; Mahoning Constr. Co., Warren (street address not available), (b) $82,860 (d) $82,860; W. G. Mustard, Ada, (c) $84,216; Bower & Taylor, Farmdale, (c) $85,832; G. A. Stein, Niles, (d) $83,398. **Geauga Co., Sect. "A" Euclid-Chardon Rd.**, 4.06 mi., from Central Paving Co., Hamilton, (b) $98,425 (d) $98,809; F. M. Mark, Washington, C. H., (b) $100,981 (c) $100,981; Gray Bros., Youngstown (street address not available) (b) $102,518 (c) $102,518 (d) $102,138; Seaborn Bros., Youngstown (street address not available) (c) $105,105; Mahoning Constr. Co., Warren, (street address not available) (d) $102,518. Jackson Co., Sect. "L" Jackson-Ironton Rd., 4.433 mi., from O. M. Junk, Chillicothe, (a) $137,974; Anderson & Brown, Chillicothe, (a) $141,652; C. Hoolihan, 1406 Riverview St., Dayton, (a) $142,594. **Montgomery Co., Sect. "R" Dayton-Greensville Rd.**, 3.965 mi., from McArthur Constr. Co., Kenton, (a) $126,801 (e) $131,923; R. Daoust Defiance, (a) $126,569; Eldorado Paving Co., Eldorado, (a) $131,250; W. Huber, Eaton, (e) $135,222; Fisher & Flory, Union, (e) $133,601. **Morrow Co., Sect. "L" Mt. Gilead-Mansfield Rd.**, 6.322 mi., from McArthur Constr. Co., Kenton (a) $172,167 (e) $168,229 (f) $173,987; Winchell & Campbell, Columbus (street address not available) (e) $173,805. **Trumbull Co., Sect. "P" Youngstown-Conneaut Rd.**, from Evans & Evans, Hubbard, (g) $137,344 (h) $137,161. **Holmes Co., Sect. "L-2" Mansfield-Millersburg Rd.**, 1.678 mi., grading and drainage structures only, from C. Drake, Nashville, $15,195; W. G. Reimund, Holgate, $15,332; O. Johnson, West Mansfield, $15,609. **Holmes Co., Sect. "K" Mansfield-Millersburg Rd.**, superstructures and grading, from Stout & Stout, Stoutsville, $18,981; Stein & Geisel, Niles, $19,227; Swingle & Robinson, Franklin, $19,267. Noted Jan. 18.

Wash., Seattle—Opened bids Jan. 19, paving North 77th St. et al., 1,127 sq.yd. 6 in. concrete, 5,800 lin.ft. concrete and 550 lin.ft. asphaltic concrete curbing, 50 sq.yd. concrete sidewalk, 2,825 cu.yd. earth excav. from Fiorito Bros., 2306 Charles St., $39,249. R. G. Stevenson, 1327 North 34th St., $39,862, Olympic Constr. Co., 1326 Northlake Ave., $39,564. Engrs. est. $40,497.

CONTRACTS AWARDED

N. C., Albemarle—Paving 50,000 sq.yd. various streets with either sheet asphalt or bitulithic, to Asheville Paving Co., Asheville, asphalt $2.78 per sq.yd., bitulithic $2.48. Noted Dec. 21.

N. C., Charlotte—Grading and paving with asphalt and apshaltic concrete, 13-14 mi. streets, also concrete sidewalks, to Blythe Bros., Brevard Court, $700,000.

S. C., Sumter—For 15,000 sq.yd. sheet asphalt paving, to Powell Paving Co., Palmetto Bank Bldg., Columbia, $200,000.

Fla., Homestead—To J. E. Nash, Homestead, 5,405 lin.ft. concrete gutter at $0.60 per lin.ft.; 60,000 sq.ft. concrete sidewalks at $0.1975. Noted Nov. 30.

Ala., Birmingham — City and Jefferson Co. paving 2½ mi. Pratt City-Ensley Rd., 40,000 sq.yd. asphalt surface, 44,000 sq.yd. concrete base, to H. N. Bowdry, Empire Bldg., $82,172. Noted Dec. 7.

Michigan—State Hy. Dept., Lansing, grading and surfacing 7.255 mi. Federal Aid Project 64, Sects. A and B, Crawford and Otsego Co., to A. Jeffrey, Saginaw, incl. 31,821 cu.yd. excav. $0.40, 3.2 cu.yd. 1:2:4 concrete $20, 76,612 sq.yd. gravel surface $0.80. Noted Dec. 28.

Mich., Kalamazoo—Kalamazoo Co. Rd. Comn., grading and surfacing 1½ mi. Indian Reserve Rd., 18 ft. bituminous concrete, to Globe Constr. Co., Kalamazoo, $47,000; 5 mi. Assessment Dist. Rd. 18, 9 ft., waterbound macadam, to A. E. Beebe, Mendon, $47,600; 3 mi. Assessment Dist. Rd. 10, 9 ft., waterbound macadam, to Kleine Bros., Mendon, $32,600.

Streets and Roads (Continued)

Missouri—State Hy. Dept., at div. office Bloomfield, 5.176 mi. road from Dexter eastward, 16 ft., Federal Aid Project 118B, Stoddard Co., to Novaculite Constr. Co., Marion, Ill., $31,617. Noted Jan. 18.

Missouri—State Hy. Dept. at div. office Columbia, 6.429 mi. road from Columbia eastward, State Aid Project 20.127, Boone Co., to E. A. Stoner, Chamois, $23,785. Noted Jan. 25.

Missouri—State Hy. Dept., at div. office Dexter, 7.723 mi. road from Dexter to Bernie, 16 ft., Federal Aid Project 211A, Stoddard Co., to Dexter Constr. Co., Dexter, $59,896. Noted Jan. 18.

Missouri—State Hy. Dept., at div. office Doniphan, 2.702 mi. road from Doniphan eastwardly, 12 ft., Federal Aid Project 201, Ripley Co., to T. L. Wright Lumber Co., Doniphan, $23,790. Noted Jan. 18.

Missouri—State Hy. Dept., at div. office Galena, 5.546 mi. road from Galena northwestwardly, 24 ft., Federal Aid Project 161B, Stone Co., to R. H. Sharp, Reed Springs, $41,172. Noted Jan. 18.

Missouri—State Hy. Dept. at div. office Greenfield, 5.516 mi. road east of Greenfield northwardly, 24 ft., Federal Aid Project 213 A, Dade Co., to Carterville Constr. Co., Carterville, $31,684. Noted Jan. 18.

Missouri—State Hy. Dept., at div. office Houston, 4.003 mi. road from Houston southwardly, 24 ft., Federal Aid Project 90 C, Texas Co. and one 100 ft. and two 80 ft. steel truss and one 25 ft. rein.-con. deck girder spans, 2 concrete piers, 4 concrete abutments, 20 ft. roadway, etc., on above road, to Davis Constr. Co., Mammoth Springs, Ark., $16,349 and $37,732 respectively. Noted Dec. 21.

Missouri—State Hy. Dept. at div. office Kennett, 6.43 mi. road from Holcomb northwardly, 16 ft., **Federal Aid Project 221B**, Dunklin Co., to A. Creek, Gideon, $76,859; 11.026 mi. road from Campbell northwestwardly, 16 ft., **Federal Aid Project 221 A**, Dunklin Co., to M. E. Gillioz, Monett, $173,986; 12.061 mi. road from Kennett southwestwardly, **Federal Aid Project 209B**, and 3.324 mi. road from Kennett southwestwardly, **Federal Aid Project 209C**, both Dunklin Co., to Service Constr. Co., Poplar Bluff, $263,557 and $74,787 respectively; 5.969 mi. road from Kennett southwestwardly, 16 ft., **Federal Aid Project 209A**, Dunklin Co., to Bennett, Robertson-Carmine, Caruthersville, $123,163; 6.921 mi. road from Kennett east and west, **Federal Aid Project 212**, Dunklin Co., to W. A. Leach, Poplar Bluff, $155,500. Noted Jan. 18.

Missouri—State Hy. Dept., at div. office Marshall, 7.702 mi. road from Marshall east and west, 24 ft., Federal Aid Project 16, Saline Co., to M. E. Gillioz, Monett, $40,370. Noted Jan. 18.

Missouri—State Hy. Dept. at div. office New London, 5.498 mi. road from New London southwestward, 12 and 16 ft., State Aid Project 20,168, Balls Co., to F. F. O'Dell, Farmington, $28,776. Noted Jan. 25.

Missouri—State Hy. Dept. at div. office Rolla, 1.195 mi. road from Newburg southwestwardly, 24 ft., State Aid Project 20,216, Phelps Co., to Birmingham, Jones & Lenox, Rolla, $23,977. Noted Jan. 18.

Tex., La Grange—Fayette Co. grading and surfacing 8.03 mi. Highway 3-A, Federal Aid Project 319, 18 ft., to C. M. Kelly & Co., 502 Barrett Pl., San Antonio, $42,504; rein.-con. drainage structures, to L. Robertson, Schulenburg, $13,949. Noted Jan. 25.

Tex., Sherman—Grayson Co. grading and gravel surfacing 3.69 mi. Highway 5, Federal Aid Project 292, 18 ft., 217 cu.yd. concrete, 14,759 cu.yd. roadway and 15,698 cu.yd. loose excav., 18,781 lb. reinforcing, to S. Brooks, Denison, $17,575; Grayson Co. to furnish 8,669 cu.yd. gravel $15,778. Engrs. est. $36,688.

Tex., Wichita Falls—Wichita Co. grading and gravel surfacing 5 mi. Park-Jonesdale Rd., 16 ft. to L. E. Whitham & Co., Wichita Falls, $47,368. Noted Jan. 25.

Calif., Fresno—Improving Moroa Ave. between Peralta Way and Olive Ave., to Thompson Bros., Divisadero and G Sts., $29,824. Noted Dec. 7.

Calif., Los Angeles—Improving Melrose Ave. between Seward and Gower Sts., to W. Lindington, 420 East 60th St., $106,700. Noted Dec. 28.

Calif., Merced—Supervs. Merced Co., paving 13.4 mi. Volta and Dos Palos Rds., 1½ in. warrenite bitulithic on 3½ in. asphaltic concrete, to W. F. Hanrahan, Griffith-McKenzie Bldg., Fresno, $331,000. Noted Jan. 25.

Calif., Tulare — Improving Tulare and Salida Sts., warrenite bitulithic on asphaltic concrete, to J. A. Dowling, 2200 D St., Bakersfield, $35,989. Noted Jan. 18.

Industrial Works

PROPOSED WORK

Me., Rumford—Maine Central R.R., Portland, plans 1 story repair shop, brick and concrete, at freight yards, here. $50,000. B. T. Wheeler, c/o owners, engr.

Vt., Brattleboro—H. Clark, Ludlow, plans 2 story, 50 x 100 ft. factory, brick, plain foundation, Williams St., here. $40,000.

Mass., Cambridge—Ginn & Co., 15 Ashburton Pl., Boston, had plans prepared by J. R. Worcester & Co., archts. and engrs., 79 Milk St., Boston, 5 story and basement, 55 x 325 ft. printing plant addition, rein.-con. and brick, plain foundation, 1st St., here. Foundation contract let.

Mass., Holyoke — Skillings Garage and Tire Station, 154 Elm St., having plans prepared by Howes & Howes, archts., 199 High St., 1 story, 60 x 110 ft. garage addition, brick and steel, Elm St. $50,000.

Mass., Springfield—S. J. Cordner & Co., Taylor St., plans 2 story garage, brick and steel, plain foundation. $75,000-$100,000.

Mass., Westfield—Saffer, 92 Franklin St., plans 125-250 hp. heating and power plant to supply several factory buildings.

R. I., Bristol—Cranston Worsted Co. having plans prepared by Jenks & Ballou, archts. and engrs., 1035 Grosvenor Bldg., Providence, 5 story mill addition, brick and timber.

Conn., Hartford — Herchman & Levine, Prospect St., having plans prepared by F. C. Walz, archt., 407 Trumbull St., 1 story, 85 x 185 ft. addition to garage, brick and steel, plain foundation. $40,000.

Conn., Waterbury—Amer. Republican, Inc., plans 4 story, 50 x 102 ft. plant, brick and rein.-con., Leavenworth St. and Printers Court. $150,000. Architect not selected.

N. Y., Binghamton — F. M. Hutchins plans 2 story, 40 x 83 ft., fireproof garage, Hawly, Exchange and Myrtle Sts. Architect not selected.

N. Y., Buffalo—A. Fircher, Connecticut and Prospect Sts., plans 80 x 160 ft., concrete, brick and steel garage, 18 ft. high, Prospect St. To exceed $40,000. Architect not announced.

N. Y., Buffalo—Hendon Chemical Co., c/o Williams, Minard & Williams, Erie Co. Bank Bldg., plans chemical plant. $1,000,000. Architect not selected.

N. Y., Buffalo—Watkins Commercial Body Corp., 666-672 Genesee St., plans 2 story, 29 x 150 ft., birck and steel plant addition. Architect not selected.

N. Y., Cohoes—Cohoes Fibre Reclaiming Co. plans rebuilding major portion of its plant destroyed by fire. $75,000. Architect not annonuced.

N. Y., Deferiet — St. Regis Paper Co., Trust Co. Bldg., Watertown, plans rein. con. and timber grinding plant, here. $50,-$60,000. Address C. C. Burns, 337 Franklin St., Watertown.

N. Y., Endicott—Endicott Johnson Corp., 108 East Main St., plans rebuilding sole leather tannery. $65,000. S. J. Beebe, c/o owner, in charge of construction.

N. Y., New York—Maux Realty Corp., c/o J. J. Dunnigan, archt .and engr., 394 East 150th St., having plans prepared 2 story, brick, steel and concrete garage, plain foundation, Southern Blvd. $65,000.

N. Y., New York—J. D. Rockefeller, c/o H. C. Pelton, archt, and engr., 151 West 42nd St., having plans prepared brick, steel and concrete garage, plain foundation, 127-129 West 55th St. $100,000.

N. Y., Niagara Falls—Wood-Harmon Co. plans brick garage, 3rd St. $40,000. Architect not announced. Niagara Falls Police Dept., Niagara and 2nd Sts., lessee.

N. Y., Rochester—Max Motor Co., 160 East Ave., plans fireproof garage and service station, Court and Chestnut Sts. To exceed $55,000. Architect not announced.

N. J., Elizabeth—Elizabeth Daily Journal, 74 Broad St., plans 3 story, 69 x 120 ft., newspaper plant, fireproof. $175,000. C. G. Poggi, 275 Morris Ave., archt. Hollingsworth & Bragdon, 17 West 45th St., New York City, assoc. archts.

Pa., Allentown—Allentown Paper Box Co., 10th St., plans 3 story, 100 x 120 ft., brick factory, Jefferson St. To exceed $40,-000. Architect not announced.

Pa., Allentown—Merkle Bobbin Co. plans plant, 6th and Lehigh Sts. $50,000. Architect not announced.

Pa., Altoona—United Home Dressed Meat Co. having plans prepared by Anders & Riemers, archts., 314 Erie Bldg., Cleveland, O., 2 story and basement, 80 x 100 ft. brick and steel addition to plant. $75,000.

Pa., Bakerton (Elmora P. O.)—Sterling Coal Co., having plans prepared for machine shop, incl. motor barn and blacksmith dept. $100,000. W. Lamont, Wilmora, genl. supt.

Pa., Bethlehem — Allentown Bethlehem Gas Co., having plans prepared by Koppers Co., engrs., Union Arcade, Pittsburgh, 1 story plant. $55,000.

Pa., Farmers Valley—B. B. Sproud Gasoline Co., Coleville (Bellefonte P. O.), plans oil refinery, here. $70,000. Architect not announced.

Pa., Harbour Creek—Yerkes Steel Coupling Tie Co., W. H. Yerkes, pres., c/o W. Kraemer, Harbor Creek, plans 40 x 100 ft. plant on 10 acre site here. Architect not announced.

Pa., Harrisburg — Harris Knitting Co., 2434 West 2nd St., had plans prepared 3 story and basement, 80 x 125 ft. rein.-con., brick and steel plant, 4th and Dauphin Sts. $100,000. Architect not announced.

Pa., Johnstown—Henderson Bros. Inc., Market St., plans 3 story and basement, 80 x 125 ft. rein.-con. and brick plant, in Morrellville. $200,000.

Pa., Kingston (Wilkes-Barre P. O.)—Bell Telephone Co., 33 East Northampton St., Wilkes-Barre, plans improvements and additions to plant, also 12 mi. underground cables, etc. $84,800. Architect not announced.

Pa., Midland—Crucible Steel Co. of America, 2012 Oliver Bldg., Pittsburgh, having plans prepared by Koppers Co., engrs., Union Arcade, Pittsburgh, 1 story, brick and steel plant, here. $60,000.

Pa., Pittsburgh—R. G. Jackson, Keown Sta., having preliminary plans prepared by F. G. Ross, engr., 309 4th Ave., 5 story and basement, 60 x 150 ft. rein.-con. and steel warehouse and office, 1st Ave., here. $150,000. Western Electric Co., Rodgers Ave., lessee.

Pa., Pittsburgh—W. W. Lawrence Co., West Carson St. and Point Bridge, having revised plans prepared by W. G. Wilkins Co., archts., Westinghouse Bldg., 3 story and basement, 60 x 79 ft. brick warehouse, West Carson St. $150,000.

Pa., Shamokin — Neel-Cadillac Co. soon takes bids 1 story and basement, 80 x 120 ft. brick and steel service station, plain foundation. $40,000. W. H. Lee, 32 South 17th St., Phila., archt.

Pa., Warren—W. H. Frost Co. plans 40 x 70 ft. garage and salesroom, fireproof construction, Liberty St. To exceed $40,-000. Architect not announced.

Pa., Wilkes-Barre—Wilkes-Barre Wholesale Grocery Co., 75 East Northampton St., having plans prepared by Knapp & Bosworth, archts., 15 South Franklin St., 3 story, 40 x 100 ft. and 35 x 60 ft. brick and steel warehouse, East Northampton St. To exceed $50,000.

Md., Baltimore—Maryland Meter Wks., 224 North Holliday St., having plans prepared by T. W. Pietsch, archt., American Bldg., 7 story, 37 x 82 ft. factory, rein.-con. and brick, Holliday and Saratoga Sts. $75,000. H. Massart, 322 North Charles St., engr.

D. C., Wash.—H. A. Blessing, 317 Woodward Bldg., soon receives bids for garage. $300,00. H. H. Warwick, 1106 16th St., N. W., archt.

D. C., Wash.—Edmonds Contg. Co., 2523 Evarts St., N.E., having plans prepared by G. T. Santmyer, archt., 1340 I St., N.W., for factory on Blair Rd. $200,000.

W. Va., Fairview—Marion Constr. Co., plans to rebuild planing mill, recently destroyed by fire. $60,000. Architect not announced. T. R. Montgomery, mgr.

N. C., Bladenboro — Bladenboro Cotton Mill Co. plans construction and equipment of cotton mill, No. 3, brick and concrete. $400,000. H. C. Bridger, pres.

N. C., Lenoir—Nelson Cotton Mill Co., Charlotte, having plans prepared by R. C. Bibeistein, engr., 1614 Elizabeth Ave., Charlotte, for 6,000 spindle cotton mill, here.

N. C., Lumberton—Lumberton Cotton Mills having plans prepared by Lockwood, Greene Co., archts., Piedmont Bldg., Charlotte, weave room addition to textile mill, to house 600 looms. H. B. Jennings, pres.

N. C., Lumberton — Mansfield Mill Co. plans 600 loom weaving mill, brick. H. B. Jennings, pres.

Industrial Works (Continued)

N. C., Reidsville—W. L. Pannill, Reidsville, and R. Graham, Winston-Salem, plan large knitting mill, here. $150,000.

N. C., Salisbury—Autovac Co. Inc., plans factory to manufacture autovacs and other auto parts, 500,000 yearly capacity. H. H. Rouzer, pres. Architect not selected.

N. C., Shelby—Eagle Roller Mills Co., plans 6 story, roller mill, fireproof, 400 bbl. capacity. $70,000. W. R. Hartness, pres.

N. C., Wadesboro—L. D. Robinson is interested in company composed of local citizens who have subscribed $425,000 to construct cotton mill, to spin yarn, weave, bleach, dye and print goods. C. H. Van Hervie, secy. Chamber Commerce, is also interested.

La., Carson—Delta Land & Timber Co. plans to rebuild factory recently destroyed by fire. $150,000.

Tenn., Nashville—McQuiddy Printing Co., 5th Ave. and Diaderick St., having plans prepared by H. C. Hibbs, archt., 4th & 1st Natl. Bank Bldg., and soon takes bids 3 story, 65 x 150 ft., brick, printing plant, Broad St. $50,000-$60,000.

Ky., Louisville—Summers-Hermann Co., 906 South 3rd St., plans auto service and repair plant, fireproof, 3rd St. $125,000. Architect not announced.

Ky., Louisville—Superior Woolen Mills plans factory and sales building, 509-511 West Market St. $150,000. J. W. Strother, treas.

O., Bellefontaine—Citizens Ice & Supply Co., opens bids about March 1, ice and storage plant. $85,000. J. H. Meyer, Wapakoneta, archt.

O., Canton—Canton Hardware Co. purchased 31,000 sq.ft. site on 3rd St. N.E., along tracks of Pennsylvania R.R., and plans warehouse.

O., Canton — Swineford Mfg. Co., 942-8 Union Ave. S. W., plans 2 story factory, Union Ave. S. W., to replace one recently destroyed by fire. $100,000.

O., Cleveland—Anchor Cartage & Storage Co., 1595 East 40th St., plans 6 story, brick, steel and concrete storage building on 162 x 500 ft. lot, East 37th St. near Erie R.R. tracks. $150,000. R. L. Kolarik, mgr. Architect not selected.

O., Cleveland—Amer. Gypsum Co., Cleveland Discount Bldg., plans brick and steel mill, 2146 West 3rd St. $100,000. A. C. Stewart, mgr. Private plans.

O., Cleveland — Detroit & Cleveland Navigation Co., c/o C. L. Park, genl. mgr., foot of 3rd St., Detroit, Mich., having plans prepared by W. S. Lougee Co., archts., 500 Marshall Bldg., 2 story, 300 x 750 ft., concrete, steel and brick warehouse and concrete pier, foot of 9th St., here. $1,000,000. Noted April 6 under "Miscellaneous."

O., Cleveland—Euclid Prospect Co., c/o A. G. McKee Co., engrs., 2422 Euclid Ave., had plans prepared 2 story, 47 x 77 ft., brick and steel garage, 2443 Prospect Ave. $40,000. Private plans.

O., Cleveland — Hughes Provision Co., 3199 West 65th St., having plans by Anders & Reimers, archts., Erie Bldg., 3 story and basement, packing plant addition, brick, steel and concrete. $150,000.

O., Cleveland—W. S. Tyler Co., 3615 Superior Ave., having plans prepared by G. S. Rider & Co., archts., Century Bldg., 3 or 4 story, brick, steel and concrete factory, 3803 Superior Ave. $500,000.

O., Cleveland Heights (Warrensville P. O.)—W. J. Austin, pres. Austin Co., 16112 Euclid Ave., plans brick and steel service garage, Lennox and Surrey Rds. $75,000. Private plans.

Ind., East Chicago—Pressed Steel Mfg. Co., 120 West Jackson Blvd., Chicago, having plans prepared by F. D. Chase, Inc., Archts., 645 North Michigan Ave., Chicago, 2 story factory, rein.-con., brick and steel. $750,000.

Ind., Evansville — Franklin Corp., 1116 West Franklin St., plans 2 story and basement, 100 x 119 ft., auto assembly and service building, rein.-con. and brick, West Franklin St. $60,000. Private plans.

Ind., Indianapolis—A. A. Wilkinson Lumber Co., 931 East Michigan St., having plans prepared by Rubush & Hunter, archts., Amer. Central Life Bldg., 4 story, 100 x 190 ft. warehouse, brick and timber, East Michigan St. $200,000.

Mich., Detroit—Schroeder Paint & Glass Co., Cadillac Sq., having plans prepared by J. Finn & Son, archts., 7720 Plymouth Rd., 4 story, 125 x 195 ft., rein.-con. and brick factory, 12th St. and Grand Trunk Ry., $300,000.

Ill., Centralia — Pfeffer Motor Co. had plans prepared by T. P. Barnett Co., archts., 1559 Arcade Bldg., St. Louis, Mo., 3 story, 80 x 160 ft. garage, rein.-con. and brick, plain foundation, Main St. $100,000.

Ill., Chicago—Chicago Beach Hotel Co., 1600 Hyde Park Blvd., plans 8 story, 100 x 200 ft., rein.-con., brick and steel garage, Hyde Park Blvd. and Lake Michigan. $500,000. G. C. Nimmons, 122 South Michigan Ave., archt.

Ill., Chicago—Hetzel & Co., 1739 Larrabee St., having plans prepared by D. I. Davis & Associates, archts., 327 South La Salle St., 1 and 2 story, 70 x 122 ft. power plant, rein.-con., brick and steel. $60,000.

Ill., Chicago—H. H. Riis Motor Co. c/o M. H. Harris, archt., 118 North La Salle St., having plans prepared 2 story, 100 x 125 ft., rein.-con., brick and steel, garage, repair and welding shop, Fullerton Ave. near Crawford St. $100,000.

Ill., Chicago—Studebaker Sales Co., 21st St. and Michigan Ave., plans 6 story, 100 x 300 ft. service station, rein.-con., brick and steel, Federal St. between 24th and 25th Sts. $750,000. Loewenberg & Loewenberg, 111 West Monroe St., archts.

Ill., Evanston—Evanston Fireproof Warehouse Co., 1621 Benson Ave., having plans prepared by G. S. Kingsley, archt., 109 North Dearborn St., Chicago, 5 story, 51 x 194 ft. warehouse, rein.-con., brick and steel. $250,000.

Ill., Kewanee — Making plans complete electric light plant, incl. equipment $125,000. Burns & McDonnell, Interstate Bldg., Kansas City, Mo., engrs.

Wis., Beloit—Gaston Scale Co., 715 2nd St., plans rebuilding 2 story scale factory, brick and rein.-con., plain foundation, recently destroyed by fire. $50,000. Architect not selected.

Wis., Hartford—E. Ripley plans 1 story and basement, 50 x 100 or 100 x 100 ft., paint shop and storage addition to garage, brick and concrete, plain foundation, Main St. $40,000-$50,000. Architect not selected.

Wis., Madison—C. Rieder, 615 University Ave., having plans prepared by P. M. Horner, archt., 1 East Main St., 3 story, 50 x 65 ft., tire and vulcanizing shop, brick, rein.-con. and steel, plain foundation, University Ave. $50,000.

Wis., Madison—C. B. Fritz, 138 North Frances St., plans 1 story, 50 x 110 ft. woodworking shop, brick and rein.-con., plain foundation. $50,000. Architect not selected.

Wis., Marshfield—S. Miller Cold Storage Co., Main St., had plans prepared by M. R. Carpenter, archt. and engr., 72 West Washington St., Chicago, 3 story and basement, 52 x 130 ft., addition to cold storage plant, brick and concrete, plain foundation. $150,000.

Wis., Milwaukee—J. Topzant, archt., 144 Oneida St., preparing plans 1 story and basement, 60 x 130 ft. storage plant, brick and concrete, plain foundation, West Side. $40,000. Owner's name withheld.

Wis., Milwaukee—Western States Envelope Co., 255 South Water St., having plans prepared by A. C. Runzler, archt., 144 Oneida St., remodeling 4 story and basement, 60 x 70 ft., brick and timber warehouse, South Water St. $40,000.

Wis., Oshkosh—Wisconsin Dairymen's Storage Co. plans 2 story, 50 x 95 ft., cold storage warehouse, brick, rein.-con. and steel. $50,000. Architect not selected.

Wis., Rhinelander—S. Miller Cold Storage Co., Main St., Marshfield, having plans prepared by M. R. Carpenter, engr. and archt., 74 West Washington St., Chicago, 3 story and basement, 46 x 120 ft. cold storage plant, brick and concrete, plain foundation, here. $145,000.

Wis., Stevens Point—F. Spalenka, archt., 426 Normal Ave., soon takes bids 2 story and basement, 80 x 137 ft., brick and concrete garage, plain foundation, for R. E. Newby Auto Co., c/o architect. $45,000.

Wis., Wausau—Kickbusch Grocery Co., 126 West Washington St., had plans prepared by Oppenhamer & Obel, archts., Spencer Bldg., 2 story and basement, 60 x 180 ft., brick and concrete warehouse addition, plain foundation. $60,000.

Wis., Waukesha — Harvey Paper Specialty Co., 453 West Main St., plans 1 story, (ultimately 2 story) 80 x 200 ft. warehouse and factory, concrete, plain foundation. $40,000. Architect not selected.

Wis., Wauwatosa—Forsyth Leather Co., State St., having plans prepared by Cahill & Douglas, engrs., 217 West Water St., Milwaukee, 40 x 50 ft., brick and concrete boiler house.

Wis., West Allis—Burbach Service Station, 5225 Greenfield Ave., having plans prepared by J. Schunk, archt., 521 51st Ave., 2 story and basement, 60 x 87 ft., brick and concrete, garage, plain foundation. $40,000.

Ia., Iowa City—Sidewell Dairy Co., c/o A. B. Sidewell, 15 College St., having plans prepared by Anthony & Holmes, archts., Cedar Rapids (street address not available) 2 story, 60 x 90 ft. factory, brick and concrete, here. $40,000.

Kan., Wichita—Conway Springs Water Co., 223 South Wichita St., plans 1 story, bottling plant, concrete, concrete foundation. $50,000. Architect not selected.

S. D., Rapid City—State Cement Comm., c/o A. C. Hunt, secy., Capitol, Pierre, had plans prepared by J. C. Buckbee, engr., 38 South Dearborn St., Chicago, for cement plant, 2,000 bbl. per day capacity.

Mo., Kansas City—Amer. Ice Co., Agnes Ave. and Guinotte St., had plans prepared by G. Carman, archt., 406 Gumbel Bldg., 2 story and basement, 80 x 127 ft., plant, 4730 Tracy Ave. $75,000.

Mo., Kansas City — Schreiber Flour & Cereal Co., 223 West 8th St., plans to rebuild mill. Architect not selected.

Mo., Leeds—Blue Valley Ice & Storage Co., having plans prepared 2 story and basement, 70 x 80 ft., brick and rein.-con. plant. H. Von Unwerth, 509 Finance Bldg., Kansas City, engr.

Mo., Osceola — Stock Co. plans hydro electric plant. $500,000. A. L. Mullergren, 555 Gates Bldg., Kansas City, engr.

Ark., Star City—Ozark Timber & Stave Co. plans to rebuild mill recently destroyed by fire. $70,000. Architect not announced.

Tex., Waco—B. C. Richards, mayor, 319 South 8th St., soon takes bids 2 story, rein.-con. garage, 10th and Austin Sts. $40,000. Architect not announced.

Okla., Ardmore—Consumers' Power Co. had plans prepared 2 story and basement, brick, power plant, complete with necessary machinery. $100,000. W. A. Beahr, Peoples' Gas Bldg., Chicago, engr.

Okla., Marietta—S. Suggs, Ardmore, is interested in corporation which is having plans prepared for factory in or near here. $200,000.

Okla., Tulsa—E. S. Hutchinson, 2012 East 6th St., had preliminary plans prepared 1 story furniture plant, rein.-con. and steel, 20,000 ft. floor space, 623 South Xanthus St. $150,000.

Okla., West Tulsa (Tulsa P. O.)—Oklahoma Power Co. plans new unit to its generating plant, here. To exceed $40,000.

Nev., Gerlach—See "Buildings."

Calif., Alvarado—California Salt Works Mills Bldg., San Francisco, plans to rebuild plant, incl. frame building, wharves, tanks, equipment, etc., here, recently destroyed by fire. Loss $300,000.

Calif., Azusa—Azusa Ice and Cold Storage Co., plans to rebuild portion of ice manufacturing and cold storage plant recently destroyed by fire. $100,000. Architect not announced.

Calif., Loleta—Libby, McNeil & Libby, Merchants Exch. Bldg., San Francisco, having plans prepared 2 story, 75 x 160 ft., milk condensing plant. Private plans.

Calif., Los Angeles—Los Angeles Warehouse Co., c/o A. Martin, archt., Higgins Bldg., had plans prepared 5 story and basement, 100 x 350 ft. rein.-con. warehouse, Commercial St.

Calif., Oakdale—See "Waterworks."

Calif., San Francisco—See "Miscellaneous."

Calif., San Francisco—Star Garage (T. McDougall, owner), 150 Turk St., having revised plans prepared by J. L. Stewart, archt., Claus Spreckels Bldg., 2 story, rein.-con. garage extension, 129 ft. frontage, Turk St. Noted Dec. 28.

Calif., San Rafael—Marin Municipal Water Dist., having plans prepared by J. W. Dolliver, archt., Monadnock Bldg., San Francisco, shops and corporation yard, also 2 story, 65 x 75 ft., rein.-con. office building ($70,000), 4th St.

Que., Donnacona—Donnacona Paper Co. plans to enlarge plant, from 30,000 to 60,000 ton capacity. Address C. E. Eaton, Trust Co. Bldg., Watertown, N. Y., engr.

Ont., Brampton—J. W. Hewitson Shoe Co. plans addition to factory, probably concrete, brick and steel, here. $50,000. Architect not selected.

Ont., Brampton—McIlroy Belting & Hose Co., Hammond, Ind., plans concrete and brick plant, here. $40,000.

Ont., Jarvis—McCarter & Allen, Jarvis, plans rebuilding garage, recently destroyed by fire. $45,000.

Industrial Works (Continued)

Ont., Ottawa—Bd. Control takes bids in spring for abattoir. $100,000. A. F. Macallum, city engr.

BIDS DESIRED

N. Y., Watertown—Northern New York Utilities, Inc., 58, Public Sq., taking bids new retort house, Engine St. $250,000. S. D. Gilbert, Light and Power Bldg., mgr.

Pa., Phila.—Feb. 8, by F. H. Caven, dir. pub. wks., 3 and 4 story, 87 x 150 ft. brick and steel warehouse and printing plant, plain foundation, New and Front Sts., for Bd. Educ. 19th and Chestnut Sts. $250,000. Private plans.

W. Va., Charleston — The Devore Co., engrs., Nicholas Bldg., Toledo, O., receiving bids 2 story, 45 x 240 ft., brick, rein.-con. and steel factory addition, here, for Libby Owens Co., Nicholas Bldg., Toledo, O. $300,000.

N. C., Whiteville—See "Waterworks."

Ala., Birmingham—Feb. 10, by National Cast Iron Pipe Co., Tarrant City, furnishing and erecting steel foundry, incl. cleaning shed, annealing oven shed and cupola charging platform.

Miss., Columbus—Feb. 24, by State Bond Impvt. Comn., Box 636, Jackson, new steam heating plant at State College, here.

O., Springfield — Everwear Mfg. Co., Sycamore St., taking bids 1 story, 90 x 220 ft. plant addition. Architect not announced.

Mich., Grand Rapids—A. McCell, archt., Michigan Trust Bldg., taking bids 5 story and basement, 50 x 100 ft. brick and timber addition to factory, plain foundation, Monroe St., for Mueller Furniture Co., Grand Rapids. $75,000.

Ill., Chicago—W. P. Doerr, archt., 28 East Jackson Blvd., receiving bids 1 and 2 story, 100 x 150 ft., garage, rein.-con., brick and steel, Lake Park Ave. and 55th St., for O. Metz, 5525 Harper Ave. $40,000.

Ill., Chicago—Garibaldi & Cuneo, 1 West South Water St., receiving bids 4 story, 100 x 125 ft. factory, rein.-con., brick and steel, 212 West Illinois St. $50,000. Dean & Dean, 137 South La Salle St., archts. This corrects report in Jan. 11 issue.

Ill., Chicago—Zimmerman, Saxe & Zimmerman, archts., 212 East Superior St., receiving bids 1 story and basement, 80 x 164 ft., factory, rein.-con., brick and steel, 4113-35 Ravenswood Ave., for Pike Web Mfg. Co., 29 South Clinton St. $40,000.

Wis., La Crosse—O. A. Merman, archt., 210 Linker Bldg., taking bids 1 story, part basement, 60 x 146 ft., brick and concrete garage, plain foundation, 6th and State Sts., for Cameron Motor Car Co., 127 South 6th St. $40,000. Noted Nov. 9.

Wis., Milwaukee — C. H. Thoringer, archt., 3328 State St., taking bids 2 story and basement, 110 x 142 ft., brick and concrete garage, plain foundation, for R. L. Clark, 2218 Meinecke Ave. $65,000. Noted Dec. 28.

Wis., Milwaukee — Wisconsin Telephone Co., 418 Bway., taking bids and opens same about Feb. 5, 1 and 2 story, 120 x 270 ft. warehouse and garage, brick and concrete, plain foundation, Clybourn St. A. C. Eschweiler, 141 Wisconsin St., archt.

Minn., Minneapolis—Feb. 5, by State Bd. Control, Capitol, St. Paul, 3 story and basement, storehouse and shop buildings, rein.-con., brick and tile, State "U," here. $200,000. C. H. Johnston, 715 Capital Bank Bldg., St. Paul, archt. C. L. Pillsbury Co., 1200 2nd Ave. S., engr. Noted Aug. 31.

Minn., St. Paul—Twin City Motor Car Co., 1428 Harmon Pl., Minneapolis, receiving bids and opens same about Feb. 10, 2 story and basement, 60 x 138 ft. garage and sales room, rein.-con. and brick, 5th and Exchange Sts., here. $50,000. Toltz, King & Day, 1410 Pioneer Bldg., archts.

Mo., St. Louis — Feb. 23, by Bd. Pub. Serv., 208 City Hall, 2 story, 54 x 225 ft., rein.-con. and brick service building, plain foundation, for St. Louis Training School for Feeble Minded, at Scott Farm. $115,000. Former contract rescinded. L. R. Bowen, 301 City Hall, archt. and engr. Noted Jan. 18.

Calif., Oakland—Feb. 13, by State Dept. Pub. Wks., Division of Architecture, Sacramento, power house, recreation building, employees cottage and womens shop, here. G. B. McDougall, Forum Bldg., Sacramento, archt.

CONTRACTS AWARDED

Mass., Gardner—O. W. Siebert & Co., Logan St., 4 story, 80 x 230 ft. factory, brick and timber, plain foundation, Main St., to E. J. Cross Co., 82 Foster St., Worcester. Archts. est. $175,000.

Mass., Millbury—Felters Co. Inc., West St., 1 story dyehouse and 1 story addition to main factory building, brick and timber, to J. J. Roberts, 4 Wall St., Worcester. Archts. est. $150,000. Noted Oct. 5.

Mass., Watertown — Hood Rubber Co., Nichols Ave., 4 story factory addition, brick and concrete, plain foundation, Nichols Ave., to Aberthaw Constr. Co., 27 School St., Boston. Archts. est. $50,000.

N. Y., Rochester—Powerton Tire Sales Corp., 253 East Ave., general contract 4 story, brick, sales and service station, East Ave., to A. Goldstein, Rochester (street address not available); masonry work, to W. Kinney, Rochester (street address not available). Archts. est. $58,000.

Pa., Bridgeville—Universal Steel Co., 1 story, 50 x 152 ft. steel addition to plant, to Pittsburgh Bridge & Iron Wks., Rochester.

Pa., Erie—Northwestern Motor Sales Co., 21st and State Sts., 2 story, brick garage, State St., to H. Shenk Co., Erie. $40,000. Noted Nov. 30.

Pa., Glassmere—Allegheny Plate Glass Co., 3 story and basement, 108 x 120 ft. brick addition to factory, to Cruikshank Eng. Co., 5th Ave. Arcade, Pittsburgh. (Will let separate contracts). $100,000.

Pa., Phila.—R. H. Greenburgh, Phila. (street address not available), 4 story and basement, 122 x 220 ft. rein.-con., brick and steel service building, 3020-3032 Market St., to Wark Co., 231 South Broad St. Wiley Motor Co., Broad and Vine Sts., lessee.

Pa., Phila.—New Way Laundry Co., 4809 Aspen St., 2 story, 65 x 80 ft. brick and steel laundry, plain foundation, 4809 Aspen St., to J. N. Gill, Otis Bldg.

Md., Baltimore—Amer. Ice Co., Calvert Bldg., 2 story, 80 x 142 ft. ice plant, brick and hollow tile, Eden St. between Madison and Monument Sts. to North Eastern Constr. Co., Lexington Bldg., $60,000.

N. C., Charlotte—Lockwood, Greene & Co., engrs., Piedmont Bldg., 4 story, 116 x 146 ft. factory, to J. A. Gardner, 211½ North Tryon St., for H. M. Wade, South Graham Extension, $80,000. Noted Jan. 11.

O., Ashland — Faultless Rubber Co., 2 story, 40 x 130 ft., brick and steel factory and warehouse, to Camp Constr. Co., Newman-Stern Bldg., Cleveland. Archts. est. $50,000. Noted Jan. 18.

Mich., Grand Rapids — Grand Rapids Chair Co., 1661 Monroe St. N. W., 5 story, 100 x 100 ft. brick and timber addition to factory, Monroe St., to Owen, Ames & Kimball Co., Pearl St., cost plus basis. Archts. est. $75,000.

Mich., Grand Rapids — C. J. Litscher Electric Co., 41 Market Ave., 3 story and basement, 48 x 164 ft. rein.-con., brick and steel factory, plain foundation, Market Ave., to W. Baker & Son, 1350 Bemis St., cost plus basis. Engrs. est. $150,000. Noted Dec. 28.

Ill., Chicago—Chicago Mill and Lumber Co., 111 West Washington St., 2 story and basement, 300 x 400 ft. factory, rein.-con., brick and steel, 949-53 Elston Ave., to Mueller Constr. Co., 179 West Washington St. Archts. est. $500,000.

Wis., Milwaukee—C. W. Valencourt, 172 12th St., 1 story and basement, 60 x 100 ft., brick and concrete garage, plain foundation, to Meredith Bros., 1043 Kinnickinnic Ave. Archts. est. $40,000. Noted Nov. 2.

Wis., Oshkosh—Badger Lumber & Mfg. Co., Badger Rd., 1 story, 130 x 300 ft., (1st unit), brick and concrete, plain foundation, to C. R. Meyer & Sons, 50 State St. Archts. est. $145,000. Noted Jan. 25.

Wis., Wausau — Hall Garage Co., 107 Scott St., 3 story, 50 x 60 ft., addition to garage and repair shop, brick, rein.-con. and steel, Scott St., to J. Larson, 627 Weile Ave. Archts. est. $40,000.

Mo., St. Louis—U. S. Motor Bus Transit Co., 911 Title Guaranty Bldg., 2 story, 200 x 200 ft. garage, factory and assembly plant, Grand Blvd., also 2 story, 150 x 200 ft. administration building and garage, Delmar Blvd. near Rosedale Ave., rein.-con. and brick, concrete pile foundations, to McKelvey Constr. Co., Title Guaranty Bldg., $200,000. Noted Jan. 18.

Calif., Los Angeles—See "Buildings."

Calif., Oakland—Westinghouse Electric & Mfg. Co., 1st Natl. Bank Bldg., San Francisco, 1 and 2 story insulator factory (first unit) fireproof, on 15 acre site, to R. McLeran & Co., Hearst Bldg., San Francisco, $175,000.

Buildings

PROPOSED WORK

N. H., Keene—Theatre—D. Latchia, Brattleboro, Vt., having plans prepared by G. N. Jacobs, archt., 12 Bosworth St., Boston, 2 story, here. $150,000. Noted Dec. 28.

Mass., Boston — Schools — Schoolhouse Comn., Room 1007, City Hall, having sketches made addition to Roxbury High School, $150,000, H. H. Atwood, Ashmount St., Dorchester, archt.; 20 room intermediate school, brick and concrete, East Eagle and Glendon Sts., Emerson Dist., East Boston, $350,000, J. J. Driscoll, 6 Beacon St., archt. Having plans prepared 1 story addition to Winship School, Bennett Dist., Brighton, $100,000-$150,000, McLaughlin & Burr, 88 Tremont St., archts.; 8 room and basement, Nathan St. and Northbourne Rd., Forest Hills, in Francis Parkman Dist., $150,000, Blackall, Clapp & Whittemore, 20 Beacon St., archts.; 12 room, brick and concrete, Dudley St., in Hugh O'Brien Dist., Roxbury, $200,000, Mulhall & Holmes, 248 Boylston St., archts.; 18 unit girls high school, Worthington St., in John Martin Dist., Roxbury, $500,000, and 4 story intermediate school, Maverick and Everett Sts., Samuel Adams Dist., East Boston, $500,000, both brick and concrete, C. R. Greco, 8 Beacon St., archt.; 8 room and basement grammar school, brick and concrete, Bennett Dist., Brighton, to exceed $125,000, Coolidge & Shattuck, 122 Ames Bldg., archt.; 10 room junior high school, brick and concrete, John Mather Dist., Dorchester, $500,000, O'Connell & Shaw, 18 Boylston St., archts.; 20 room grammar school, brick and concrete, Phillips Brooks Dist., Dorchester, $750,000, J. M. Gray, 169 High St., archt. Plans 8 room addition to grammar school, Thomas Gardner Dist., Brighton, $175,000; 8 room addition to Mary A. Baker School, Tileston Dist., Dorchester, $125,000; 10 room addition to Frank V. Thompson School, Dorchester, $240,000; 16 room, Blue Hill Ave., William E. Endicott Dist., Dorchester, $400,000; 8 room addition to Florence Nightingale School, John Marshall Dist., $200,000; architects not selected.

Mass., Chicopee—School—Bd. Educ. plans 2 story and basement, brick and steel, Center School Dist. $150,000. Architect not selected.

Mass., Lawrence—City Hall—City having preliminary plans prepared by G. G. Adams, archt., Bay State Bldg., for city hall. $300,000.

R. I., East Providence (Providence P. O.) —Theatre and Business—Chiaverni & Blank, archts., 32 Bway., soon let contract 3 and 1 story, brick, concrete and steel, plain foundation, Bway., for D'Angelis Bros., c/o architects. $150,000.

R. I., Pawtucket—Church—St. Jean de Baptist Church, plans 1 story and basement, brick or stone, Harrison St. $150,000. A. Graton, Harrison St., pastor. Architect not announced.

R. I., Providence—Academy—La Salle Academy, 205 Fountain St., having plans prepared by J. W. Donahue, archt., 496 Main St., Springfield, Mass., 2 story and high basement, brick and concrete, Academy Ave. $400,000.

R. I., Providence—Library and Auditorium—Providence College soon takes bids 2 story, 60 x 150 ft., brick, steel and concrete, plain foundation, College St. $150,000. J. W. Donahue, 496 Main St., Springfield, Mass., archt.

R. I., Providence—Office—Providence Gas Co., Turks Head Bldg., plans office, brick, concrete and steel, Weybosset and Orange Sts. $250,000. Clarke & Howe, 1208 Turks Head Bldg., archts. Noted Dec. 28.

Conn., Hartford—School—St. Josephs Cathedral, c/o J. S. Duggan, pastor, 140 Farmington Ave., having plans prepared by W. F. O'Neill, archt., 277 Farmington Ave., 3 story, brick, concrete, stone and steel, Farmington Ave. $350,000. Noted Jan. 26.

Conn., New Haven—Club and Gymnasium—Della Valle & Vece, archts., 956 Chapel St., take bids about Feb. 15, 3 story and basement, 50 x 150 ft. brick and steel, plain foundation, Greene St., for St. Michael's Young Men's Club. $150,000.

N. Y., Alexandria Bay—School—Bd. Educ. and Citizens' Building Co. plan new school. $200,000. Address W. E. McDonnell.

N. Y., Brooklyn—Apartment—C. Groell, c/o Shampan & Shampan, archts. and engrs., 188 Montague St., having plans prepared 6 story, 100 x 175 ft., brick, steel and stone, plain foundation, St. Johns Pl. $600,000.

Buildings (Continued)

N. Y., Brooklyn — Apartment — Orange Constr. Co., c/o E. Roth, archt. and engr., 119 West 40th St., New York, having plans prepared 6 story, 101 x 101 ft., brick, steel and stone, plain foundation, Hicks St., here. $400,000.

N. Y., Brooklyn—Apartment Hotel—M. Ansorge and H. Kornblum Co., c/o B. W. Dorfman, archt. and engr., 26 Court St., having plans prepared 14 story, brick, steel and stone, plain foundation, Joralemon and Clinton Sts. $1,000,000.

N. Y., Brooklyn—Temple—Congregation Talmud Torah Tifereth Israel of Bensonhurst, c/o E. M. Adelsohn, archt. and engr., 1776 Pitkin Ave., having plans prepared brick, steel and stone, plain foundation, 79th St. near 20th Ave., here. $200,000.

N. Y., Buffalo—Museum—Dept. Parks and Buildings, City Hall, having preliminary plans prepared by Essenwein & Johnson, archts., Ellicott Sq. Bldg., natural science museum, Humboldt Parkway. $1,000,000.

N. Y., Fultonville—School—Bd. Educ. having preliminary plans prepared by G. W. Conable, archt. and engr., 45 West 24th St., New York City, brick, steel and stone, plain foundation. $150,000.

N. Y., Jamestown—Hotel—Hotel Jamestown, Inc., Cherry St., having plans prepared by W. L. Stoddart, archt., 9 East 40th St., New York City, 8 or 10 story, 3rd and Cherry Sts. $1,225,000.

N. Y., Johnstown—High School—Bd. Educ. having preliminary plans prepared by Tooker & Marsh, archts. and engrs., 101 Park Ave., New York City, brick, steel and stone, plain foundation. $325,000.

N. Y., Kenmore—High School—School Dist. 1, 69 Tremaine Ave., has purchased site in Delaware Rd. and plans to build high school. $500,000.

N. Y., Marion—School—Bd. Educ. having preliminary plans prepared by Tooker & Marsh, archts. and engrs., 101 Park Ave., New York City, brick, steel and stone, plain foundation. $200,000.

N. Y., New York—Hotel—Klein & Jackson, c/o Rouse & Goldston, archts. and engrs., 512 5th Ave., having plans prepared 80 x 100 ft., brick, steel and stone, plain foundation, East 67th St. $500,000.

N. Y., New York—School—St. Angelamerici Roman Catholic Church, c/o T. F. Dunn, archt. and engr., 62 West 45th St., soon takes bids 3 story, brick, steel and stone, plain foundation, 162nd St. and Morris Ave. $200,000. J. Harrington, pastor.

N. Y., New York—School—Bd. Educ., 500 Park Ave., soon takes bids P. S. 60, brick, steel and stone, plain foundation, East 12th St. $850,000. C. B. J. Snyder, Flatbush Ave. extension and Concord St., Brooklyn, archt. and engr.

N. Y., New York—School—Bd. Educ., 500 Park Ave., having plans prepared by C. B. J. Snyder, archt. and engr., Flatbush Ave. extension and Concord St., Brooklyn, brick, steel and stone, plain foundation, Vyse Ave. $175,000.

N. Y., Niagara Falls—Apartment and Inn—Peabody-Schoelkopf Realty Co., Buffalo, (street address not available), having plans prepared by H. J. Cook, archt., 408 Pearl St., Buffalo, 3 story, modern, Old English style, Buffalo Ave., here. $150,000.

N. Y., Scotia—School—Bd. Educ. having preliminary plans prepared by Tooker & Marsh, archts. and engrs., 101 Park Ave., New York City, brick, steel and stone, plain foundation. $200,000. Noted May 11.

N. Y., Solvay (Syracuse P. O.)—High School—Bd. Educ. takes bids in February, 3 story, 120 x 218 ft., brick and steel, Orchard Rd. $400,000. M. L. King, Snow Bldg., Syracuse, archt. and engr. Noted July 13.

N. Y., Syracuse—High School—Bd. Educ. having plans prepared by A. L. Brockway, archt. and engr., Syracuse Savings Bank Bldg., 17th Ward Junior High School, 2 story and basement, 200 x 300 ft., brick, steel and stone. $450,000. Noted May 4.

N. Y., Watertown—Office—F. A. Empsall, 126 Flower Ave., purchased Taggart site on Public Sq., and plans office building. $200,000. Address C. A. Phelps, Bank Bldg. Architect not selected. Noted April 13.

N. J., Paterson — Hotel — Alexander Hamilton Hotel, c/o Guilbert & Bettelle, archts. and engrs., 2 Lombardy St., Newark, soon takes bids brick, steel and stone, plain foundation, here. $1,000,000.

Pa., Altoona—Hotel—Blair Hotel Co., c/o D. J. Howard, secy., Chamber of Commerce Bldg., and Altoona Hotel Co., c/o G. D. Worthington, managing dir., Hotel Penn-Alto, having plans prepared by W. L. Stoddard, archt., 9 East 40th St., New York City, 3 story, 105 room addition, rein.-con. and brick, 13th Ave.

Pa., Ambridge—High School—Bd. Educ. having plans prepared by W. W. Williams, archt., 309 4th Ave., Pittsburgh, 2 story and basement, 71 x 250 ft. with 50 x 85 ft. wing, Duss Ave. $400,000. Noted Nov. 30.

Pa., Bradford—Church—First Methodist Episcopal Church, c/o L. O. Longworthy, having plans prepared by E. D. Green & Sons, archts., Niagara St., Buffalo, N. Y., 1 and 2 story and basement, $150,000.

Pa., Clearfield—Church—West Side Methodist Episcopal Congregation, c/o A. C. Kramer, pastor, having plans prepared by J. C. Fulton & Son, archts., Uniontown, 1 story and basement, 60 x 84 ft. and 60 x 109 ft., brick and stone. $150,000.

Pa., Grove City — Dormitory — Grove City College having plans prepared by W. G. Eckles, archt., Lawrence Savings Bldg., New Castle, 4 story and basement additions, 2 wings, 30 x 40 ft. and 1 wing 20 x 100 ft., brick and stone. $250,000.

Pa., Harrisburg — Hotel — Penn Harris Hotel, c/o W. L. Stoddart, archt. and engr., 9 East 40th St., New York City, soon takes bids brick, steel and stone. $500,000. Noted July 6.

Pa., Harrisburg — Schools — Bd. Educ. plans two 2 story, 8 room brick and steel schools, one at Washington Heights, other at Manor Park. $150,000. T. B. Stockham, Stockham Bldg., archt.

Pa., Mt. Union—School—Mt. Union School Dist., c/o E. Goodman, having plans prepared by Hersh & Shollar, archts., Commerce Bldg., Altoona, 2 story and basement, 42 x 83 ft., rein.-con. and brick. $150,000.

Pa., New Castle—Theatre—J. Genkinger, Opera House, plans theatre, East Washington Ave., to exceed $150,000. Architect not selected.

Pa., Phila. — Apartment—E. Towsen, Norris Bldg., plans 4 story and basement, brick, steel and stone, plain foundation, 43rd and Spruce Sts. $500,000. N. Hulme, 1524 Chestnut St., archt.

Pa., Phila.—Exchange—Bell Telephone Co., Parkway Bldg., soon takes bids 3 story and basement, 50 x 220 ft. brick, steel and stone, plain foundation, 38th and Chestnut Sts. $250,000. J. T. Windrim, Commonwealth Bldg., archt.

Pa., Phila.—Hotel—Phila. Hotel Corp., 642 Widener Bldg., does not plan to build 20 story and basement, 84 x 219 ft. brick and stone, Broad and Locust Sts. This corrects report in Jan. 18 issue.

Pa., Phila.—Loft—S. Sionsky, 1033 North Front St., soon takes bids 5 story and basement, 54 x 100 ft. rein.-con. and brick, Front and Allen Sts. $175,000. F. N. Greisler, 1035 Walnut St., archt.

Pa., Phila.—Office—U. S. Fidelity & Guarantee Co., c/o J. K. Kane, 315 Walnut St., having plans prepared by Parker, Thomas & Rice, archts., Union Trust Bldg., Baltimore, Md., 9 story, concrete, steel and stone, 125-129 5th St. $250,000.

Pa., Pittsburgh—Office—See "Industrial Works."

Pa., Pittsburgh—School—Bd. Educ., Fulton Bldg., having plans prepared by L. Stevens, archt., Century Bldg., 2 story and basement, brick and tile, Bonvue Ave. $225,000.

Pa., Pittsburgh—School—Bd. Educ. soon takes bids 3 story, concrete, brick and steel, Brighton Rd. and Island Ave. Cost to exceed $150,000. J. T. Steen & Son, Vandergrift Bldg., archts.

Pa., Shamokin—Bank—Guarantee Trust & Deposit Co., c/o T. R. Moser, plans 1 story, mezzanine and basement, 50 x 95 ft. brick, steel, granite and limestone, plain foundation. $175,000. W. H. Lee, 32 South 17th St., Phila., archt.

Pa., Torresdale (Phila. P. O.)—Home—Dept. Pub. Welfare, City Hall, plans 3 story and basement, 40 x 100 ft. concrete, brick, steel and stone. $250,000. J. P. B. Sinkler, 1211 Chestnut St., Phila., archt.

Pa., Waynesburg—Church—First Presbyterian Congregation, having plans prepared by Smith & Walker, archts., 80 Boyleston Ave., Boston, Mass., 1 story and basement, brick and stone. $150,000.

Md., Westport (Baltimore P. O.)—School—Mayor and City Council, City Hall, Baltimore, having plans prepared by B. Frank, archt., 328 North Charles St., Baltimore, 3 story, 60 x 227 ft., concrete and brick, Nevada and 1st Sts., here. $600,000. H. Massart, 328 North Charles St., Baltimore, engr.

D. C., Wash.—Apartment—[illegible] A. Bloss, having plans prepared by H. H. Warwick, archt., [illegible] Munsey Bldg., apartment house, 63 apartments, 19th St. and Wyoming Ave. $300,000.

D. C., Wash.—Apartment—[illegible] Regie Real Estate Co., 1344 G St., N.W., has plans prepared by C. Hest, archt., 1403 [illegible] St., N.W., for apartment house, 250 apartments. $750,000.

D. C., Wash.—Office and Store—F. H. Smith, 1414 I St., N.W., having plans prepared by J. DeSibour, archt., Hibbs Bldg., 911 15th St., N.W., office and store building, 15th and K Sts., N.W. $2,500,000.

D. C., Wash.—School—Dist. Comrs., 5th Dist. Bldg., having plans prepared, alterations and additions to Armstrong Manual Training School. $500,000.

D. C., Wash.—Theatre—T. Moore, Hadleigh Apartments, had plans prepared by J. J. Zink, archt., 126 Overland Ave., Baltimore, Md., for theatre at 18th St. and Columbia Rd., N.W. $250,000.

N. C., Elon College—School—Elon College plans to rebuild school, recently destroyed by fire. $250,000. W. A. Harper, pres.

Tenn., Chattanooga — Office — Interstate Life & Accident Co., Vol. State Life Bldg., receiving competitive sketches for 6 story, 150 x 250 ft. McCallie and Mabel Sts. $250,000.

Tenn., Memphis—Sunday School—Methodist Episcopal Church South having plans prepared by H. T. McGee, archt., Madison Ave. Bldg., 1½ to 2 story annex to church, brick and stone, North 2nd St. and Poplar Ave. $175,000.

Ky., Lexington—City Hall—City having plans prepared by F. L. Packard, archt., Hayden Bldg., Columbus, O., city hall, North Limestone and Barr Sts. $500,000, bonds voted.

Ky., Louisville — Apartment — Consolidated Realty Co., 229 South 5th St., plans addition, 4th St. near Ormsby Ave. $800,000.

Ky., Louisville — Sales—See "Industrial Works."

Ky., Louisville—Station—Louisville Ry. Co., Traction Bldg., plans joint interurban station, 2nd and Liberty Sts. $500,000.

O., Cleveland—Apartments—Garden Court Realty Co., c/o G. A. Grieble, pres. and archt., 517 Sloan Bldg., having plans prepared two 8 story and basement, 128 suites, brick, steel and concrete, 7338 Euclid Ave. $1,000,000.

O., Cleveland—Apartment—W. T. Sokolkin, 11627 Ely Ave., having plans prepared by L. Skolnik, archt., 11914 Kinsman Rd., 3 story, 80 x 100 ft., brick and timber, Lakeview Rd. near Superior Ave. $150,000.

O., Cleveland Heights (Warrensville P. O.)—Abrams Bros., 201 Ulmer Bldg., Cleveland, soon lets contract 3 story, 80 x 122 ft., brick and steel, 2872 Mayfield Rd., here. $160,000. Brauerman & Havermaet, 801 Ulmer Bldg., Cleveland, archts.

O., Cleveland Heights (Warrensville P. O.)—Apartment—L. B. Shifrin, 2229 East 78th St., Cleveland, having plans prepared by Braverman & Havermaet, archts., 801 Ulmer Bldg., Cleveland, 3 story and basement, brick, Overlook Rd. near Mayfield Rd., here. $250,000.

O., Cleveland Heights (Warrensville P. O.)—Temple—B'nai Jeshurum Congregation, c/o H. Spira, 2207 Ontario St., Cleveland, having sketches made by J. L. Weinberg, archt., 3226 Euclid Ave., Cleveland, 3 story and basement, brick, steel and concrete, Euclid Heights Blvd. and Derbyshire Rd., here. $750,000.

O., Dayton—Office—City plans 8 story, 50 x 300 ft., rein.-con., brick and stone, plain foundation, Main and Market Sts. $750,000. F. O. Eichelberger, city mgr. Architect not selected.

O., Dayton—School—Bd. Educ. plans 2 story and basement, 36 rooms, brick and rein.-con., Burns Ave. $500,000. E. E. Turvene, Bd. Educ., supt. constr.

O., Youngstown—Club—West Mahoning Athletic Club having plans prepared by Stanley & Schelbel, archts., 1301 Wick Bldg., and takes bids about April 1, 1 and 2 story, club. $150,000. W. J. Dunlap, pres.

Ill., Chicago—Apartment—H. P. Aarens, archt., 127 North Dearborn St., preparing plans 3 story and basement, 100 x 140 ft., rein.-con., brick and steel, Congress St. and Lockwood Ave. $175,000. Owner's name withheld.

Ill., Chicago—Office—Central Furniture Market, c/o G. C. Nimmons, archt., 122 South Michigan Ave., plans 12 story and basement, 50 x 146 ft., rein.-con., brick and steel, 1416-18 South Wabash Ave. $500,000.

Buildings (Continued)

Ill., Chicago—School—Bethany Bible Institute, 4435 West Van Buren St., plans 2 story and basement, 72 x 240 ft., rein.-con., brick and steel addition, Congress St. near St. Louis Ave. $300,000. N. M. Dunning, 304 South Wabash Ave., archt.

Ill., Glencoe—Church, etc.—St. Elizabeths Episcopal Parish, c/o Coolidge & Hodgdon, archts., 134 South La Salle St., Chicago, plans 1 and 2 story, rein.-con., brick and steel, church and parish house, South St. near Vernon Ave., here. $200,000.

Ill., Park Ridge—Theatre, Store and Office—Barry, Byrne & Ryan Co., archts., 104 South Michigan Ave., Chicago, soon receive bids 2 story and basement, 142 x 200 ft., rein.-con., brick and steel, Prospect Ave., here, for Home Realty Co., Park Ridge. $250,000.

Ill., South Chicago (Chicago P. O.)—Hospital—E. E. Hall, archt., 123 West Madison St., takes bids in about 2 weeks, 4 and 5 story and basement, 125 x 149 ft., rein.-con., brick and steel, 11th and Perry Sts., for South End Hospital Assn., 11212 South Michigan Ave. $300,000. Noted July 6.

Ill., Rogers Park (Chicago P. O.)—Apartment—A. J. Alcorn, 2022 North Tripp Ave., Chicago, having plans prepared by F. V. Prather, archt., 400 North Michigan Ave., Chicago, 3 story and basement, rein.-con., brick and steel, here. $250,000.

Wis., Appleton—Vocational School—Bd. Educ., c/o Clerk, having plans prepared by Perkins, Fellow & Hamilton, archts., 814 Tower Court, Chicago, 3 story and basement, 150 x 175 ft., brick, rein.-con. and steel, plain foundation. $500,000.

Wis., Madison—Store—Kessenicks Co., 26 North Carroll St., having plans prepared by F. Riley, archt., Conklin Bldg., 2 and 4 story, 60 x 155 ft., brick, rein.-con. and steel, plain foundation, State St. $150,000. F. Kessenick, mgr.

Wis., Manitowoc—Hospital—Holy Family Hospital, c/o Franciscan Sisters, having plans prepared by E. Brielmaier & Sons, archts., 432 Bway., Milwaukee, 4 story and basement, brick and concrete, plain foundation. $300,000.

Wis., Oshkosh — Hospital — Mercy Hospital, 185 Hazel St., having plans prepared by E. Brielmaier & Sons, archts., 432 Bway., Milwaukee, two 4 story and basement, 46 x 100 ft. additions, brick and concrete, plain foundations. $200,000.

Wis., Oshkosh—Store—Medberry-Findeisen Co., 58 Algoma St., plans to rebuild 3 story, 75 x 150 ft., rein.-con., steel and brick, plain foundation, recently destroyed by fire. $150,000. Architect not selected.

Wis., Verona—Asylum, etc.—Dane Co. Bd., c/o M. Sommers, chn., Court House, Madison, having plans prepared by A. D. Conover, archt., Tenney Bldg., Madison, 4 story, 160 x 140 ft. asylum, incl. cold storage building, brick, rein.-con. and steel, plain foundation. $150,000. Noted Dec. 28.

Wis., Wausau—Bank and Office—Amer. Natl. Bank having preliminary plans prepared by Childs & Smith, archts., 64 East Van Buren St., Chicago, 8 story and basement, 50 x 120 ft., brick, stone and concrete, plain foundation. $300,000.

Ia., Ames—High School—Feb. 8 to vote on $200,000 bonds for high school. Noted Jan. 18.

Ia., Sioux City—Schools—March 12 to vote on $850,000 bonds for schools.

Ia., Waterloo—Store—P. Davis Dry Goods Co., 510 Commercial St., having plans prepared by C. P. Schockley, archt., 719 Black Bldg., 6 to 8 story and basement, rein.-con., brick, tile and stone, Commercial St. $600,000.

Kan., Kansas City—Club and Office—B. P. O. E. Lodge 440, c/o W. L. Woods, secy., 717 Minnesota Ave., having plans prepared by J. T. Craven Eng. Co., St. Louis, Mo., 12 story and basement, rein.-con., terra cotta, brick and stone, 7th St. and Minnesota Ave. $700,000.

Kan., Pittsburg—Temple—Masonic Lodge having preliminary plans prepared by Henrici & Loury, archts and engrs., 222 Commerce Bldg., Kansas City, Mo., 3 story and basement, 140 x 200 ft., rein.-con., brick and steel. $400,000.

Kan., Wichita—Station—Missouri Pacific Ry., Railway Exch., St. Louis, Mo., Midland Valley Ry., Liberty Bldg., Phila., and Orient R.R., plan 2 story union station, stone, West Douglas St., here. $250,000.

Neb., Grand Island—Schools—Election Feb. 11 to vote on $400,000 bonds, for schools.

Mo., Kansas City—Lodge—Greenbaum, Hardy & Schumacher, archts., 216 Scarritt Bldg., takes bids in about 2 weeks 3 story and basement, 110 x 160 ft., rein.-con. and brick, Linwood Ave. and Wynne St., for Y. M. H. A., 3117 Troost Ave. $300,000.

Ark., Blytheville—Bank and Office—1st Natl. Bank having plans prepared by Sieg & Mandeville, archts., Randolph Bldg., Memphis, Tenn., 2 story and basement, 35 x 140 ft., rein.-con., steel and white Indiana limestone. $150,000. T. G. Mahan, vice pres. and chn. building com.

Okla., Chickasha—Court House—Grady Co. plans election early in spring to vote on $250,000 bonds for court house. W. T. Cloud, clk.

Okla., Okmulgee—Community—City plans 2 story and basement, 120 x 140 ft., rein.-con., brick and terra cotta, North Alabama Ave. $165,000. Architect not selected.

Okla., Okmulgee — Temple and Office—Masonic Temple Assn. had plans prepared by J. M. Whitehead, archt., Rebold Bldg., 5 story and basement, 70 x 103 ft., rein.-con., brick and stone, 5th and Grand Sts. $350,000.

Okla., Ponca City—Business—Ponca City Masons plan 5 story, 50 x 140 ft., brick and steel, 3rd St. and Grand Ave. $200,000.

Okla., Ponca City—School—Bd. Educ. having plans prepared by Smith & Senter, archts., 602 Finance Bldg., Kansas City, Mo., rein.-con., brick and stone. $150,000.

Okla., Tulsa—Chamber of Commerce—Business Men's Organization had plans prepared 5 story, rein.-con. and steel. $75,000 already raised. Cost $150,000.

Okla., Tulsa—Office—E. S. Hutchinson, 2012 East 6th St., had plans prepared 2 story, 100 x 100 ft., rein.-con. and steel, plain foundation, 6th St. $150,000.

Nev., Gerlach—Hotel, Auditorium, etc.—Pacific Portland Cement Co., Pacific Bldg., San Francisco, Calif., had plans prepared by Weeks & Day, archts., California Insurance Bldg., San Francisco, Calif., for townsite, incl. rein.-con. hotel, cottages, auditorium, etc., power plant and tramway. Owner receiving quotations on materials and supplies.

Wash., Walla Walla—Hospital—Memorial Hotel Assn. plans hospital. $300,000.

Calif., Huntington Beach—School—Huntington Beach Grammar School Dist., to vote on $250,000 bonds for school.

Calif., Los Angeles—Loft and Store—Alexander and Oviatt, c/o Walker & Eisen, archts., Pacific Finance Bldg., having sketches made 12 story, fireproof, Olive St. To exceed $500,000.

Calif., Placerville—High School—Placerville, High School Dist. to vote on $160,000 bonds for high school. Architect not selected.

Calif., San Francisco—Home—City and San Francisco Co., having plans prepared by J. Reid, Jr., archt., 1st Natl. Bank Bldg., group of buildings for relief home, fireproof. $2,000,000 bonds voted. Noted Oct. 19.

Que., Montreal—Office—Montreal Insurance Exch., c/o J. N. Greenshields, 120 St. James St., takes bids within 2 weeks, 10 story, 85 x 110 x 190 ft. St. James and Notre Dame Sts. $3,000,000. Architect not announced.

Ont., North Bay—School—Bd. Educ. plans 2 or 3 story and basement, 12 room, concrete, brick and steel addition. $200,000. Architect not selected.

Ont., Ottawa—Auditorium—Milson & Burgess, archts., Spark St., soon take bids brick and steel auditorium, incl. stores and skating rink, O'Connor St., for Ottawa Auditorium, Ltd., Sparks St. $225,000.

Ont., Ottawa—Store and Office—C. R. Stephen, 246 1st Ave., takes bids in early spring, 4 story and basement, 33 x 64 ft. rein.-con., brick and steel, Bank St. $200,000.

Ont., Toronto—Commercial School—Bd. Educ., 155 College St., having plans prepared by C. Dyson, archt., 155 College St., 3 story and basement, 12 room, concrete, brick and steel, eastern section of city. $200,000.

Ont., Toronto—School—Bd. Educ., 155 College St., having plans prepared by C. Dyson, archt., 155 College St., 2 story and basement, 8 room, concrete, brick and steel, Lyall Ave. $150,000.

Ont., Toronto—Schools—Bd. Educ. having plans prepared by C. Dyson, archt., 155 College St., 2 story and basement, 8 room, concrete, brick and steel addition to Riverdale Collegiate. $150,000.

Cuba, Havana—Hotel—J. McE. Bowman, Hotel Biltmore, New York City, having plans prepared by Schultze & Weaver, archts., 17 East 49th St., New York City, 10 story, brick, steel and stone, plain foundation, here. $5,000,000.

BIDS DESIRED

Mass., East Boston (Boston P. O.) — Grammar School—Feb. 16, by J. J. Mahar, schoolhouse comr., Room 1007 City Hall, Boston, 2 story and basement, brick and concrete, in Theodore Lyman Dist., here. $150,000. J. Purdon, 8 Beacon St., Boston, archt.

Mass., Roxbury (Boston P. O.)—School—Feb. 23, by J. J. Mahar, schoolhouse comr., Room 1007 City Hall, Boston, 2 story and basement, brick and concrete, 8 room addition to Julia Ward Howe School, here. $125,000-$175,000. F. I. Cooper Corp., 72 Tremont St., Boston, archts.

R. I., Lonsdale (Pawtucket P. O.)—High School—Building Comn. of Town of Cumberland (Manville P. O.), taking bids 2 story and basement, 60 x 120 ft. with 40 x 43 ft. ell, brick and steel, plain foundation, here. $150,000. J. F. O'Malley, 241 Fanning Bl., Pawtucket, archt.

R. I., Providence—School—A. J. Murphy, archt., 146 Westminster St., taking bids 2 story and basement, 70 x 140 ft., rein.-con. and brick, plain foundation, Oxford St., for St. Michael's Roman Catholic Church. $200,000.

N. Y., Attica—High School—Feb. 26, by Bd. Educ., 3 story, 80 x 150 ft., brick and stone, Prospect St. $260,000. Former bids rejected. Miller & McNeil, 80 West Genesee St., Buffalo, archts. Noted Nov. 23.

N. Y., Cortland—High School—Bd. Educ. taking bids and opens same about Feb. 15, brick, steel and stone addition, plain foundation. $400,000. G. W. Conable, 45 West 24th St., New York City, archt. and engr. Noted Jan. 25.

N. Y., Jamestown—High School—Feb. 21 by Bd. Educ., 3 story, 150 x 180 ft., brick, Buffalo St. $350,000. Guilbert & Bettelle, 2 Lombardy St., Newark, N. J., archts. and engrs. Former bids rejected. Noted Nov. 2.

N. Y., Brooklyn — Apartment — Nayet Constr. Co., c/o Gronenberg & Leuchtag, archts. and engrs., 450 4th Ave., New York, 6 story, 100 x 120 ft., brick, steel and stone, plain foundation, 74th St., here. $200,000. Work will be done by separate contracts under supervision of architects.

N. Y., New York—Office—See "Contracts Awarded."

N. Y., Roosevelt—School—Feb. 27, by Bd. Educ., brick, steel and stone, plain foundation. $150,000. Tooker & Marsh, 101 Park Ave., New York City, archts. and engrs. Noted Jan. 18.

N. Y., Whitehall—School—Feb. 26, by Bd. Educ., brick, steel and stone, plain foundation. $150,000. Tooker & Marsh, 101 Park Ave., New York City, archts. and engrs. Noted Jan. 18.

N. J., Jersey City—Hotel—Gershonowitz Bros., c/o Clinton & Russell, archts. and engrs., 100 Maiden Lane, New York City, 7 story, 50 x 125 ft., brick, steel and stone, plain foundation, Sip Ave., here. Work will be done by separate contracts.

Pa., Bridgeport—School—Feb. 5, by H. C. Richards, archt., 618 Chestnut St., Phila., 2 story and basement, 70 x 140 ft. brick, steel and stone, plain foundation, for Bd. Educ. $200,000.

Pa., Lock Haven—Lodge—Feb. 5, by J. W. Dickey, chn. building com. Masonic Temple Assn., 3 story and basement, 60 x 160 ft. brick and steel, Main and Grove Sts. $150,000. Sterns & Woodnutt, 920-923 Stephen Girard Bldg., Phila., archts. Noted Oct. 12.

Pa., Norristown—Thomas, Martin & Kirkpatrick, archts., Otis Bldg., Phila., taking bids 3 story and basement, 72 x 176 ft. building, for Y. M. C. A., c/o H. C. Gresh, Norristown.

Pa., Phila.—Apartment—Kennedy & Johnson, archts., 1324 Walnut St., taking bids 14 story and basement, 150 x 208 ft. with one 44 x 60 ft. and one 52 x 300 ft. wings, Lincoln Dr. and Johnson St., for Lincoln Dr. Apartment Co., c/o L. D. Cahan, 1324 Walnut St. $2,000,000. Noted Jan. 25.

Pa., Phila.—Apartment—Neubauer & Supowitz, archts., 929 Chestnut St., taking bids 3 story and basement, 55 x 119 ft. brick and stone, plain foundation, 42nd and Baltimore Aves., for E. Zinn, 831 Chestnut St. $200,000. Former bids rejected. Noted Nov. 16.

Pa., Phila.—Office—J. Catlin, c/o Maganiner, Eberhard & Harris, archts., 603 Chestnut Sts., taking bids 12 story and basement, 72 x 106 ft. concrete, brick, steel and stone, 13th and Filbert Sts. $500,000.

Pa., Phila.—Schools—Feb. 8, by Director Bd. Educ., 19th and Chestnut Sts., 4 story and basement, 148 x 172 ft. brick, steel and stone, Large and Dyre Sts. $450,000, also 4 story and basement, 148 x 172 ft. brick, steel and stone, plain foundation, Knorr and Cottman Sts., $400,000. Private plans.

Buildings (Continued)

Pa., Phila.—Store and Office—C. P. Berger, archt., 1512 Walnut St., taking bids 4 story and basement, 44 x 230 ft. brick, steel and stone, plain foundation, 1924-26 Chestnut St., for Phila. Art Galleries, 15th and Chestnut Sts. $200,000.

Pa., Trafford—High School—Feb. 19, by Bd. Educ., 2 story, basement and sub-basement, 65 x 92 ft. brick and tile, 5th St. and Fairmont Ave. $150,000. W. H. King, Jr., Ferguson Bldg., Pittsburgh, archt.

W. Va., Charleston—Temple—J. L. Montgomery, associated archt., Coyle-Richardson Bldg., receiving bids 2 story and basement 135 x 200 ft., brick, tile, steel and stone, Quarrie and Morris Sts., for Baptist Temple Congregation. $300,000. L. Flagg, 111 East 40th St., New York City, archt.

W. Va., Williamson—Hotel—Feb. 15, by C. F. Vaughn, Vaughn Hotel, and R. M. Bates, Jr., archt., Mortimer Pl., Huntington, 5 story and basement, 97 x 100 ft., brick and steel. $200,000. Noted Dec. 14.

Tenn., Bristol—School—Taking bids and opens same about March 10, for Mary St. School, 3 story 95 x 230 ft., $250,000. D. R. Beeson, Johnson City, archt.

O., Akron—Office—Feb. 5, by United Cigar Store Co., 44 West 18th St., New York City, 8 story, 50 x 100 ft., brick and steel, concrete pile foundation, Main and Market Sts., here. $800,000. Sommerfeld & Steckler, 31 Union Sq., New York City, archts. and engrs. Noted Dec. 21.

O., Cleveland—Bank and Office—Atlas Savings & Loan Co., c/o J. F. Rybak, pres., 5454 Bway., taking bids and opens same about Feb. 20, 5 story and basement, 37 x 100 ft., brick, steel and concrete, 5644 Bway. $150,000. J. H. Graham & Co., 8201 Cedar Ave., archts. Noted Dec. 21.

O., Cleveland—Office and Commissary—Clark Restaurant Co., c/o H. Y. Clark, pres., 1954 East 6th St., taking bids 2 story and basement, 112 x 120 ft., brick, steel and concrete, East 23rd St. and Payne Ave. $150,000. J. Gray, 1685 High St., Boston, Mass., archt. Noted Dec. 7.

O., Cleveland Heights (Warrensville P. O.)—City Hall—Feb. 14, 2 story and basement, brick, steel and concrete, Mayfield Rd. $175,000. W. R. Powell, Rose Bldg., Cleveland, archt. Noted March 9.

O., Cleveland Heights (Warrensville P. O.)—School—Feb. 21, by Bd. Educ., 1005 Lee Rd., 2 story, 100 x 211 ft., brick, steel and concrete. $250,000. F. C. Warner, 767 Hippodrome Bldg., Cleveland, archt.

O., Columbus — Lodge — Feb. 7, by United Commercial Travelers of America, c/o W. D. Murphy, supreme secy., Park St., 2 story and basement, 112 x 155 ft., brick, steel and concrete, Park St. $200,000. T. D. McLaughlin & Associates, Savings Bldg., Lima, archts.

O., Greenville—High School—Feb. 15, by Bd. Educ., 2 story, brick, steel and concrete. $600,000. W. B. Ittner, Bd. Educ. Bldg., St. Louis, Mo., archt. Noted Dec. 28.

O., Massillon—High School—Feb. 12, by Bd. Educ., 2 story, junior high school. $300,000. Albrecht, Wilhelm & Kelly, 1836 Euclid Ave., Cleveland, archts.

O., Upper Arlington (Columbus P. O.)—School—Feb. 17, by J. E. Barker, clk. Bd. Educ., 3 story, 62 x 124 ft., rein.-con., brick and stone, Arlington Ave. $175,000. Miller & Reeves, 20 South 3rd St., Columbus, archt. H. D. Smith, 50 East Town St., Columbus, consult. archt.

O., Warren—Bank and Office—Feb. 12, by Trumbull Savings & Loan Co., 102 High St., 10 story, 40 x 132 ft., brick, steel and concrete, North Park and High Sts. $400,000. Watson Eng. Co., 4614 Prospect Ave., Cleveland, archts. Noted Dec. 7.

Ind., Ft. Wayne — Temple — C. R. Weatherhogg, archt., Citizens Trust Bldg., taking bids and soon opens same, 10 story, 90 x 130 ft., brick, steel and concrete, for Masonic Temple Building Co., Wayne and Clinton Sts. $1,000,000. C. C. French, Plymouth Bldg., Cleveland, O., engr. Noted Dec. 7.

Mich., Grand Rapids—High School—Feb. 13, by H. H. Turner, archt., 923 Michigan Trust Bldg., 4 story, 109 x 224 ft. rein.-con., brick and stone, plain foundation, Bway., for Bd. Educ. $300,000.

Ill., Chicago—Apartment—Loewenberg & Loewenberg, archts., 111 West Monroe St., receiving bids 3 story and basement, 120 x 132 ft., rein.-con., brick and steel, Ashland Ave. and Juneway Terrace. $175,000. Owner's name withheld.

Ill., Chicago—Hospital and Home—Schmidt, Garden & Martin, archts., 104 South Michigan Ave., receiving bids 2 and 3 story, 175 x 175 ft., rein.-con., brick and steel, Crawford and Keeler Sts., for Salvation Army. $150,000. Noted Feb. 16.

Ill., Evanston—Store and Office—Feb. 10, by Lowe & Bollenbacher, archts., 108 South La Salle St., Chicago, 6 story and basement, 70 x 120 ft., rein.-con., brick and steel, 517 Davis St., for Northwestern University, 522 Davis St., $250,000. J. G. Rogers, 367 Lexington Ave., New York City, associated archt.

Ia., Mason City—Home—Feb. 5, by Independent Order Odd Fellows, W. F. Knight, chn. Home Comn., Des Moines, 3 story and basement, 60 x 160 ft., rein.-con., brick, tile and stone addition, here. $150,000. Proudfoot, Bird & Rawson, 810 Hubbell Bldg., Des Moines, archts. Noted Dec. 7.

Minn., Minneapolis—Junior High School—Feb. 15, by Bd. Educ., 305 City Hall, 3 story and unfinished basement, 45 x 250 x 300 ft., with 1 story, 60 x 80 ft. wing, rein.-con., brick and tile, 26th St. and Emerson Ave. S. $550,000. Div. of Design and Inspection, Bd. Educ., 245 9th Ave., N., archts. Noted Dec. 14.

Mo., St. Louis—Apartment Hotel—A. M. Cornwell, 111 North 7th St., 6 story, 236 x 236 ft., West Pine Blvd. and Euclid Ave. $2,200,000. Work will be done by separate contracts under supervision of P. J. Bradshaw, archt., International Life Bldg.

Calif., Oakland—School—Feb. 13, by Bd. Educ., constructing S. B. Anthony School, 2 story, rein.-con. and hollow tile, Park Hill Blvd. and Hopkins St. First unit $100,000. Total cost $1,000,000. C. W. Dickey, 2149 Bway., archt.

Man., St. Boniface—School—A. Henry, pastor, taking bids building Provencher School, here. $200,000. Private plans.

BIDS RECEIVED

N. Y., Brooklyn—School—C. B. J. Snyder, supt. School Buildings of Bd. Educ., Flatbush Ave. extension and Concord St., opened bids Jan. 29, brick, steel and stone addition to P. S. 6, plain foundation, Warren St. near Smith St., from C. Meads Co., 217 West 14th St., New York City, $184,000; Werner Disken Co., $199,800; Concord Constr. Co., 476 Seneca Ave., $214,900. Noted Jan. 25.

Pa., Brackenridge—High School—School Dists. of Brackenridge and Harrison Twp., c/o T. M. Hathaway, 74 Garfield St., Natrona, opened bids 2 story and basement, 178 x 179 ft., Freeport Rd., general contract from Natl. Concrete Fireproofing Co., Citizens Bldg., Cleveland, O., $168,711, West Bros., 635 Trenton Ave., Wilkinsburg, $176,965. J. G. Fullman Co., East End Trust Bldg., Pittsburgh, $178,966; heating from J. A. Langdon & Son, 2030 5th Ave., Pittsburgh, $26,000. R. T. Withers & Son, New Castle, $28,243. T. W. Forrester, 860 Stanton Ave., New Kensington, $28,327. Noted Nov. 2.

Mich., Holland—High School—Bd. Educ. opened bids 2 story and basement, concrete, brick and steel, plain foundation, from W. M. Allen, 929 Jefferson Bldg., Peoria, Ill., $193,749; Van Dyke & Oosting, Holland, $195,435; F. Dyke, Holland, $200,800.

Mich., Kalamazoo—High School—R. A. Leroy, archt., Pratt Bldg., opened bids 4 story, 114 x 173 x 173 ft. rein.-con. and brick, plain foundation, from DeRight Bros., Stockbridge Ave., $297,000; H. I. Vanderhorst, Kalamazoo, $319,000; A. J. DeKoning, Vine St., $359,000. Noted Jan. 18.

Ia., Des Moines—Office and Store—Silverberg & Lince, S and L Bldg., superstructure 6 story, 67 x 130 ft., rein.-con., brick, tile and stone, 5th and Walnut Sts., from Sugarman Constr. Co., 8th and Tuttle Sts., $176,200; A. H. Neumann Co., 519 Hubbell Bldg., $176,439; J. A. Benson Constr. Co., Valley Natl. Bank Bldg., $175,000. Noted Jan. 18.

Wash., Everett—Hospital—Bebb & Gould, archts., Hoge Bldg., Seattle, opened bids Jan. 20 3 story and basement, 42 x 208 ft., brick and stone, 13th and Colby Sts., here, for Everett Hospital Assn., from J. Arrington, Seattle (street address not available) $215,291; W. T. Butler, Central Bldg., Seattle, $242,000; Arveson & Lidral, Downs Bldg., Seattle, $251,225. Archts. est. $250,000.

CONTRACTS AWARDED

Mass., Brighton (Boston P. O.)—Apartment—Summit Realty Trust, 40 Court St., Boston, will build six 3 story and basement, 60 x 80 ft., brick, plain foundations, Woodstock Ave. and Warren St., here, by day labor. $350,000. Silverman, Brown & Heenan, 51 Cornhill, Boston, archts. Noted Jan. 18.

Mass., Brighton (Boston P. O.)—Sales—Commonwealth Investment Co., 40 Court St., Boston, will build 1 story and basement, 100 x 260 ft., brick and stone, plain foundation, Commonwealth Ave., here, by day labor. $275,000. Noted Jan. 18.

Mass., Brookline (Boston P. O.)—Apartment—N. Kriuitsky, 28 School St., Boston, will build 5 story, 90 x 150 ft., brick and stone, plain foundation, Commonwealth Ave., here, by day labor. $275,000. S. S. Eisenberg, 46 Carnhill, Boston, archt.

N. Y., New York—Apartment—Brandt Building Corp., c/o Springsteen & Goldhammer, archts. and engrs., 32 Union Sq., 5 story, 50 x 100 ft., brick, steel and stone, plain foundation, Edgecomb Ave., by day labor. $250,000. Noted Jan. 11.

N. Y., New York—Apartments—Brodsky & Klosk, c/o Springsteen & Goldhammer, archts. and engrs., 32 Union Sq., two 5 story, brick, steel and stone, plain foundations, Grand Concourse and 169th St., by day labor. $175,000 each.

N. Y., New York—Apartment—W. Phelan, c/o Moore & Landseidel, archts. and engrs., 148th St. and 3rd Ave., 5 story, brick, steel and stone, plain foundation, Kingsbridge Rd., by day labor. $250,000.

N. Y., New York—Office—F. T. Ley & Co., 19 West 44th St., 23 story, brick, steel and stone, plain foundation, Liberty St. and Bway. $6,000,000. Owner is builder, will award separate contracts. Starrett & Van Vleck, 8 West 40th St., archts. and engrs.

N. J., Avon-by-the-Sea—Apartment—W. H. Post, c/o H. R. Kenyon, archt. and engr., 103 Park Ave., New York City, brick, steel

BRIDGES—MISSOURI

Bids were opened by State Highway Dept., Jefferson City, Dec. 20, for constructing bridges over Missouri River on state road from Carrollton to Lexington, Federal Aid Project No. 220, Carroll and Lafayette Counties, (1) substructure, (A) Missouri Valley Bridge & Iron Co., 4th and Walnut Sts., Leavenworth, Kan., (awarded contract); (B) Kansas City Bridge Co., 510 Orear-Leslie Bldg., Kansas City; (C) Foundation Co., 209 South LaSalle St., Chicago; (D) Union Bridge & Constr. Co., Kansas City; (2) erecting superstructure, (A) Wisconsin Bridge & Iron Co., North Milwaukee, Wis., (awarded contract); (B) Mt. Vernon Bridge Co., Mt. Vernon, O.; (C) Kansas City Bridge Co.; (3) furnishing material for superstructure, (A) Wisconsin Bridge & Iron Co., (awarded contract); (B) Mt. Vernon Bridge Co.; (C) Kansas City Bridge Co.; (D) McClintic-Marshall Co., Chicago. The unit bids were as follows:

	A	B	C	D
4,585 cu.yd. concrete, pier bases	$36.00	$46.00	$43.00	$47.00
162 cu.yd. concrete, pier bases	39.00	31.70	77.00	30.00
2,255 cu.yd. concrete, pier shafts	25.00	26.20	26.30	27.50
205 cu.yd. concrete in bents	28.00	28.00	27.00	27.50
120 cu.yd. concrete in abutments	28.00	33.00	28.00	32.00
47,000 lb. reinforcing steel	.565	.067	.08	.064
5,400 cu.yd. embankment	.60	.75	1.50	.80
2,100 tons riprap	4.50	6.60	8.00	7.00
340 cu.yd. stone revetment	2.00	4.70	4.00	4.50
Extended totals	$252,819	$307,483	$302,851	$315,423
4,180,000 lb. fabricated structural steel	$0.0165	$0.0234	$0.03	.....
3,940 lin.ft. structural steel railing	.35	.41	.80	.....
3,940 lin.ft. gas pipe railing (alternate)	.33	.70	.80	.....
850 cu.yd. concrete slab	19.75	33.00	31.20	.....
120,000 lb. reinforcing steel	.011	.05	.0085	.....
Extended totals	$88,378	$133,477	$162,692	.....
4,180,000 lb. fabricated structural steel	$0.0435	$0.044	$0.0462	$0.0550
3,940 lin.ft. structural steel railing	5.65	4.00	3.80	4.65
3,940 lin.ft. gas pipe railing (alternate)	2.25	2.70	4.40	2.60
Extended totals	$190,695	$194,558	$207,252	$228,906

Buildings (Continued)

and stone, plain foundation, Lincoln Ave., here, to W. H. Pawson, 103 Park Ave., New York City. Archts. est. $900,000.

N. J., Newark—Exchange—New York Telephone Co., 15 Dey St., New York City, altering present building and constructing 3 story, 50 x 75 x 150 ft., brick, steel and stone addition, plain foundation, Bloomfield Ave. and Crittenden St., here, to W. A. L'Hommedieu & Co., 1 Madison Ave., New York City. Archts. est. $250,000.

N. J., Newark—School—Bd. Educ., City Hall, Broad St., Milford School, brick, steel and stone, plain foundation, 18th Ave. and Boyd St., to Morgan Constr. Co., 207 Market St., $267,762. Archts. est. $255,000.

N. J., Ocean City—Hotel—Ocean City Hotel Co., 8 story and basement, 34 x 150 ft., 112th St. and boardwalk, to D. A. McClellan, Drexel Bldg., Phila., $850,000.

Pa., Hazleton—Bank and Office—Markle Banking & Trust Co., 6 story, brick, steel and stone, plain foundation, Broad and Wyoming Sts., to F. T. Leey & Co., 19 West 44th St., New York City. Archts. est. $250,000.

Pa., Phila.—Community—Federation of Jewish Charities, 1512 Walnut St., 4 story and basement, 45 x 128 ft., 9th and Pine Sts., to W. Linker & Co., 735 Cherry St., $150,000. Noted Jan. 4.

Pa., Phila—Loft—Allied Realty Co., c/o Webber & Wurster, archts., Morris Bldg., 8 story and basement, 80 x 95 ft. rein.-con. and brick, plain foundation, 6th and Cuthbert Sts., to Turner Constr. Co., 1716 Sansom St., $300,000.

Tenn., Memphis—Church—First Baptist Church, Linden Ave., 1½ story addition to church and Sunday School, cream brick and stone, to W. C. Owens, 1181 Wellington St. Archts. est. $150,000.

Ky., Louisville—Hospital—Kentucky Baptist Hospital, 824 Barrett Ave., 6 story, concrete and brick, Barrett Ave., to Rommel & Co., 956 Logan St., $250,000. Noted Nov. 9.

O., Lakewood (Cleveland P. O.)—Commercial and Market—Union Properties Co., c/o W. Rohn, secy., Cleveland Discount Bldg., Cleveland, general contract 3 story, 178 x 281 ft., brick, steel and concrete, 11826 Detroit Ave., here, to Alexander Bros., Williamson Bldg., Cleveland. Archts. est. $350,000.

O., Wooster—High School—Bd. Educ., 3 story and basement, 95 x 188 ft., 62 x 81 ft. and 24 x 80 ft., brick and concrete, to J. I. Barnes, South Bend, Ind. (street address not available), $327,215. Noted Jan. 25.

Ill., Chicago—Hotel—Buena Park Hotel Corp., c/o A. S. Hecht, archt., 155 North Clark St., 7 story, 53 x 105 ft., rein.-con., brick and steel, Buena Park and Hazel St., to G. H. J. Haas, 130 North Wells St. Archts. est. $400,000. Noted Dec. 21.

Wis., Kohler—Clubhouse—Kohler Co. (plain foundation and 1st floor) of 3 story and basement, 34 x 239 ft., brick, tile and concrete addition, to F. Radloff Co., Plymouth. Bids soon on balance of superstructure. Total $150,000.

Wis., La Crosse—Nelson Garment Co., 111 South 2nd St., superstructure 1 and 2 story, 90 x 160 ft., brick and timber factory, to J. Lee, 1903 Liberty St. and A. Keim, 2521 Fremont St. Archt. est. $55,000.

Wis., Milwaukee—Store—Gimbel Bros., 3 Grand Ave., 8 story and basement (3 units) 77 x 120 ft., 50 x 177 ft. and 42 x 175 ft., brick, concrete and steel, plain foundations, Grand Ave., to W. W. Oeflein, 86 Kichigan St. $800,000-$1,000,000. Noted Dec. 14.

Minn., Chisholm—Junior High School—Bd. Educ., 3 story, 249 x 422 ft., rein.-con. and brick, general contract, to Madsen Constr. Co., Builders Exch., Minneapolis, $442,000. Archts. est. $500,000. Noted Jan. 18.

Mo., Kansas City—Club—Marquette Council 1698, Knights of Columbus, general contract 5 story and basement, 131 x 138 ft., rein.-con., brick, steel and terra cotta, Forest Ave. and Armour Blvd., to Edelman-Flushing Constr. Co., 320 New York Life Bldg., $400,000. Noted Dec. 14.

Mo., Kansas City—Temple—Mt. Moriah Cemetery Assn., 100 Interstate Bldg., 54 x 104 ft. temple with 106 x 154 ft. court, 105th and Holmes St., to L. M. Rowland, 623 Bryant Bldg., $150,000. Noted Nov. 30.

Mo., St. Louis—High School—St. Louis University, Grand and West Pine Sts., general contract 3 story, 250 x 460 ft., rein.-con. and brick, plain foundation, Oakland Ave., to Caldwell Constr. Co., Ry. Exch. Bldg.; iron work, to Foerster-Kaysing, 2710 North 25th St.; excavating, etc., to J. A. Bellinger, 7713 Virginia St. Archts. est. $500,000.

Mo., St. Louis—Hotel Apartment—A. A. Wagner, 5628 Delmar Blvd., 7 story, 48 x 190 ft., rein.-con. and brick, plain foundation, Clara Ave., to F. L. Cornwell, La Salle Bldg. Archts. est. $350,000.

Mo., Webster Groves—Convent—Sisters of Mercy, general contract two 3 story, 50 x 150 ft. additions, rein.-con. and brick, plain foundations, Lockwood Ave., to J. Grewe Constr. Co., Century Bldg., St. Louis. Archts. est. $150,000.

Tex., Houston—Office—Houston Cotton Exch., (street address not available), 16 story and basement, brick and steel, cassion foundation, Prairie and Caroline Sts. to D. Hall Constr. Co., 613 Carter Bldg., $1,500,000. Archts. est. $1,000,000. Noted Dec. 21.

Calif., Fresno—Store and Office—Blacks Package Co., 1025 Van Ness St., 2 story, 100 x 150 ft., Inyo and Van Ness Sts., to R. F. Felchlin Co., Bank of Italy Bldg., $150,000.

Cal., Long Beach—Hotel and Store—El Boliver Holding Co., c/o Milton Realty Co., 12 and 14 story, rein.-con., to Heitmann Constr. Co., Merritt Bldg., Los Angeles, $1,250,000.

Calif., Los Angeles—Hotel—Davenport Corp., c/o H. H. Whiteley, archt., 520 South Western Ave., 7 story, brick and steel, also ice making plant and garage, Hollywood Blvd. near Carols St., to Heitman Constr. Co., Merritt Bldg., $2,000,000.

Calif., Tanforan—Clubhouse—G. A. Applegarth, archt., Claus Spreckels Bldg., San Francisco, 2 story, frame and plaster, to Grace & Bernieri, 703 Market St., San Francisco, $200,000, for Pacific Coast Jockey Club, c/o H. Spreckels, secy., 1st Natl. Bank Bldg., San Francisco. Noted Jan. 4.

B. C., Vancouver—Store—Woodwards Dept. Stores, Ltd., Hastings and Abbott Sts., 6 story, 86 x 86 ft. rein.-con., brick, steel and stone addition, Hastings and Abbott Sts., to Dominion Constr. Co., Ltd., 509 Richards St., $115,000. Noted Jan. 4.

Federal Government Work

PROPOSED WORK

N. Y., New York—Dredging—U. S. Engineer, 1st Dist., plans dredging at Flushing Bay.

Tenn., Memphis—Tank and Tower—Mississippi River Comn., 1st and 2nd Dists., Custom House, plans to purchase water tank and tower for U. S. Dredge Depot.

La., New Orleans—Dredging—U. S. Engineer, 329 Custom House, plans dredging Intercostal Waterway, near Houma.

Idaho—Roads—U. S. Forestry Dept., Bureau Pub. Rds., Missoula, Mont., plans to build Copeland-Porthill, Grangeville-Elk City, Wallace-Avery, Bonners Ferry-Eastport, Harvard-Enida and Bonners Ferry-Porthill Rds., total length 15 mi. $404,000. C. H. Purcell, dist. engr.

Calif., Mare Island—Riprapping Dike—Spec. 4775—Bureau Yards & Docks, Navy Dept., Wash., D. C., soon receives bids placing about 50,000 ton hard stone riprap along longitudinal dike at Navy Yards, here. Noted Jan. 11.

BIDS DESIRED

Va., Norfolk—Dredging—Spec. 4771—Feb. 7 by Bureau Yards & Docks, Navy Dept., Wash., D. C., dredging approximately 14,000 cu.yd. at Navy Yard, here. Noted Dec. 21.

Miss., Gulfport—Hospital—Spec. 4774—Feb. 26, by Bureau Yards & Docks, Navy Dept., Wash., D. C., for U. S. Veterans' Hospital, here. Noted Jan. 11.

Miss., Gulfport—Refrigerating Equipment—Spec. 4780—Feb. 21, by Bureau Yards & Docks, Navy Dept., Wash., D. C., refrigerating and ice-making equipment for U. S. Veterans' Hospital, here. Noted Jan. 18.

California—Roads—Feb. 14, by C. H. Sweetser, dist. engr., U. S. Bureau Pub. Rds., Dept. Agriculture, 881 Mills Bldg., San Francisco, 4.1 mi. road. Salmon River Project, Siskiyou Co., 103,581 cu.yd. excav., 40 cu.yd. Class A concrete, 1,088 ft. corrugated metal pipe, 320 cu.yd. cement rubble masonry, etc. Noted Dec. 21.

Calif., Eureka—Stone—March 2, at office U. S. Engineer, Custom House, furnishing and delivering approximately 80,000 ton stone at entrance to Humboldt Bay. Noted Dec. 7.

Calif., Mare Island—Extension to Shell House, etc.—Spec. 4742—Feb. 28, by Bureau Yards & Docks, Navy Dept., Wash., D. C., 1 story extension to shell house and magazine buildings, steel, hollow tile, and stucco, concrete foundations on timber piles, also lightning protection system, etc., here. Noted Oct. 12.

BIDS RECEIVED

D. C., Wash.—Extension—Spec. 4773—Bureau Yards & Docks, Navy Dept., extension to refrigeration and cold storage plant, at Navy Yard, here, from Frick Co., Waynesboro, Pa., $17,950; Clothel Refrigerating Co., 61 Bway., New York City, $18,826; Chatard & Norris, 304 Continental Bldg., Baltimore, Md., $22,688. Noted Jan. 11.

H. T., Pearl Harbor—Refrigerating and Ice-Making Plant—Spec. 4735—Bureau of Yards & Docks, Navy Dept., Wash., D. C., refrigerating and ice-making plant, here, from Vilter Mfg. Co., 935 Clinton St., Milwaukee, Wis., $17,670; W. Olund, 820 Puke St., Honolulu, $18,796; Shipley Constr. Co., 42nd St. and End Ave., Brooklyn, N. Y., $35,125. Noted Dec. 14.

CONTRACTS AWARDED

N. Y., Tupper Lake—Plumbing—Spec. 4718c—Bureau Yards & Docks, Navy Dept., Wash., D. C., plumbing at U. S. Veterans' Hospital, here, to W. G. Cornell Co., 17 Patterson St., N.E., Wash., D. C., Items 9, 10a, 10b, 10c, 10d, 10e and 10f, $105,720. Noted Dec. 7.

Pa., Phila.—Scows—U. S. Engineer, 815 Witherspoon Bldg., 4 steel dump scows to Newport News Shipbuilding Co., Newport News, Va., $190,000. Noted Dec. 28.

Va., Norfolk—Dredging—U. S. Engineer, Custom House, dredging in Appomattox River, to W. H. French Dredging and Wrecking Co., Citizen's Bank Bldg., Norfolk, $21,902. Noted Nov. 2.

Wash., Smith Island—Sheds, Filters, etc.—Spec. 4752—Bureau Yards & Docks, Navy Dept., Wash., D. C., rain sheds, filters, cisterns, fuel sheds and walk, at Naval Radio Compass Station, here, and at New Dungeness, to B. Ward, Peoples Bank Bldg., Seattle, $6,296. Noted Jan. 25.

Wash., Tacoma—Hospital—Director U. S. Veterans' Bureau, Wash., D. C., Neuro-Psychiatric Hospital at American Lake, here, to Hurley-Mason Co., Gasco Bldg., Portland, Ore., $1,397,000 (260 days). Noted Jan. 25.

Calif., San Diego—Garage, Fence, etc.—Spec. 4741—Bureau Yards & Docks, Navy Dept., Wash., D. C., garage, fence and pavement at Naval Base Supply Depot, here, to Cornell & Rauch, National City, $13,925. Noted Jan. 25.

Miscellaneous

PROPOSED WORK

Light and Power Lines—New York—Depew Light, Power & Conduit Co., Perry, plans extending its light and power lines to towns of Cowlesville, Bennington, Strykersville, Java, Curriers, etc. $25,000.

Steam Roller—Leroy, N. Y.—Plans to purchase new 10 ton steam roller with scarifying attachment. $4,000. A. Palmer, village supt.

Underground Cables—Kingston (Wilkes-Barre P. O.), Pa.—See "Industrial Works."

Seawall and Fill—West Palm Beach, Fla.—Plans seawall and fill along Lake from 10th to Hudson Sts. $40,000. K. Riddle, city mgr.

Terminals, etc.—West Palm Beach, Fla. City to vote on $250,000 bonds building waterfront terminals, docks, belt railway line and buying property. K. Riddle, city mgr.

Car Barn—Louisville, Ky.—Louisville Ry. Co., Traction Bldg., having plans prepared by D. X. Murphy & Bro., archts., Louisville Trust Bldg., for car barn, concrete, to replace one recently destroyed by fire, 4th and Avery Sts. $200,000.

Pier—Cleveland, O.—See "Industrial Works."

Road Machinery—Prairie Du Chien, Wis.—Crawford Co. appropriated $2,000 for road machinery. J. N. Campbell, comr.

Rock Crusher and Grader—Minneapolis, Minn.—Hennepin Co., rejected bids opened Jan. 8, rock crusher, and 1 grader with scarifier attached. Noted Dec. 28.

Dump Truck, etc.—Wichita, Kan.—M. R. Ammerman, 248 North Market St., plans to purchase new heavy duty 3-3½ ton dump truck, also concrete paving mixer.

Concrete Mixer—Kansas City Mo.—P. H. Morley, 9th and Main Sts., plans to purchase new concrete mixer.

Drilling—Smackover, Ark.—Vitek Oil & Refining Co., c/o P. Vitek, trustee, El Do-

Miscellaneous (Continued)

rado, plans extensive drilling operations for oil and gas, here. $75,000.

Gas Plant Improvements, etc.—Oregon—Mountain State Power Co., Eugene, plans to improve gas plants at Eugene and Marshfield, water system at Albany, and electrical equipment for power line from Prospect to Springfield, etc. $200,000. F. Brown, mgr.

Structural Steel—San Francisco, Calif.—City and San Francisco Co. soon take bids furnishing, fabricating and erecting 350 ton structural steel for Mocassin Creek Power Plant. M. M. O'Shaughnessy, city engr.

Wharf—Pembroke, Ont.—Dominion Government, Dept. Pub. Wks., Ottawa, having plans prepared and soon takes bids concrete and timber wharf, here. $125,000. A. St. Laurent, c/o Dept. Pub. Wks., engr.

Subway — Toronto, Ont. — Dept. Pub. Wks. had estimates prepared for concrete and steel subway under Grand Trunk Ry. tracks north from Gerrard St. between Greenwood and Coxwell Aves. Three locations under consideration, Morley Ave. $39,000, Hiawatha Rd. $36,000, and Ashdale Ave. $70,000. Morley Ave. location favored. R. C. Harris, city engr.

Grain Elevator—Vancouver, B. C.—Dominion Government and Vancouver Harbor Comrs., 712 Pender St. W., having plans prepared rein.-con. addition to elevator, 1,000,000 to 1,250,000 bu. capacity. $1,000,000 to $1,500,000.

Power Line—Vancouver, B. C.—British Columbia Electric Ry. Co., 325 Carroll St., takes bids in about 2 months, high voltage transmission line from Buntzen Lake power house via Port Moody to Vancouver. $47,000. J. I. Newell, c/o owner, engr.

BIDS DESIRED

Park—Astoria, N. Y.—Feb. 8, by Park Bd., at office of Dept. Parks, Municipal Bldg., New York City, improving Astoria Park, here. F. D. Gallatin, pres.

Plumbing and Drainage—Brooklyn, N. Y.—Feb. 5, by J. E. Douglass, acting supt. School Buildings of Bd. Educ., Flatbush Ave. extension and Concord St., plumbing and drainage work in Thomas Jefferson High School, northerly side of Dumont Ave. from Pennsylvania to Sheffield Aves.

Portland Cement, etc.—New York, N. Y.—Feb. 7, by J. Miller, pres. Manhattan Boro. Municipal Bldg., furnishing and delivering 20,000 bags Portland cement, 3,000 cu.yd. paving sand, 50,000 granite paving blocks, 600 ton asphaltic paving cement, 3,000 cu.yd. coarse aggregate for concrete, 3,000 ton inorganic dust and 2,000 cu.yd. paving grits.

Underground Fire Alarm System—New York, N. Y.—Feb. 5, by T. J. Drennan, fire comr., Municipal Bldg., constructing portion of underground fire alarm system.

Steam or Motor Roller—Flemington, N. J.—Feb. 8, by Bd. Freeholders, Hunterdon Co., one 10 ton steam or motor roller with scarifier attached. F. J. Dineen, clk.; adv. this issue.

Power and Lighting Systems, etc. — Phila., Pa.—Feb. 9, by Director of Dept. Wharves and Ferries, Chestnut St. pier, wiring for power and lighting systems, 5 transformers, oil switches, panels, fixtures, etc., at Pier 4, Wharves North, $25,000, heating and hot water systems in Pier 3, North Delaware River, $35,000, furnishing bolts, bar steel, castings, cement, 21,000 ft. lumber, $10,000. G. F. Sproul, Chestnut St. pier, engr.

Supplies—Phila., Pa.—Park Comrs., 127 City Hall, taking bids iron for frames, grates, etc.; plumbing supplies, incl. pipe, solder, lead pipe, pig lead, w.i. pipe, ¾ to 2½ in. galvanized pipe; paving granite block, vitr. block, curbing, asphalt, 23,000 brick, cement, lime, sand, gravel, 110,000 ft. various kind of lumber, etc. A. Corson, City Hall, engr.

Supplies—Phila., Pa.—Feb. 6, by Park Comrs., 127 City Hall, furnishing tools and supplies, axes, bolts, files, pliers, wrenches, etc. $25,000. A. Corson, City Hall, engr.

Terra Cotta Drains, etc. — Charleston, S. C.—Feb. 20, by Street Dept., 35,000 ft. terra cotta and 3,000 ft. rein.-con. drains and appurtenances. J. H. Dingle, city engr.; adv. this issue.

Coffee Conveyors—New Orleans, La.—Feb. 8, by Bd. Port Comrs., New Court Bldg., four coffee conveyors, for use at Poydras St. shed.

Road Oil—Urbana, Ill.—Feb. 15, by R. F. Fisher, engr., Court House, furnishing and spreading 2,500,000 gal. E3 road oil on township roads in Champaign Co.

Pipe, Piling, etc.—Cresco, Ia.—Feb. 8, by Auditor Howard Co., 2,620 ft. culvert pipe, 1 car piling and 6 cars lumber. L. Brown, co. engr.

Lumber, etc.—Burlington, Ia.—Feb. 6, by Auditor Des Moines Co., furnishing 2 cars lumber, 2,300 ft. corrugated culvert metal and 40,000 lb. reinforcing steel. C. E. Waterhouse, co. engr.

Bridge Lumber, etc.—Eldora, Ia.—Feb. 6, by Auditor Hardin Co., 6 cars bridge lumber and 2 cars piling. J. R. Maher, co. engr.

Lumber and Steel—Fairfield, Ia.—Feb. 5, by Auditor Jefferson Co., furnishing 116,179 ft. fir lumber and aproximately 40,000 lb. reinforcing steel. M. H. Bryant, co. engr.

Lumber, Piling, etc.—Garner, Ia.—Feb. 9, by Auditor Hancock Co., 3 cars bridge lumber, 3 cars piling and 4,700 ft. corrugated culvert metal. C. F. Merten, co. engr.

Bridge Lumber—New Hampton, Ia.—Feb. 13, by Auditor Chickasaw Co., 150,000 ft. fir lumber and 4 cars cypress piling. W. R. Garland, co. engr.

Lumber, Steel, etc.—Newton, Ia.—Feb. 6, by Auditor Jasper Co., furnishing 225,000 ft. fir lumber, 400,000 lb. reinforcing steel, 7,500 bbl. cement and 4 cars red cedar piling. R. McMurray, Newton, co. engr.

Lumber, etc.—Sigourney, Ia.—Feb. 9, by Auditor Keokuk Co., 166,790 ft. lumber, 2,294 ft. piling and 35 steel caps. B. J. Conlon, co. engr.

Lumber and Steel—West Union, Ia.—Feb. 7, by Auditor Fayette Co., 11 cars lumber and 90,000 lb. reinforcing steel. A. D. Finch, co. engr.

Road Grader—Biwabik, Minn.—Feb. 14, by Biwabik Twp., one 12 ft. blade road grader, quick lift type.

Bridge Lumber—Minneapolis, Minn.—Feb. 5, by A. P. Erickson, aud. Hennepin Co., 420 pieces bridge lumber, 3 x 12 ft., total 30,240 ft.; also 10,000 sq.ft. oak flooring. J. W. Shaffer, co. surveyor.

Truck Tractors—Minneapolis, Minn.—Feb. 6, by F. S. Gram, city purch. agt., two 5 ton capacity, and two 3½ ton capacity truck tractors, for Garbage Dept. N. W. Elsberg, city engr.

Caterpillar Tractor, Auto Truck, etc.—Rochester, Minn.—Feb. 6, by A. L. Glabe, aud. Olmstead Co., 1 caterpillar tractor 40 hp. drawbar capacity; 1 auto truck with pneumatic tires and dump body; one 12 in. blade grader with engine hitch.

Tractor—Onida, S. D.—Feb. 6, by C. L. Glessner, aud. Sully Co., one Aultman & Taylor 30-60 tractor. Old 30-60 tractor must be taken as part payment.

Lumber—Minot, N. D.—Feb. 7, by R. W. Kennard, aud. Ward Co., 2 carloads bridge lumber and corrugated metal culverts.

Graders—Clarksville, Tex.—W. McMaster, purch. agt. Red River Co., taking bids one 7 ft. and one 8 ft. grader with or without engine hitch.

Fire Fighting Equipment, etc.—Houston, Tex.—City Comn., taking bids fire fighting equipment, incl. valves, hydrants, etc., for Turning Basin on Ship Channel. $4,500. J. C. McVea, city engr.

Motor Street Flusher—San Francisco, Calif.—Feb. 5, by J. S. Dunnigan, clk. Bd. Supervs., furnishing and delivering 1 motor street flusher, for city and San Francisco Co. M. M. O'Shaughnessy, city engr.

Steel Dump Hoist—San Jose, Calif.—Feb. 19, by H. F. Pfister, clk. Bd. Supervs. Santa Clara Co., furnishing and delivering 1 or more 4 yd. steel dump Hell Hydro-Hoists No. 5, direct acting.

Wharf—Grand River, Que.—Feb. 22, by R. C. Desrochers, secy. Dept. Pub. Wks., Ottawa, Ont., extending wharf here. $30,000. A. St. Laurent, c/o Dept. Pub. Wks., Ottawa, engr.

Steel Rails—Toronto, Ont.—Natl. Fireproofing Co. of Canada, Dominion Bank Bldg., taking bids several ton 20 lb. steel rails.

BIDS RECEIVED

Plumbing and Drainage Work—Brooklyn, N. Y.—C. B. J. Snyder, supt. School Building of Bd. Educ., Flatbush Ave. extension and Concord St., opened bids Jan. 29, plumbing and drainage work in P. S. 192, from W. J. Endres, Grand Central Terminal, New York, $38,383; J. E. Kahn, 224 West 20th St., New York, $39,200; Wells & Newton, Ave. B and 17th St., New York, $39,395.

Bulkhead Wall—New York, N. Y.—Comr. Docks & Ferries, Pier A, North River, opened bids Jan. 22, concrete bulkhead wall along Harlem River driveway between 165th and 193rd Sts., from Phoenix Constr. Co., 41 Park Row, $179,987; Tre[illegible] Contg. Co., 128 East 59th St., $186,986; G[illegible] W. Rodgers, $193,973. Noted Jan. 18.

Motor Trucks—New York, N. Y.—J. Miller, pres. Manhattan Bo[illegible] Municipal Bldg., opened bids Jan. 26, furnishing and delivering six 5 ton motor trucks from White Co., Thompson Ave., Long Island City, $27,250, International Motor Co., 252 West 64th St., $34,735; three 2 to 3 ton motor trucks, from Herrman Motors, $8,422, Brockway Motor Truck Co., 2[illegible] West 61st St., $8,780.

Motor Trucks—Long Island City, N. Y.—M. E. Connolly, pres. Queens Boro. Queens Subway Bldg., opened bids Jan. 22, furnishing and delivering twenty-one 3 to 3½ ton motor trucks, from White Co., Thompson Ave., $95,865; Pierce Arrow Trucking Co., 336 St. Marks Ave., Brooklyn, $[illegible],511; Four Wheel Drive Auto Co., 50 West 145th St., New York City, $98,997. Noted Jan. 18.

Plumbing and Drainage Work—New York, N. Y.—C. B. J. Snyder, supt. School Building of Bd. Educ., Flatbush Ave. extension and Concord St., Brooklyn, opened bids Jan. 29, plumbing and drainage work in (1) P. S. 65 (2) P. S 69, Bronx Boro, from W. J. Endres, Grand Central Terminal, (1) $35,421 (2) $18,118; J. E. Kahn, 224 West 20th St., (1) $38,261; J. J. Kenney Co., 220 West 20th St., (1) $39,900; N. P. Lorenzo, 430 Pearl St., (2) $18,640; Nally Plumbing & Contg. Co., Inc., 172 West 98th St., (2) $18,481.

Timber Jetties, etc.—Rockaway Beach (Far Rockaway P. O.), N. Y.—Dept. Parks, Municipal Bldg., New York City, opened bids Jan. 25, timber jetties and bulkheads on ocean side of Jacob Riis Park, here, from S. Casalino, Inc., $60,944; A. M. Hazell, Inc., 26 Cortlandt St., New York, $69,547; Phoenix Constr. Co., 41 Park Row, New York, $79,897. Noted Jan. 18.

CONTRACTS AWARDED

Foundation—Cambridge, Mass.—Ginn & Co., 15 Ashburton Pl., Boston, foundation for 5 story and basement, 55 x 325 ft. printing plant addition, rein.-con. and brick, 1st St., here, to Scully Co., 118 1st St.

Heating and Ventilating Apparatus, etc. —New York, N. Y.—J. E. Douglass, acting pres. School Buildings of Bd. Educ., Flatbush Ave. extension and Concord St., Brooklyn, heating, ventilating, and temperature regulating apparatus, in P. S. 69, P. S. 80, East 120th St. and P. S. 139, West 140th St., to W. J. Olvaney, 100 Charles St., $37,806, $55,358 and $64,236 respectively. Noted Jan. 18.

Tar Patching Material, etc. — Trenton, N. J.—Mercer Co., Court House: 40,000 gal. tar patching material, Grade K.P., to T. Tobish, Amer. Mechanic Bldg., $7,600; 20,000 gal. asphalt "cut back" Grade H.K., to Warner-Quinlan Co., 79 Wall St., New York City, $3,246. Noted Jan. 11.

Pier, etc.—Phila., Pa.—Phila. & Reading Terminal, 900 ft. pier, installing 120 car dumping machines, power plant, thawing house, to McMyler-Interstate Co., Stop 27, A B and C Electric Ry., Bedford, O. $1,500,000.

Heating Work—Wooster, O.—Bd. Educ. heating work in 2 story high school, from Thatcher Heating Co., 46 South Bway., Akron, $61,500.

Foundation — Kohler, Wis.—See "Buildings" under Clubhouse.

Roofing Gravel and Refined Tar, etc.—Clayton, Mo.—W. Elbring, engr. St. Louis Co., Court House, furnishing 1,713 ton, 3,109 ton and 1,217 ton roofing gravel, to St. Louis Material & Supply Co., 314 North 4th St., St. Louis, $1.65, $1.78 and $1.80 respectively; 337,567 gal. refined tar, to Barrett Co., Laclede Gas Light Bldg., St. Louis, $11.24; 2,457 squares macadam, to H. E. Heintz, G. H. Knoche & Co., E. Steffen, 4760 Seibert Ave., Maplewood, J. F. Rothwell, 731 North Euclid St., St. Louis, Bambrick Bros. Constr. Co., 5229 St. Louis Ave., St. Louis, and Big Bend Quarry Co., Lulu Ave. and Wall Rd., Webster, prices range from $7.40 to $10.50; 1,440 squares gravel, to W. W. Sutton, F. A. Wallash, E. Wolff, H. Studer, W. H. Nolan, W. O. Bopp, Ballwin, P. Meyer, Webster, E. Kassebaum, Clayton, F. C. Poertner, Allenton, W. Krueger, Allenton, A. Kiefer, Kirkwood, J. E. Devine, Valley Park, J. G. Lehman, Jr., Maplewood, and O. Bauer, Eatherton, prices range from $2 to $8.20; 110 squares creek gravel, to G. Corless and P. Meier, prices range from $6.35 to $6.75; 141 squares ¾ macadam, to E. Steffen, 4760 Seibert Ave., Maplewood, $9; 242 squares bank gravel, to A. Schaedler and A. Jaeger, Webster, prices range from $2.67 to $5.[illegible] Noted Dec. 21.

Construction News

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Feb 10	Buffalo, N. Y.	Feb. 1
	Adv. Feb. 1 and 8.	
Feb. 12	Willoughby, O.	Feb. 1
Feb. 12	Springfield, Mass.	Feb. 1
	Adv. Feb. 1 and 8.	
Feb. 12	Milwaukee, Wis.	Feb. 1
Feb. 12	Des Moines, Ia.	Feb. 8
Feb. 13	St. Henry, O.	Feb. 1
Feb. 13	De Beque, Colo.	Feb. 1
Feb. 13	St. George, N. Y.	Feb. 8
Feb. 14	Wellsville, O.	Jan. 25
	Adv. Jan. 25 to Feb. 8.	
Feb. 14	Vorheesville, N. Y.	Feb. 1
	Adv. Feb. 1 and 8.	
Feb. 14	Nokomis, Ill.	Feb. 8
Feb. 14	Wash., D. C.	Feb. 8
	Adv. Feb. 8.	
Feb. 14	Clawson, Mich.	Feb. 8
Feb. 14	Republic, Kan.	Feb. 8
Feb. 15	Appleton, Wis.	Feb. 8
Feb. 15	El Monte, Calif.	Feb. 8
Feb. 15	Cheney, Wash.	Jan. 18
Feb. 15	Fond du Lac, Wis.	Jan. 25
Feb. 15	Aberdeen, Wash.	Feb. 1
Feb. 15	Marengo, Ill.	Feb. 8
Feb. 16	Cleveland, O.	Feb. 8
Feb. 16	Gloucester, N. J.	Feb. 1
Feb. 16	Lindsay, Neb.	Feb. 8
Feb. 19	Mishawaka, Ind.	Feb. 8
Feb. 19	Carlyle, Ill.	Feb. 1
Feb. 19	St. Paul, Minn.	Feb. 8
Feb. 20	Puyallup, Wash.	Feb. 8
Feb. 22	Whitby, Ont.	Feb. 8
Feb. 27	Canton, Ill.	Feb. 1
Feb. 27	La Porte, Ind.	Feb. 8
	Adv. Feb. 8.	
Mar. 6	Toronto, Ont.	Feb. 1
Mar. 7	Rawlins, Wyo.	Feb. 1

SEWERS

Feb. 12	Elmhurst, Ill.	Jan. 25
Feb. 12	Akron, O.	Feb. 1
Feb. 13	St. Louis, Mo.	Feb. 1
Feb. 13	Park Ridge, Ill.	Feb. 8
Feb. 13	St. George, N. Y.	Feb. 8
Feb. 13	Kansas City, Mo.	Feb. 8
Feb. 14	Brooklyn, N. Y.	Feb. 8
Feb. 21	Sturgis, Mich.	Feb. 8
	Adv. Feb. 8.	
Feb. 23	Portland, Ore.	Jan. 11
Feb. 23	Scottsville, N. Y.	Feb. 1
	Adv. Feb. 1 and 8.	
Feb. 24	Cuba, N. Y.	Feb. 1
	Adv. Feb. 1 and 8.	
Mar. 12	New Castle, Pa.	Jan. 25
	Adv. Jan. 25 to Feb. 8.	

WASTE DISPOSAL

Feb. 13	Allentown, Pa.	Feb. 8
Feb. 21	Sea Cliff, N. Y.	Feb. 8
	Adv. Feb. 8.	
Feb. 26	Tulsa, Okla.	Feb. 1
Mar. 1	Spokane, Wash.	Jan. 18

BRIDGES

Feb. 13	Black River Falls, Wis.	Feb. 8
Feb. 14	Minnesota	Jan. 25
Feb. 14	New Orleans, La.	Jan. 18
Feb. 15	Kennebec, S. D.	Feb. 8
Feb. 15	Georgia	Feb. 8
Feb. 16	Pikeville, Ky.	Jan. 25
	Adv. Jan. 25 to Feb. 8.	
Feb. 19	Alabama	Jan. 25
Feb. 19	Seattle, Wash.	Feb. 1
Feb. 20	Chautauqua, Kan.	Feb. 8
Feb. 23	Lewiston, Pa.	Feb. 8
Feb. 24	Rockwell City, Ia.	Feb. 8
Feb. 26	Massena, N. Y.	
	Adv. Feb. 8.	
Apr. 1	Wilkes-Barre, Pa.	Dec. 14
Sept. 1	Sydney, New South Wales, Australia	Aug. 3

DAMS

Feb. 20	Quebec, Que.	Feb. 1
Feb. 26	Napa, Calif.	Feb. 8
Feb. 28	Illinois	Feb. 1
	Adv. Feb. 1 and 8.	

EXCAVATION, DRAINAGE, IRRIGATION

Feb 13	New York, N. Y.	Feb. 8
Feb 14	Webster City, Ia.	Feb. 1
Feb. 15	Mankato, Minn.	Jan. 25
Feb. 15	Cleveland, O.	Feb. 8
Mar. 1	Redwood Falls, Minn.	Jan. 25

STREETS AND ROADS

Feb. 12	Ontario	Jan. 18
Feb. 12	Salem, N. J.	Jan. 25
	Adv. Jan. 25 to Feb. 8.	
Feb. 12	Duluth, Minn.	Feb. 1
Feb. 13	Atwood, Kan	Jan. 18
Feb. 13	Tulsa, Okla.	Jan. 25
Feb. 13	Louisiana	Jan. 25
Feb. 13	Bexley (Columbus P. O.), O.	Feb. 1
Feb. 13	Kingstree, S. C.	Feb. 1
Feb. 13	San Diego, Calif.	Feb. 1
Feb. 13	Los Angeles, Calif.	Feb. 1
Feb. 13	San Diego, Calif.	Feb. 8
Feb. 13	Ft. Worth, Tex.	Feb. 8
Feb. 14	Baltimore, Md.	Feb. 8
Feb. 14	Florida	Feb. 8
Feb. 14	San Francisco, Calif.	Feb. 8
Feb. 14	Emporia, Kan.	Feb. 8
Feb. 14	Brooklyn, N. Y.	Feb. 8
Feb. 14	Cleveland, O.	Feb. 8
Feb. 14	Virginia	Jan. 25
Feb. 14	Henderson, Tex.	Jan. 25
Feb. 14	Canton, O.	Jan. 25
Feb. 14	Camden, Ark.	Jan. 25
Feb. 14	Oklahoma	Feb. 1
Feb. 14	Florida	Feb. 1
Feb. 15	Salina, Kan	Jan. 18
Feb. 15	Sioux City, Ia.	Feb. 1
Feb. 15	New Richmond, Wis.	Feb. 1
Feb. 15	Georgia	Feb. 8
Feb. 16	Duluth, Minn.	Feb. 8
Feb. 19	Spring Lake, N. J.	Feb. 8
	Adv. Feb. 1 and 8.	
Feb. 19	Virginia	Feb. 8
Feb. 19	Alabama	Jan. 25
Feb. 20	Waseca, Minn.	Jan. 25
Feb. 20	Charleston, S. C.	Feb. 1
	Adv. Feb. 1 and 8.	
Feb. 21	Owen, Wis.	Feb. 8
Feb. 26	Tekamah, Neb.	Feb. 8
Feb. 26	Ontario	Feb. 1
Feb. 26	Madison, S. D.	Feb. 8
Mar. 1	Marshall, Minn.	Jan. 25
Mar. 1	Columbus, O.	Feb. 8
Mar. 5	Hillsdale, Mich.	Jan. 25
Apr. 1	Huntingdon, Pa.	Feb. 8
Apr. 3	Amsterdam, N. Y.	Feb. 1
Apr. 23	Spokane, Wash.	Feb. 1

INDUSTRIAL WORK

Feb. 13	Oakland, Calif.	Feb. 1
Feb. 15	Cleveland, O.	Jan. 25
Feb. 23	St. Louis, Mo.	Feb. 1
Feb. 24	Columbus, Miss.	Feb. 1

BUILDINGS

Feb. 10	East Rochester, N. Y.	Feb. 8
Feb. 12	Albion, Mich.	Jan. 18
Feb. 12	Warren, O.	Feb. 1
Feb. 12	Massillon, O.	Feb. 1
Feb. 12	Milwaukee, Wis.	Feb. 8
Feb. 12	Cleveland, O.	Feb. 8
Feb. 13	Taft, Calif.	Jan. 25
Feb. 13	Grand Rapids, Mich.	Feb. 1
Feb. 13	Oakland, Calif.	Feb. 1
Feb. 14	Marcy, N. Y.	Jan. 25
Feb. 14	Kings Park, N. Y.	Jan. 25
	Adv. Jan. 25 to Feb. 8.	
Feb. 14	Cleveland Heights (Warrensville P. O.), O.	Feb. 1
Feb. 14	Baltimore, Md.	Feb. 8
Feb. 14	Groveport, O.	Feb. 8
Feb. 14	Toronto, Ont.	Feb. 8
Feb. 14	Columbus, O.	Feb. 8
Feb. 15	St. Louis, Mo.	Feb. 8
Feb. 15	Grand Rapids, Mich.	Feb. 8
Feb. 15	Ellwood City, Pa.	Feb. 8
Feb. 15	Monongahela, Pa.	Feb. 8
Feb. 15	Seattle, Wash.	Feb. 8
Feb. 15	Crystal Lake, Ill.	Feb. 8
Feb. 15	St. Charles, Minn.	Jan. 11
Feb. 15	Greenville, O.	Feb. 1
Feb. 15	Minneapolis, Minn.	Feb. 1
Feb. 15	Williamson, W. Va.	Feb. 1
Feb. 16	East Boston (Boston P. O.), Mass.	Feb. 1
Feb. 17	Upper Arlington (Columbus P. O.), O.	Feb. 1
Feb. 17	Chicago, Ill.	Feb. 8
Feb. 17	Green Bay, Wis.	Feb. 8
Feb. 19	Brooklyn, N. Y.	Feb. 8
Feb. 19	Trafford, Pa.	Feb. 1
Feb. 19	Albion, Mich.	Feb. 8
Feb. 20	San Jose, Calif.	Feb. 8
Feb. 20	Kenosha, Wis.	Feb. 8
Feb. 20	Columbus, O.	Feb. 8
Feb. 21	Jamestown, N. Y.	Feb. 1
Feb. 21	Cleveland Heights (Warrensville P. O.), O.	Feb. 1
Feb. 23	Jamestown, N. Y.	Jan. 11
Feb. 23	Jamestown, N. D.	Jan. 25
Feb. 23	Roxbury (Boston P. O.), Mass.	Feb. 1
Feb. 23	Toledo, O.	Feb. 8
Feb. 23	Owego, N. Y.	Feb. 8
Feb. 24	Eveleth, Minn.	Feb. 8
Feb. 26	New Brunswick, N. J.	Feb. 8
Feb. 26	Attica, N. Y.	Feb. 1
Feb. 26	Whitehall, N. Y.	Feb. 1
Feb. 27	Roosevelt, N. Y.	Feb. 1
Feb. 27	Troy, Pa.	Feb. 8
Feb. 28	Memphis, Tenn.	Feb. 8
Mar. 1	Red Lion, Pa.	Jan. 18
Mar. 1	Denver, Colo.	Jan. 18
Mar. 1	Chico, Calif.	Feb. 8
Mar. 15	Duluth, Minn.	Jan. 18
Mar. 15	Trenton, N. J.	Jan. 11
Mar. 23	Shreveport, La.	Nov. 9
Apr. 1	Oil City, Pa.	Jan. 18

FEDERAL GOVERNMENT WORK

Feb. 12	Steel, etc.—Cincinnati, O.	Jan. 18
	Adv. Jan. 18 to Feb. 8	
Feb. 12	Generator—Florence, Ala.	Jan. 25
	Adv. Jan. 25 to Feb. 8.	
Feb. 13	Breakwater—Phila., Pa.	Jan. 25
Feb. 14	Sluice Gates — Boise, Idaho	Jan. 4
Feb. 14	Roads—California	Feb. 1
Feb. 15	Furnishing Stone, etc.—Crescent City, Calif.	Dec. 28
Feb. 15	Valves—Boise, Idaho	Jan. 4
Feb. 16	Hospital — Battle Creek, Mich.	Jan. 18
	Adv. Jan. 18 to Feb. 8	
Feb. 17	Tanks—Florence, Ala.	Jan. 25
	Adv. Jan. 25 to Feb. 8.	
Feb. 19	Post Office—Nogales, Ariz.	Jan. 25
Feb. 20	Barges — Huntington, W. Va.	Feb. 8
Feb. 21	Dredging—Galveston, Tex.	Jan. 11
Feb. 21	Castings, etc. — Florence, Ala.	Jan. 25
	Adv. Jan. 25 to Feb. 8.	
Feb. 21	Refrigerating Equipment — Gulfport, Miss.	Feb. 1
Feb. 24	Quarter-boat and Barges — Wilmington, Del.	Jan. 25
	Adv. Jan. 25 to Feb. 8.	
Feb. 24	Barge—Phila., Pa.	Feb. 8
Feb. 26	Hospital—Gulfport, Miss.	Feb. 1
Feb. 28	Extension — Mare Island, Calif.	Feb. 1
Mar. 2	Stone—Eureka, Calif.	Feb. 1
Mar. 2	Dredging—New York, N. Y.	Feb. 8
	Adv. Feb. 8.	
Mar. 5	Protection, etc. — Boston, Mass.	Feb. 8
	Adv. Feb. 8.	
Mar. 6	Towboat—Nashville, Tenn.	Feb. 8
May 10	Post Office — Cordova, Alaska	Jan. 25

MISCELLANEOUS

Feb. 12	Lumber—Logan, Ia.	Feb. 8
Feb. 13	Bridge Lumber—New Hampton, Ia.	Feb. 1
Feb. 13	Tractor—Hibbing, Minn.	Feb. 8
Feb. 13	Pump, Motor, etc.—Inglewood, Calif.	Feb. 8
Feb. 14	Tractors—Florida	Feb. 8
Feb. 14	Road Grader — Biwabik, Minn.	Feb. 1
Feb. 14	Iron Manholes, etc.—Baltimore, Md.	Feb. 8
Feb. 14	Cable—New York, N. Y.	Feb. 8
Feb. 14	Asphaltic Cement—New Orleans, La.	Feb. 8
Feb. 15	Corrugated Metal Pipe — Pierre, S. D.	Feb. 8
Feb. 15	Steam Ashes—Long Island City, N. Y.	Feb. 8
Feb. 15	Lumber—New York, N. Y.	Feb. 8
Feb. 15	Mowers, etc.—New York, N. Y.	Feb. 8
Feb. 15	Dry Dock Machinery—Esquimalt, B. C.	Jan. 4
Feb. 15	Road Oil—Urbana, Ill.	Feb. 1
Feb. 19	Brick—Wash., D. C.	Jan. 25
Feb. 19	Steel Dump Hoist—San Jose, Calif.	Feb. 1
Feb. 19	Metal and Lumber—Muscatine, Ia.	Feb. 8
Feb. 20	Terra Cotta Pipe Drains, etc. —Charleston, S. C.	Feb. 1
	Adv. Feb. 1 and 8.	
Feb. 22	Wharf—Grand River, Que.	Feb. 1
Feb. 26	Street Lighting System — Plattsmouth, Neb.	Feb. 8

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Me., Winthrop—Plans new water system. $90,000. Engineer not selected. Address town clerk.

N. Y., Dundee—Plans election to vote on $90,000 bonds new waterworks system.

Pa., Mount Union—Mount Union Boro. Waterworks Co., having plans prepared and takes bids in spring, 50,000,000 gal. reservoir at Singers Gap, 7 mi. south of here, rein.-con., earth or masonry. Work will also include 4,000 ft. 8 in. c.i. pipe. $70,000. D. W. Dillman, 8081 Altoona Trust Bldg., Altoona, engr.

N. C., Concord—Plans enlarging present water supply, incl. small dam, pumps, pipe lines, etc. $200,000. W. H. Booker of Mees & Mees, Kinney Bldg., Charlotte, engrs.

Fla., Miami—Plans to vote on $75,000 bonds for waterworks extensions, incl. filtering plants, new wells, pumping stations, etc. J. G. White Eng. Corp., 43 Exch. Pl., New York City, engrs.

La., Melville—Takes bids in about 90 days, waterworks system. $45,000 bonds voted. Swanson-McGraw Inc., United Fruit Bldg., New Orleans, consult. engrs.

O., Cleveland—Plans 100,000,000 gal. reservoir, Bean and York Rds., Parma Twp. $1,300,000. A. V. Ruggles, City Hall, engr.

Ind., South Bend—Having plans prepared by J. W. Toyne, supt. present waterworks plant, for addition. $400,000. Burns & McDonell, Interstate Bldg., Kansas City, Mo., consult. engrs.

Mich., Ferndale—Had plans prepared extending mains incl. 7,820 lin.ft. 10 and 12 in. c.i. pipe. $25,000. G. Jerome, 1331 Majestic Bldg., Detroit, engr.

Wis., Neenah—Waterworks Comn. plans to purchase water meters also double stop and check valves to install in mains. Private plans.

Ia., Davenport—Making plans waterworks improvements, incl. tank and tower, mains, valves, pumps, etc., $20,000. Prince-Nixon Eng. Co., 501 Peters Trust Bldg., Omaha, Neb., engrs.

Ia., Oskaloosa—Making plans waterworks improvements incl. dams, filtration plant, etc. $30,000. Burns & McDonnell, 402 Interstate Bldg., Kansas City, Mo., engrs.

Ia., Traer—Had plans prepared 80,000 gal. steel tower and tank; and 2 mi. 4-10 in. mains. C. P. Chase, Clinton, engr.

Neb., Davenport—Election soon to vote on $25,000 bonds for water tank, tower, pumps, mains, etc. Prince-Nixon Eng. Co., 501 Peters Trust Bldg., Omaha, engrs.

Mo., Glasgow—See "Sewers."

Mo., Kirkwood—Feb. 10 to vote on $105,000 bonds for water plant, incl. pipe line from wells in Meramec River to city.

Tex., Highland Park (Dallas P. O.)—Voted $125,000 bonds for waterworks improvements. H. R. Davis, mayor.

Wash., Everett—C. F. Clapp, city clk., soon takes bids excavation for 20,000,000 gal. reservoir, 235,000 yd. $75,000.

Calif., San Diego—March 20, to vote on $325,000 bonds improving water distributing system. F. A. Rhodes, city engr.

Calif., San Diego—April 3, to vote on $400,000 bonds for auxiliary wood-stave pipe line between Lower Otay reservoir and city water system. F. A. Rhodes, city engr.

Calif., Santa Cruz—To vote on $325,000 bonds for waterworks system. J. K. James, city engr.

Calif., Venice—Feb. 20, to vote on $350,000 bonds constructing water system.

Calif., Watsonville—Voted $25,000 bonds furnishing and installing 1,100 lin.ft. 12 in. and 4,700 lin.ft. 18 in. c.i. mains, etc. H. B. Kitchen, city engr.

Ont., North Bay—Plans to purchase and install gasoline pump, 3 stage centrifugal, 1,800 gal. per minute. W. N. Snyder, clk.

Ont., Ottawa—Plans 20,600 ft. c.i. mains in various streets, 6 in. up. $125,000. A. F. Macallum, city engr.

B. C., Vancouver—Opens bids about Feb. 18, 3,100 ft. 16 in. riveted steel pipe. $36,000. Separate bids for furnishing and laying. F. L. Fellowes, city engr.

BIDS DESIRED

N. Y., St. George—Feb. 13, N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Decker, Forest, Lexington, Post Aves., etc., here.

D. C., Wash.—Feb. 14, at office Washington Suburban Sanitary Comn., furnishing c.i. pipe and specials. R. B Morse, Hyattsville, Md., ch. engr. of dist; adv. this issue.

O., Cleveland—Feb. 16, by Commissioner Purchases & Supplies, 400 ton 24 and 36 in. c.i. pipe, 5,000 ft. 2½ in. cotton rubber line hose, 8,000 pieces brass water fittings and 100 ton pig lead.

O., Columbus—See "Streets and Roads."

Ind., Laporte—Feb. 27, by Bd. Pub. Wks., 2450 g.p.m. oil engine pumping unit. J. H. Harding, supt. waterworks.

Ind., Mishawaka—Feb. 19, by Burns & McDonnell, engrs., Interstate Bldg., Kansas City, Mo., 1,500,000 gal. rein.-con. reservoir and motor-driven pumps (centrifugal unit), for Bd. Public Wks. Noted Oct. 26.

Mich., Clawson—Feb. 14, by A. C. Hodges, village clk., one 75 gal. per minute, 2 stroke, deep well pump with electric motor to pump against 215 ft. head, also concrete, brick and steel pump house. Ruhling, Holdsworth & Hudson, 16549 Woodward Ave., Highland Park (Detroit P. O.), engrs.

Ill., Marengo—Feb. 15, for 6,000 ft. 4 in. and 1,200 ft. 6 in. mains, 4,250 ft. 8 in. and 3,200 ft. 10 in. sewers. A. L. Webster, Wheaton, engr.

Ill., Nokomis—Feb. 14, material and labor for 4 wells 10 in. diam., 40 ft. deep; 4,300 ft. 8 in. Class B mains, etc. Taylor & Woltmann, 428 Unity Bldg., Bloomington, engrs. Noted Nov. 23.

Wis., Appleton—Feb. 15, by Water Dept., furnishing 156 ton 12 in. c.i. pipe, 132 ton 6 in. c.i. pipe, 6½ ton pig lead, 300 sets brass service connections and 22,000 lb. ⅝ in. lead pipe for water services. F. Morris, secy.

Ia., Des Moines—Feb. 12, for 250,000 gal. steel water tank and tower. G. J. Long, city engr.

Minn., St. Paul—Feb. 19, by H. W. Austin, city purch. agt., rein.-con. reservoir, also concrete water tank and tower. G. M. Shepard, city engr.

Kan., Republic—Feb. 14, by W. B. Rollins & Co., engrs., 521 Railway Exch. Bldg., Kansas City, Mo., new water plant and distribution system. $30,000. Noted Nov. 16.

Neb., Lindsay—Feb. 16, by P. Shad, city clk., one 50,000 gal. steel tank with 100 ft. tower, 108 lin.ft. 8 in. and 660 lin. ft. 6 in. Class B c.i. pipe, 1 two stroke deep well pump, 125 gal. per minute, etc. $15,000. Henningson Eng. Co., Natl. Bldg., Omaha, engrs.

Ark., Van Buren—Taking bids rebuilding present water plant on Lee Creek, incl. 7,500 ft. 3 and 4 in. pipe, 75 valves all sizes, 97 fire hydrants, 750 new meters, 2 centrifugal pumps, 2 triplet pumps, relining present reservoir. W. L. Winters, 700 South 20th St., Ft. Smith, engr.

Wash., Puyallup—Feb. 20, by City Clerk, relaying water pipe in Meridian Ave. from Pioneer Ave. to 19th Ave. S., 7,000 ft. 6-12 in. and 6,054 ft. 4 in. c.i. pipe.

Calif., El Monte—Feb. 15, by B. Moore, city clk., furnishing 1 centrifugal booster pump to deliver 900 gal. per minute against head of 160 ft., also one 50 hp. horizontal connected 40 deg. motor.

Ont., Whitby—Feb. 22, by W. J. Luke, chn. Pub. Utilities Comn., slow sand filter system incl. concrete filters, excav., cement, steel, concrete and laying pipe, Contr. A; c.i. pipe and specials, Contr. B, gate and foot valves, valve boxes, etc., Contr. C; tile pipe and junctions, Contr. D; centrifugal pumps, motors, gasoline engines, etc. Contr. E. F. W. Thorold Co., Ltd., 54 Admiral Rd., Toronto, consult. engrs.

BIDS RECEIVED

Mass., Holyoke—Water Dept., 500 ft. 4 in., 2,000 ft. 6 in., 2,000 ft. 8 in., 1,000 ft. 12 in. and 7,400 ft. 24 in. pipe, from Donaldson Iron and Pipe Co., Emaus, Pa., $64,795; R. D. Wood & Co., 400 Chestnut St., Phila., $66,312; U. S Cast Iron Pipe and Fdry. Co., Morris Bldg., Phila., $66,503. Engrs. est. $50,000.

N. Y., New York—Bd. Water Supply, Municipal Bldg., opened bids Jan. 30, gate valves and hydrants for Mt. Prospect Park Slope, Ft. Hamilton and Clove conduits and Narrows Siphon 2 of Catskill Aqueduct, from Michigan Valve & Fdry. Co., Detroit, Mich. (street address not available), $222,870; J. F. Ferguson & Son, Clinton St., Hoboken, N. J., $231,379; Caldwell Wilcox Co., $21[illegible]. Noted Jan. 18.

N. Y., New York—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., opened bids Jan. 30, mains in West 133rd St., from Beaver Eng. & Contg. Co., 51 Chambers St., $29,600; DeBlasio, $38,000; Knight & Demicco, 46 East Tremont Ave., $50,000. Noted Jan. 2[illegible]

CONTRACTS AWARDED

Tenn., Memphis—Memphis Artesian Water Dept., machinery in new plant being erected on North Parkway, auxiliary equipment, to M. J. Daugherty Co., Phila. (street address not available), $124,820; boiler settings, to Rust Eng. Co., Woodward Bldg., Birmingham, Ala., $15,900; air meters, to Cutler-Hammer Co., 12th and St. Paul Sts. $13,600.

Mich., Detroit—Furnishing two hundred and fifty 6 in. Detroit standard fire hydrants, and 100 tons special castings for Fire Dept., to J. W. Flower Eng. Co., 7362 14th St., $14,795 and $84.88 per ton respectively.

Ill., Chicago Heights—Drilling 2,200 ft. artesian well, to S. B. Geiger, 37 West Van Buren St., Chicago, $39,876 ($211 higher than low bidder).

Wis., Milwaukee—For six 42 in. gate valves for Riverside Pumping Sta., to Kennedy Valve Mfg. Co., East Water St., Elmira, N. Y., $7,900. Noted Jan. 25.

Minn., Minneapolis—Plans laying 12½ mi. mains. $500,000. Work will be done by day labor. City Purch. Dept. soon takes bids on mains and other materials. N. W. Elsberg, city engr. J. F. Jensen, waterworks superv.

Minn., St. Paul—Castings and fittings for alum solution agitator for Water Dept., to St. Paul Fdry. Co., Como Ave. and Mackubin St., $1,333. Noted Jan. 18.

Minn., St. Paul—For six hundred and thirty-nine 12 ft. lengths Class C, one thousand six hundred and twenty-six 12 ft. lengths Class B, and sixteen 12 ft. lengths Class A spigot water pipe, and 2,644 ton miscellaneous pipe, to United States Cast Iron Pipe Co., Amer. Trust Bldg., Birmingham, Ala., $140,000, (30 and 42 in. pipe not awarded); 3,177 lb. c.i. pipe and 2,802 lb. miscellaneous steel, to Valley Iron Wks., 8 East Water St., $616; c.i. ladders, pipe railing, posts, bases, fittings, flanges, channel stringers, etc., to St. Paul Fdry. Co., Como Ave. and Mackubin St., $1,800. Noted Jan. 4.

S. D., White Lake—See "Sewers."

Sewers

PROPOSED WORK

Conn., Bridgeport—Having plans prepared storm sewer in Lindley St., Hawley Ave. and intersecting streets $80,000, Beechwood Park Sect., section north of North Ave. on Laurel and Park Aves. and emptying into Rooster River, $75,000, East Main and Hickory Sts., Forest Sq. and Minnesota Ave. $55,000, Bethany Chapel Sect., North Main St., etc., $30,000, Laurel Ave. from Arlington to Cleveland Aves., $20,000; trunk storm sewer in Gilman St., $30,000, Capitol Ave., $25,000; combined storm and sanitary sewers in Maplewood Ave. from Colorado Ave. to Dewey St., through Dewey St. into Ash Creek, $40,000, Grand St. from Grand and Oak Sts. to North Washington Ave. and Grand Sts., $45,000, Wayne St. from Keeler Ave. south to Marion St., $30,000, Grant St., Clairmont and Boston Aves. and Mill Hill Ave. section, $35,000; sanitary trunk sewer in Mt. Grove St. from Dewey St. to Bostwick Ave., emptying into Bostwick Ave. trunk system, $60,000. J. E. McElroy, City Hall, city engr.

Pa., Erie—Bd. Directors of Poor Erie Co. plans sewage disposal plant in Fairview Twp. $25,000. Engineer not announced.

Md., Baltimore—Mayor and City Council having plans prepared 1 mi. sanitary sewers in Tiffany Run from Hillen Rd. to Arlington Ave. $200,000. A. E. Christhilf, City Hall, ch. engr.

O., East Cleveland (Cleveland P. O.)—See "Streets and Roads."

Ill., Lewistown—Making plans 2 mi. sanitary sewerage system, incl. disposal plant, in Sewer Dist. 2. $40,000. W. A. Fuller Co., 1917 Ry. Exch., St. Louis, Mo., engrs.

Ia., Muscatine—Rejected bids opened Jan. 11, 42,669 ft. 8-12 in. sanitary and storm sewers, 7,830 ft. 10 in. storm water connections, etc., in Sub Sewerage Dist. 3 of Main Sewerage Dist. 4, also for lifting plant and

Sewers (Continued)

discharge mains in above district. Central States Eng. Co., Muscatine, engrs. Noted Jan. 4.

Minn., Minneapolis — Plans sewer construction, $785,000; also work on Minnehaha Creek trunk sewer, $192,000. Work will be done by day labor. City Purch. Dept. will soon take bids on materials. C. Ilstrup, sewer eng.

Neb., Omaha — Soon takes bids storm sewers in Grace St. from 8th to 15th Sts., 11th and Grace Sts. to 13th and Locust Sts., $250,000; extension to Saddle Creek storm sewer west to 50th St., $50,000; Mud Creek storm sewer from A to G Sts., South Omaha, $125,000; extension to Minne Lusa storm sewer to 23rd St., $250,000; storm sewer from 30th and Weber Sts. to junction with Minne Lusa sewer, $100,000; Benson sewer northwest from 63rd St. and Military Ave., $125,000. H. Beal, City Hall, engr.

S. D., McIntosh—Plans sewerage system, $25,000. Cory & LeCocq, Aberdeen, engr.

Mo., Glasgow—Preparing plans sewage and waterworks system. $75,000-$100,000. A. J. Archer & Co., 609 New England Bldg., Kansas City, engrs.

Mo., Richmond—Voted $60,000 bonds for sewers. J. W. Kirkpatrick, clk.

Calif., Fresno—Had plans prepared sewers in H and Stanislaus Sts., 1,163 ft. 24 in., 397 ft. 22 in., 400 ft. 20 in., 400 ft. 18 in., and 400 ft. 12 in. concrete pipe, 938 ft. 10 in. and 435 ft. 8 in. vitr. clay pipe W. Stranahan, city engr.

Calif., Redwood City—Had plans prepared sewers in portions of James, Hudson and Iris Sts., etc., 1,120 lin.ft. 10 in., 2,600 lin.ft. 8 in. and 7,670 lin.ft. 6 in. vitr. pipe, 8,900 lin.ft. 4 in. vitr. laterals, etc. C. L. Dimmitt, city engr.

Calif., Venice—Feb. 20, to vote on bonds to construct outfall sewerage system.

Ont., Brantford—Plans 1 mi. vitr. tile sanitary sewers, 8 in. up. $30,000. F. P. Adams, city engr.

Ont., Galt — Plans extending sewers. $40,000. Prices wanted on materials. J. McCartney, City Hall, engr.

Ont., Owen Sound—Having plans prepared 6,000 to 7,000 ft. vitr. tile sanitary sewers in various streets, 8 in. up. $30,000. D. H. Fleming, city engr.

BIDS DESIRED

N. Y., Brooklyn—Feb. 14, by E. Riegelmann, boro pres., Boro Hall, sewers in Colonial Rd., Ave. O, East New York, Ocean and Belmont Aves., East 7th, East 12th, Crown, and Cleveland Sts.

N. Y., St. George — Feb. 13, by J. A. Lynch, pres. Richmond Boro, Boro Hall, temporary sanitary sewers in Sand Lane from Seaside Blvd. to Richmond Ave., Mills, Ocean, Townsend, Jackson and Sherman Aves. from Cedar to Richmond Aves., Old Town Rd., Cedar and Richmond Aves. from Sand Lane to Ocean Ave., Windom Ave. from Old Town Rd. to Cedar Ave.

O., Columbus—See "Streets and Roads."

Mich., Sturgis—Feb. 21, by City Comn., sewers. A. H. Niles, city engr.; adv. this issue.

Ill., Marengo—See "Waterworks."

Ill., Park Ridge—Feb. 13, rein.-con. and tile sewerage system, $300,000. H. L. Emmerson, 133 West Washington St., Chicago, engr.

Mo., Kansas City—Feb. 13, by Bd. Pub. Wks., 4,500 ft. 10-27 in. vitr. or plain concrete sewer in Dist. 361, 16,500 cu.yd. earth, 2,500 cu.yd. loose and 4,500 cu.yd. solid rock excav., etc. P. Hartung, City Hall, engr.

BIDS RECEIVED

Md., Baltimore — Bd. Awards, sanitary sewer in Dist. G-14, Contr. 196, 22,491 lin.ft. 8-18 in. vitr. sewer, 12,984 lin.ft. house connections, 106 manholes, from Arundel Constr. Co., Knickerbocker Bldg., $73,582. P. Agrios, 3641 13th St., Wash., D. C., $78,813, Aiello Constr. Co., Knickerbocker Bldg., $79,519; in Dist. 11, Contr. 197, 14,162 lin.ft. 8-24 in. vitr. sewer, 5,686 lin.ft. house connections, 88 manholes, from Shyrock & Rich, 4701 Reistertown Rd., $61,053. Ryan Constr. Co., Real Estate Trust Bldg., Phila., $67,082, Aiello Constr. Co., Knickerbocker Bldg., $71,456. Noted Jan. 25.

Mich., Springwells—B. P. Esper, village clk., opened bids storm water outlet, Ford Outlet Channel, (a) improving 4,723 ft. ditch by excav. and cleaning and building 10 pile bridge, (b) alternate bid for enclosing 1,540 ft. of ditch, from Candler Dock & Dredge Co., 8145 Medina Ave., Detroit, (a) $66,800; R. A. Mercier, 5435 Wesson Ave., Detroit, (a) $85,000, (b) $219,000; Lennane & McIlvenna, 1205 Book Bldg., Detroit, (a) $90,000, (b) $224,000. Noted Jan. 18.

CONTRACTS AWARDED

N. Y., Endicott—Endicott Johnson Corp., 108 East Main St., will build large outfall sewerage system, by day labor, under supervision of A. Beebe, engr. c/o owner. $200,000. Noted Feb. 1.

N. Y., Syracuse—Bd. Contr. & Supply, First Ward Sewer, 14 streets, 8-12 in. tile, to S. Palmisano, 305 Fulton St., $34,965. Engrs. est. $38,000.

N. J., Newark—Passaic Valley Sewerage Comrs., 128 Market St., Newark, local sewer connections in Carlisle Pl., Ogden, Passaic and Clark Sts., to Culp Co., Inc., 412 East 37th St., Paterson, $109,829. Noted Dec. 21.

O., Toledo—W. T. Jackson, dir. Pub. Serv., intercepting sewerage system, Contr. 5, to Booth & Flinn, 17 Battery Pl., New York City. Noted Jan. 4.

Mich., Detroit—For 7,263 ft. Butternut St. Arm, Clark Ave. Sewer, to J. A. Mercier, 216 Hammond Bldg., $190,324; 6,813 ft. Buchanan Ave. Arm, Clark Ave. Sewer, to G. R. Cooke, 1260 Penobscot Bldg., $194,449. Noted Jan. 25.

Wis., Rice Lake—Sewer extensions in South Main and Allen Sts., incl. 1,650 lin.ft. 8 in. vitr. tile, thirty-eight 8 in. wyes, 3,750 lin.ft. 15 in. vitr. tile, one hundred thirty-four 15 in. wyes, 1,640 lin.ft. 20 in. vitr. tile and fifty-five 20 in. wyes, manholes, 1 lamphole, to Pastoret Constr. Co., 308 Sellwood Bldg., Duluth, Minn., $34,000.

S. D., White Lake — Sewage disposal plant, to H. A. Kobes, Mitchell, $19,620; elevated tank and tower, to Omaha Steel Wks., 4802 Leavenworth St., Omaha, Neb., $5,279.

Tex., Brownsville — Complete disposal plant, to Kroeger & Hayner, Moore Bldg., San Antonio, $50,034. Noted Jan. 25.

Okla., Tulsa—Sanitary sewers in Terrace, Regina and Ridgewood Sts., Dist. 189, to Comstock-Smedley, 432 Iowa Bldg., $42,953. Noted Jan. 11.

Calif., Hanford—For two No. 7 single stage raw sewage pumps with motors, to Horlock-Clow Co., Hanford, $1,400.

Calif., Lodi — City Trustees, machinery for sewage disposal plant, pumps to Byron-Jackson Iron Wks., 55 New Montgomery St., San Francisco, $3,355; electric motors, to Fairbanks-Morse Co., 651 Mission St., San Francisco, $3,236; air compressors, to Halloran & Golcher, Sharon Bldg., San Francisco, $7,270; flow meters, to General Electric Co., Rialto Bldg., San Francisco, $1,460; filtrous plates, to General Filtration Co., 325 Cutler Bldg., Rochester, N. Y., $4,380; fine screens and clarifiers, to Dorr Co., 101 Park Ave., New York City, $4,570 and $6,620 respectively. Noted Feb. 1.

Calif., San Francisco—Bd. Pub. Wks., constructing Army St. sewer extension, to Clinton Constr. Co., 126 Townsend St., $115,784. Noted Jan. 4.

Waste Disposal

BIDS DESIRED

N. Y., Sea Cliff—Feb. 21, by Bd. Village Trustees, combined garbage incinerator plant and storage building. R. H. Branthwaite, clk.; adv. this issue.

Pa., Allentown—Feb. 13, by M. W. Gross, mayor, City Hall, 70 ton per day garbage incinerator. H. F. Bascom, city engr. Noted Jan. 25.

Bridges

PROPOSED WORK

N. J., Trenton—Pennsylvania R.R., Broad St. Sta., Phila., plans 100 ft. steel and concrete bridge, 60 ft., over tracks of above railroad on Olden Ave., here. $100,000. F. B. Temple, Broad St. Sta., Phila., engr.

N. J., Wilburtha — Pennsylvania R.R., Broad St. Sta., Phila., plans 2 concrete bridges over Delaware & Raritan Canal feeder, here. J. M. Kinkead, Aleda Apartment, Trenton, engr.

Florida—See "Railways."

Ia., Ft. Dodge—City and Minneapolis & St. Louis R.R. Co., Transportation Bldg., Minneapolis, Minn., having plans prepared 400 ft. rein.-con. and steel, through girder viaduct over railroad tracks on 8th Ave. and 7th St. $35,000. C. H. Reynolds, city engr. R. G. Kenly, ch. engr. railroad.

Minn., Minneapolis — See "Streets and Roads."

S. D., Chamberlain — State Hy. Dept., Pierre, had preliminary estimate made 1,292 ft. bridge with 5 spans and 292 ft. concrete viaduct approach, incl. 2,204,680 lb. steel, 3,368 cu.yd. concrete, etc., here. $303,623.

S. D., Forest City — State Hy. Dept., Pierre, having preliminary estimates made 1,572 ft. bridge with 5 spans and 240 ft. concrete viaduct approach, 3,107,040 lb. steel, 4,037 cu.yd. concrete, 1,452 cu.yd. structure excav., here. $395,541.

S. D., Mobridge—State Hy. Dept., Pierre, having preliminary estimates made 1,292 ft. bridge with 5 spans and 240 ft. concrete viaduct approach, 2,176,180 lb. steel, 3,313 cu.yd. concrete, 963 cu.yd. structure excav., here. $283,048.

S. D., Pierre—State Hy. Dept. having preliminary estimates made 1,887 ft. bridge with 5 spans and 360 ft. concrete viaduct approach, 4,070,680 lb. steel, 4,266 cu.yd. concrete, 1,740 cu.yd. structure excav., here. $498,235.

S. D., Rosebud—State Hy. Dept., Pierre, having preliminary estimates made 1,810 ft. bridge with 7 spans and 120 ft. concrete viaduct approach, 3,102,740 lb. steel, 5,012 cu.yd. concrete, 1,445 cu.yd. structure excav., here. $408,205.

Mo., St. Louis—Pub. Serv. Comn. plans 1,200 ft. concrete viaduct, 80 ft. wide, with 550 ft. southern and 200 ft. northern approaches, spanning Terminal R.R. and Missouri Pacific R.R. tracks, to replace old wooden structure on 14th St., incl. 13,200 cu.yd. earth excav., 40,000 lin.ft. concrete piling, 16,400 cu.yd. rein.-con., 1,000 ton reinforcing, 5,400 lin.ft. granite curb, 11,300 sq.yd. granite blocks and 7,000 sq.yd. concrete sidewalks. $627,000. Cost to be borne by city, Terminal R.R., Missouri Pacific R.R. and United Railways Co.

Wash., Seattle—King Co. had tentative plans prepared bridge connecting Mercer Island with Mainland, 80 ft. horizontal and 30 ft. vertical clearance, 20 ft. roadway, 4 ft. sidewalk, piling trestle. $40,000. D. H. Evans, county bridge engr.

BIDS DESIRED

N. Y., Massena—Feb. 26, at office F. A. Hough, town clk., highway bridge over Grasse River. Jarrett-Chambers Co., Inc., 30 East 42nd St., New York City, engrs.; adv. this issue.

Pa., Lewistown — Feb. 23, by Comrs. Mifflin Co., 350 ft. rein.-con. bridge with 4 spans over Juniata River, between here and Lewistown Junction. $100,000. J. M. Long, Boyer Arcade, Norristown, engr.

Georgia—Feb. 15, by State Hy. Dept., Atlanta, 2 timber treated bridges on Fureys Ferry Rd., Federal Aid Project 323, Richmond and Columbia Counties, incl., 251.62 cu.yd. concrete, 21, 551 lb. reinforcing, etc.; concrete bridge over Southern R.R. tracks near Gainesville, Federal Aid Project 44, Hall Co., 337.1 cu.yd. concrete, 41,234 lb. reinforcing, 328 sq.yd. 4 in. concrete paving, etc.; bridge over Atlanta, Birmingham & Atlantic R.R. tracks on La Grange Rd., Federal Aid Project 98, Troup Co., 219.73 cu.yd. concrete, 26,970 lb. reinforcing, 235.6 sq.yd. 4 in. concrete paving, etc.; 2 concrete bridges on La Grange Chipley Rd., Federal Aid Project 324, Troup Co., 335.57 cu.yd. concrete, 38,867 lb. reinforcing, 208 sq.yd. 4 in. concrete paving, etc. State to furnish cement f.o.b. nearest railroad stations.

Wis., Black River Falls—Feb. 13, at office O. H. Overlien, highway comr., Jackson Co., Court House, Irving Bridge, Town of Irving, 8 mi. southwest of here, two 50 x 24 ft. deck girder spans; Vaudruel Bridge, Town of Brockway, 2 mi. east of here, 12 :: 12 x 46 ft. rein.-con. box culvert.

Ia., Rockwell City—Feb. 20, by Auditor Calhoun Co., furnishing material and constructing 1 pair abutments, 2 box culverts, 1 slab and 4 I-beam bridges and 4 pony trusses. W. E. McClure, Rockwell City, engr.

Kan., Sedan—Feb. 20, by C. E. Sperry, engr., Caney, 120 ft. steel truss span bridge, 18 ft. roadway, over Big Caney River.

S. D., Kennebec—Feb. 15, by State Hy. Comn., Pierre, one 90 ft. span pony truss over Medicine Creek, also one 72 ft. span rein.-con. viaduct over Medicine Creek Overflow, on Kennebec-Winner Rd., 1½ mi. southwest of here, Lyman Co., incl. 133.5 cu.yd. Class A, 78.9 cu.yd. Class D concrete, 27,450 lb. reinforcing steel, 112,328 lb. structural steel, etc. F. D. Hudgins, ch. engr.

Bridges (Continued)

BIDS RECEIVED

Ia., Marshalltown—Marshall Co., 32 concrete box and 22 circular concrete culverts, 4 culvert extensions, one 36 x 20 ft. deck girder and one 70 x 20 ft. steel pony truss on Primary Bridge Project 159, from Ingersoll & Stouffer, Marshalltown, $43,900; B. J. Cole, Ames, $48,900; J. A. Dunkle, Webster City, $49,734. Noted Jan. 18.

CONTRACTS AWARDED

Connecticut—State Hy. Dept., Hartford, concrete substructure and approaches for one 154 ft. steel truss bridge, over Little River, on River Rd., in Cromwell and Middletown, to J. E. Fitzgerald Co., 85 State St., New London, $30,000 (cement and piles furnished by State); superstructure, to C. A. Sibley Co., 902 Chapel St., New Haven, $22,000. Noted Jan. 25 under "Streets and Roads."

Ia., Ft. Dodge—Webster Co., 6 span concrete cantilever deck girder bridge, concrete pier and abutments, 308 ft. long, near north limits of Ft. Dodge, to Nelson & Aldrich Constr. Co., Spencer, $35,698. Noted Jan. 18.

Minn., Spooner—Bridge, to Minneapolis Bridge Co., Metropolitan Life Bldg., Minneapolis, $44,850.

Minn., Warren—See "Excavation, Drainage and Irrigation."

Oklahoma—See "Streets and Roads."

Wash., Wilderness (Hoquiam P. O.)—Grays Harbor Co. (Montesano), 200 ft. steel bridge, concrete piers, over Humptulips River, near here, to Union Bridge Co., Central Bldg., Seattle, $39,765.

Dams

PROPOSED WORK

N. C., Concord—See "Waterworks."

Ill., Danville—Interstate Water Co. having plans prepared for reservoir dam, $600,000. Mead & Seastone, State Journal Blk., Madison, Wis.

Tex., Ballinger—Colorado Valley Irrigation Assn. having surveys made for dam to impound water for irrigation of from 150,000-200,000 acres. Address C. S. Guin, pres.

BIDS DESIRED

Calif., Napa—Feb. 26, by City Council, constructing Milliken dam and appurtenances, and furnishing supplies, Schedule 1 (construction of dam), to be single arch concrete type, with maximum height of 112 ft. and approximate length 600 ft., to store 630,000,000 gal., involving stripping, Plan A, using channeler cuts, item 1, 11,000 sq.ft. channeler cut, 2,600 cu.yd. excav., Plan B, without channeler cuts, item 1, 2,600 cu.yd. excav.; concrete in dam, Plan A, using concrete rock adjacent to dam, item 2, 16,800 cu.yd. concrete in dam, incl. that in refill of excav., Plan B, using rock fill from elsewhere, item 2, 16,800 cu.yd. concrete in dam, incl. that in refill of excav.; outlet tower, Plan A, using rock fill adjacent to dam, item 3, 200 cu.yd. rock in outlet tower, incl. excav., etc., Plan B, using rock from elsewhere, item 3, 200 cu.yd. rock in outlet tower, incl. excav., etc.; grouting holes, item 4, 930 lin.ft. grouting holes drilled and grouted; gunite, item 5, 2,540 sq.ft. ¼ in., 18,100 sq.ft. ⅜ in., 9,300 sq.ft. ½ in., and 7,060 sq.ft. ¾ in. gunite; Schedule 2, furnishing portland cement, f.o.b. cars Napa, 25,000 bbl. portland cement; Schedule 3, furnishing reinforcing steel, per 100 lb., f.o.b. Napa, 48,000 lb. ¾ in. sq. bars reinforcing steel; Schedule 4, furnishing gate valves f.o.b. Napa, seven 12 in., one 18 in. and one 24 in. gate valves, flanged, c.i. body, brass mounted, etc.; Schedule 5, furnishing castings, flanged bolts and gaskets, anchor bolts, bridge, grating, screens, extension to gate stems and supports therefor, Standard pipe and fittings for railings and all other metal fixtures except gate valves and reinforcing steel, furnished f.o.b. Napa. A. Kempkey, Hobart Bldg., San Francisco, consult. engr.

Railways

PROPOSED WORK

New York—Buffalo, Rochester & Pittsburgh R.R., 20 State St., Rochester, plans relaying tracks near Salamanca and constructing additional tracks in yard, etc. To exceed $25,000. E. F. Robinson, ch. engr.

Florida — Florida East Coast Ry., St. Augustine, plans 120 mi. railway from Okeechobee to Lemon City, incl. 8-15 bridges. $1,000,000. H. N. Rodenbaugh, ch. engr.

Florida — Florida East Coast Ry., St. Augustine, plans 8 mi. railroad from Miami to Hialeah. $60,000 bonds authorized. H. N. Rodenbaugh, ch. engr.

Illinois—Illinois Central R.R., 135 East 11th Pl., Chicago, plans 125 mi. road between Edgewood, Ill., and Fulton, Ky. $25,000,000. F. L. Thompson, ch. engr.

Oklahoma — St. Louis & San Francisco R.R., St. Louis, Mo., soon takes bids installing additional track between Tulsa and West Tulsa, via Arkansas River Bridge, incl. set of deck plate girders for bridge, 90 lb. rail and chat road ballast. $90,000. F. G. Jonah, ch. engr.

Missouri — St. Louis & San Francisco R.R., St. Louis, soon takes bids additional track from Valley Park to Eureka, incl. 2 crossing over Meramec River, increasing bridge space. $850,000. F. G. Jonah, ch. engr.

California — Fruit Growers Supply Co., 1st Natl. Bank Bldg., San Francisco, plans 15 mi. electrically operated railroad, in Eagle Lake Sect., Lassen Co., to haul logs to sawmill. Private plans.

Ontario—Dominion Power & Transmission Co., Terminal Sta., Hamilton, having surveys made for 5 mi. single track electric line from Hamilton to McKittrick Survey. $200,000. W. C. Hawkins, mgr.

CONTRACTS AWARDED

Kentucky—Illinois Central R.R., 118 East 11th St., Chicago, 32 mi. railroad from Central City to Dawson Springs, to A. Guthrie & Co., 366 Jackson St., St. Paul, Minn. Engrs. est. $1,500,000.

Ohio—Youngstown Municipal Ry., Box 58, Youngstown, will reconstruct Albert St. car line, by day labor. $46,000. Paving work will be done by city. J. B. Stewart, Jr., genl. supt. Noted Feb. 1.

Excavation, Drainage, Irrigation

PROPOSED WORK

Fla., Miami — Plan election to vote on $50,000 bonds filling in Bay Front Park, sand. C. W. Murray, City Hall, engr.

O., Conneaut—See "Miscellaneous."

Minn., Gaylord — Sibley and Nicollet Counties had plans prepared Judicial Ditch 9, 1,068,050 cu.yd. excav., $128,166; 313,877 lin.ft. 6-30 in. tile, $181,261. F. D. Minium, New Ulm, engr.

Minn., Willmar—Kandiyohi Co. having plans prepared Judicial Ditch 9, 13 mi. open ditch and 2 laterals, each 1 mi., 167,797 cu.yd. excav., $122,553; tile drain, 5-36 in., $285,000. J. A. Rowat, Willmar, engr.

Tex., Austin—State Recl. Dept. and State Bd. Water Engineers, plan to expend $600,000 for hydrographic survey of rivers and water sheds for reclamation purposes, flood control, etc. A. A. Stiles, state recl. engr.

Tex., Magnolia Park (Houston P. O.)—Feb. 15, to vote on $300,000 bond issue for drainage improvements, Sands & Culpepper, Houston, (street address not available), consult. engrs.

Idaho, Lewiston — Lewiston-Clarkston Impvt. Co. having surveys made by R. Foster, engr., Lewiston, for irrigation project incl. 7 mi. 48 in., 4 mi. 40 in. and 1.5 mi. 32 in. pipe, 4,500 acre ft. reservoir, storage dam, 120 ft. high and 750 ft. long, on Asotin Creek, etc. $200,000.

Utah—Deseret Irrigation Co., Salt Lake City, plans improvements and extensions to irrigation systems in Millard Co. $210,000. J. A. Melville, Jr., Deseret Bank Bldg., Salt Lake City, attorney. Engineer not selected.

Wash., Yakima—Fruitvale D. D., Fruitvale (North Yakima P. O.), plans election Feb. 20 to vote on $40,000 bonds, draining 1,160 acres, here. W. T. McFilney, Yakima, engr.

Calif., San Diego—San Dieguito Irrigation Dist., plans election to vote on $400,000 bonds constructing irrigation system. T. A. King, Fletcher Bldg., engr.

BIDS DESIRED

N. Y., New York—Feb. 13, by J. H. Delaney, comr. Docks, Pier A, North River, dredging at foot of East 72nd St., East River, Contr. 1800.

O., Cleveland—Feb. 15, by city, dredging Cuyahoga River, 140,000 yd. excav. To exceed $25,000. R. Hoffman, City Hall, engr.

BIDS RECEIVED

Neb., North Platte—D. D. 1, Lincoln Co., 22 mi. open ditch work, 884,210 cu.yd. to C. L. Hansen, Charles City, Ia., $75,737; 2,829 lin.ft. 8 in., 10,399 lin.ft. 10 in., 7,559 lin.ft. 12 in., 20,360 lin.ft. 15 in., 26,776 lin.ft. 18 in., 6,051 lin.ft. 20 in., 4,873 lin.ft. 22 in. and 13,275 lin.ft. 24 in. clay tile, to Iowa Pipe & Tile Co., East 4th and Hayes Sts., Des Moines, Ia., $51,976; laying tile to L. M. Rude and C. A. Wold, Pomeroy, Ia., $63,037. Noted Aug. 1.

CONTRACTS AWARDED

Minn., Warren—Marshall Co., Co. Ditch 35, 206,286 cu.yd. excav., to Strom, Degerness & Hanson, Gary, $.0874 per cu.yd.; bridges, to R. Belcher, Thief River Falls, $7,490; culverts, to Minneapolis Bridge Co., Metropolitan Life Bldg., Minneapolis.

Calif., Patterson—Concrete lining 2½ mi. main laterals, to N. M. Ball, Porterville, $0.06 per sq.ft. Noted Dec. 21.

Streets and Roads

PROPOSED WORK

Conn., Wallingford—Plans paving 1 mi. South Main St., bituminous macadam, $45,000.

N. Y., Jamestown—Plans paving Sampson St. and Hall Ave., vitr. brick on 5 in. concrete. $25,000. L. O. Bergmann, city engr.

Pa., Erie—Comrs. Erie Co. plan paving 23 mi. Corry-Waterford Rd. $500,000. F. Hill, co. engr.

Pa., Scranton—Plans paving Clearview St. from West Main St. to Rebecca Ave., sheet asphalt and stone blocks on concrete, $25,000. W. LaFontaine, dir. pub. wks.

N. C., Greenville—Pitt Co. plans paving with concrete or some type of asphalt, 14.3 mi. road from here to Beaufort Co. line. J. B. Harding, co. engr. Work will probably be done under supervision of State Hy. Dept., Raleigh.

Ala., Birmingham — Plans grading and asphalt paving 1 mi. 8th Ave. Rd. to Ensley, incl. 2 mi. stone curbing, 2 mi. cement gutter. $37,000. A. J. Hawkins, City Hall, engr.

Tennessee—State Hy. Dept., Nashville, making surveys grading, surfacing, etc. 10 mi. road from Greenville to Paint Rock, North Carolina State line, Greene Co., 18 ft. D. A. McComb, Nashville, ch. engr.

Tenn., Nashville—Plans paving 4.75 mi. various streets, incl. Jefferson, Belcourt, 11th and Forest Sts., 8th, 17th, 2nd, 15th, Gartland and Capers Aves., 93,000 sq.yd. granite block, bituminous macadam or asphalt. W. W. Southgate, City Hall, engr.

Ky., Owenton—Owen Co. voted $200,000 bonds for road work.

O., Canton—Stark Co. plans grading and paving 1½ mi. Canton-Middlebranch Rd., 16 ft., vitr. brick. $60,000. G. L. Sickafoose, co. surv.

O., East Cleveland (Cleveland P. O.)—Plans paving East 125th St., Allendale Ave., Alton, Hillsboro, Terrace and Lee Rds., Dover and Nela Courts, strip on Euclid Ave. from Superior Ave. to point 250 ft. easterly and strip on Superior Ave. from Euclid Ave. to Emily St.; repaving Doan St., Bardwell, Forest Hill, Shaw and Superior Aves., Eddy, Noble and Terrace Rds.; sewers between Belt Line R.R. and New York, Chicago & St. Louis R.R., west of Eddy Rd., along New York, Chicago & St. Louis R.R., right of way from Strathmore to Coit Aves., Woodworth Rd., Hayden and Phillips Aves. J. Garnett, City Hall, engr.

O., New Philadelphia—Plans brick or sheet asphalt paving and laying sewers in Boulevard from New Philadelphia to Dover Twp. line, 16 ft. $88,000. G. E. Arnold, New Philadelphia, engr.

Michigan—State Hy. Dept., Lansing, soon takes bids grading and gravel surfacing 3.726 mi. Assessment Dist. Rd. 448, Clinton and Ionia Counties.

Mich., Detroit—Plans resurfacing with 3 and 3½ in. sheet asphalt, Alexandrine, Alger, Burns, Beechwood, Beaufait, Benson, Breckenridge, Beacon, Belvidere, Belmont, Calumet, Canton, Crane, Chalmers, Colburn, Central, Crawford, Cleveland, Campbell, Clippert, Charles, Carbon, Cavalry, Canfield, Catherine and Durand Sts.; grading and paving with 3 in. sheet asphalt on 6 in. concrete Posen Ave., $2,750, Lyle Ave., $2,640; 3½ in. sheet asphalt on 8 in. concrete, Fullerton Ave., $38,760, Leslie Ave., $38,760, Eureka Ave., $14,330, Iroquois Ave., $27,390, E St., $5,470, Army Ave., $9,900, Van Buren Ave., $10,915, Dexter Ave., $59,350; grading and paving 7 alleys with one course 7 in. concrete $25,450. J. W. Reid, city engr.

Streets and Roads (Continued)

Ill., Astoria—Making plans paving about 1 mi. Bway., 30-40 ft., brick on concrete. $30,000 up. W. A. Fuller Co., 1917 Ry. Exch., St. Louis, Mo.

Wis., Milwaukee—Milwaukee Co. Road and Bridge Comn., plans to concrete surfacing, etc., 2¾ mi. Lisbon Ave. from South Fond du Lac Rd., west; 3 mi. Wauwatosa Ave. from North Fond du Lac Rd. to Town Hall; 2½ mi. Lovers Lane Rd. from Zanesville Rd. to Beloit Rds.; ¾ mi. 35th St. from north city limits to Lake St.; 2 mi. Rawson Ave. from Howell Ave. to city limits of South Milwaukee. Wisconsin Hy. Comm., Madison, engrs.

Wis., South Milwaukee—Plans new pavement on Rawson Ave. from 10th to 17th Aves., Hawthorne Ave. from Chicago Ave., east, Milwaukee Ave. from 12th to 14th Aves., Marquette Ave. from 10th to 12th Aves., 10th Ave. from Marquette to Madison Aves., probably concrete. To exceed $25,000.

Ia., Independence—Making plans paving 38 blocks. $125,000. T. N. Tschirgi & Son, 711 Amer. Trust Bldg., Cedar Rapids, engrs.

Minn., Duluth — City plans to expend $1,000,000 on street improvements and paving, incl. concrete paving. Largest single item is grading Congdon Blvd. and laying crushed rock base, 40 ft. wide, for distance of 5 mi. Bids will be received about March 1. E. K. Coe, city engr.

Minn., Minneapolis — Comrs. Hennepin Co. levied $592,000 for road and bridge construction. State and Federal Government will grant aid.

Minn., Owatonna—Steele and Rice Counties plan grading etc. 6.5 mi. road on Steele-Rice county line from Moland west, 24 ft. $30,000. R. W. Hosfield, Owatonna, and J. C. McElherne, Faribault, engrs.

Kan., Fredonia—Takes bids later part of February paving 43 blocks, macadam with concrete intersection. C. R. Schiek, Fredonia, engr.

Kan., Pittsburg — Takes bids early in spring paving 11 blocks, brick or concrete. L. D. Cornelius, Pittsburg, engr.

S. D., Madison—Lake Co. plans grading and gravel surfacing 6.25 mi. Federal Aid Project 137 from here to Junius. $41,706. V. W. Elfert, aud.

S. D., Sioux Falls—Plans paving 8 blocks Duluth Ave. between 18th and 26th Sts., 8,900 sq.yd. pavement, 5,052 lin.ft. curb. $40,000. W. C. Leyse, city aud.

Wyo., Casper—Had plans prepared and takes bids early in spring, approximately 120,000 lin.ft. 5 ft. concrete sidewalks, one course concrete 4 in. thick on 4 in. gravel 1:2:4 mix, $108,000; 4,700 ft. concrete cross-walks, $5,875; 5,000 lin.ft. concrete curb, 18 in. high, $3,000.

Missouri—State Hy. Dept., Jefferson City, plans grading, etc., 5 mi. road from Fredericktown to Jackson, 30 ft., State Project Route 9, Cape Girardeau Co.; 5 mi. road east of Lebanon, 30 ft., State Project Route 14, Laclede Co.; 5 mi. road from Portageville to Arkansas State Line, 30 ft., State Project Route 9, Pemiscot Co.; 5 mi. road from Doniphan to Poplar Bluff, 28 ft., State Project Route 42, Ripley Co.; 5 mi. road east and west through Springfield, 30 ft., State Project Route 14, Greene Co.; 5 mi. road east of Fisk, 28 ft., State Project Route 16, Stoddard Co.; 5 mi. road from Fredericktown to Irontown, 28 ft., State Project Route 70, Madison Co.; 5 mi. road from Fredericktown to Jackson, 30 ft., State Project Route 9, Madison Co.; 5 mi. road from Fredericktown to Jackson, 30 ft., State Project Route 9, Bollinger Co.; 5 mi. road from Cabool to Houston, 28 ft., State Project Route 7, Texas Co.; 5 mi. road from St. Louis to Springfield, 30 ft., State Project Route 14, Pulaski Co.; 5 mi. road south of Galena, 28 ft., State Project Route 43, Stone Co.; 5 mi. road east and west through Lawrence Co., 30 ft., State Project Route 14; 5 mi. road from Holt Co. line to Savannah, 28 ft., State Project Route 21, Andrew Co. B. H. Piepmeier, state highway engr.

Missouri — State Hy. Dept., Jefferson City, plans grading, etc., 5 mi. road south of Neosho, 28 ft., State Proect Route 1, Sect. 108, McDonald Co.; 5 mi. road from St. Louis to Springfield, 30 ft., State Project Route 14, Phelps Co.; 5 mi. road from Neosho to Goodman, 28 ft., State Project Route 1, Sect. 107, Newton Co.; 5 mi. road from Beverly to Barnhart, State Project Route 9, Jefferson Co.; 5 mi. road from De Soto to Potosi, 28 ft., State Project Route 9, Washington Co.; 5 mi. Gravois Rd., 28 ft., State Project Route 30, St. Louis Co.; 5 mi. road from Jefferson Co. line south, 28 ft., St. Genevieve Co.; 5 mi. road from Kansas City to St. Louis, 30 ft., State Project Route 2, Montgomery Co.; 5 mi. road from Jefferson City to Columbia, 30 ft., State Project Route 7, Callaway Co.; 5 mi. Southern Highway, 28 ft., State Project Route 12, Morgan Co.; 5 mi. road north of Waverly, 28 ft., State Project Route 3, Carroll Co.; 5 mi. road north of Kansas City, 28 ft., State Project Route 33, Clay Co.; 5 mi. road from Belton to Harrisonville, 28 ft., Cass Co.; 5 mi. road from Hannibal west, 30 ft., State Project Route 9A, Marion Co.; 5 mi. road west of New London, 28 ft., State Project Route 54, Ralls Co.; 5 mi. road from Salt River to Shelbina, 28 ft., State Project Route 15, Shelby Co.; 5 mi. road north of Paris, 28 ft., State Project Route 15, Monroe Co.; 5 mi. road south of Macon, 28 ft., State Project Route 7, Macon Co.; 5 mi. road north of Moberly, 28 ft., State Project Route 7, Randolph Co.; 5 mi. road from Queen City north and south, 28 ft., State Project Route 7, Schuyler Co.; 5 mi. road from Buchanan Co. line east, 30 ft., State Project Route 6, De Kalb Co.; 5 mi. road south of King City, 28 ft., State Project Route 31, De Kalb Co.; 4 mi. road east of Gallatin, 28 ft., State Project Route 6, Daviess Co.; 5 mi. road south of Grant City, 28 ft., State Project Route 29, Worth Co.; 5 mi. road from Appleton City to Butler, 28 ft., St. Clair Co. B. H. Piepmeier, state highway engr.

Mo., Glasgow—Preparing plans 30,000 yd. pavement, all types. A. T. Archer & Co., 609 New England Bldg., Kansas City, engrs.

Tex., Angleton—Brazoria Co. plans to construct State Highway 19 from here 8.1 mi. south in Rd. Dist. 20. State Highway Comn., Austin, granted $48,914 aid. E. N. Gustafson, co. engr.

Tex., Ballinger — Runnels Co. making plans grading, bridging, etc., 15 mi. State Highway 7-A, Central Texas Highway, 24 ft., 2,570 cu.yd. concrete, 55,000 cu.yd. earth and rock excav., 203,300 lb. reinforcing. $76,300. W. Stephens co. engr.

Tex., Coleman—Coleman Co. plans to construct State Highways 7 and 23. State Hy. Comn., Austin, granted $83,500 aid. W. E. Dickerson, co. engr.

Tex., Canton—Van Zandt Co. plans to construct 7 mi. north loop State Highway 15, from Smith Co. line to point 4 mi. west of Grand Saline. $90,000. State Highway Comn., Austin, granted $45,000 aid. F. W. Gaines, co. engr.

Tex., Del Rio—Val Verde Co. plans to construct 12.7 mi. State Highway 12. $80,000. State Hy. Comn., Austin, granted $40,000 aid. G. M. Jowers, co. engr.

Tex., Ft. Worth—Tarrant Co. plans to construct 1.6 mi. State Highway 40. $28,000. State Highway Comn., Austin, granted $14,000 aid. R. V. Glenn, co. engr.

Tex., Franklin—Robertson Co. plans to construct State Highway 43. Hearne Rd. Dist. recently voted $200,000 bonds. State Highway Comn., Austin, granted $60,000 aid. J. Reid, co. judge. Engineer not selected.

Tex., Hemphill—Sabine Co. plans to construct 20 mi. State Highway 43. $106,000. State Hy. Comn., Austin, granted $53,000 aid. W. H. Davidson, co. judge.

Tex., Roscoe—City Comn. soon takes bids permanent paving business section. Cost to exceed $25,000. Montgomery-Ward Co., Wichita Falls, engrs.

Idaho, St. Maries—Having surveys made and takes bids in spring paving various streets. Cost to exceed $30,000. D. P. Woods, Realty Bldg., Spokane, Wash., engr.

Calif., Bakersfield—Soon takes bids improving portions 20th, 21st and R Sts., 220,375 sq.ft. grading, 220,375 sq.ft. 1½ in. warrenite on 3½ in. asphaltic concrete, 552 lin. ft. 18 in. culverts, 7,583 lin.ft. concrete curb, 12,058 sq.ft. concrete gutter. W. D. Clarke, city engr.

Calif., Fresno—Had plans prepared improving Amador St. from H to Van Ness Sts., 51,623 sq.ft. grading, 46,080 sq.ft. asphalt, 3,387 sq.ft. gutter, 1,855 lin.ft. curb, 2,015 sq.ft. concrete pavement; Mono Ave. between 4th and 5th Sts., 5th St. between Ventura and Balch Sts., 13,680 sq.ft. walks, 2,826 lin.ft. curb; Lucerne Lane between McKinley and University Aves., Peralta Way between Wilson and Lucerne Lane, etc., 77,163 sq.ft. grading, 54,859 sq.ft. asphalt, 4,269 sq.ft. gutter, 1,846 lin.ft. curb, 8,913 sq.ft. walks; Howard St. between Illinois and Washington Sts., 9,850 sq.ft. concrete walks. W. Stranahan, city engr.

Calif., Salinas — Having plans prepared paving 12 blocks with waterbound macadam, and 2,000 ft. 4 in. concrete pavement on Maple St. D. Davies, city engr.

Calif., San Diego—Common Council having revised plans prepared paving Lincoln Ave. between Georgia and Boundary Sts. $36,017. Former bid rejected. F. A. Rhodes, city engr. Noted Jan. 4.

Calif., San Diego—Had plans prepared improving A and C Sts., 145,883 sq.ft. 2½ in. asphaltic concrete on 2½ in. bituminous, 352 sq.ft. surfacing existing base, 2,223 lin.ft. concrete curb, 925 sq.ft. concrete walks, etc. F. A. Rhodes, city engr.

Calif., San Diego — Had plans prepared paving E St. from 16th to 25th Sts., 16,243 sq.yd. 2½ in. asphaltic concrete base, 1½ in. top; 18th St. from Imperial St. to Bway., 18,859 sq.yd. 2½ in. two course asphaltic concrete base, 1½ in. top; A St. from 24th to 25th Sts., and C St. from 19th to 25th Sts., 2,223 lin.ft. cement curbing, 925 sq.ft. cement sidewalks, 16,235 sq.yd. 2½ in. asphaltic concrete base, 1½ in. top. F. A. Rhodes, city engr.

Calif., San Diego—San Diego Co. voted $600,000 bonds constructing 57 mi. highways. E. R. Childs, co surv. B. Allen, clk. Bd. Supervs.

Calif., Tulare — Having plans prepared concrete paving 8 blocks. R. M. Berryhill, city engr.

Calif., Venice—Feb. 20, to vote on $200,000 bonds extending Windward Ave.

Calif., Yuba City—Sutter Co. plans resurfacing oil macadam pavements, 1.3 mi. Sanders lateral, 1.3 mi. Pease Lateral, 0.5 mi. Nuestro lateral, 1.3 mi. Nuestro-Terra Beuna Rd., 2.1 mi. Oswald lateral, 2 mi. O'Banion Corners lateral; reconstructing and oil macadam surfacing 2½ mi. State Highway from Tahoe to Ukiah, etc. $25,000. O. W. Lanzendorf, co. road engr.

Ontario—Provincial Hy. Dept., University Ave. and Dundas St., plans to take over 15 mi. road between Gananoque and Lillies Corners, and convert same into provincial highway, probably macadam. $300,000. G. Hogarth, ch. engr.

Ontario—Provincial Hy. Dept., University Ave. and Dundas St., Toronto, have taken over 30 mi. road, mostly 20 ft. wide, between Smith Falls and Brockville, and will convert same into provincial highway, probably macadam. $600,000. G. Hogarth, ch. engr.

Ont., Hespeler—Plans ¾ mi. pavements on Dover and Fountain Sts., 7,000 sq.yd., probably concrete. $30,000. M. E. Jardine, town clk.

Ont., London—Middlesex Co. plans new concrete pavements and road improvements. $200,000. Prices wanted on materials. C. Talbot, County Bldgs., engr.

Ont., St. Thomas—Plans asphaltic concrete pavements on Centre, Metcalfe and Manitoba Sts., also improvements on Mitchell St. and Gladstone Ave. $50,000. W. C. Miller, city engr.

Ont., Sandwich — Essex Co. Good Rds. Com. plans new concrete highways. $100,000. Prices wanted on materials. W. B. Clifford, County Bldgs., engr.

Ont., Toronto—Had plans prepared and soon takes bids, 4,800 ft. asphalt pavement on 8 in. concrete in Kingston Rd. from Queen St. to Victoria Park Ave. and from Dixon Ave. to Main St., 46 ft. wide, incl. 9,600 lin.ft. concrete curbing, 9,600 lin.ft. brick gutters, $330,089; 600 ft. asphalt on 8 in. concrete on Dundas St. from Victoria St. west, 46 ft. wide, incl. 1,200 lin.ft. concrete curbs and 1,200 lin.ft. brick gutters, $25,512. R. C. Harris, city engr.

Ont., Toronto — Having plans prepared paving 2,500 ft. Weston Rd., 12,000 sq.yd. asphalt. $63,788. R. C. Harris, city engr.

Ont., Toronto—Plans 2 mi. concrete sidewalks on portions of Kingston Rd. $57,000. R. C. Harris, city engr.

Ont., Toronto—Plans asphalt pavements on Dawes Rd., $13,644, Patterson Ave., $8,338, 4,000 sq.yd. asphalt; grading Northcliffe Blvd., 5,000 cu.yd. excav., $3,225; 4,500 sq.ft. concrete sidewalks on Indian Grove, $1,107. R. C. Harris, city engr.

Ont., Toronto—Toronto and York Good Rds. Comn., 57 Adelaide St., E., plans 5 mi. highway in King Twp., probably macadam. $100,000. E. A. James, c/o owner, engr.

BIDS DESIRED

N. Y., Brooklyn—Feb. 14, by E. Riegelmann, boro pres., Boro Hall, recurbing Bay 23rd St.; curbing, grading and flagging Conselyea and Maple Sts.; permanent asphalt paving Conselyea St., Ave. D and Livonia Ave.; grading, curbing and laying sidewalks on 72nd St.; cement sidewalks on Warehouse and 18th Aves., 5th and West 30th Sts.

N. J., Spring Lake—Feb. 19, by Mayor and Council, grading, resetting curbs and paving streets, sheet asphalt on concrete. J. M. Braly, boro engr.; adv. this issue.

Pa., Huntingdon—April 1, by P. V. Heffner, pres. Boro Council, paving 4,000 ft. 6th

Streets and Roads (Continued)

and Penn Sts., brick on concrete. $50,000. J. W. Oates, boro. engr.

Md., Baltimore—Feb. 14, by Bd. Awards, City Hall, grading, curbing and paving with cement concrete and old granite blocks (not redressed) on concrete, streets listed in Contr. 229-OCNA, 10,295 sq.yd. cement concrete, 870 sq.yd. old granite block. $45,000. A. E. Christhilf, City Hall, engr.

Va., Richmond — See "Miscellaneous" under Bituminous Patch Material, etc.

Georgia—Feb. 15, by State Hy. Dept., Capitol, Atlanta, constructing 7.181 mi. sand clay on Fureys Ferry Rd., Federal Aid Project 323, Richmond and Columbia Counties, 993 lin.ft. 15-24 in. pipe in culverts, 60,779 cu.yd. earth and 650 cu.yd. rock excav., 42,478 sta.yd. overhaul excav., 7 acres clearing, 18,903 cu.yd. sand clay surfacing, etc.; 1.704 mi. Athens Danielsville Rd., Federal Aid Project 300, Clark Co., 5,353 cu.yd. earth excav., 18,140 sq.yd. concrete pavement, etc. State to furnish cement f.o.b. nearest railroad stations. W. R. Neel, highway engr.

Florida—Feb. 14, by State Hy. Dept., Tallahassee, grading, constructing timber bridge and placing rock base on 5.378 mi. Rd. 8 from Sta. 422 south of Lake Stearns to line between Twps. 35 and 36, Project 562 A, Highlands Co. W. F. Cocke, state highway engr.

O., Cleveland—Feb. 14, grading, curbing and paving Argus Ave. N.E. from East 133rd to East 140th Sts. and Darley Ave. N.E. from East 140th St. to west end of East 133rd St. To exceed $125,000. R. Hoffman, City Hall, engr.

O., Columbus—March 1, grading, curbing, laying mains, sewers connections and paving 2 mi. Parsons Ave. from Livingston Ave. to viaduct, 44 ft., asphalt. $163,948. R. H. Simpson, City Hall, engr. Noted Dec. 21.

Wis., Fond du Lac—Feb. 17, by Fond du Lac Co. State Road and Bridge Comn., concrete surfacing ,etc., 6 mi. Fond du Lac-Ripon-Green Lake Rd., 29,610 cu.yd. earth and 871 cu.yd. borrow excav., 443.1 cu.yd. concrete in culverts and bridges, 66,687 sq.yd. 18 ft. concrete surfacing, etc.; 5.7 mi. Ripon-Oshkosh Rd., 17,300 cu.yd. earth, 310 cu.yd. borrow and 600 cu.yd. loose rock excav., 155 cu.yd. concrete in culverts, 53,863 sq.yd. 16 ft. concrete surfacing, etc.; 3.3 mi. Waupun-Brandon Rd., 12,498 cu.yd. earth, 167 cu.yd. ditch, 202 cu.yd. borrow, 400 cu.yd. loose and 100 cu.yd. solid rock excav., 259.2 cu.yd. concrete in culverts and bridges, 31,356 sq.yd. 16 ft. concrete surfacing, etc. Wisconsin Hy. Comn., Madison, engrs.

Wis., Milwaukee—Feb. 19, by C. R. Weymouth, div. engr., Milwaukee Co., Stephenson Bldg., Milwaukee, concrete surfacing, etc., 2.86 mi. Brown Deer-Menononee Falls Rd., Federal Aid Project 285, 18 ft., 13,311 cu.yd. earth excav., 252.35 cu.yd. concrete in bridges, 30,196 sq.yd. 18 ft. concrete surfacing, 29,895 lb. reinforcing, etc. Wisconsin Hy. Comn., Madison, engrs.

Wis., Owen—Feb. 21, by C. L. Johnson, village clk., concrete paving and ornamental street lighting system on Central Ave., incl., 1,300 cu.yd. earth excav., 1,925 lin.ft. concrete curb, 5,570 sq.yd. concrete, 4,540 lin.ft. drain tile, 30 ornamental lights, 3 mushroom lights, cable, reflectors, etc. $25,000. Universal Eng. Co., Eau Claire, (street address not available), engrs.

Minn., Duluth—Feb. 16, by J. A. Farrell, city comr., paving 1864 ft. 8th St. from 10th Ave. to 14th Ave., E., 5,280 sq.yd. concrete, 3,550 lin.ft. concrete curbing, 200 lin.ft. concrete sidewalk, 5,750 cu.yd. earth and 115 cu.yd. rock excav. $25,777. E. K. Coe, city engr.

Kan., Emporia—Feb. 14, by W. S. Ruggles, engr. Lyons Co., paving 2.925 mi. Federal Aid 118, Sect. A, 18 ft., 5 ft. shoulders, 18,000 cu.yd. earth excav., 30,163 yd. paving, one course, bitulithic or bituminous filled brick.

Kan., Hays—A. W. Seng, engr., Hays, taking bids and opens same about Feb. 20, paving 30,000 sq.yd. various streets, 3 in. fiber block on 5 in. concrete with asphalt filler.

Neb., Tekamah—Feb. 26, by M. Work, clk., paving various streets, 33,000 sq.yd. vitr. brick, asphalt or concrete. W. E. Standeven, 741 Peters Trust Bldg., Omaha, engr.

S. D., Madison—Feb. 26, paving Dist. 15, incl. 3,700 lin.ft. concrete curb and gutter, 6,000 sq.yd. concrete, bitulithic, wood block, asphaltic concrete or sheet asphalt. $20,000 to $30,000. C. A. Trimmer, city engr.

Tex., Ft. Worth—Feb. 13, by City Comn paving 575 sq.yd. Hawthorne St. from Lipscomb to Travis Sts., 400 ft. curb and gutter; 2,170 sq.yd. Hawthorne St. from 5th to Washington Sts., 2,500 ft. curb and gutter; 3,600 sq.yd. Edwin Ave. from Jerome to Buck Sts., 2,500 ft. curb and gutter; 1,600 sq.yd. 8th Ave. from Morgan to Farwell Sts., 920 ft. curb and gutter; 1,200 sq.yd. Henderson St. from Bois d'Arc to Carson Sts., 840 ft. curb and gutter; 840 sq.yd. 21st St. from North Main to Ellis Sts., 580 ft. curb and gutter. Bids on 1½ in. Uvalde rock asphalt, 2 in. bitulithic or 3 in. vertical fiber brick. $40,000. D. L. Lewis, city engr.

Tex., Liberty—Feb. 16, by C. R. Wilson, judge Liberty Co., grading, etc., 21.11 mi. State Highway 3, Sect. A, Federal Aid Project 352, 30 ft., 77.9 acres clearing, 39 acres grubbing, 5,831 cu.yd. earth and 445,314 cu.yd. borrow excav., 1,573.6 cu.yd. concrete, 155,641 lb. reinforcing, $158,097; 13.32 mi. State Highway 3. Beaumont-Houston Highway, 30 ft., 23,290 cu.yd. roadway and 498,145 cu.yd. borrow excav., 5,450 cu.yd. concrete, 15,644 lin.ft. concrete piling, 531,512 lb. reinforcing, $343,000. W. C. Youngs, Dayton, co. engr.

Calif., San Diego—Feb. 13, by City Council, improving 8th St. between Imperial and N Sts., 11,659 sq.ft. 2 in. asphalt surface, 1 in. binder course and 5 in. cement concrete base, 108 ft. cement curb, etc. F. A. Rhodes, city engr.

Calif., San Francisco—Feb. 14, by Bd. Pub. Wks., improving Vicente St. between Forestside and 19th Sts., 19,592 cu.yd. excav., 8,225 cu.yd. fill, 500 lin.ft. 8 in., 680 lin.ft. 12 in., 410 lin.ft. 15 in., and 275 lin.ft. 18 in. ironstone pipe sewers, 3,240 lin.ft. concrete curb, 93,155 sq.ft. asphaltic concrete, 3,100 sq.ft. artificial stone walks, etc., $60,000; boulevard connecting Lincoln Park and Sutro Heights, 55,965 cu.yd. excav., 604 cu.yd. 1:3:6 concrete retaining walls, culvert walls and gutters, 3,110 cu.yd. crushed rock or gravel surface, etc., $60,000. M. M. O'Shaughnessy, city engr.

BIDS RECEIVED

Pa., Phila.—Opened bids Jan. 30, grading and paving Bingham St. from Deveraux Ave. to Robbins St., from Ferranti & Cellici, Lincoln Bldg., $18,975, T. L. Flannigan, 1204 Montgomery St., $25,559; G St. from Wyoming Ave. to Ramona St., from Lombardi & Co., Lincoln Bldg., $65,584, C. A. Conan, Inc., Mud Puddle Lane, along tracks Pennsylvania R.R., $79,543, J. J. McHugh, South Penn Sq., $83,168.

Kentucky—State Rd. Dept., Frankfort, opened bids Jan. 23, grading 14.815 mi. Barboursville-London Rd., State Project 5, Sect. B, Federal Aid Project 61, Knox Co., (1) 104.851 cu.yd. earth excav. (2) 41,591 cu.yd. solid rock excav. (3) 1,738 cu.yd. loose rock excav. (4) 49,587 cu.yd. borrow (5) 80,984 sta. yd. overhaul (6) 11 acres clearing (7) 12 cu.yd. Class D concrete, alternate bids on (8) 1,524 lin.ft. 18 in. standard vitr. pipe (9) 592 lin.ft. 24 in. standard vitr. pipe (10) 1,104 lin.ft. 18 in. D. S. vitr. pipe (11) 596 lin.ft. 24 in. D. S. vitr. pipe, (12) 200 cu.yd. 1:3:6 concrete or (13) 2,628 lin.ft. 18 in. rein.-con. pipe, (14) 1,188 lin.ft. 24 in. rein.-con. pipe, or (15) 2,028 lin.ft. 18 in. standard c.i. culvert pipe (16) 1,188 lin.ft. 24 in. standard c.i. culvert pipe, alternate bids on (17) 449 cu.yd. Class A concrete (18) 19 cu.yd. Class B concrete (19) 78,178 lb. reinforcing (20) 1,954 cu.yd. cement rubble masonry or (21) 1,425 cu.yd. Class A concrete (22) 820 cu.yd. Class B concrete (23) 112,090 lb. reinforcing, using (a) cement rubble masonry and concrete pipe (b) concrete masonry and concrete pipe (c) cement rubble masonry and vitr. pipe (d) concrete masonry and vitr. pipe, from Costello Bros., Henson Bldg., Knoxville, Tenn., (1) $0.34 (2) $0.70 (3) $0.70 (4) $0.32 (5) $0.02 (6) $40 (7) $60 (13) $2.15 (14) $3.20 (17) $21 (18) $20 (19) 0.055 (20) $10 (21) $23.50 (22) $21 (23) $0.06, (a) $130,214 (b) $154,034; J. D. Crippen Constr. Co., Mercantile Bldg., Knoxville, Tenn., (1) $0.35 (2) $0.80 (3) $0.60 (4) $0.35 (5) $0.04 (6) $40 (7) $50 (8) $1.90 (9) $2.90 (10) $2.15 (11) $3.15 (12) $17 (13) $2.15 (14) $3.15 (17) $19.50 (18) $19 (19) $0.06 (20) $10 (21) $19.50 (22) $18.50 (23) $0.06, (a) $137,666, (c) $140,593 (d) 156,915; Ellis & Smeathers, Owensboro, (1) $0.35 (2) $1 (3) $1 (4) $0.35 (5) $0.02 (6) $60 (7) $50 (8) $2 (9) $2.75 (10) $2.25 (11) $3 (12) $18 (13) $2.50 (14) $3.75 (17) $19 (18) $19 (19) $0.06 (20) $9 (21) $19 (22) $19 (23) $0.06. (a) $145.662.

Tex., Center—Shelby Co. grading, gravel surfacing and bridging 6 mi. State Highway 35, Federal Aid Project 280, 16 ft., from B. Latimer, Garrison, $47,581; McClung Constr. Co., Cleburne, $47,614; Standifer & Wood, Royce City, $50,143. Engrs. est. $84,346.

Calif., Crescent City—City opened bid Jan. 22, improving various streets, 15,355 cu.yd. grading, excav., 201,800 cu.yd. grading, surface, 158,000 sq.ft. resilt asphalt macadam pavement, 201,800 sq.ft. new asphalt macadam pavement, 12,360 lin.ft. concrete curb, 39,200 sq.ft. concrete gutter and concrete valley, etc., from J. A. Bowling, Call Bldg., San Francisco, $179,635. Noted Jan. 11.

CONTRACTS AWARDED

Connecticut—State Hy. Dept., Hartford, paving 24,880 ft. Naugatuck-New Haven Rd., in Bethany and Naugatuck, 3 in. bituminous macadam on 6 in. base, to J. Arborio, 82 Church St., New Haven, $118,000; 36,650 ft. Clinton-Killingsworth Rd., 4 in. traprock waterbound macadam, to F. Arrigoni & Son, 605 Main St., Middletown, $75,000; 20,600 ft. Town Rd., in East Haddam, 7 in. waterbound macadam, to F. Valerio, Newfield Ave., Stamford, $76,000; 17,870 River Rd., in Rocky Hill, plain cement concrete, (State to furnish cement), to Immick Co., State St. Ext., Meriden, $78,000; 14,400 ft. Thomaston-Waterbury Rd., in Thomaston, plain cement concrete (State to furnish concrete), to T. J. Fleming, 27 Chestnut Ave., Waterbury, $90,000; 3,500 ft. Franklin Rd., in Franklin, waterbound macadam, to F. D. Miller & Co., R.F.D. 6, Norwich, $18,000. Noted Jan. 25.

N. Y., Brooklyn — E. Riegelmann, boro pres., Boro Hall, to T. B. Scott, 671 Halsey St., grading, curbing and flagging East 78th St. $5,006, East 38th St. $1,526, East 39th St. $1,387, Sutter Ave. $1,208; to Borough Asphalt Co., 1301 Metropolitan Ave., paving Sutter Ave. $2,234, 74th St. $6,942, 82nd St. $6,771; to Cranford Co., 52 9th St., paving 83rd St. $7,258. Noted Feb. 1.

North Carolina—State Hy. Dept., Raleigh, grading and asphaltic concrete paving on 5 in. cement concrete 6.05 mi. State Project 696, Union Co., to Redmon Constr. Co., Monroe, $170,843.

Ky., Earlington — Improving various streets, to Saether Roads Co., Birmingham, Ala. (street address not available), $125,000. Noted Nov. 23.

Ill., Belleville—St. Clair Co., rein.-con. paving 2.5 mi. East St. Louis-Cahokia Rd. 18 ft., to Keeley Bros., 2200 State St., East St. Louis, $41,120.

Wis., Racine—Racine Co. concrete paving, etc., Union Grove, 12th St. Rd., to E. G. Russell Constr. Co., Kenosha, (street address not available) $64,405. Noted Jan. 25.

Ia., Dyersville—Paving 52 blocks, 54,390 sq.yd. 7 in. one course concrete, 20,000 lin. ft. curb and gutter, 900 ft. storm sewer, to Dearborn Constr. Co., Waterloo, $149,795. Noted Jan. 11.

Minn., Faribault — Rice Co., improving State Rd. 1 in Scott Co., Job 2501, 63,886 cu.yd. earth and 1,976 cu.yd. loose rock excav., 33,909 cu.yd. overhaul, to M. J. Nolan Constr. Co., 609 Kasota Blk., Minneapolis, $7,643, 21 monolithic culverts, to Lundeen Bros., Mankato, $1,982, 2,006 lin. ft. of 15 in. portable corrugated metal culverts, to Austin Western Road Machy. Co., 375 Cedar St., St. Paul, $644; State Project 21, Job 2308, Rice Co., 247,320 cu.yd. earth excav., 4,750 cu.yd. loose rock and 840 cu.yd. solid rock excav., 287,729 cu.yd. overhaul, to M. J. Nolan Constr. Co., 609 Kasota Blk., Minneapolis, $69,303, monolithic culverts and bridges, to Morris Constr. Co., Morris, $26,472, and W. Weires & Co., Faribault, $24,330, corrugated metal culverts, to Austin Western Road Machy. Co., 375 Cedar St., St. Paul, $5,146. Noted Dec. 14.

Minn., Hastings—Dakota Co., improving 6 mi. State Aid Rd. 1, 60,000 cu.yd. excav., to C. Johnson, 506 Harrison Ave., St. Paul, $21,608; monolithic culverts, to W. Weires & Co., Faribault, $7,322; corrugated metal culverts, to Lyle Culvert & Road equipment Co., 171 27th Ave. S. E., Minneapolis, $2,146.

Neb., West Point—Improving Dists. 2 and 3, 24,000 cu.yd. grading, 48,050 sq.yd. brick on 4 and 5 in. base, 23,400 lin.ft. curb and gutter, 2,000 lin.ft. curb, 210 sidewalk approaches, 4,000 lin.ft. sidewalks, etc., to Roberts Constr. Co., 415 First Natl. Bank Bldg., Lincoln, $184,891.

Tex., Cisco—Paving and curbing ¾ mi. 6th St., 40 ft., brick on natural base, to P. Brown, Taylor, $40,000. Noted Jan. 4.

Tex., Dallas—To Central Bitulithic Co., Praetorian Bldg., paving Knox St. from McKinney St. to Missouri, Kansas & Texas R.R. tracks, 40 ft., 5,107 sq.yd. bitulithic $3.25, 2,300 ft. curb and gutter $1.15, total $21,880, Willis St. from Lanier to Greenville Sts., 26 ft., 7,290 sq.yd. bitulithic $3.45, 5,700 ft. curb and gutter $1.15, $39,254; to Uvalde Paving Co., Insurance Bldg., Market St. from Pacific St. to Routh Sts., 5,203 sq.yd. Uvalde rock asphalt $3.45, 1,000 ft. curb and gutter $1.15, total $21,402, Collin St. from Jefferson to Lamar

Streets and Roads (Continued)

sts., 1,858 sq.yd. Uvalde rock asphalt $3.45, 815 ft. curb and gutter $1.15, $8,669. Caruth St. from Jefferson to Lamor Sts., 1,877 sq.yd. Uvalde rock asphalt $3.45, 727 ft. curb and gutter $1.15, $8,449.

Oklahoma—State Hy. Comn., Oklahoma City, grading, paving and bridges on 2 mi. Federal Aid Project 90, Carter Co., 21,000 sq.yd. asphalt rock, to Baum Constr. Co., Durant. $31,400. Noted Dec. 28.

Oklahoma — State Hy. Dept., Oklahoma City, grading, paving and bridges on 3.3 mi. Federal Aid Project 93, Sect. A. Creek Co., 34,848 sq.yd. concrete, to Highway Constr. Co., Tulsa, (street address not available). $84,755.

Oklahoma — State Hy. Dept., Oklahoma City, grading and paving 6½ mi. Edmond Rd., Oklahoma Co., 48,000 cu.yd. earth excav., 69,700 sq.yd. vertical fibre brick, to Beekman Constr. Co., Coffeeville, Kan., $251,094; 3 mi. Newcastle Rd., Oklahoma Co., 2,400 cu.yd earth excav., 31,680 sq.yd. concrete, to Green Constr. Co., 503 S. W. Natl. Bank Bldg., Oklahoma City, $106,000.

Wash., Seattle—Paving North 77th St., 1,127 sq.yd. 6 in. concrete, 5,800 lin.ft. concrete and 550 lin.ft. asphaltic concrete curbing, to Fiorito Bros., 2306 Charles St., $39,249. Engrs. est. $40,497. Noted Feb. 1.

Calif., Modesto—To Standard Paving Co., 9th and N Sts., improving 16th St. between I and Burney Sts., 84,577 sq.ft. 1½ in. warrenite on 2½ in. asphaltic concrete at $0.17, 5,098 ft. concrete gutter $0.20, 3,387 ft. concrete curb $0.70; Poplar Ave. between Needham and Stoddard Aves., 58,547 sq.ft grading $0.05, 54,881 sq.ft. paving $0.17, 3,666 ft. gutters $0.20, 2,432 ft. concrete curb $0.70, etc. Noted Dec. 7.

Calif., Oakland—Improving 104th Ave. between 12th St. and Sunnyside Ave., to Oakland Paving Co., 5000 Bway., 117,769 sq.ft. grading at $0.039, 361 ft. concrete curb $0.70, 1,719 ft. concrete gutter $0.28, 84,658 ft. oil macadam $0.12, 11,815 ft. concrete walks $0.165. Noted Dec. 21.

Calif., Rio Vista—Paving streets in Dists. 1 and 2, 1½ in. warrenite on 3½ in. asphaltic concrete, to Municipal Impvt. Co., 306 12th St., Oakland, $98,243 and $17,902 respectively. Noted Jan. 18.

Calif., Santa Ana—Orange Co. improving Dist. 15, 181,967 sq.ft. 4 in. gravel sub base and gravel shoulders, 6 in. concrete surface in center, 8 in. thick at edges, to B. R. Ford, Santa Ana, $29,695. County to furnish cement and sub-grade gravel, $18,000.

Calif., Stockton — San Joaquin Co improving Brian and Woods Ferry Rd., to Irey & Holden, Lodi, $22,005. Noted Dec. 21.

Quebec — Dept. Provincial Rd., Quebec, road work in Loretteville Village, to Langaniere, Houde & Co., Grondines, 17,220; in St Croix, to U. Paris, Deschallons, $139,-959; in St. Nicholas, to T. E. Rousseau, St. Vallier St., Quebec, $117,394.

Industrial Works

PROPOSED WORK

Mass., Springfield—Eastern States Refrigerating Co., 343 Bridge St., soon lets contract to selected contractors and builders, remodeling 3 story plant, Dwight St. $200,000.

Mass., West Springfield (Springfield P. O.)—Wico Electric Co., 132 Liberty St., Springfield, plans 1 story factory, brick and steel, 2nd unit, West Rd. $75,000. Private plans.

R. I., Providence—New York, New Haven & Hartford R.R., New Haven, plans 1 story repair shop, brick and concrete, Oregon St.

Conn., Bantam — Bantam Ball Bearing Co. having plans prepared by Fletcher-Thompson Inc., archts and engrs., 542 Fairfield Ave., Bridgeport, 3 story, factory addition, brick and rein.-con. $150,000.

Conn., New Milford—Confederated Home Abattoirs Corp., c/o H. O. Averhill, New Preston, plans packing plant, brick and concrete, along tracks New York, New Haven & Hartford R.R., here. $150,000. Architect not announced.

Conn., Waterbury — Amer. Metal Hose Co., 67 Jewelry St., having plans prepared 3 story, 60 x 100 ft. plant addition, brick and steel. $130,000. Architect not announced.

N. Y., Buffalo—J. W. Clement Co., 8 Lord St., had plans prepared 3 story, 60 x 100 ft., printing plant, rein.-con. and brick, Lord St. $150,000. Architects name withheld.

N. Y., Syracuse—E. A. Simonds Co. having plans prepared by Goggin & Goggin, archts, and engrs., University Bldg. 4 story, 50 x 103 ft., furniture plant, North Clinton St. $50,000.

Pa., Elizabethtown—Morganthau Electric Co., 204-206 Market St., Harrisburg, plans 2 story and basement, 80 x 110 ft. rein.-con. plant, here. $100,000. Architect not selected.

Pa., Etna (Pittsburgh P. O.)—Etna Buick Co., 425 Butler St., having plans prepared by C. R. Geisler, archt., Ferguson Bldg., Pittsburgh, 2 story, 75 x 100 ft. concrete and brick addition to garage, Maplewood and Spring Sts. $40,000.

Pa., Phila.—See "Buildings."

W. Va., Martinsburg—Dunn Woolen Mills having plans prepared 2 story, 36 x 200 ft., rein.-con. and brick mill. Private plans.

N. C., Belmont—Eagle Yarn Mills Co. plans 10,000 spindle cotton mill. W. B. Puett, pres.

N. C., Belmont—Stowe Spinning Co. plans 22,000 spindle cotton mill. S. P. Stowe, pres.

O., Cleveland—Forest City Fdry & Mfg. Co., 1220 Main Ave., plans 1 story, brick and steel foundry, West 90th St. along tracks of Cleveland, Cincinnati, Chicago & St. Louis R.R. $200,000. Architect not selected.

O., Cleveland—Cleveland Metal Products Co., 7609 Platt Ave., had plans prepared by G. S. Rider & Co., archts. and engrs., Century Bldg., altering brick and steel factory and elevated track, 7600 Platt Ave. $75,000.

Every state in the Union was represented in Construction News of Feb. 1 except Arizona and Montana.

O., Cleveland—E. J. Redmond Electric Co., c/o E. J. Redmond, 711 St. Clair Ave., plans 2 story, 30 x 120 ft., brick and steel factory and warehouse, 1529 St. Clair Ave. $40,000. Private plans.

Ind., Crawfordsville—R. R. Donnelley & Sons Co. soon lets contract 1 story printing plant, brick. $1,000,000. H. Shaw, 39 South State St., Chicago, archt.

Mich., Detroit—Dispatch Laundry Co., 409 West Larned St., plans 4 story, 100 x 196 ft. rein.-con., brick and steel laundry, plain foundation, Grand River Ave. $200,-000. Architect not selected.

Ill., Chicago—Commonwealth Edison Co., Adams and Clark Sts., having plans prepared by Graham, Anderson, Probst & White, archts., 80 East Jackson Blvd., 4 story, 118 x 211 ft., rein.-con., brick and steel central station, first unit, Crawford Ave. Total $10,000,000. Sargent & Lundy, 89 West Adams St., mechanical engrs.

Ill., Chicago — E. Katzinger & Co., 910 West Washington Blvd., having plans prepared by A. S. Alschuler, archt., 28 East Jackson Blvd., 2 story and basement, factory, 200,000 sq.ft. floor space, rein.-con., brick and steel, Armitage and Cicero Sts. $1,000,000.

Ill., Granite City — St. Louis Coke & Chemical Co. plans new blast furnace. $1,500,000. C. R. Holzworth, genl. supt.

Wis., Fond du Lac — W. E. Pierce, 179 North Park St., plans 2 story, 50 x 110 ft., garage, service building and repair shop, brick, rein.-con. and steel, plain foundation. $50,000. Architect not selected.

Wis., La Crosse — Lutheran Hospital Assn., c/o F. Techmer, chn., 1248 Jackson St., having plans prepared by O. A. Merman, archt., Linker Bldg., 2 story power plant, brick, rein.-con. and steel, plain foundation. $125,000.

Wis., La Crosse—See "Buildings" under nurses home.

Wis., Milwaukee—E. A. Swendson, 714 Natl. Ave., having plans prepared by W. J. Kozick, archt., 664 26th St., 1 story and basement, 160 x 220 ft., brick and concrete garage, plain foundation. $80,000.

Wis., Milwaukee—Pittsburgh Plate Glass Co., 205 Lake St., having plans prepared by Kirchoff & Rose, archts., 221 Grand Ave., 5 story and basement, 87 x 140 ft., brick and concrete plant, plain foundation, Lake St.

Wis., Portage—Nehl Boat & Furnace Co., c/o W. Nehls, mgr., making plans 2 story, 40 x 110 ft., factory, brick, rein.-con. and steel, plain foundation. $50,000. Private plans.

Wis., Racine — Lockwood Oil Co., 1421 Racine St., having plans prepared by A. L. Flegel, archt., c/o owner, 1 story and basement, 40 x 80 ft., filling station and warehouse, brick and concrete, plain foundation. $40,000.

Wis., Stetsonville — Ripon Produce Co., 110 North Depot St., Marshfield, having plans prepared by G. A. Krasin, archt., Marshfield, 1 story, 58 x 96 ft., brick, rein.-con. and steel dairy, plain foundation. $50,000.

Wis., Sturgeon Bay—Lakeshore Motors Co., c/o R. Herbold mgr., plans 2 story, 60 x 90 ft. addition to machine shop, brick, rein.-con. and steel, plain foundation. $40,-000. Architect not selected.

Kan., Eldorado—Evans Thewing Refinery Co., 624 Finance Bldg., Kansas City, Mo., had plans prepared brick, rein.-con. and steel refinery, here. $500,000. Private plans.

Neb., Columbus—Swift & Co. had plans prepared creamery, 11th Ave. $75,000. W. W. Whitter, mgr.

Mo., Kansas City—Acme Cleaning Co., 27th and Main Sts., having plans prepared 2 story and basement, 110 x 150 ft., rein.-con. and brick plant, Linwood and McGee Aves. $200,000. Private plans.

Tex., Dallas—De Witt & Lemmon, archts., Southwestern Life Bldg., soon take bids 2 story, 60 x 100 ft., rein.-con. and brick garage, plain foundation, Pearl and Cora Sts., for Nachtrieb Motor Co., 2114 Main St. $60,000.

Tex., Dallas—French Carbon & Battery Co., 2317 Winnebago St., Madison, Wis., plans warehouse and sale building, here. $250,000. A. Folsen, 531 South Ervay St., Dallas, mgr.

Tex., Port Arthur—Gulf Refining Co. plans addition to refinery. $500,000.

Tex., Sherman—Diamond Ice Co. had plans prepared and soon takes bids 2 story, 52 x 120 ft., rein.-con. and brick plant, plain foundation, 30 ton capacity. $100,-000. Architect not announced.

Tex., Sugarland—Imperial Refinery Co. making plans increasing output of sugar plant from 3,500-5,000 bags per day. I. H. Kempner, pres.

Tex., Sweetwater—Universal Gypsum Co., c/o Chamber Commerce, had plans prepared plaster and wall board factory. $100,000. Architect not announced.

Okla., Oklahoma City—C. Bennett & Co., 701 West 15th St., plans 2 story, 100 x 140 ft. automobile building, rein.-con., 5th and Robinson Sts. $150,000. Dodge Co., lessee.

Wash., Seattle — Pacific Steamship Co., Admiral Line, L. C. Smith Bldg., plans shipping terminal, incl. warehouses, office building, three 1,100 ft. piers. $3,000,000.

Wash., Spokane—Hedlund Box and Lumber Co., North 802 Stone St., plans 120 x 240 ft. sawmill. $75,000-$100,000.

Wash., Tacoma—Tacoma Mill Co. plans large sawmill to replace one destroyed by fire. W. Y. Hanry, 817 North Yakima St., pres.

Wash., Vancouver—Columbia River Paper Co. plans paper and pulp mill, sulphite mill, lumber mill and box factory. F. W. Leadbetter, pres.

Calif., Orland—Grant & Goldstein plan 1 story, 80 x 100 ft., rein.-con. garage.

Calif., Richmond—J. P. Stron, 1229 Macdonald Ave., plans 1 story, rein.-con. garage and auto salesrooms. $50,000. Architect not selected.

Calif., San Jose—Pacific Gas & Electric Co., 445 Sutter St., San Francisco, plans warehouse and garage, Lenzen and Stockton Aves. $75,000.

Calif., Stockton—Miller Ice Cream Co., 2941 Bway., Oakland, plans ice cream plant, Willow and Eldorado Sts., here. To exceed $50,000.

Ont., Brantford—Glen Motors Ltd., Bank of Toronto Bldg. plans 1 story, 500 x 1,000 ft. concrete, brick and steel factory. $750,-000. Architect not selected.

Ont., Humberstone — Humberstone Shoe Co. plans 2 or 3 story factory, probably concrete, brick and steel. $60,000. Private plans.

Ont., Mount Dennis—Electroplax Mfg. Co., York Bldg., Toronto, having plans prepared by H. M. Hyland, engr., York Bldg., Toronto, concrete, brick and steel factory, to replace one destroyed by fire. $100,000.

Ont., Norwich—C. G. Orth plans garage and repair shop. $40,000.

Ont., Toronto—Coca Cola Co., 65 Bellwoods Ave., having plans prepared by Harkness, Loudon & Hertzberg, archts., Confederation Life Bldg., 2 story and basement, 80 x 100 ft. rein.-con., brick

Industrial Works (Continued)

and steel factory. Broadview Ave. $150,000.

Ont., Toronto—Cutten & Foster, 302 Church St., having plans prepared by W. F. Sparling & Co., archts., 54 University Ave., 3 or 4 story and basement, rein.-con. factory. $150,000.

BIDS DESIRED

Pa., Phila.—J. T. Windrim, archt., Land Title Bldg., taking bids 2 story and basement, 83 x 104 ft. rein.-con., brick and steel sub-station, Trenton and Turner Sts., for Phila. Electric Co., 10th and Chestnut Sts. $150,000.

O., Cleveland—Perfection Trailer & Mfg. Co., 1453 West 110th St., taking bids and opens same about Feb. 15, 2 story, 100 x 200 ft., brick and steel factory. $60,000. A. L. Hohlfelder, genl. mgr. H. W. Grieme, 110 Engineers Bldg., archt.

Mich., Grand Rapids—Poolman Furniture Co. taking bids 3 story, 30 x 42 ft. brick and steel factory, plain foundation, Ionia St. $50,000. H. Weemhoff, Murray Bldg., archt.

Wis., Chilton—Hingiss & Bessler, at Kiel, and W. F. Neumann, archt., 114 Grand Ave., Milwaukee, taking bids 1 story and basement, 60 x 150 ft., brick and concrete garage, plain foundation. $40,000. Noted Jan. 18.

Wis., Cudahy—E. R. Liebert, archt., 432 Bway., Milwaukee, taking bids on structural steel for 3 story, 100 x 110 ft. yeast house, brick, steel and concrete, plain foundation, here, for Milwaukee Vinegar Co., 79 Buffalo St., Milwaukee.

Calif., San Francisco—A. Burgren, archt., 110 Sutter St., receiving bids 2 story, rein.-con. and brick factory addition, Mission and Ottis Sts., for Pacific Embroidery Co., 130 Sutter St. $40,000.

BIDS RECEIVED

Wis., Milwaukee—See "Buildings."

Minn., Minneapolis—State Bd. Control, Capitol, St. Paul, opened bids Feb. 2, 3 story and basement, rein.-con., brick and tile storehouse and shop buildings, State "U" campus, general contract from Madsen Constr. Co., 848 Builders Exch., $135,000; H. O. McMillan, 2 5th St. S. E., $137,592; J. and W. A. Elliott, 906 Lumber Exch., $139,540. Noted Feb. 1.

Calif., San Francisco—L. R. Lurie Co., Mills Bldg., 2 story, 120 x 192 ft., rein.-con. garage, Fell and Gough Sts., from Yukichevich & Bagge, 180 Jessie St., $125,000. Pacific Telephone & Telegraph Co., 333 Grant Ave., lessee. Noted Jan. 25.

CONTRACTS AWARDED

R. I., Providence—Patton-MacGuyer Co., 31 Mathewson St., 1 story and basement, 50 x 120 ft. factory, brick and timber, plain foundation, Manucentre St., to C. I. Bigney Constr. Co., 357 Westminster St. Archts. est. $40,000.

Conn., Waterbury—Amer. Brass Co., Meadow St., 3 story, 80 x 110 ft. factory addition, brick and steel, Jewelry St., to Tracy Bros. Co., 52 Benedict St. Archts. est. $75,000.

N. Y., Buffalo—Statler Hotels Co., Inc., Mohawk St. and Delaware Ave., 5 story, 132 x 181 ft., rein-con., brick, stone and steel garage, Mohawk St., to Hotel Statler Co. Constr. Dept., Mohawk St. and Delaware Ave., $400,000. Noted May 25.

N. Y., Jamestown—Jamestown Metal Desk Co., 104 Blackstone Ave., 1 story, 100 x 200 ft., brick and stone factory addition, to Shellberg & Lindquist, Jamestown (street address not available). Former contract rescinded. Noted Jan. 11.

Pa., Erie—Union Storage Co., 819 Commerce Bldg., 8 story and basement, 78 x 100 ft. concrete and brick warehouse, to Ferro Concrete Constr. Co., 3rd and Elm Sts., Cincinnati, O. Noted Nov. 23.

Pa., Phila.—Phila. Paper Mfg. Co., River Rd., factory on Randolph and Willow Sts., to J. S. Rogers Co., Drexel Bldg., $225,000.

Pa., Pittsburgh—B. H. Prack, archt. and engr., Keystone Bldg., brick and masonry contracts for 1 story and mezzanine, 80 x 200 ft. factory, Fulton and Page Sts., to Davis-Smith Co., 516 Federal St., heating, to J. A. Langdon, 2030 5th Ave., plumbing to Sauer Plumbing Co., 804 Chestnut St., for B. P. Tracey, 901 Pennsylvania Ave. Noted Jan. 25.

Pa., Reading—Ballinger & Co., archts., 12th and Chestnut Sts., Phila., 7 story and basement, 80 x 259 ft. factory, to J. W. Ferguson Co., 152 Market St., Paterson, N. J., for Reading Hardware Co., 6th St. Noted Jan. 25.

Pa., Scranton—Fairmont Creamery Co., 610 West Linden St., 2 story and basement, 70 x 100 ft. plant, steel frame, 6th and Linden Sts., to L. T. Stipp, 635 Wheeler Ave. Archts. est. $45,800.

Pa., Wilkes-Barre—Shepherd Constr. Co., Miners Bank Bldg., will build 12 warehouse buildings, incl. one 3 story, 140 ft. long, fireproof, South Main St. by day labor. $100,000. W. C. Shepherd, pres. Architect not announced.

Md., Baltimore—L. E. Jones Wire & Iron Wks., 321 North Calvert St., 4 story addition to factory, brick, 321 North Calvert St., to C. E. Ehman & Son, 703 Woodbourne Ave. Archts. est. $40,000.

O., Cleveland—Euclid Prospect Co., c/o A. G. McKee Co., archts., 2422 Euclid Ave., 2 story 48 x 77 ft., brick, steel and concrete garage, 2443 Prospect Ave., to Forschner Co., East 10th St. and St. Clair Ave. Archts. est. $40,000. Noted Feb. 1.

O., Cleveland—W. Rosensweig, Society for Savings Bldg., 1 story, 88 x 100 ft., brick and steel garage, 3834 Prospect Ave., to Attenson & Attenson, 5818 Thackery Ave. Archts. est. $40,000. Noted Jan. 25.

O., Niles—Ohio Galvanizing Co., 1 story, 76 x 120 ft., brick, steel and concrete factory addition, to Warren Eng. Co., Warren.

Mich., River Rouge — Ford Motor Co., Highland Jark (Detroit P. O.) 1 and 2 story, 150 x 300 ft., rein.-con., brick and steel plant, to H. G. Christman Co., 315 Stevens Bldg., Detroit.

Ill., Chicago — Pettibone-Mulliken Co., 4710 West Division St., 1 story, 130 x 400 ft. warehouse, 45 ft. high, rein.-con., brick and steel, to Bowie-Lydon & Co., 340 West Harrison St. Archts. est. $200,000.

Ill., Forreston — Illinois Central R.R., 135 East 11th Pl., Chicago, gravel washing plant, incl. power plant, here, to W. J. Zitterell & Co., Webster City, Ia. Estimate $200,000.

Wis., Milwaukee — P. O. Kopplin, 1145 12th St., 2 story and basement, 40 x 120 ft., brick and timber factory, plain foundation, Cherry St., to H. Danischefsky, 1484 Humboldt Ave. $40,000. Private plans.

Wis., Milwaukee—South Side Malleable Castings Co., 14th and Windlake Aves., 1 story, 180 x 240 ft., annealing plant, brick and steel, plain foundation, 44th Ave., to H. A. Kroening, 893 Layton Blvd. Archts. est. $60,000.

Wis., Racine—Horlick Malted Milk Co., Horlicksville, 1 story, 70 x 120 ft., brick and concrete garage, plain foundation, Northwestern Ave., to Bondgard & Christensen, Mound Ave. and Mead St. Archts. est. $40,000.

Minn., St. Paul — Natl. Furniture and Stove Co., University and Raymond Aves., 2 story and basement, 43 x 141 ft. warehouse, rein.-con. and brick, Dudley St. and Wycoff Ave., general contract to A. G. Erickson, 410 North Prior Ave., $39,500.

Mo., Kansas City—Amer. Butter Co., 517 Delaware St., 5 story and basement, 75 x 130 ft., rein.-con., brick and terra cotta warehouse, Pershing Rd., to Fogel Constr. Co., 619 Reliance Bldg., $130,000. Archts. est. $165,000. Noted Jan. 4.

Tex., Graham—M. K. Graham, 2 story, brick garage, plain foundation, to W. O'Connell, Graham, $45,000.

Nev., Gerlach—Pacific Portland Cement Co., Pacific Bldg., San Francisco, cement plant and townsite incl. hotel, cottages, auditorium, power house, etc., here, to Cahill Bros., 110 Sutter St., San Francisco. Noted Feb. 1 under "Buildings."

Calif., Isleton—J. F. Butts Co., 2 Pine St., San Francisco, 1 story, 100 x 260 ft. cannery, here, to Davison & Nicolsen, 180 Jessie St., San Francisco, $40,000. Noted Nov. 30.

Buildings

PROPOSED WORK

N. H., Gorham—High School—School Dept. plans 2 story and basement, brick. $150,000. Architect not selected.

Mass., Boston — Apartment — Rotman & Herwitz, c/o Silverman, Brown & Heenan, 51 Cornhill, having plans prepared 4 story, 75 x 125 ft., rein.-con. and brick, Warren St. $450,000.

Mass., Chicopee — Club House — Polish Natl Home, c/o J. J. Chmura, 211 Exchange St., plans 5 story, brick and steel, plain foundation, Centre St. $150,000. $160,000. G. P. Dion, 30 Church St., archt.

Mass., Middleboro—High School—School Dept. plans 2 story and basement, brick and steel, North Main St. $150,000. E. I. Wilson, 109 State St., Boston, archt.

Mass., South Hadley — Dormitory — Mt. Holyoke College plans 3 story, brick, steel and concrete, Campus, to replace one recently destroyed by fire. $175,000. M. E. Woolley, pres. Architect not announced.

Mass., Westford (Graniteville)—School Comn. plans 2 story and basement, brick and steel. $150,000. Architect not selected.

Mass., Weymouth — High School — Bd. Educ. having plans prepared by H. B. S. Prescott, archt., 12 Pearl St., Boston, 1 story and basement, brick. $250,000.

R. I., Edgewood (Providence P. O.)—Library—Hall Library Comn., c/o G. F. Hall, archt., Union Trust Bldg., Providence, having plans prepared 2 story, brick and stone, here. $300,000.

R. I., Pawtucket—Club and Business—Loyal S. S. Collier Lodge, I. O. O. F. Bldg. plans 5 story, brick and steel, Broad and Manchester Sts. $200,000. Architect not selected.

Conn., Groton—High School—School Bd. plans 2 story and basement, Main St. $250,000. Architect not announced.

Conn., Hartford—Bank and Office—Dennison & Hirons, archts., 288 Lexington Ave., New York City, soon let contract 7 story, about 70 ft. high, 60 x 170 ft., stone, marble and concrete, Main St. at City Hall Sq., for Phoenix Natl. Bank. $500,000. Noted Nov. 16.

Conn., Hartford—Orphanage—Hartford Orphan Asylum, 171 Putnam St., had plans prepared by G. Atterbury, archt., 139 East 53rd St., New York City, 2 story, 30 x 100 ft. with 20 x 40 ft. ell, Bloomfield and Albany Aves. $200,000. Noted Jan. 12, 1922.

Conn., Hartford — School — Northwest School Dist. plans 2 story and basement, brick and concrete. $275,000. A. Cameron, 264 Edgewood St., member. Architect not selected.

Conn., Middletown — School — School Com. having plans prepared by W. T. Towner, archt., 152 West 42nd St., New York City, 2 story, 60 x 135 ft., brick and steel, Pease Ave. $150,000.

Conn., New Britain—Dormitory—State Bd. Educ., State Capitol, Hartford, plans 3 story, brick, at State Normal School, here. $500,000. Architect not selected.

Conn., Winsted—Theatre—W. H. and S. Mosely, Greenswood Rd., Norfolk, having plans prepared by Taylor & Levi, archts., 105 West 40th St., New York City, 1 and 2 story, brick and steel, Main St., here. $150,000.

N. Y., Brooklyn — Apartment — Norek Constr. Co., Inc., c/o Shampan & Shampan, archts. and engrs., 188 Montague St., having plans prepared 6 story, brick, steel and stone, plain foundation, Eastern Parkway near Classon Ave. $900,000.

N. Y., Buffalo—Bank—Marine Trust Co., 325 Main St., plans large brick and steel addition, in rear of present structure. $500,000. Architect not announced.

N. Y., Eggertsville — School—Bd. Educ. plans school, Eggertsville Rd. $190,000. Architect not selected.

N. Y., Fayetteville — Clubhouse — Onondaga Golf & Country Club, plans clubhouse, to be built in several units, Seneca Turnpike. $200,000. E. I. White, White Memorial Bldg., Syracuse, pres. Architect and engineer not announced.

N. Y., Geneva—Club—Knights of Columbus, 68 Castle St., plans modern club and home, Main St. $200,000. Architect not announced.

N. Y., Lackawanna (Buffalo P. O.) — Welfare Hall—Bethlehem Steel Co. plans rein.-con., brick and steel, Ridge Rd. $500,000. W. A. James, c/o owner, engr.

N. Y., New York—Apartment—Syndicate headed by Gogin & Ripley, c/o H. O. Chapman, archt. and engr., 334 5th Ave., having plans prepared 9 story, 50 x 120 ft., brick, steel and stone, plain foundation, 951 5th Ave.

Buildings (Continued)

N. Y., Penn Yan—College—Keuka College plans to construct additional building. $500,000. A. H. Norton, pres. Architect not announced.

N. Y., Penn Yan—Hospital—Soldiers & Sailors Hospital, plans new unit to hospital, modern construction. $175,000. E. J. Walker, member building com. Architect not announced.

N. Y., Utica—Theatre—W. H. Linton, c/o T. W. Lamb, archt. and engr., 644 8th Ave., New York City, having plans prepared brick, steel and stone, plain foundation. Lafayette St., here. $150,000.

N. J., Leonia—School—Bd. Educ. having plans prepared by E. Sibley, archt., Bluff Rd., Palisade, brick. $200,000.

Pa., Allentown—Clubhouse—Lodge 120, B. P. O. E., plans extensive alterations to clubhouse, 8th and Walnut Sts. $150,000. Architect not announced.

Pa., Bellefonte—Theatre—H. J. Thompson, Curwensville, plans 2 story and basement, 60 x 100 ft. rein.-con., brick and steel, High St., here. $150,000. Architect not selected.

Pa., Canadenis—Hotel—Price Bros. plan hotel. $350,000. Architect not announced.

Pa., Hazelton—Hotel—G. B. Markle, 227 East Broad St., soon takes bids 9 and 10 story and basement, 95 x 150 ft. rein.-con., brick and steel, Broad and Church Sts. $2,000,000. Thomas, Martin & Kirkpatrick, Otis Bldg., Phila., archts.

Pa., Oil City—Hotel—Oil City Hotel Co. plans 100 room addition to Hotel Arlington. $150,000. Architect not announced.

Pa., Phila.—Auditorium and Clubhouse—University of Pennsylvania, 34th and Spruce Sts., takes bids in spring, brick and stone auditorium, clubhouse and power plant, 34th and Spruce Sts. $3,000,000. P. Cret, 1512 Chestnut St., archt.

Pa., Williamsport—Church—West 4th St. Methodist Church takes bids in spring, 1 story and basement, 90 x 110 ft. brick, 4th St. and Cemetery. $150,000. W. W. Sholl, pastor.

Md., Baltimore — Apartment — Wyatt & Nolting, archts., Keyser Bldg., prepared plans 9 story, 192 x 241 ft., rein.-con. and brick, steel frame, University Parkway. $800,000. Owner's name withheld.

Md., Baltimore—Clubhouse—Knights of Columbus, Madison and Cathedral Sts., having plans prepared by G. R. Callis, Jr., archt., Amer. Bldg., 4 story, 60 x 119 ft., brick, Madison and Cathedral Sts. $150,000.

Md., Baltimore—Office—Home Friendly Society, 1026 Linden Ave., having plans prepared by C. N. and N. Friz, archts., Lexington Bldg., 10 story, 60 x 150 ft., brick and steel, Park Ave. and Centre St. $500,000. H. F. Doeleman, 507 North Charles St., engr. Noted Jan. 18.

Md., Baltimore — School, Parish House and Convent—St. Edward's Roman Catholic Church, c/o A. Kahler, pastor, having plans prepared by G. R. Callis, Jr., archt., Amer. Bldg., 3 story, 62 x 147 ft. school, 2½ story, 34 x 60 ft. parish house, and 2½ story, 34 x 60 ft. convent, Poplar Grove St. and Lafayette Ave. $150,000.

W. Va., Charleston—Apartment—Kanawha Apartments, Inc., c/o Wysong & Jones, archts., Charleston, having plans prepared 8 story and basement, 90 x 120 ft., brick, tile, steel and terra cotta, Kanawha St. $600,000.

W. Va., Huntington—Bank and Office—Union Savings Bank, 9th St., having plans prepared by Meanor & Handloser, archts., Robson-Prichard Bldg., 12 story and basement, 44 x 78 ft., brick and tile, 4th Ave. and 9th St. $500,000.

W. Va., Huntington—Club and Lodge—Peramorz Grotta, M. O. V. P. E. R., plans 3 story and basement, 75 x 120 ft. $150,000. Architect not selected. Meanor & Handloser, archts., Robson-Prichard Bldg., submitting sketches.

W. Va., White Sulphur Springs—Hotel—White Sulphur Springs Co., Inc., having plans prepared by Elzner & Anderson, archts., Citizens Bank Bldg., Cincinnati, O., 5 story and basement, T shape, brick, steel and limestone. $500,000.

N. C., Charlotte—Courthouse, Jail and Office—City and Mecklenburg Co. plan 12 story, South Tryon St. $1,000,000. Project not definitely decided upon. If not undertaken, city will construct city hall and county will remodel old building. M. E. Boyer, Jr., Trust Bldg., archt.

N. C., Charlotte — Store — Efird Dept. Store, 43 East Trade St., having plans prepared by L. Asbury, archt., Realty Bldg., 6 story, 70 x 83 ft. addition, East 5th St. $150,000.

Fla., St. Petersburg — Hotel — Penflora Restaurant Co., having plans prepared by Van Leyen Schilling, Keough & Reynolds, archts., 3440 Cass Ave., Detroit, Mich., 7 story and basement, 70 x 100 ft., steel, stone and terra cotta, plain foundation. $150,000.

Miss., Vicksburg — Schools — Takes bids about March 19, 3 story school on Cherry St., $200,000. W. A. Stanton, Vicksburg, archt.; 3 story, 140 x 150 ft., Magnolia St., $80,000, M. J. Donovan, Vicksburg, archt.; repair work to schools, $145,000. Noted Dec. 28.

Tenn., Chattanooga—Physicians, etc.—F. Robinson, 709-11 Chestnut St., plans 8 story, 60 x 150 ft., physicians' building and garage, rein.-con. and brick, plain foundation, Georgia Ave. $200,000. Architect not announced.

Tenn., Memphis—Office—Memphis Cotton Exch., 66 South Front St., having plans prepared by Mahan & Broadwell, archts., Amer. Bank Bldg., 14 story, brick and terra cotta, South Front St. and Union Ave., S. E.

O., Cleveland—Club and Office—Cuyahoga Co. Council of Amer. Legion, c/o L. P. Wolfford, secy., East 21st St. and Euclid Ave., plans 13 story and basement, brick, steel and concrete. $900,000. Architect's name withheld.

O., Cleveland — Commercial — Phoenix Mortgage Co., c/o D. Lawrence, secy., Natl. City Bldg., plans 4 story, brick, steel and concrete, East 17th St. and Superior Ave. $150,000. Architect not selected.

O., East Cleveland (Cleveland P. O.)—High School—Feb. 27, to vote on $750,000 bonds for 3 story and basement, 32 room, brick, steel and concrete, Euclid and Grasmere Aves., for Bd. Educ., Cavanaugh & Baer, archts., 2725 Prospect Ave., Cleveland, prepared preliminary plans. Noted Dec. 28.

O., East Cleveland (Cleveland P. O.)—School, etc.—Feb. 27, to vote on $150,000 bonds for 4 room, brick and steel addition to Caledonia School, and concrete grand stand for Shaw High School athletic field, A. Tilden, Prospect and Euclid Aves., dir. Bd. Educ. Architect not selected.

O., Lima—Schools — Bd. Educ. having plans prepared by T. D. McLaughlin, archt., Savings Bldg., for South High, Franklin Junior High and Grade School. $700,000.

Mich., Detroit—Apartment—B. Braver, 271 Hendrie St., having plans prepared by Varney & Varney, archts., 1422 Washington Blvd., 4 story and basement, 92 x 93 ft. brick and steel, plain foundation, Collingwood Ave. $175,000.

Mich., Detroit — Church — West Grand Blvd. Methodist Episcopal Church, having plans prepared by W. E. N. Hunter, archt., 1436 Washington Blvd., 2 story, 100 x 264 ft. brick, steel and stone, plain foundation, West Grand Blvd. $300,000.

Mich., Detroit—Hospital—Detroit Receiving Hospital, Macomb St., plans 4 story, rein.-con., brick and steel addition, plain foundation, capacity 200 beds, Macomb and Antoine Sts. $500,000. Architect not selected.

Mich., Detroit—Theatre—J. M. Robertson, Brook Bldg., having plans completed by C. W. Brandt, archt., Kresge Bldg., 2 story and basement, 140 x 160 ft. rein.-con., brick and steel, plain foundation, Gratiot Ave. and May St. $500,000.

Mich., Pontiac—Hotel—P. R. Rossello, archt., 406 Congress Bldg., Detroit, preparing plans 10 story and basement, 120 x 140 ft. rein.-con., brick and steel, plain foundation. $450,000. Owners name withheld.

Mich., Strathmoor—School Dist. 4, having plans prepared by Verner, Wilhelm & Molby, archts., 602 Book Bldg., Detroit, 2 story and basement, 120 x 135 ft. rein.-con., brick and steel, plain foundation. $200,000.

Ill., Chicago—Apartment—C. F. Henry, 7455 Greenwood Ave., plans two 3 story, 120 x 125 ft., rein.-con., brick and steel, Clyde Ave., one near 69th St., other near 70th St. $150,000 each. Private plans.

Ill., Chicago—Apartment—A. L. Himelblau, archt., 127 North Dearborn St., preparing plans three 3 story, 136 x 390 ft., rein.-con., brick and steel, Addison St. near Glenwood Ave. $600,000. Owner's name withheld.

Ill., Chicago — Apartment — Ludgin & Leviton, Archts., 53 West Jackson Blvd., soon receives bids 3 story, 144 x 150 x 188 x 277 ft., rein.-con., brick and steel, Spaulding and Schubert Aves. $350,000. Owner's name withheld. Noted Nov. 2.

Ill., Chicago—Apartment—P. F. Olsen, archt., 127 North Dearborn St., preparing plans 3 story, 103 x 160 ft., rein.-con., brick and steel, Lakewood Ave. and Sawyer St. $300,000. Owner's name withheld.

Ill., Chicago—Apartment—P. F. Olsen, archt., 127 North Dearborn St., preparing plans 3 story, 125 x 250 ft., rein.-con., brick and steel, Hampden Court near Wrightwood Ave. $450,000. Owner's name withheld.

Ill., Chicago—Office—Graham, Anderson, Probst & White, archts., 82 East Jackson Blvd., preparing plans 16 story, 157 x 160 ft., rein.-con., brick and steel, Canal St. near Jackson St. $7,000,000. Owner's name withheld.

Ill., Chicago — Store and Cafe — F. Loeffler, c/o Loewenberg & Loewenberg, archts., 111 West Monroe St., having plans prepared 2 story, 104 x 125 ft., rein.-con., brick and steel, Cottage Grove Ave. and 64th St. $200,000.

Ill., East St. Louis—Hotel—St. Clair Hotel Co., c/o A. T. Spiver, 511 Missouri Ave., had plans prepared by H. L. Stevens & Co., archt., 30 North Michigan Ave., Chicago, 6 or 7 story, 130 x 145 ft., rein.-con. and brick, concrete pile foundation, Missouri Ave., here. $600,000.

Wis., Appleton—Temple—Appleton Masonic Temple Assn., c/o A. E. Buchanan, pres., 718 College Ave., had plans prepared by Leenhouts & Guthrie, archts., 424 Jefferson St., Milwaukee, 3 story, 62 x 100 ft. and 2 story and basement, 46 x 50 ft. stone and concrete, plain foundation. $150,000.

Wis., Green Bay—Club House—Green Bay Columbus Club, c/o A. K. Bong, Sheridan Bldg., H. A. Foeller, archt., Nicollet Bldg., and H. Carr, archt., Minahan Bldg., soon take bids 3 story and basement, brick and concrete, plain foundation. $150,000.

Wis., La Crosse—Nurses' Home, etc.—Lutheran Hospital, 1910 South Front St., having preliminary plans prepared by O. A. Merman, archt., 210 Linker Bldg., 3 story and basement nurses home and 1 story power house, brick and concrete, plain foundations. $150,000.

Wis., LaCrosse—Schools—Bd. Industrial Educ., c/o J. B. Funke, pres., having plans prepared by O. A. Merman, archt., Linker Bldg., 4 story, 200 x 310 ft., rein.-con., brick and steel, plain foundation. $400,000.

Wis., La Crosse—Schools—School Bd. and Bd. Industrial Educ. having preliminary plans prepared by O. A. Merman, archt., 210 Linker Bldg., for Lincoln Grade School, 8th and Division Sts., $200,000; North Branch Grade School, George St., North La Crosse, $30,000; Longfellow Vocational School, 6th and Vine Sts., $200,000.

Wis., Milwaukee—Business—R. Strandt Co., 862 Teutonia Ave., having plans prepared by C. H. Tharinger, archt., 3328 State St., 3 story and basement, 82 x 150 ft., brick and concrete, plain foundation, 3rd St. $150,000.

Wis., Milwaukee—Church and School—St. Catherine Congregation, c/o R. L. Kuhn, chn. building com., 548 12th St., having plans prepared by Backes & Pfaller, archts., 216 West Water St., 2 story, brick and tile, or stucco and tile, plain foundation, Center St. $150,000. Noted Dec. 28.

Wis., Milwaukee—Exchange—Wisconsin Telephone Co., 418 Bway., having plans prepared by A. C. Eschweiler, archt., 141 Wisconsin St., 5 story, 120 x 120 ft. addition, brick, steel and concrete, Bway. $500,000.

Wis., Milwaukee—Office and Store—A. J. Straus, 97 Wisconsin St., having preliminary plans prepared by Van Ryn & De Gelleke, archts., 114 Grand Ave., 11 story and basement, 40 x 90 ft., brick, plain foundation, Grand Ave. and 3rd St. $300,000-$400,000. Noted Jan. 11.

Wis., Oconomowoc—Seminary—Redemptorist Fathers had plans prepared by A. C. Eschweiler, archt., 141 Wisconsin St., Milwaukee, 2 wings each, 3 story and basement, 40 x 126 ft., brick and concrete, plain foundation. $400,000.

Wis., Racine—Academy—St. Catherine's Academy, 1201 Park Ave., plans 2 and 3

Buildings (Continued)

story and basement, L shaped, brick and concrete, plain foundation, Park Ave. $150,000. Architect not selected.

Wis., South Milwaukee—School, Church, etc.—St. John's Congregation, 800 Marquette Ave., having preliminary plans prepared by A. C. Eschweiler, archt., 141 Wisconsin St., Milwaukee, 2 story and basement, 34 x 100 ft., (1st unit) brick and tile, plain foundation. $200,000.

Minn., St. Paul — Auditorium — Dept. Educ. had sketches made by F. X. Tewes, city archt., City Hall, 3 or 4 story, rein.-con., brick, tile and steel addition, 4th St. and Franklin Ave. $500,000. L. R. S. Ferguson, City Hall, comr.

Minn., St. Paul—Hospital—Northwest Baptist Hospital Assn., plans 3 or 4 story and basement, rein.-con., brick and tile, University and St. Anthony Aves. $400,000. R. Earl, 1210 Lowry Bldg., chn. Bd. Dir. Architect not announced.

Minn., St. Paul — Schools — Dept. Educ. plans 2 senior high schools, one in Rice St. Dist., other in Dayton Dist., $600,000 each; 3 junior high schools, one in Macalester Dist., one near Victoria St. and Marshall Ave., other at Walsh Ave. and Jenks St., $400,000 each; remodeling junior high school at Baldwin Ave. and Grant St., $400,000. F. X. Tewes, City Hall, city archt.

Kan., Emporia—Bank—Commercial Citizens Natl. Bank had plans prepared by Weavy & Alford Co., archts., 1923 Cain Ave., Chicago, 5 story and basement, 45 x 130 ft., rein.-con., brick and stone, 6th and Commercial Sts. $300,000.

Mo., Kansas City—Hotel and Apartment—Rush & Willett, 507 Lathrop Bldg., having preliminary plans prepared by Lodge & Gornall, archts., 1505 Commerce Bldg., 8 story and basement, rein.-con., brick, stone and terra cotta, Valentine Rd. and Bway. $500,000.

Mo., Kansas City — Institute — Deaner Dental Institute, 3520 Bway., having plans prepared by A. F. Adams, archt., 600 Walnut St., 4 story and basement, 52 x 126 ft., rein.-con. and stone, Hunter and Baltimore Aves. $150,000.

Mo., Springfield—Passenger Depot—St. Louis & San Francisco R.R., St. Louis, having plans prepared passenger depot, Mill and Main Sts., here. $500,000. F. G. Jonah, St. Louis, ch. engr.

Mo., University City—Schools—Voted $135,000 bonds for high school, $115,000 bonds 12 room grade school, $12,000 bonds site new grade school. W. B. Ittner, 911 Locust St., St. Louis, archt.

Tex., Dallas—Church—Central Christian Church, c/o G. Frank, Masten and Patterson St., having preliminary plans prepared converting present 2 story brick church into 6 story community house, church and dormitory. $350,000. Architect not announced.

Tex., Houston—Club—Y. W. C. A., 1014½ Prairie Ave., plans club, incl. dormitory for 125 persons. $325,000. Architect not announced.

Tex., Livingston—Court House—Polk Co. having plans prepared by McClelland & Fink, archts. and engrs., Woodworth Bldg., Houston, for court house. $200,000. E. T. Murphy, co. judge.

Okla., Ardmore—Temple—Masonic Lodge, c/o G. E. Dannis, Box 301, plans to raise $500,000 for a 3 story and basement, rein.-con. and brick. Architect not selected.

Okla., Oklahoma City — Office — S. M. Gloyd, Continental Bldg., plans 8 story, 75 x 100 ft., rein.-con., Bway. and Main St. $200,000.

Okla., Okmulgee—Hotel—Creek Hotel Co. had plans prepared by Smith & Senter, archts., 401 Commerce Investment Bldg., and soon take bids 9 story and basement, 100 x 140 ft., rein.-con., brick, steel, stone and terra cotta, 3rd and Morton Sts. $1,000,000.

Wash., Seattle — Office — See "Industrial Works."

Wash., Seattle—Office and Store—Shafer Bros. Land Co., Arcade Bldg., having plans prepared by H. E. Blackwell, archt., 112 Harvard St. N., 10 story, 53 x 120 ft., rein.-con. and brick, 6th and Pine Sts. $500,000.

Calif., Centerville—High School—Washington Union High School Dist., having plans prepared by H. H. Meyers, archt., Kohl Bldg., San Francisco, brick and concrete.

Calif., Fresno — Fire Stations — Plans election to vote on $250,000 to $300,000 bonds to construct fire stations and purchase additional equipment. W. Stranahan, city engr.

Calif., Glendale — Schools — Glendale School Dist. plans election to vote on $450,000 to $500,000 bonds to purchase additional sites, erect new schools and additions to present structures.

Calif., Hollywood — Club — Hollywood Athletic Club having plans prepared by Milwaukee Bldg. Co., archts., Wright and Callendar Bldg., Los Angeles, 2 story, rein.-con. and hollow tile club, and 9 story annex for dormitory quarters. To exceed $200,000.

Calif., Huntington Beach — School — Huntington Beach Grammar School Dist. to vote on $250,000 bonds for school. Architect not selected.

Calif., Los Angeles—Loft and Store—Alexander & Oviatt, c/o Walker & Eisen, archts., Pacific Finance Bldg., having sketches made 12 story, fireproof, Olive St. To exceed $500,000.

Calif., Oakland—Office—C. and E. G. Burg, 2235 Macdonald Ave., Richmond, plans fireproof office, 12th and Franklin Sts., here. To exceed $150,000. Architect not selected.

Calif., San Diego—Library—April 3, to vote on $175,000 bonds enlarging public library. A. H. Wright, city clk.

Calif., San Francisco — Apartment — T. McDougall, c/o J. L. Stewart, archt., Claus Spreckels Bldg., having plans prepared 8 story and basement, rein.-con., Western Addition. $265,000.

Calif., San Francisco—Apartment—A. F. Rousseau, French Bank Bldg., had plans prepared by D. C. Coleman, archt., 110 Sutter St., 6 story and basement, rein.-con., Geary and Leavenworth Sts. $250,000. Noted March 2.

Calif., San Francisco—Apartment—San Francisco capitalists organizing company and having sketches prepared by J. L. Stewart, archt., Claus Spreckels Bldg., 15 story, fireproof, probably rein.-con. $300,000.

Calif., San Francisco—Hotel—V. W. Houghton, archt., 275 Post St., preparing preliminary plans 7 story, fireproof, downtown section of city. $150,000. Owner's name withheld.

Calif., Santa Barbara—Temple—Masonic Temple Assn. having plans prepared by C. Werner, archt., Santa Fe Bldg., San Francisco, 3 story, rein.-con. $250,000.

Calif., Whittier—Apartment and Store—Whittier Hotel Co., c/o Walker & Eisen, archts., Pacific Finance Bldg., Los Angeles, having plans prepared 3 story, brick or concrete, Philadelphia St. $200,000.

Ont., Belleville—College—Albert College having plans prepared by Chapman, Oxley & Bishop, archts., Harbor Bldg., Toronto, 3 story and basement, concrete, brick, stone and tile. $300,000.

Ont., Belleville — High School — High School Bd., Dunbar St., plans 15 or 20 room, concrete, brick and steel. $200,000. Architect not selected. J. Diamond, secy.

Ont., Hamilton—School—Bd. Educ. plans 2 story and basement, 12 room, concrete, brick and steel, Murray St. $200,000. Architest not selected.

Ont., Kingston — Hospital — Kingston General Hospital plans clinic hospital, probably concrete, brick and stone. $250,000. Architect not selected.

Ont., Pembroke—School—Bd. Educ., plans concrete, brick and steel. $150,000. W. C. Keighley, Pembroke, archt.

Ont., Peterboro—Church—Salvation Army plans to rebuild 1 and 2 story and basement, brick, recently destroyed by fire. $175,000. Architect not selected.

BIDS DESIRED

N. Y., Brooklyn—Bank—Feb. 19, by Holmes & Winslow, archts. and engrs., 134 East 44th St., New York, 2 story, brick, steel and stone, plain foundation, Atlantic and Pennsylvania Aves., here, for East New York Savings Bank, Atlantic Ave. $500,000. Noted Dec. 14.

N. Y., East Rochester—School—Feb. 10, by O. W. Dryer, archt., 310 Cutler Bldg., Rochester, 2 story and basement, 146 x 172 ft., rein.-con. and steel, East Ave., here, for Bd. Educ. $180,000. Noted April 6.

N. Y., Owego—School—Feb. 23, by Bd. Educ., 2 story, 120 x 145 ft., brick, $250,000. Coffin & Coffin, 522 5th Ave., New York City, archts. Noted Sept. 21.

N. J., New Brunswick — Animal Husbandry—Feb. 26, by B. G. Lewis, comr., State House, Trenton, 2 story and basement, 80 x 105 ft., brick and limestone, here, for State Agricultural College. $150,000. A. B. Mills, State Office Bldg., Trenton, engr.

Pa., Ellwood City—School—Feb. 15, by G. B. Hancher, secy. Bd. Educ., 2 story, 22 room, brick and steel, 4th and Crescent Sts. $200,000. E. A. Stotz, Monongahela Bank Bldg., Pittsburgh, archt.

Pa., Middletown—Home—I. O. O. F., 17th and Tioga Sts., Phila., taking bids 2 story and basement, 38 x 229 ft. with two 33 x 154 ft. wings, brick, steel and stone, plain foundation, here. $750,000. W. H. Lee, 32 South 17th St., Phila., archt. Noted Nov. 30.

Pa., Monongahela—High School—Feb. 15 by Bd. Educ., and W. G. Eckles Co., archts. Lawrence Savings & Trust Co., New Castle, 2 story and basement, 75 x 300 ft. $200,000. Noted Nov. 2.

Pa., Phila.—Apartment—J. E. Fieldstein, archt., Otis Bldg., taking bids 4 story and basement, 25 x 145 ft. brick, steel and stone, plain foundation, 1300 North Broad St. $150,000. Owner's name withheld.

Pa., Phila.—Apartment—T. H. Harges, 501 North 52nd St., taking bids 6 story and basement, 124 x 208 ft. rein.-con. and brick, plain foundation, 46th and Walnut Sts. $250,000. Private plans.

Pa., Troy—School—Feb. 27, by Bd. Directors Boro. Schools, 2 story and basement, 110 x 140 ft. brick and steel. $150,000. W. R. Croman, secy. Lawrie & Green, 222 Market St., Harrisburg, archts.

Md., Baltimore—School—Feb. 14, by Bd. Awards, 3 and 4 story, 87 x 237 ft., rein.-con. and brick, 36th St. west of Falls Rd. $450,000. W. W. Emmart, Union Trust Bldg., archt.

W. Va., Williamson—Bank and Office—A. Acy, archt., 1st Natl. Bank Bldg., taking bids and opens same about Feb. 15, 3 story and basement, 25 x 100 ft., brick, tile, steel, rein.-con. and terra cotta, for Day and Night Bank. $150,000.

Tenn., Memphis — Office — Feb. 28, at office of President of Columbian Mutual Life Assurance Society, Odd Fellows Bldg., 22 story and tower, steel, concrete, granite, clay tile, terra cotta and enamel brick, on 75 x 77 ft. lot. Boyer & Baum, Arcade Bldg., St. Louis, Mo., I.O.O.F. Bldg., Memphis, archts. Noted Dec. 14.

O., Cleveland—Apartment Hotel—Feb. 12, by Commodore Impvt. Co., c/o M. Marmorstein, Ulmer Bldg., 12 story and basement, 122 x 160 ft., brick, steel and concrete, 11327 Euclid Ave. $2,000,000. S. H. White, Schofield Bldg., archt.

O., Columbus—Administration, etc.—Feb. 20, by C. E. Steele, secy. Bd. Trustees Ohio State University, 3 story and basement, 100 x 180 ft. administration building, $300,000, 4 story and basement, 75 x 145 ft. medical science building, $250,000, both brick, stone and concrete on campus. Former bids rejected. J. N. Bradford, Ohio State University, archt. Noted Sept. 14.

O., Columbus — Office — Feb. 14, by Trustees of United Commercial Travelers of America, 636 North Park St., 2 story and basement, 75 x 152 ft., brick, concrete and terra cotta, North Park St. $250,000. T. D. McLaughlin, Savings Bldg., Lima, archt.

O., East Cleveland (Cleveland P. O.)—Apartment—Zuckerman Bros., East 116th St. and Kinsman Rd., Cleveland, taking bids 3 story and basement, 73 x 150 ft. brick and steel, 1744 Wymore Ave., here. $150,000. Steffens & Steffens, Williamson Bldg., Cleveland, archts.

O., Groveport—High School—Feb. 14, by Bd. Educ., 2 story, 120 x 199 ft., brick, steel and concrete. $185,000. W. H. Hanstein, pres. Riebel Sons & Matheny, 1st Natl. Bldg., Columbus, archts. and engrs.

O., Toledo — Church — Feb. 23, by St. Paul's Lutheran Church, 1 story and basement, brick, steel and stone. $300,000. J. W. C. Corbusier, B. F. Keith Bldg., Cleveland, archt. Langdon, Hohly & Gran, Nicholas Bldg., associated archts.

Mich., Albion—Hospital—Feb. 19, by P. P. Nagle, city clk., 3 story, rein.-con., brick and steel, plain foundation, for City. $175,000. A. Wood, 3513 Woodward Ave., Detroit, archt.

Buildings (Continued)

Mich., Detroit — Apartment — M. H. Finkel, archt., 919 Majestic Bldg., taking bids and opens same about Feb. 15, 11 story and basement, 100 x 120 ft. rein.-con., brick and steel, plain foundation, Cass Ave., for H. Silverman, 1030 Penobscot Bldg.

Mich., Grand Rapids—High School—Feb. 15, by Bd. Educ., City Hall, 3 story addition to Union High School, rein.-con., brick and steel, plain foundation. $200,000. H. H. Turner, 919 Michigan Trust Bldg., archt.

Ill., Chicago—Apartment—H. I. Dalsey, archt., 2321 West North Ave., receiving bids 3 story, 125 x 125 ft., rein.-con., brick and steel, 2619-29 Greenview Ave. $150,000. Owner's name withheld.

Ill., Chicago—Apartment—Feb. 17 by H. J. Leidberg, archt., 154 West Randolph St., 3 story, 150 x 390 ft., rein.-con., brick and steel, Sheridan Rd. near Grace St., for A. Wille, c/o architect. $800,000.

Ill., Chicago—Apartment—Lundstrom & Carlson, 7240 South Park Ave., receiving bids 3 story and basement, 130 x 157 ft., rein.-con., brick and steel, Jefferson Ave. and 72nd Pl. $250,000. L. G. Hallberg & Co., 116 South Michigan Ave., archts.

Ill., Crystal Lake—School—Feb. 15, by Bd. Educ., 2 story, 200 x 200 ft., rein.-con., brick and steel. $200,000. J. C. Llewellyn, 38 South Dearborn St., Chicago, archt.

Wis., Green Bay—Hospital—Feb. 17, by Deaconess Hospital, 742 Webster St., 3 story and basement, 66 x 147 ft., brick, tile and concrete addition, plain foundation. $150,000. Oppenhamer & Obel, Nicollet Bldg., archts. Noted Aug. 17.

Wis., Kenosha — Schools — Feb. 20 (change of date), by School Bd., two 2 story and basement, 67 x 180 ft., brick, tile and concrete, plain foundations, one on Fairfield Ave., other on North Bronson St. $150,000 each. J. D. Chubb, 109 North Dearborn St., Chicago, archt. Noted Jan. 4.

Wis., Milwaukee—School—Feb. 12, by Brust & Philipp, archts., 405 Bway., 2 story and basement, 60 x 150 ft. brick, tile and concrete, plain foundation, 24th and Cherry Sts., for St. Michael's Congregation, 469 24th St. $150,000.

Minn., Eveleth—Store and Theatre—Feb. 25, by C. Jessmore, 2 story and basement, 51 x 115 ft., rein.-con. and brick. $150,000. C. K. Shand, Eveleth, archt.

Neb., Lincoln—Hospital—Davis & Wilson, archts., 515 Security Mutual Bldg., receiving bids and opens same about Feb. 10, 4 story and basement, 54 x 246 ft., municipal hospital, rein.-con., brick and stone, 7th and Sewell Sts., for city. $200,000. Noted Dec. 7.

Mo., St. Louis—Theatre and Store—Feb. 15, by R. K. Kaufman, c/o Mercantile Trust Co., 721 Locust St., 3 story and mezzanine, 125 x 150 ft., rein.-con. and brick, concrete pile foundation, Washington Ave., for M. Loew, 1540 Bway., New York City. $1,000,000. T. W. Lamb, 644 8th Ave., New York City, archt.

Wash., Seattle—Apartment—Feb. 15, by J. A. Creutzer, archt., Leary Bldg., 6 story and basement, brick, terra cotta and steel, 5th Ave. and Cherry St., for Collins Estate, Leary Bldg. $300,000. Noted Nov. 16.

Calif., Chico—Bank and Office—March 1, by C. Cole, archt., Waterland-Breslauer Bldg., 4 story and basement, brick and concrete, 3rd and Main Sts., for First Natl. Bank. $150,000-$175,000. Former bids rejected.

Calif., Oakland—Store and Office—C. W. McCall, archt., Central Bank Bldg., taking bids 7 story and basement, rein.-con., terra cotta or pressed brick facing, 17th St. near Bway., for Ambassador Realty Co., c/o architect. $160,000 or more.

Calif., Pomona—Bank and Office—Curlett & Beelman, archts., Union Bank Bldg., Los Angeles, receiving bids 5 story and basement, fireproof, for First Natl. Bank of Pomona. To exceed $150,000. Noted Jan. 18.

Calif., San Jose—School—Feb. 20, by State Div. Architecture, Forum Bldg., Sacramento, 2 story home economics building and 1 story manual arts building, both rein.-con., at State Normal School, here. To exceed $150,000.

Ont., Toronto — Church — Feb. 14, by Gordon & Helliwell, archts., Confederation Life Bldg., 1 story and basement, 50 x 100 ft. concrete, brick and steel, Humberside and Quebec Aves. for St. Johns Church. $150,000.

BIDS RECEIVED

N. J., Trenton—Apartment and Store—C. F. Hildebrecht, State and Chauncery Sts., opened bids Jan. 30, 8 story, West State St., general contract, from W. C. Ehret, 39 East State St., $304,823; J. H. Morris & Co., 211 North Montgomery St., $316,226; C. J. Smith, 204 Academy St., $329,497. Noted Jan. 18.

N. J., Trenton Junction (Trenton P. O.)—School—A. H. Moses, archt., 415 Market St., Camden, opened bids Jan. 31, group of 1 story buildings and transformer house, brick, State School for Deaf, here, general contract from G. W. Shaner & Son, Washington St., Palmyra, $154,777; Gibbs-Mueller Co., Heyman Bldg., Phila., $181,950; Wills-Bill & Co., 1708 Sansom St., Phila., $189,980. Noted Jan. 18.

La., New Orleans — Hotel—L. Jacobs, Liverpool & London & Globe Bldg., and A. D. Danziger, Carondelet Bldg., opened bids 4 story, 50 ft. high, 120 x 130 ft. concrete and steel, from Southern Constr. Co., 901 Carondelet Bldg., $133,950; J. A. **Petty,** Godchaux Bldg., $156,000; R. P. **Farnsw**orth, 808 Perdido St., $168,000.

Wis., Milwaukee—School, etc.—School Bd. opened bids Feb. 1, 3 story and basement, 68 x 80 ft. school addition and 28 x 40 ft. boiler house, 27th Ave., concrete work, from Jahns & Knuth, 1915 Chestnut St., $32,800; masonry work, from V. Pacholski, 343 Farwell Ave., $25,380; boilers and heating, from Zuehlke-Stoehr Heating Co., 236 24th St. $19,521. Noted Jan. 18.

Neb., Omaha—Club—B.P.O.E., 4th floor, Elks Bldg., 8 story and basement, 132 x 132 ft., brick, stone, steel and concrete, 18th and Dodge Sts., from Vaughn Constr. Co., 322 W.O.W. Bldg., $509,462; C. F. Hagelin & Co., Minneapolis, Minn. (street address not available), $521,600; F. P. Gould & Son, 1137 City Natl. Bank Bldg., $555,800. Noted Jan. 4.

Tex., Dallas — Club—Dallas Athletic Club opened bids Jan. 26, 14 story and basement, rein.con., brick and steel, plain foundation, Elm St., general contract from G. W. Hewitt, 1909½ Elm St., $875,130, Central Contg. Co., Deere Bldg., $878,000, J. J. Garfield, Central and 6th Sts., Albuquerque, N. M., $888,803; electrical work from F. E. Newberry, Southwestern Life Bldg., $35,000, Wright Bros., 122 Avenue C, San Antonio, $41,661, J. W. Johnson & Co., 508 North Akard St., $44,900; plumbing work, from H. W. Greenaway, 214 Hemphill St., Ft. Worth, $186,000, J. J. Madigan, 1713 Orange St., $188,500, Martyn Bros., 415 North Harwood St., $196,140; heating, from C. Wallace Plumbing Co., 2224 Sumner St., $85,590, H. W. Greenaway, 214 Hemphill St., Ft. Worth, $89,000, Kinnison Bros., 311 North Austin St., $96,982; plumbing and heating combined, from Hamilton Co., 2301 Griffin St., $262,350; H. W. Greenaway, 214 Hemphill St., Ft. Worth, $270,000. Archts. est. $1,600,000. Noted Dec. 21.

Calif., Hollywood—Hospital—R. H. Orr, archt., Van Nuys Bldg., Los Angeles, 5 story, 40 x 199 ft. with 40 x 60 ft. wing, rein.-con., Vermont Ave., for Hollywood Hospital, from Simpson & Co., 701 San Antonio St., Los Angeles, $273,230; W. Crowell Co., 2026 West 9th St., Los Angeles, $284,860; Winter Constr. Co., Los Angeles Ry. Bldg., Los Angeles, $285,285. Noted Dec. 28.

Calif., Sacramento—High School—City opened bids Jan. 15, 1 and 2 story, brick, steel, concrete and terra cotta, general contract from K. E. Parker, Clunie Bldg., San Francisco, $421,600, Methews Constr. Co., Forum Bldg., $423,000, W. Murcell, Ochsner Bldg., $426,720; steel work, from Palm Iron & Bridge Wks., 1814 15th St., $58,470; electric work from Newbery Electric Co., 359 Sutter St., San Francisco, $36,000; plumbing and sewer construction from Hateley & Hateley, Mitau Bldg., $27,398; heating and ventilating, from Latourette-Fical Co., 907 Front St., $49,950. Noted Jan. 4.

CONTRACTS AWARDED

Mass., Boston—Apartment—Yarchin & Fluck, c/o Silverman, Brown & Heenan, archts., 51 Cornhill, will build 5 story, 100 x 110 ft., brick and steel, plain foundation, Audubon Rd., by day labor. $150,000. Noted Nov. 16.

Mass., Roxbury (Boston P. O.)—Hospital—New England Baptist Hospital, 11 Parker Hill, 3 story, brick and concrete, plain foundation, Parker Hill and Fisher Ave., to I. F. Woodbury & Sons Co., 185 Summer St., Boston. Archts. est. $150,000. Noted Nov. 16.

Conn., Waterbury—School—St. Francis Xavier Roman Catholic Church, 625 Baldwin St., 2 story and basement, 65 x 140 ft., brick and steel, plain foundation, Baldwin St., to O. Carey, Crescent St. Archts. est. $150,000.

N. Y., Brooklyn—Apartments—Fishberg Constr. Co., c/o M. Courland, archt. and engr., 47 West 34th St., New York, two 4 story, brick, steel and stone, plain foundations, Ocean Ave. and Ave. O, here, by day labor. $150,000 each.

N. Y., Brooklyn—Apartment—Kelner & Kelner, 614 Lincoln Pl., will build brick, steel and stone, plain foundation, Eastern Parkway and Vanderbilt Ave., by day labor. $350,000. Springsteen & Goldhammer, 32 Union Sq., New York, archts. and engrs.

N. Y., Brooklyn—Apartment—A. Seigal, c/o Springsteen & Goldhammer, archts. and engrs., 32 Union Sq., New York, 4 story, brick, steel and stone, plain foundation, Beverly Rd., here, by day labor. $250,000.

N. Y., Brooklyn—School—C. B. J. Snyder, supt. School Buildings of Bd. Educ., Flatbush Ave. extension and Concord St., addition to P. S. 6, brick, steel and stone, plain foundation, Warren St. near Smith St., to C. Meads Co., 217 West 14th St., New York. $184,000. Archts. est. $185,000. Noted Feb. 1.

N. Y., New York—Apartment—Forty-Six West 83rd St. Corp., c/o G. F. Pelham, archt. and engr., 200 West 72nd St., 6 story, brick, steel and stone, plain foundation, Manhattan Ave., by day labor. $275,000.

N. Y., New York—Apartment—S. Shapiro, c/o C. Kreumborg, archt. and engr., 2534 Marion Ave., 5 story, brick, steel and stone, plain foundation, 173rd St. near Ft. Washington Ave., by day labor. $250,000.

N. Y., New York—High School—J. E. Douglass, acting supt. of School Buildings of Bd. Educ., Flatbush Ave. extension and Concord St., Brooklyn, George Washington High School, brick, steel and stone, easterly side of Audubon Ave. about 432 ft. north of West 190th St., here, to J. T. Brady & Co., 103 Park Ave., $2,311,385. Noted Jan. 11.

Pa., Phila.—Bank and Office—Fifteenth and Chestnut Sts. Realty Co., c/o W. B. Saul, Land Title Bldg., 24 story and subbasement, 72 x 230 ft. rein.-con., brick and steel, caisson foundation, 15th and Chestnut Sts., to Thompson-Starrett Co., 49 Wall St., New York City. Archts. est. $3,000,000. Noted Nov. 16.

Pa., Phila.—Loft—S. Sionsky Co., 1033 North Front St., 5 story and basement, 54 x 160 ft., Front and Allen Sts., to Robbins Constr. Co., 1137 North Front St. Archts. est. $175,000. Noted Feb. 1.

Md., Baltimore—Convent—Sacred Heart Convent, 4 story, 80 x 148 ft. stone, Joppa Rd. and Charles St., to J. T. Buckley, 1429 Mt. Royal Ave. Archts. est. $150,000.

Md., Baltimore—School—Mayor and City Council, City Hall, 3 story, 145 x 264 ft., brick, plain foundation, Granada and Oakford Aves., to Price Constr. Co., Maryland Trust Bldg., $456,000. Noted Jan. 25.

Va., Richmond—Office—Imperial Job Co., Ltd., 106 South 6th St., general contract 3 story, 5th and Franklin Sts., to J. T. Wilson & Co., Mutual Bldg., $300,000. Noted Jan. 4.

Va., Richmond—Office—Life Insurance Co. of Virginia, 10th and Bank Sts., 11 story, brick, steel and stone, 10th and Broad Sts., to J. T. Wilson Co., Mutual Bldg., $900,000. Noted Jan. 25.

Tenn., Nashville—Capitol Annex and Memorial—State, c/o H. McAllister, chn. Memorial Comn., general contract for capitol annex and soldiers memorial, Capitol Blvd., to A. J. Krebs & Co., Rhodes Bldg., Atlanta, Ga., $1,240,000. Noted Jan. 25.

O., Cleveland—Hotel—Allerton-Cleveland Co., c/o J. S. Cushman, pres., 16 story, brick, steel and concrete, East 13th St. and Chester Ave., to Crowell & Little Constr. Co., 3751 Prospect Ave. Archts. est. $2,000,000.

O., Columbus—School—E. L. McCune, clk. Bd. Educ., 2 story and basement, 125 x 145 ft., concrete and brick, Fairwood Ave., to L. L. LeVeque Co., 1518 Clifton Ave., $151,960. Noted Jan. 11.

Mich., Holland—High School—Bd. Educ., high school, to W. N. Allen, 929 Jefferson Bldg., Peoria, Ill., $193,749. Noted Feb. 1.

Mich., Mt. Clemens—High School—Bd. Educ., 3 story, 300 x 300 ft., rein.-con., brick and steel, plain foundation, Cass Ave., to F. R. Patterson Constr. Co., 2631 Woodward Ave., Detroit. $600,000.

Buildings (Continued)

Ill., Chicago—Apartment—A. Rootberg, 3955 West Adams St., 3 story, 147 x 149 ft., rein.-con., brick and steel, 52-64 North Lotus St., to H. Entin, 2116 Alice Pl. Archts. est. $225,000. Noted Jan. 11.

Ill., Chicago—Apartment—D. G. Wallace, archt., 22 West Monroe St., 3 story, 75 x 125 ft., rein.-con., brick and steel, 4615-23 Lincoln Ave., to B. W. Constr. Co., 720 Cass St. Archts. est. $150,000. Owner's name withheld.

Ill., Chicago—Hotel—Bway. Hotel Corp., 30 North La Salle St., 7 story, 62 x 160 ft., rein.-con., brick and steel, 5406 North Spaulding Ave., to R. Sollitt & Sons Constr. Co., 5 North La Salle St. Archts. est. $400,000.

Ill., Chicago—Office—Courts Bldg. Corp., c/o D. H. Burnham & Co., archts., 209 South La Salle St., 20 story, 162 x 181 ft., rein.-con., brick and steel, Randolph and La Salle Sts., to Starrett Bros., Inc., 8 South Dearborn St. Archts. est. $8,000,000.

Kan., Atchison—Gymnasium—St. Benedict's College, 2 story and basement, 100 x 190 ft., brick, tile and concrete, plain foundation, to Immel Constr. Co., 200 North Main St., Fon du Lac. $250,000. Noted Jan. 18.

Tex., Port Arthur—High School, etc.—Bd. Educ., two 2 story, 145 x 160 ft. wings to present high school, also 1 story, 30 x 65 ft. boiler house, rein.-con. and brick, plain foundation, Lake Shore Blvd., to Hickey & Montgomery, Scollard Bldg., Dallas, $400,000. Noted Jan. 11.

Okla., Ponca City—Hotel—Jens Hotel Co., 117½ East Grand St., will build 5 story and basement, 50 x 140 ft., brick, plain foundation, by day labor, under supervision of J. C. Ibach, archt., Kansas City, Mo. (street address not available). Archts. est. $200,000.

Nev., Gerlach—Hotel, Cottages, etc.—See "Industrial Work."

Wash., Everett—Hospital—Everitt General Hospital, 3 story and basement, concrete and steel, 13th and Colby Sts., to J. Arrington, 2451 Federal Ave., Seattle, $215,297. Archts. est. $225,000. Noted Feb. 1.

Wash., Seattle—Store—N. M. Carman, Cheasty Bldg., 5 story 74 x 113 ft., glazed terra cotta, 5th and Pine Sts., to Great Northern Constr. Co., New York Blk. Archts. est. $200,000.

Ore., Portland—Apartment—J. Moore, 776 East Burnside St., 4 story and basement, 77 x 93 ft., rein.-con., 280 East 25th St., to V. Carlson, 433 Vancouver Ave. Archts. est. $150,000. Noted Dec. 14.

Calif., Bakersfield—Lodge—Bakersfield Lodge of Masons, general contract 3 story, rein.-con., to Beck & Cohn, 180 Jessie St., San Francisco. $146,130; plastering, to MacGruer & Simpson, 266 Tehama St., San Francisco, $35,928; plumbing and heating, to Burnham Plumbing Co., 1220 Webster St., San Francisco, $31,964.

Calif., Fresno—Office—San Joaquin Light & Power Co., 1801 Tulare St., 10 story, rein.-con. and terra cotta, J and Tuolumne Sts., concrete work to R. F. Felchin Co., Bank of Italy Bldg.; reinforcing steel, to Kyle & Co., Call Bldg., San Francisco; structural steel, to Pacific Rolling Mills, 17th and Mississippi Sts., San Francisco; mill work, to Fresno Planing Mill, H and Monterey Sts.; plastering, to MacGruer & Simpson, 266 Tehama St., San Francisco; plumbing, to Luppen & Hawley, 906 7th St., Sacramento; sheet metal, to Standard Sheet Metal Wks., 2547 Tulare St.; cement, to Riverside Portland Cement Co., Riverside; etc. Total $800,000. Noted Jan. 18.

Calif., Mountain View—College—Roman Catholic Archbishop of San Francisco, 1100 Franklin St., San Francisco, 4 story, rein.-con., here, to J. L. McLaughlin, 251 Kearny St., San Francisco, $1,250,000.

Calif., Santa Rosa—Hotel and Apartment—Santa Rosa Hotel Corp., represented by Dunn-Hurst & Martin, Insurance Exch. Bldg., San Francisco, 6 story, concrete, here, to Ellery, Frost & Patton, Merchants' Natl. Bank Bldg., San Francisco, and Brix Bldg., Fresno, $500,000. Noted Jan. 25.

Calif., Sonoma City—Hotel—Mission Inn Corp., c/o Golden Gate Ferry Co., foot Hyde St., San Francisco, 2 story, rein.-con., hotel, natatorium and mineral baths, on Bigelow Ranch in Valley of the Moon, here, to Lange & Bergstrom, Sharon Bldg., San Francisco, $500,000.

Calif., Whittier — Auditorium and High School—Whittier High School Dist., auditorium, rein.-con., brick and tile, high school, brick, to Davies Constr. Co., I. W. Hellman Bldg., Los Angeles, $190,075 and $107,000 respectively. Noted Jan. 18.

Ont., Toronto—Store—T. Eaton Co. Ltd., Queen and Yonge Sts., 8 story and basement, 120 x 200 ft. concrete, brick and steel addition, masonry and general contract, to Thompson Bros., Ryrie Bldg., structural steel, to McGregor & McIntyre, Shaw St. Archts. est. $500,000. Noted Jan. 18.

Federal Government Work

PROPOSED WORK

Pa., Phila.—Dredging—U. S. Engineer, 815 Witherspoon Bldg., rejected bid dredging in Delaware River, between here and Trenton, N. J. Noted Jan. 25.

Del., Wilmington—Dredging—U. S. Engineer, Wilmington, plans dredging in Harbor, here.

Ala., Florence—Gates, etc.—U. S. Engineer, Florence, plans gates and screen track, castings, etc., for power house at Wilson Dam.

Ala., Florence—Valves, etc.—U. S. Engineer, Florence, plans cylinder valves, etc., for Wilson Dam.

Ky., Louisville—Lock—U. S. Engineer, P. O. Box 72, plans Lock 47 in Ohio River.

Mich., Detroit—Superstructure—U. S. Engineer plans concrete superstructure on West Center Pier, St. Marys Falls Canal.

BIDS DESIRED

Mass., Boston—Protection, etc.—March 5, by Treas. Dept., Wash., D. C., protection of site and building, and approach work at U. S. Immigrant Station, here. J. A. Wetmore, acting superv. archt.; adv. this issue.

N. Y., New York—Dredging—March 2, at office U. S. Engineer, 616 Army Bldg., dredging in Shrewsbury River, N. J.; adv. this issue. Noted Jan. 18.

Pa., Phila.—Barge—Feb. 24, at office U. S. Engineer, 815 Witherspoon Bldg., 1321 Walnut St., one 87 ft. steel oil barge, at Ft. Mifflin, here.

W. Va., Huntington—Barges—Feb. 20, at office U. S. Engineer, Huntington, three 80 x 26 x 5 ft. steel barges.

Tenn., Nashville—Towboat—March 6, at office U. S. Engineer, Nashville, 1 electric towboat; adv. this issue.

BIDS RECEIVED

N. Y., Iona Island — Quarters — Spec. 4743—Bureau Yards & Docks, Navy Dept., Wash., D. C., 1 double set quarters, here, from D & K Eng. Corp., 1976 Nostrand Ave., Brooklyn, $27,000 (120 days); W. Lange, 280 Park Ave., Weehawken, N. J., $29,543 (120 days); G. DeKimpe, 143 Summit Ave., West Hoboken, N. J., $32,000 (210 days). Noted Jan. 25.

Ga., Ft. Benning—Houses—Constructing Quartermaster for 23 sets of 2 family houses, here, from Dickie Constr. Co., 2339 Franklin St., St. Louis, Mo., $405,400; A. Blair, 11 South Lawrence St., Montgomery, Ala., $436,940; W. P. Thurston Co., Merchants Natl. Bank Bldg., Richmond, Va., $438,000. Noted Jan. 11.

CONTRACTS AWARDED

N. Y., New York—Tower—U. S. Engineer, 3rd Dist., 608 Army Bldg., one 100 ft. range finding tower at Arverne, to M. A. Hammond Constr. Co., 15 Park Row, $8,395. Noted Jan. 4.

N. Y., Tupper Lake—Tank—Spec. 4724—Bureau Yards & Docks, Navy Dept., Wash., D. C., elevated steel water tank, to Pittsburg-Des Moines Steel Co., 959 Munsey Bldg., Wash., D. C., $15,890 (240 days). Noted Jan. 4.

D. C., Wash.—Extension—Spec. 4773—Bureau Yards & Docks, Navy Dept., extension to refrigerating and cold storage plant at Naval Hospital, here, to Chatard & Norris, 304 Continental Bldg., Baltimore, Md., $20,130 (90 days). Noted Feb. 1.

Ala., Florence—Barges—U. S. Engineer, 4 steel barges, to Nashville Bridge Co., foot of Shelby Ave., Nashville, Tenn., $70,880. Noted Jan. 4.

O., Cincinnati—Dredge—U. S. Engineer, Custom House, one 24 in. pipe line dredge, to Charles Ward Eng. Wks., South Side, Charleston, W. Va., $292,600. Noted Dec. 7.

Mo., St. Louis—Levee Work—Mississippi River Comn., 1311 International Life Bldg., levee work incl. 900,000 cu.yd. earthwork in Sny Island Levee D.D., Illinois, to La Crosse Dredging Co., 405 Plymouth Bldg., Minneapolis, Minn., $170,100. Noted Dec. 28.

Ore., Astoria—Piers—Spec. 4615—Bureau Yards & Docks, Navy Dept., Wash., D. C., piers, bulkhead and dredging at Naval Submarine and Destroyer Base, here, to Gilpin Constr. Co., foot of 14th St., $100,000 (180 days). Noted Jan. 25.

California—Road—C. H. Sweetser, dist. engr., U. S. Bureau Pub. Rds., 881 Mills Bldg., San Francisco, grading and building structures on 15.1 mi. Cuyama Rd. in Santa Barbara Natl. Forest, to C. H. Hudson, Marsh-Strong Bldg., Los Angeles, $491,602. Noted Dec. 14.

California—Road—C. H. Sweetser, dist. engr., U. S. Bureau Pub. Rds., 881 Mills Bldg., San Francisco, grading and building structures on 10.9 mi. Adin-Adin Summit Natl. Forest Highway, about 28 mi. southwest of Alturas, Modoc Co., to D. H. Ryan, 1615 Fern St., San Diego, $92,856. Noted Dec. 14.

H. T., Pearl Harbor—Refrigerating and Ice-Making Plant—Spec. 4735—Bureau Yards & Docks, Navy Dept., Wash., D. C., refrigerating and ice-making plant, here, to Vilter Mfg. Co., 935 Clinton St., Milwaukee, Wis., $17,670. Noted Feb. 1.

Miscellaneous

PROPOSED WORK

Piers and Bulkhead—Baltimore, Md.—Mayor and City Council plan 6 piers, 1,200 ft. long, 300 ft. wide, and 2,400 ft. marginal wharf, concrete, $20,000,000; 4,000 ft. bulkhead, $1,200,000, Hanover St. B. Hill, Recreation Pier, harbor engr.

Elimination of Grade Crossings—Johnson City, N. Y.—State Hy. Dept., Albany, and Erie R.R. Co., 50 Church St., New York City, plans eliminating grade crossing on Johnson City-Endicott Highway, here, 48,057 cu.yd. fill of roadway, 7,550 cu.yd. excav., 2,561 cu.yd. reinforcement, 4,000 lin.ft. piling sheathing below water, 8,000 lin.ft. sheathing above water, etc. $126,640. A. Vanamann, c/o Erie R.R. Co., ch. engr.

Snow Plow—Milo (Penn Yan P. O.), N. Y.—Town Bd. plans to purchase 3,000 lb. snow plow. $1,000.

Coal Breaker—Avondale, Pa.—G. F. Lee Coal Co. plans to rebuild coal breaker, 1,200 ton daily capacity, recently destroyed by fire. $200,000. Architect not announced.

Asphalt—Harrisburg, Pa.—W. H. Lynch, street comr., soon takes bids 700 ton asphalt in tank cars for street repairs.

Cranes—Lancaster, Pa.—Lancaster Steel Products Corp. plans to purchase three 2 ton, 3 motor traveling cranes, 30 ft. span each.

Grand Stand—East Cleveland (Cleveland P. O.), **O.**—See "Buildings."

Docks, etc.—Conneaut, O.—Bessemer & Lake Erie R.R. Co., Erie, Pa., plans improvements to ore docks, here, incl. replacing Dock 1, a wooden structure with concrete, widening and deepening channel also enlarging storage facilities. $1,000,000. Engineer not announced.

Gas Reservoir — Duluth, Minn. — City Utilities Dept. plans 1,000,000 cu.ft. gas reservoir, brick, steel and concrete, Cook St. west of 40th Ave. E. $300,000. P. G. Phillips, comr. Public Utilities. Engineer not selected.

Stadium, etc.—University Place (Lincoln P. O.), **Neb.**—Nebraska Wesleyan University soon takes bids 1 story, 42 x 187 ft. stadium, rein.-con. and brick, 25 x 75 ft. swimming pool, also athletic field. $75,000. Fiske & Meginnis, Bankers Life Bldg., Lincoln, archts. Noted Dec. 14.

Grain Elevator—Little Rock, Ark.—Hayes Grain & Commission Co., 423 Poplar St., North Little Rock, plans new grain elevator, mill construction. $60,000.

Power Line—Pullman, Wash.—Washington Water Power Co., 825 Trent St., Spokane, plans 60,000 volt power line from here to Moscow, 11 mi.

Piers—Seattle, Wash.—See "Industrial Works."

Subway—Bakersfield, Calif.—City plans subway under Southern Pacific R.R. tracks. $45,000. W. D. Clarke, city engr.

Concrete Work—Berkeley, Calif.—University of California, soon takes bids con-

Miscellaneous (Continued)

crete work for stadium, Strawberry Canyon. $500,000. Baker & Carpenter, 58 Sutter St., San Francisco, consult. engrs. J. G. Howard, 1st Natl. Bank Bldg., San Francisco, university archt. Noted Jan. 11.

Power and Lighting System — London, Ont.—London and Lobo Twps. plan to take over and extend several private electrical companies. $25,000. M. Grant, 110 Dundas St., London Twp. Clk. E. R. Barclay, Poplar Hill, Lobo Twp. clk.

Electric Lighting System—Tavistock, Ont.—Voted $25,000 bonds for hydro electric lighting and distribution system. Power to be supplied by Hydro Electric Power Comn., University Ave., Toronto.

Breakwater — Toronto, Ont. — Harbor Comn. and Dept. Pub. Wks., Ottawa, plan to complete 4,400 ft. breakwater in front of Exhibition Grounds, precast concrete and mass concrete on pile foundation. $1,000,000. E. L. Cousins, Harbor Comn. Bldg., engr.

BIDS DESIRED

Manholes, etc.—Baltimore, Md.—Feb. 14, by Bd. Awards, 125,000 lb. manholes, sewer inlet and similar iron castings. $9,000. C. F. Goob, City Hall, highways engr.

Steam Ashes—Long Island City, N. Y.—Feb. 15, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., furnishing and delivering 13,000 ton steam ashes to Bureau of Highways.

Building Materials—New York, N. Y.—Starrett Bros., Inc., 101 Park Ave., desires catalogs covering all materials entering building construction. A. S. Clair, secy.

Cable—New York, N. Y.—Feb. 14, by Bd. Purch., Municipal Bldg., furnishing and delivering weatherproof cable, to Dept. Plant & Structures. G. A. Whalen, comr. Plant & Structures, chn.

Lumber—New York, N. Y.—Feb. 15, by Bd. Purch., Municipal Bldg., furnishing and delivering lumber to Dept. Street Cleaning; lumber and piles to Dept. Plant & Structures. G. A. Whalen, comr. Plant & Structures, chn.

Mowers, etc.—New York, N. Y.—Feb. 15, by Bd. Purch., Municipal Bldg., furnishing and delivering mowers and tractor, to Dept. Parks-Bronx. G. A. Whalen, comr. Plant & Structures, chn.

Bituminous Patch Material, etc.—Richmond, Va.—Feb. 19, by G. P. Coleman, state highway comr., furnishing 529,287 gal. bituminous patch material; furnishing and applying 1,402,509 gal. surface treatment material.

Tractors—Florida—Feb. 14, by State Rd. Dept., Tallahassee, 9 tractors suitable for road construction and maintenance, 5 and 10 ton capacity. H. B. Philips, chn.

Steam Shovel, etc.—Jacksonville, Fla.—H. W. Dexter, Box 665, in market 1 yd. steam shovel, crawler or caterpillar type; also 5 or 6 ton steam tandem type, road roller.

Asphaltic Cement—New Orleans, La.—Feb. 14, by W. Ball, purch agt., City Hall, 1-3 car loads asphaltic cement per week.

Structural Steel—Cudahy, Wis.—See "Industrial Works."

Street Lighting System—Owen, Wis.—See "Streets and Roads."

Lumber—Logan, Ia.—Feb. 12, by Auditor Harrison Co., 10 cars standard sawed fir lumber, 4 cars red cedar piling and 4 cars treated piling. B. C. Dale, co. engr.

Metal and Lumber—Muscatine, Ia.—Feb. 19, by Auditor Muscatine Co., 3,434 ft. corrugated culvert metal and 138,026 ft. Douglas fir, full sawed or standard sawed. F. P. G. Halbfass, co. engr.

Tractor — Hibbing, Minn. — Feb. 13, by village, one 5 ton tractor. C. E. Everett, village recorder.

Street Lighting System — Plattsmouth, Neb.—Feb. 26, by A. H. Duxbury, city clk., street lighting system, incl. 71 electroliers, 500 lin.ft. No. 4, 7,600 lin.ft. No. 6 and 7,120 lin.ft. No. 10 underground cable, and appurtenances. $11,172. Bruce & Grupe, 408 Finance Bldg., Omaha, engrs.

Corrugated Metal Pipe—Pierre, S. D.—Feb. 15, by State Hy. Comn., furnishing 554 ft. 15 in., 652 ft. 18 in., 380 ft. 24 in., 306 ft. 30 in., 122 ft. 36 in. corrugated metal pipe, f.o.b. cars Bowman, N. D.

Piling—Phoenix, Ariz.—L. S. Atkinson, Jr., P. O. Box 118, in market for 10,000 sq.ft. interlocking sheet piling, long lengths and heavy section preferred. Quote immediately furnishing full information as to condition, length, size, previous use, price, etc.

Pump, Motor, etc.—Inglewood, Calif.—Feb. 13, by O. H. Duelke, city clk., deep well turbine type, 900 gal. per minute, pump; elevated hemispherical bottom steel water tank and tower, steel stand pipe 84 ft. high, 25 ft. diam. Separate bids on each item.

Pier—San Diego, Calif.—March 20, to vote on $495,000 bonds constructing mole type pier in San Diego harbor. F. A. Rhodes, city engr. Noted Jan. 25.

Grain Elevator and Wharf—Vancouver, B. C.—E. A. Woodward, Grain Exch., Winnipeg, Man., taking bids new grain elevator, concrete storage, timber work house and wharf. $500,000.

BIDS RECEIVED

Plumbing and Drainage—Brooklyn, N. Y.—J. E. Douglass, acting supt. School Buildings of Bd. Educ., Flatbush Ave. extension and Concord St., opened bids Feb. 5, plumbing and drainage work in Thomas Jefferson High School, northerly side of Dumont Ave. from Pennsylvania to Sheffield Aves., from J. D. Duffy Co., 315 East 23rd St., New York, $92,764; J. A. Graff, 394 Waverly Pl., $94,330; N. P. Lorenzo, 430 Pearl St., New York, $97,900. Noted Feb. 1.

Refined Asphalt, etc.—Brooklyn, N. Y.—E. Riegelmann, boro pres., Boro Hall, opened bids Jan. 31, furnishing and delivering (1) 400,000 gal. refined asphalt (2) 4,500 cu.yd. binder stone (3) 2,000 net ton limestone dust (4) 10,000 cu.yd. asphalt sand (5) 8,000 bbl. Portland cement (6) 50,000 asphalt paving blocks (7) 50,000 grade 1 granite blocks (8) 50,000 wood paving blocks (9) 5,000 cu.yd. steam cinders (10) 300,000 gal. asphalt road oil (11) 1,800 cu.yd. broken stone, from Standard Oil Co., 26 Bway., New York, (1) $22,320 (10) $16,450; Warner Quinlan Co., 79 Wall St., New York, (1) $22,400 (10) $18,000; Calvin Tompkins Co., 30 Church St., New York, (2) $9,945; New York Trap Rock Corp., 101 Park Ave., New York, (2) $10,980 (3) $10,620 (11) $7,550; E. Meyer Co., 25 Church St., New York, (3) $11,300; J. Grielo, (4) $13,800; High Grade Builders' Supply Co., (4) $16,300; F. Polestro, (4) $17,000; Burroughs Building Material Co., Johnson Ave. and Newtown Creek (5) $22,960; M. M. Canda, 184 3rd St., (5) $25,440; Hastings Pavement Co., 25 Broad St., New York, (6) $4,711; J. Meehan & Son, 74 Cortlandt St., New York, (7) $6,725; J. Leopold & Co., Inc., Woolworth Bldg., New York, (7) $6,750; Rockport Granite Co., 13 Park Row New York, (7) $7,150; Amer. Creosoting Co., 17 Battery Pl., New York, (8) $3,225; D. Negri & Sons, 792 Maple Ave., (9) $3,600; T. E. McCormick, 810 Lincoln Rd., Flatbush, (9) $4,050; J. J. Guinan Contg. Co., 2314 Gravesend Ave., (9) $4,250 (11) $5,984; Texas Co., 17 Battery Pl., New York, (10) $16,770; J. Grillo, (11) $6,850. Noted Jan. 25.

Asphalt Road Oil, etc.—New York, N. Y.—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., opened bids Feb. 1, furnishing and delivering (1) 600,000 gal. asphalt road oil (2) 200,000 gal. tar road oil (3) 50,000 gal. bituminous surfacing material (4) 800 ton asphaltic cement (5) 60 ton paving pitch (6) 6,000 cu.yd. broken trap rock stone (7) 8,000 cu.yd. asphalt sand (8) 4,000 cu.yd. binder stone (9) 1,000 ton limestone dust (10) 4,000 bags Portland cement (11) 6,000 cu.yd. sand grits (12) 3,000 cu.yd. hard ashes (13) 1,000 cu.yd. fine sand, from Standard Oil Co., 26 Bway., (1) $34,380 (4) $17,720; Texas Co., 17 Battery Pl., (1) $34,800 (4) $21,720; Warner Quinlan Co., 79 Wall St., (1) $35,994 (4) $17,960; Barrett Co., 17 Battery Pl., (2) $20,900 (3) $8,250 (5) $1,560; F. J. Lewis Mfg. Co., Eastern Blvd. and East 177th St., (2) $22,800 (3) $9,870 (5) $1,230; P. J. Kearns Contg. Co., 2306 Creston Ave., (6) $29,260; New York Trap Rock Corp., 101 Park Ave., (6) $29,640 (8) $7,800 (9) $6,110; New Haven Trap Rock Corp., 69 Church St., New Haven, Conn., (6) $30,685; J. T. Cunningham, (7) $9,760 (11) $16,500; Calvin Tompkins Co., 30 Church St., (8) $7,720; E. Meyer Co., 25 Church St., (9) $5,800; T. J. Mallette, Inc., (10) $2,900; J. A. McCarthy, 551 Exterior St., (10) $2,950; Anderson Brick & Supply Co., 201 East 129th St., (10) $3,000; Ames Building Material Co., 3437 Kingsbridge Rd., (11) $14,880 (12) $2,220 (13) $1,670; Rosoff Sand & Gravel Co., (11) $15,300; Spadaro Contg. Co., 827 East 217th St., (12) $2,340; Gallagher-Shand, Inc., 420 East 105th St., (12) $2,850 (13) $1,750; Lenox Sand & Gravel Co., Hudson River and 157th St., (13) $1,780. Noted Jan. 25.

Structural Steel—New York, N. Y.—Transit Comn., 49 Lafayette St., opened bids Feb. 1, furnishing and erecting structural steel for 3rd addition to shops at Lenox Ave. and 148th St., from Jobson Gifford Co., 320 East 42nd St., $293,362; McClintic-Marshall Co., 50 Church St., $302,840; Bethlehem Steel Corp., 25 Bway., $304,864. Noted Jan. 25.

Underground Fire Alarm System—New York, N. Y.—T. J. Drennan, fire comr., Municipal Bldg., opened bids Feb. 5, portion of underground fire alarm system, from Croker Electric Co., 20 West 30th St., $3,429, $11,639 and $4,260; J. Sugden, 100 5th Ave., $4,022, $10,997 and $4,446; Federal Constr. & Eng. Co., $4,655, $14,538; B. T. and J. J. Mack, 200 Bway., $5,000, $16,100 and $4,950. Noted Feb. 1.

Cement — Minneapolis, Minn. — Opened bids Jan. 30, 120,000 bbl. cement, from P. G. Speakes Co., 2845 2nd Ave. S. Landers-Morrison-Christensen Co., 800 Builders Exch., Thompson Yards Inc., 2694 University Ave., St. Paul, and Minneapolis Builders Supply Co., 315 Lumber Exch., all bid $2.52 per bbl., net f.o.b. cars. Award will be divided among bidders.

CONTRACTS AWARDED

Foundation, etc.—East Boston (Boston P. O.), **Mass.**—Boston Consolidated Gas Co., 149 Tremont St., Boston, foundation, etc. for syphons at Chelsea Creek Plant, here, to T. A. Scott Co., 364 Border St. Engrs. est. $40,000.

Grandstand — Danbury, Conn.—Danbury Agricultural Society, 291 Main St., 2 tier grandstand, steel and concrete, 350 ton steel Fair Grounds to replace one destroyed by fire, to Porcupine Co., Fairfield Ave., Bridgeport, Archts. est. $25,000.

Plumbing and Drainage Work—Brooklyn, N. Y.—C. B. J. Snyder, supt. School Buildings of Bd. Educ., Flatbush Ave. extension and Concord St., plumbing and drainage work in P. S. 192, to W. J. Endres, Grand Central Terminal, New York, $38,383. Noted Feb. 1.

Plumbing and Drainage Work — New York, N. Y.—C. B. J. Snyder, supt. School Buildings of Bd. Educ., Flatbush Ave. extension and Concord St., Brooklyn, plumbing and drainage work in P. S. 65 and P. S. 69, Bronx Boro, to W. J. Endres, Grand Central Terminal, $35,421 and $18,150 respectively. Noted Feb. 1.

Test Borings—Phila., Pa.—Test borings in Broad St., to P. J. Healy Co., 26 Cortlandt St., New York City. Noted Jan. 25.

Heating Work—Wooster, O.—Bd. Educ., heating work in 2 story high school, to Thatcher Heating Co., 46 South Bway., Akron, $61,500. Noted Feb. 1.

Portland Cement—Milwaukee, Wis.—Central Bd. Purchases furnishing 10,000 bbl. Portland cement for use of various departments, to Western Lime & Cement Co., 68 Wisconsin St., $3.20 per bbl. incl. bags at 10c. each. Noted Jan. 25.

Tractor—Luverne, Minn.—One 10 ton caterpillar tractor, to Holt Mfg. Co., Peoria, Ill., $4,850; $1,200 allowed for old 20 ton Holt caterpillar tractor. Noted Dec. 21.

Ball Globes—St. Paul, Minn.—For one hundred and forty-four 16 in. ball globes with 8 in. fitter openings, seven hundred 12 in. with 6 in. fitter openings, two hundred and four No. 109, one hundred No. 104 glass G.E. globes, and one hundred No. 1104 G.E. glass canopies, to Northwestern Electric Equipment Co., 174 East 6th St., $3,000. Noted Jan. 4.

Electric Transmission Conductors — San Francisco, Calif.—Bd. Pub. Wks., to Anaconda Copper Mining Co., Anaconda, Mont., represented by Pacific States Electric Co., 575 Mission St., furnishing and delivering f.o.b. cars at San Francisco, under Proposition C, 345,000 c.m. hemp-covered copper cable, weighing 5,796 lb. per mi., outside diameter 75 in., made up of 30 wires each, having diameter .1072 in., at $0.1865 per lb., credit for empty cable reels, $15 per reel. Noted Jan. 25.

Telegraph and Telephone Lines—Ontario—Canadian Natl. Ry., 407 Old Union Sta., Toronto, will build 29½ mi. telegraph and telephone lines in connection with Long Lac cut-off near Nakina, by day labor. A. F. Stewart, ch. engr.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ADVERTISEMENTS ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE.

OFFICIAL PROPOSALS

Bids: Feb. 19.

Reconstruction of Streets

Spring Lake, N. J.

Sealed bids will be received by the Mayor and Council of the Borough of Spring Lake, N. J., for the reconstruction of certain streets in the said Borough of Spring Lake; the work to consist of grading and paving with Sheet Asphalt on concrete base and including such incidental items as resetting curbs, building underdrains, manholes, etc.

The estimated quantities are approximately as follows:

Excavation	7,740 cu.yds.
Concrete Base	4,761 cu.yds.
Sheet Asphalt Surface	28,564 cu.yds.

Said bids will be opened and publicly read at the rooms of the Borough Council in the Borough Hall in said Borough of Spring Lake, N. J., February 19th, 1923, at 2 o'clock P.M.

Plans and specifications, prepared by John M. Braly, Engineer, are on file in the office of the Engineer where they may be seen by prospective bidders during business hours. The standard proposal form is attached to the specifications.

Copies of the plans and specifications may be obtained from the Engineer by making a deposit of $10.00. The deposit will be refunded after the opening of the bids upon the return of the copy of plans and specifications in good condition.

Bids must be made on the standard proposal forms in the manner designated and required by the specifications; must be enclosed in sealed envelopes bearing the name and address of the bidder; marked "Proposal for Paving East Lake Ave., etc." and addressed to Hon. O. H. Brown, Mayor, Borough of Spring Lake, N. J.

Each proposal must be accompanied by a certified check in a sum not less than ten (10%) per cent of the total amount bid on the work, payable to the Collector of the Borough of Spring Lake, and also an undertaking form from a Surety Company, authorized to do business in New Jersey, agreeing to provide the bidder, if successful, with the required bond.

Proposals, checks and agreements of surety must be delivered at the place and on the hour above named.

The Borough Council reserves the right to reject any or all bids, should it, upon consideration, deem it to the best interest of the Borough so to do.

By order of the Mayor and Council of the Borough of Spring Lake.

P. S. BROWN,
Borough Clerk.

JOHN M. BRALY,
Borough Engineer.

Bids: Feb. 21.

Sewers

Sturgis, Mich.

The City Commission of the City of Sturgis, Mich., will receive sealed proposals until 2:00 p.m. Wednesday, February, 21st, 1923, for the construction of the following sewers: 700 ft. of 54 in.; 530 ft. of 36 in.; 30 ft. of 27 in.; 50 ft. of 18 in.; 5,080 ft. of 12 in.; 3,650 ft. of 10 in.; 4,715 ft. of 8 in.; 2,000 ft. of 6 in. house connections laid from sewer to curb line; 315 lineal ft. of manholes; plans and specifications are on file in office of City Engineer. Copies of same may be secured by a deposit of $5.00. A certified check for $1,000.00 must accompany bid. Right is reserved to reject any or all bids. Further information on application. By order of City Commission, City of Sturgis, Michigan.

ARTHUR H. NILES,
City Engineer.

OFFICIAL PROPOSALS

Bids: Feb. 12.

Brass Corporations, Sidewalk Cocks, Etc.

Springfield, Mass.

Notice is hereby given that sealed proposals will be received by the Board of Water Commissioners of the Springfield Municipal Water Works, at its office in the Municipal Building, Springfield, Mass., at 11:30 o'clock a.m., Feb. 12, 1923, for the following brass corporations, inverted key sidewalk cocks, tee handle M. & F. cocks, inverted key stop and waste cocks, and compression bibbs with hose spouts.

700—¾-in. corporations with tail pieces.
150—1-in. corporations with tail pieces.
50—1¼-in. corporations bodies only.
75—1½-in. corporations bodies only.
40—2-in. corporations with tail pieces.
25—¾-in. inverted key sidewalk cocks.
800—1-in. inverted key sidewalk cocks.
200—1¼-in. inverted key sidewalk cocks.
50—1½-in. inverted key sidewalk cocks.
100—1-in. tee handle M. & F. cocks.
50—¾-in. inverted key stop and waste cocks with special handles.
1,000—1-in. inverted key stop and waste cocks with special handles.
200—1¼-in. inverted key stop and waste cocks with special handles.
600—½-in. compression bibbs with hose spouts.

The proposal shall be placed in a sealed envelope addressed to the Board of Water Commissioners, Springfield, Mass., and plainly marked on the outside "Sealed Proposal for Brass Goods." The proposal shall contain a schedule giving dates of the earliest shipment of at least 20 per cent of each item of the proposal and of the shipment of the completed order.

The Board of Water Commissioners reserves the right to increase or decrease the number of any of the items designated above according to its needs during the year 1923. The number specified is given as a basis of estimate only.

The Board of Water Commissioners reserves the right to reject any or all bids, or to accept any bid or any portion of any bid which it may be to the best interests of the city so to do.

Price shall include freight prepaid to Armory, Mass.

For further information and specifications, apply to the Superintendent at the above address.

BOARD OF WATER COMMISSIONERS,
SPRINGFIELD, MASS.
H. M. KING, Superintendent.

Bids: Feb. 14.

Reservoir and Pipe Lines

Wellsville, Ohio.

Sealed proposals will be received at the office of the Director of Public Service, Wellsville, Ohio, until 12 o'clock noon of Wednesday, February 14th, 1923, for constructing an earthen reservoir, capacity 140,000,000 gallons, and 3½ miles of gravity pipe lines connecting with the City Water Works distribution system. Copies of specifications may be obtained from the Director of Public Service and copies of plans will be furnished by The W. J. Sherman Co., Engineers, 302 Produce Exchange Bldg., Toledo, Ohio, upon deposit with them of $10.00, of which sum one-half will be refunded if plans are returned to the Toledo office before March 1st, 1923.

T. R. SNOWDEN,
Director of Public Service.

Wellsville, Ohio,
January 15th, 1923.

OFFICIAL PROPOSALS

Bids: Feb. 14.

Water System

Voorheesville, N. Y

Notice is hereby given that sealed proposals will be received by the Board of Trustees of the Village of Voorheesville, N. Y., at their office in the "Hose House" in the Village of Voorheesville, N. Y., until two (2:00) o'clock p.m. on the fourteenth (14th) day of February, 1923, for the construction of about 3½ miles of cast iron water pipe and appurtenances and a concrete reservoir.

All proposals must be made upon printed forms to be obtained from the engineer; and the unit prices written in words and figures, and accompanied by cash or a certified check, made payable to the Village of Voorheesville, N. Y., for one thousand dollars ($1,000.00).

All proposals must be enclosed in a sealed envelope, directed to the Board of Trustees, Village of Voorheesville, N. Y., and endorsed upon the outside of the envelope "Proposal for Water System."

Plans and specifications may be obtained of the engineer. A deposit of five dollars will be required for the plans and specifications, which will be refunded upon their return in good order on or before February 20, 1923.

The Board of Trustees reserve the right to reject any or all proposals.

By order of the Board of Trustees of the Village of Voorheesville, N. Y.

GILBERT H. DARING,
Village Clerk,
Voorheesville, N. Y.

W. W. CHADSEY,
Engineer,
434 State Street,
Schenectady, N. Y.

Bids: Feb. 14.

State Hospital Work

Kings Park, N. Y.

Sealed proposals for Construction, Heating, Sanitary and Electric Work Additions to Employees' Home, and also Fire Escapes, Buildings A, B, C and D, at the Kings Park State Hospital, Kings Park, N. Y., will be received by the State Hospital Commission, Capitol, Albany, N. Y., until three o'clock P.M., on Wednesday, February 14, 1923, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3974, 3975, 3976, 3977 and 4036. The right is reserved to reject any or all bids. Drawings and specifications may be examined at the Kings Park State Hospital, Kings Park, N. Y.; at the New York Office of the Department of Architecture, Room 1058, 25 Broadway, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

L. M. FARRINGTON,
Secretary, State Hospital Commission.

Dated: January 16, 1923.

Construction News

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Feb. 19	Mishawaka, Ind.	Feb. 8
Feb. 19	Carlyle, Ill.	Feb. 1
Feb. 19	St. Paul, Minn.	Feb. 8
Feb. 20	Puyallup, Wash.	Feb. 8
Feb. 21	Dayton, O.	Feb. 15
Feb. 22	Whitby, Ont.	Feb. 3
Feb. 27	Canton, Ill.	Feb. 1
Feb. 27	La Porte, Ind.	Feb. 8
Mar. 5	Bay City, Mich.	Feb. 15
Mar. 6	Toronto, Ont.	Feb. 1
Mar. 7	Rawlins, Wyo.	Feb. 1
Mar. 7	Baltimore, Md. Adv. Feb. 15.	Feb. 15

SEWERS

Feb. 19	Clinton, Ia.	Feb. 15
Feb. 19	Akron, O.	Feb. 15
Feb. 21	Sturgis, Mich. Adv. Feb. 8 and 15.	Feb. 8
Feb. 21	Dayton, O.	Feb. 15
Feb. 21	Ashtabula, O. Adv. Feb. 15.	Feb. 15
Feb. 21	Phila., Pa.	Feb. 15
Feb. 23	Portland, Ore.	Jan. 11
Feb. 23	Scottsville, N. Y.	Feb. 1
Feb. 23	Cleveland, O.	Feb. 15
Feb. 23	Milwaukee, Wis. Adv. Feb. 15.	Feb. 15
Feb. 24	Cuba, N. Y. Adv. Feb. 1 to 15.	Feb. 1
Feb. 26	Blasdell, N. Y. Adv. Feb. 15.	Feb. 15
Mar. 3	Milwaukee, Wis. Adv. Feb. 15.	Feb. 15
Mar. 12	New Castle, Pa. Adv. Jan. 25 to Feb. 15.	Jan. 25
Mar. 13	Matawan, N. J. Adv. Feb. 15.	Feb. 15

WASTE DISPOSAL

Feb. 21	Sea Cliff, N. Y. Adv. Feb. 8 and 15.	Feb. 8
Feb. 26	Tulsa, Okla.	Feb. 1
Mar. 1	Spokane, Wash.	Jan. 18

BRIDGES

Feb. 19	Alabama	Jan. 25
Feb. 19	Seattle, Wash.	Feb. 1
Feb. 20	Merrill, Wis.	Feb. 15
Feb. 20	Northwood, Ia.	Feb. 15
Feb. 20	Chautauqua, Kan.	Feb. 8
Feb. 23	Lewiston, Pa.	Feb. 8
Feb. 24	Rockwell City, Ia.	Feb. 8
Feb. 26	Massena, N. Y. Adv. Feb. 8 and 15.	
Feb. 26	Portland, Ore.	Feb. 15
Feb. 27	Trenton, N. J. Adv. Feb. 15.	Feb. 15
Mar. 1	Indianapolis, Ind.	Feb. 15
Mar. 21	Brainerd, Minn.	Feb. 15
Apr. 1	Wilkes-Barre, Pa.	Dec. 14
Sept. 1	Sydney, New South Wales, Australia	Aug. 3

DAMS

Feb. 20	Quebec, Que.	Feb. 1
Feb. 26	Napa, Calif.	Feb. 8
Feb. 28	Illinois Adv. Feb. 1 to 15.	Feb. 1

EXCAVATION, DRAINAGE, IRRIGATION

Feb. 22	Beardstown, Ill. Adv. Feb. 15.	Feb. 15
Feb. 23	Oroville, Calif.	Feb. 15
Feb. 27	Watertown, Wis.	Feb. 15
Feb. 27	Whitham, Mo.	Feb. 15
Mar. 1	Redwood Falls, Minn.	Feb. 15
Mar. 2	Redwood Falls, Minn.	Feb. 15
Mar. 3	Manawa, Wis.	Feb. 15

STREETS AND ROADS

Feb. 19	Spring Lake, N. J.	Feb. 8
Feb. 19	Virginia	Feb. 8
Feb. 19	Alabama	Jan. 25
Feb. 19	New York, N. Y.	Feb. 15
Feb. 20	Waseca, Minn.	Jan. 25
Feb. 20	Charleston, S. C.	Feb. 1
Feb. 20	Chicago, Ill.	Feb. 15
Feb. 20	Northwood, Ia.	Feb. 15
Feb. 20	Phila., Pa.	Feb. 15
Feb. 20	Racine, Wis.	Feb. 15
Feb. 20	Fredonia, Kan.	Feb. 15
Feb. 20	Hibbing, Minn.	Feb. 15
Feb. 20	New London, Wis.	Feb. 15
Feb. 21	Owen, Wis.	Feb. 8
Feb. 21	Wisconsin Rapids, Wis.	Feb. 15
Feb. 21	Port Washington, Wis.	Feb. 15
Feb. 21	Bastrop, Tex.	Feb. 15
Feb. 23	Abilene, Tex.	Feb. 15
Feb. 24	Kenosha, Wis.	Feb. 8
Feb. 26	Tekamah, Neb.	Feb. 1
Feb. 26	Ontario	Feb. 8
Feb. 26	Madison, S. D.	Feb. 15
Feb. 26	Goshen, Ind.	Feb. 15
Feb. 26	Wahpeton, N. D.	Feb. 15
Feb. 26	San Diego, Calif.	Feb. 15
Feb. 26	Gowrie, Ia.	Feb. 15
Feb. 26	Ravenna, O.	Feb. 15
Feb. 26	Goshen, Ind.	Feb. 15
Feb. 27	Green Bay, Wis.	Feb. 15
Feb. 27	Fergus Falls, Minn.	Feb. 15
Feb. 28	Leavenworth, Kan.	Feb. 15
Feb. 28	Waukesha, Wis.	Jan. 25
Mar. 1	Marshall, Minn.	Feb. 8
Mar. 1	Columbus, O.	Feb. 15
Mar. 1	Indianapolis, Ind.	Feb. 15
Mar. 1	Wash., D. C. Adv. Feb. 15.	Feb. 15
Mar. 2	Ebensburg, Pa.	Jan. 25
Mar. 5	Hillsdale, Mich.	Feb. 15
Mar. 5	Casper, Wyo.	Feb. 15
Mar. 6	West Virginia Adv. Feb. 15.	Feb. 15
Mar. 14	Mayville, Wis.	Feb. 8
Apr. 1	Huntingdon, Pa.	Feb. 1
Apr. 3	Amsterdam, N. Y.	Feb. 1
Apr. 23	Spokane, Wash.	

INDUSTRIAL WORK

Feb. 19	Cincinnati, O.	Feb. 15
Feb. 19	Jackson, Mich.	Feb. 15
Feb. 20	River Rouge, Mich.	Feb. 15
Feb. 23	St. Louis, Mo.	Feb. 1
Feb. 23	Barnesboro, Pa.	Feb. 15
Feb. 24	Columbus, Miss.	Feb. 1

BUILDINGS

Feb. 19	Brooklyn, N. Y.	Feb. 8
Feb. 19	Trafford, Pa.	Feb. 1
Feb. 19	Albion, Mich.	Feb. 8
Feb. 19	Baltimore, Md.	Feb. 15
Feb. 19	Minneapolis, Minn.	Feb. 15
Feb. 19	Gambier, O.	Feb. 15
Feb. 20	San Jose, Calif.	Feb. 8
Feb. 20	Kenosha, Wis.	Feb. 8
Feb. 20	Columbus, O.	Feb. 8
Feb. 20	Minneapolis, Minn.	Feb. 15
Feb. 20	Wausau, Wis.	Feb. 15
Feb. 21	Jamestown, N. Y.	Feb. 1
Feb. 21	Cleveland Heights (Warrensville P. O.), O.	Feb. 1
Feb. 21	Uxbridge, Ont.	Feb. 15
Feb. 23	Jamestown, N. Y.	Jan. 11
Feb. 23	Jamestown, N. D.	Jan. 25
Feb. 23	Roxbury (Boston P. O.), Mass.	Feb. 1
Feb. 23	Toledo, O.	Feb. 8
Feb. 23	Owego, N. Y.	Feb. 8
Feb. 23	Minneapolis, Minn.	Feb. 15
Feb. 23	New York, N. Y.	Feb. 15
Feb. 24	Eveleth, Minn.	Feb. 8
Feb. 24	Lorain, O.	Feb. 15
Feb. 24	Mountain View, Calif.	Feb. 15
Feb. 25	Niagara Falls, N. Y.	Feb. 15
Feb. 26	New Brunswick, N. J.	Feb. 8
Feb. 26	Attica, N. Y.	Feb. 1
Feb. 26	Whitehall, N. Y.	Feb. 1
Feb. 26	Johnson City, Tenn.	Feb. 15
Feb. 26	State Center, Ia.	Feb. 15
Feb. 26	Braddock, Pa.	Feb. 15
Feb. 27	Roosevelt, N. Y.	Feb. 1
Feb. 27	Troy, Pa.	Feb. 8
Feb. 27	Cedar Falls, Ia.	Feb. 15
Feb. 28	Memphis, Tenn.	Feb. 8
Feb. 28	Phila., Pa.	Feb. 15
Mar. 1	Red Lion, Pa.	Jan. 18
Mar. 1	Denver, Colo.	Jan. 18
Mar. 1	Chico, Calif.	Feb. 8
Mar. 5	Albany, N. Y.	Feb. 15
Mar. 9	Wapello, Ia.	Feb. 15
Mar. 10	Greenfield, O.	Feb. 15
Mar. 12	Wichita, Kan.	Feb. 15
Mar. 15	Duluth, Minn.	Jan. 18
Mar. 15	Trenton, N. J.	Jan. 11
Mar. 19	Erie, Pa.	Feb. 15
Mar. 23	Shreveport, La.	Nov. 9
Apr. 1	Oil City, Pa.	Jan. 18

FEDERAL GOVERNMENT WORK

Feb. 17	Tanks—Florence, Ala. Adv. Jan. 25 to Feb. 15.	Jan. 25
Feb. 19	Post Office—Nogales, Ariz.	Jan. 25
Feb. 20	Barges — Huntington, W. Va.	Feb. 8
Feb. 21	Dredging—Galveston, Tex. Adv. Jan. 11, 18, Feb. 8 and 15.	Jan. 11
Feb. 21	Castings, etc. — Florence, Ala. Adv. Jan. 25 to Feb. 15.	Jan. 25
Feb. 21	Refrigerating Equipment — Gulfport, Miss. Adv. Feb. 8 and 15.	Feb. 1
Feb. 21	Stack—Gulfport, Miss. Adv. Feb. 8 and 15.	Feb. 15
Feb. 24	Quarter-boat and Barges — Wilmington, Del. Adv. Jan. 25 to Feb. 15.	Jan. 25
Feb. 24	Barge—Phila., Pa.	Feb. 8
Feb. 26	Hospital—Gulfport, Miss. Adv. Feb. 8 and 15.	Feb. 1
Feb. 28	Extension — Mare Island, Calif.	Feb. 1
Feb. 28	Distilling Apparatus, etc. — Guantanamo, Cuba Adv. Feb. 15.	Feb. 15
Mar. 2	Stone—Eureka, Calif.	Feb. 1
Mar. 2	Dredging—New York, N. Y. Adv. Feb. 8 and 15.	Feb. 8
Mar. 5	Protection, etc. — Boston, Mass.	Feb. 8
Mar. 6	Towboat—Nashville, Tenn. Adv. Feb. 8 and 15.	Feb. 8
Mar. 7	Dredging — Providence, R. I. Adv. Feb. 8 and 15.	Feb. 15
Mar. 7	Riprapping — Mare Island, Calif.	Feb. 15
Mar. 12	Barge—Florence, Ala. Adv. Feb. 15.	Feb. 15
Mar. 13	Turbine and Generator, etc.—Riverton, Wyo. Adv. Feb. 15.	Feb. 15
Mar. 15	Dredging—New York, N. Y. Adv. Feb. 15.	Feb. 15
Mar. 17	Houses — Huntington, W. Va. Adv. Feb. 15.	Feb. 15
May 10	Post Office — Cordova, Alaska	Jan. 25

MISCELLANEOUS

Feb. 19	Brick—Wash., D. C.	Jan. 25
Feb. 19	Steel Dump Hoist—San Jose, Calif.	Feb. 1
Feb. 19	Metal and Lumber—Muscatine, Ia.	Feb. 8
Feb. 19	White and Rock Oak Plank, etc.—Elmira, N. Y.	Feb. 15
Feb. 20	Terra Cotta Pipe Drains, etc. —Charleston, S. C.	Feb. 1
Feb. 20	Supplies—Ottawa, Ont.	Feb. 15
Feb. 20	Bridge Material — Onawa, Ia.	Feb. 15
Feb. 21	Lumber, etc. — Marion, Ia.	Feb. 15
Feb. 21	Corporation Cocks, etc.—New York, N. Y.	Feb. 15
Feb. 22	Wharf—Grand River, Que.	Feb. 1
Feb. 23	Culverts, etc. — Osceola, Ia.	Feb. 15
Feb. 23	Lime Dust, etc. — Cleveland, O.	Feb. 15
Feb. 26	Street Lighting System — Plattsmouth, Neb.	Feb. 8
Feb. 26	Brick—Wilkinsburg, Pa.	Feb. 15
Feb. 27	Cement, Trap Rock, etc.—Holyoke, Mass.	Feb. 15
Feb. 28	Sanitary Work, etc.—Middletown, N. Y. Adv. Feb. 8 and 15.	Feb. 15
Mar. 6	Road Maintenance Machine—Stillwater, Minn.	Feb. 15

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y., Albany — Bd. Pub. Wks., plans additions to present water supply system, and change from gravity to force method. $750,000. A. Hazen, 30 East 42nd St., New York City, engr.

Wis., Hartford—Making plans 150,000 gal. rein-con. reservoir. J. Donohue Eng. Co., 608 North 8th St., Sheboygan, engr.

Wis., Kohler—Making plans 10,000 ft. 6-8 in. c.i. water extensions, 15 hydrants, 12 valves, etc., 7,000 ft. 8-10 in. vitr. sanitary sewers. $15,000. J. Donohue & Co., 608 North 8th St., Sheboygan, engrs.

Kan., Hamilton — Feb. 26, to vote on $46,000 bond issue for waterworks system. F. E. Devlin, Sedgwick Bldg., Wichita, engr.

Kan., Smith Center—Voted $200,000 bond issues for complete waterworks system.

Waterworks (Continued)

Mo., St. Louis—Voted $5,100,000 bonds for Missouri River plant, incl. pumping station, pumps, etc., $1,977,500 for conduits and right-of-way, $1,150,000 for reservoir, $2,740,000 for distributing mains and $1,032,500 for contingencies.

Tex., Dawson—Attorney Generals Dept., Austin, approved $45,000 bond issue for waterworks improvements. Address Mayor.

Okla., Weatherford — Voted $114,000 bonds for 500 hp. plant, deep well pumps and 20 ton raw water ice plant. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Ore., Portland—City Council will sell $500,000 bonds to finance 1923 waterworks construction program. O. Laurgaard, city engr.

Colo., Rocky Ford—Preparing specifications changing water supply system from wells to river, installing settling basin, purification and filtration plant, also renewing distributing system. $350,000. P. E. Strause, city engr. W. G. Clark, 1074 Spitzer Bldg., Toledo, O., consult. engr.

Calif., Montebello — See "Excavation, Drainage, Irrigation."

Calif., Napa—Having plans prepared 9 mi. pipe line in connection with Milliken Canyon Water Project, probably 12, 14 and 16 in. diam., bids will probably be taken for various types. $52,000. A. Kempkey, Hobart Bldg., San Francisco, consult. engr.

Calif., Santa Barbara—Montecito Water Dist. plans election Feb. 27, to vote on $850,000 bonds to lay water distributing system and start construction of tunnel through mountains to tap Santa Ynez River.

Calif., San Diego—March 20, to vote on $240,000 bonds to purchase and install 94,679 lin.ft. c.i. water pipe and $85,000 bonds to purchase and construct steel stand pipe, 1,200,000 gal. capacity, near University Heights water reservoir. F. A. Rhodes, city engr.

Calif., San Francisco — City and San Francisco Co. having plans prepared extending high pressure mains in Jones St. from Beach to Jefferson Sts., and in Jefferson St. from Jones to Leavenworth Sts. $18,000. City will furnish pipe and fittings, which is not included in estimated cost. M. M. O'Shaughnessy, city engr.

Canada—See "Railways."

Ont., New Toronto—Plans 2,000 ft. 24 in. mains, probably steel with flexible joints, etc. $40,000. A. H. R. Thomas, town engr.

Ont., Toronto — Having surveys made, high pressure fire system with hydrants, etc. on Bay, Teraulay, Dundas, Chestnut, Albert and James Sts., incl. 4,000 lin.ft. c.i. pipe, 12 in. up $95,000. R. C. Harris, city engr.

BIDS DESIRED

N. Y., Middletown—See "Miscellaneous."

Md., Baltimore—March 7, by Bd. Awards at office of City Register, City Hall, addition to Montebello Filters, Contr. 63, Water Dept. W. A. Megraw, water engr.; adv. this issue.

O., Dayton—Feb. 21, by Comrs. Montgomery Co., mains in Westwood Sanitary Sewer Dist., 28,342 lin.ft. 4 in., 27,700 lin.ft. 6 in., 2,713 lin.ft. 8 in. and 10,005 lin.ft. 10 in. c.i. pipe, 54,039 lin.ft. 0-6 ft., 14,071 lin.ft. 6-8 ft. and 650 lin.ft. 8-10 ft. trenches, two hundred and four 4-10 in. valves, etc., $260,000; mains in Lakeside Sanitary Sewer Dist., 3,526 lin.ft. 4 in., 7,247 lin.ft. 6 in., 2,302 lin.ft. 10 in. and 120 lin.ft. 12 in. c.i. pipe, 8,615 lin.ft. 0-6 ft., 3,480 lin.ft. 6-8 ft., 900 lin.ft. 8-10 ft. and 200 lin.ft. 10-12 ft. trenches, thirty-nine 4-12 in. valves, etc., $138,000. K. B. Allen, 606 U. B. Bldg., engr.

Mich., Bay City — March 5, by Water Comrs., electric and power wiring, heating, ventilating and filter equipment for waterworks plant. $150,000. Frazier, Sheal & Ellms, 2000 B. F. Keith Bldg., Cleveland, O., engrs.

BIDS RECEIVED

O., Cleveland—Cuyahoga Co. installing 31,800 ft. 6-10 in. c.i. mains in Impvt. 16 B of County Water Dist., from Gantose Constr. Co., Columbia Bldg., $176,647; Langahan Constr. Co., Marshall Bldg., $179,719.

CONTRACTS AWARDED

N. Y., Buffalo—Commissioner Pub. Wks., Municipal Bldg., furnishing 571 ton iron pipe floor and wall castings for Buffalo Filter Plant, to Bowler Fdry. Co., 1688 Columbus Rd., Cleveland, $133 per ton. Noted Jan. 18.

N. Y., Buffalo—A. W. Kreinheder, comr. Pub. Wks., Municipal Bldg., furnishing 56 rectangular sluice gates, for Buffalo Filter Plant, to Chapman Valve Mfg. Co., Indian Orchard, Mass., $26,126. Noted Jan. 11.

N. Y., New York — Bd. Water Supply, Municipal Bldg., gate valves and hydrants for Mt. Prospect Park Slope, Ft. Hamilton and Clove conduits and Narrows Siphon 2 of Catskill Aqueduct, to Michigan Valve & Fdry. Co., Detroit, Mich. (street address not available). $224,320. Noted Feb. 8.

Sewers

PROPOSED WORK

Tenn., Dayton—Plans sewerage system. $50,000.

O., Akron—Plans Ohio Canal Intercepter from Market St. to Cuyahoga River, $62,200. J. E. Root, Delaware Bldg., engr.

Wis., Kohler—See "Waterworks."

Wis., Sheboygan—Plans sewage disposal plant, with complete equipment. G. Steimle, city clk.

Ia., Anamosa—Making plans sewage disposal plant. $25,000. L. Higgins & Sons, 420 Security Bldg., Des Moines, engrs.

Kan., Kansas City—Making surveys sanitary sewerage system to drain 3 mi. territory north of Quindaro Blvd. $300,000. R. L. McAlpine, City Hall, engr.

Neb., Humboldt—Plans sanitary sewerage system. $30,000. W. Lydick, clk. Engineer not selected.

Mo., St. Louis—Voted $11,000,000 bonds for River Des Peres sewerage improvement and $8,000,000 for sewer construction.

Calif., Colton—Had plans prepared outfall sewers, involving 5,000 lin.ft. 18 in., 1,800 lin. ft. 12 or 22 in., and 1,600 lin.ft. 24 in. pipe, etc. M. L. Cook, Garner Bldg., San Bernardino, engr. Noted Dec. 7.

Que., Montreal—Plans 3,800 ft. 2 x 3 brick sewers in Patricia St. from Oak to Somerled Sts., $22,715, 380 ft. 2 x 3 brick sewers in Boyce St. from Joffre to Monsseau Sts., $3,016.

BIDS DESIRED

N. Y., Blasdell—Feb. 26, by Bd. Village Trustees at office of F. F. Glezen, village clk., sanitary sewers and sewage disposal plant. Frederick K. Wink Co., 1314 Prudential Bldg., Buffalo, engrs.; adv. this issue.

N. J., Matawan—March 13, by W. H. Sutphin, mayor, and Boro Council, at Truck House Bldg., Jackson St., 6¼ mi. 6-12 in. sewers and Imhoff tank. George A. Johnson Co., Inc., 150 Nassau St., New York City, consult. engrs.; adv. this issue.

Pa., Phila.—Feb. 21, by F. H. Caven, dir. pub. wks., 12 ft. 6 in. concrete sewer in Ashdale St. from point 17 ft. southwest of Fisher St. to Fisher St. 171 ft. rein.-con., 1,400 ft. trenching, $25,000, 2,153 ft. Charles St. from Comly to Charles Sts., 600 ft. shale brick invert in hard rock, 4 ft. 6 in. diam., 1,050 ft. shale brick invert in reduced cradle, 4 ft. 6 in. diam., 503 ft. shale brick invert in reduced cradle, 4 ft. diam. $65,000, 101 ft. Pratt St. from point 70 ft. southwest of Loretto St. to Loretto St., 101 ft. 6 in. diam. and 80 ft. 2 x 3 brick, $10,000, 2 ft. 6 in. x 1 ft. 8 in. branch sewers in Grays Ave. from 49th to 51st Sts., Limekiln Pike from Andrews Ave. to Walnut Lane, McCallum St. from Ellet St. to Mt. Pleasant Ave. $25,000. J. E. Vogelson, City Hall, engr.

O., Akron—Feb. 19, by W. F. Peters, dir. Pub. Serv., for Willow Run Trunk Sewer, Contr. 3, 2,745 ft. 30-114 in. brick, 330 ft. 6 and 8 in. vitr. pipe, $234,000; Ohio Canal Intercepter Sewer, 4,005 ft. 12-45 in. vitr. pipe, $62,000; 2,140 ft. 12-24 in. vitr. sewer in Gary Ave., $10,000; 165 ft. 30 in. brick and 2,765 ft. 8-27 in. vitr. sewers in Tallmadge Ave., Spaulding, Evers and Weaver Sts., $20,000; 6,010 ft. 8-27 in. vitr. sewer in Case Ave., $26,000. J. E. Root, Delaware Bldg., engr.

O., Ashtabula—Feb. 21, at office of W. M. Cotton, city mgr., East Side Main Sanitary Sewer. G. B. Gascoigne, 648 Leader-News Bldg., Cleveland, engr.; adv. this issue.

O., Cleveland—Feb. 23, sewers in Behrwald Ave. S. W. from West 45th St. to point 590 ft. westerly, Crestline Ave. S. W. and Elston Ave. S. W. from Valley Rd. S. W. to easterly end, Galion Ave. S. W. from Valley Rd. to West 16th St., Spruce Ave. N. W. from West 25th St. to Mulberry St. N. W., West 14th St. from Denison Ave. S. W. to Jennings Rd. S. W., West 16th St. from Crestline Ave. S. W. to Elston Ave. S. W., West 19th Pl. from S. L. O. L. 87 to alley at north end, West 28th St. from Washington Ave. N. W. to River Rd. N. W., West 35th St. from Cypress Ave. S. W. to Biddulph Ave. S. W. To exceed $50,000. R. Hoffman, City Hall, engr.

O., Dayton—Feb. 21, by Comrs. Montgomery Co. constructing Sub District "B" Westwood Sanitary Sewer Dist. 1, 13,129 lin.ft. 8 in. and 1,642 lin.ft. 10 in. vitr. pipe, 12,077 lin.ft. 6 in. vitr. sub drain, 10,367 lin.ft. 6-8 ft., 2,933 lin.ft. 8-10 ft., 800 lin.ft. 10-12 ft. and 71 lin.ft. 12-14 ft. trenches, 55 manholes, etc. $40,000. K. B. Allen, 606 U. B. Bldg., engr.

O., Ravenna—See "Streets and Roads."

Wis., Milwaukee—Feb. 23, by Sewerage Comn., at its offices 508 Market St., extending intercepting sewerage system. J. H. Fowles, secy.; adv. this issue.

Wis., Milwaukee—March 3, by Sewerage Comn. at its office, 508 Market St., extending intercepting sewerage system. J. H. Fowles, secy.

Ia., Clinton—Feb. 19, for 2,091 ft. 30 in., 819 ft. 27 in., 265 ft. 24 in., 872 ft. 18 in., 3,156 ft. 15 in., 3,258 ft. 12 in., 2,718 ft. 10 in. and 10,800 ft. 8 in. vitr. clay sewers in Sewer Dist. 7, between Main and Commercial Sts. $50,000. B. R. Anderson, 418 Weston Bldg., city engr. Former contract rescinded. Noted March 23.

BIDS RECEIVED

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., opened bids Feb. 8, sewers in (1) Hemlock Pl. (2) Justice St. (3) 89th St. (Ocean View Ave.) (4) 92nd St. (Bigiow Pl.) (5) 114th St. (Stoothoff St.) (6) 115th St. (Hamilton Ave.), from J. Gallo, 203 Division St., Brooklyn, (1) $8,712 (2) $2,851; Napolitano Constr. Co., (1) $9,486 (3) $7,916 (4) $3,704 (5) $3,704 and $2,446 (6) $3,365; Seaside Contg. Co., 193 Beach 108th St., Rockaway Beach, (1) $9,939; Spinella & Muccini, (2) $2,944 (3) $7,937 (4) $4,030 (5) $2,720 (6) $3,591; Kennedy & Smith, 93 Amity St., Flushing, (2) $3,171 (3) $8,482 (4) $4,113 (5) $2,973; H. J. Mullin Contg. Co., Jamaica Ave. and 144th St., Jamaica, (6) $3,494. Noted Feb. 1.

N. Y., New York — H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., opened bids Feb. 6, sewers in (1) Bronx and Pelham Parkway (2) Edenwald Ave. (3) Barkley Ave. (4) Williamsbridge Rd. (5) Hobart Ave. (6) Odell St., from C. W. McDonald, 1010 Webster Ave., (1) $107,515 (2) $29,307 (3) $58,805; Anita Constr. Co., (1) $119,230 (2) $29,644 (4) $8,496 (5) $5,373 (6) $4,717; Gregorio & Gabriele, 1129 8th Ave., (2) $27,692 (6) $4,851; Knight & Demicco, 448 East Tremont Ave., (3) $48,130; J. V. Timoney Constr. Co., 220 East 201st St., (3) $54,942; McDonald Wilson Co., 1803 Gleason Ave., (4) $7,880; Spedero & Turriamo, (4) $9,594 (5) $5,292; C. E. Farrell Contg. Co., 1981 Pilgrim Ave., (5) $5,003 (6) $4,513. Noted Feb. 1.

N. Y., Spring Valley—City Clerk, opened bids Feb. 5, 15 mi. sewers and sewage disposal plant, from B. Pizzimenti, Hughesville, Md., $219,018; Amer. Utilities Contr. Co., Newark (street address not available), $235,736; Mahlon Averill, 196 Woodside Ave., Newark, $236,220. Noted Jan. 25.

CONTRACTS AWARDED

Md., Baltimore—Mayor and City Council, sanitary sewers in Dist. G-14, Contr. 196 to Arundel Constr. Co., Knickerbocker Bldg., $73,582; in Dist. 11, Contr. 197, to Shyrock & Rich, 4701 Reistertown Rd., $61,053. Noted Feb 8.

S. C., Clover — Constructing sewerage system, to W. A. Ebert, Latta Arcade, Charlotte, N. C., $53,064. Noted Jan. 18.

Calif., Crescent City—See "Streets and Roads."

Waste Disposal

PROPOSED WORK

Wis., Milwaukee—Making plans addition to garbage disposal plant, 50 ft. high, 101 ft. long, brick, concrete and steel, also includes concrete cinder hoppers and new grates, $90,000. C. E. Malig, City Hall, archt.

Wis., Sheboygan—Plans 1 story addition to garbage disposal plant, brick, rein.-con. and steel. $50,000. Engineer or architect not selected.

Que., Montreal—Had plans prepared 3 garbage incinerators. $1,000,000 bonds will be voted on in March. H. A. Tetreault, dir. pub. wks.

BIDS DESIRED

Wis., Sheboygan—City, c/o J. Steimle, clk., taking bids 2 story, 45 x 60 ft. incinerator, rein.-con., brick and steel, plain foundation, guaranteed capacity 15 ton in 24 hours. C. N. Boley, City Hall, city engr.

CONTRACTS AWARDED

Mo., St. Louis — Bd. Pub. Serv., City Hall, disposal of city garbage, amounting to average of 60,000 ton for year 1923-24, delivered to barges foot of Chouteau Ave., to Klein & Katz, Central Natl. Bldg., $2.10 per ton. Noted Jan. 11.

Bridges

PROPOSED WORK

Conn., Bridgeport—Dept. Pub. Wks. plans 100 ft. steel truss bridge over Ash Creek, State St. Ext., $25,000; steel truss bridge on Brewster St., $25,000. J. A. McElroy, City Hall, city engr. Noted Feb. 2.

Tennessee—State Hy. Dept., Nashville, plans rein.-con. bridge over French Broad River, near Bridgeport, Cocke Co., $75,000; rein.-con. and steel bridge over Roaring River, Federal Aid Project 90, near Gainesboro, Jackson Co. D. Q. McComb, State Hy. Dept., Nashville, ch. engr.

Minn., Austin—See "Streets and Roads."

Minn., Mankato—See "Streets and Roads."

Missouri—State Hy. Dept., Jefferson City, rejected bids opened Dec. 2, one 35 ft. rein.-con. deck girder and one 80 ft. steel truss spans, 20 ft. roadways, concrete abutments, on road from West Co. line to Hamilton, State Project Route 8, Sect. 12, Caldwell Co. also one 60 ft. steel and two 25 ft. rein.-con. deck girder spans, 20 ft. roadways, concrete abutments, on road from West Co. line to Hamilton, State Project Route 8, Sect. 13, Caldwell Co. Noted Dec. 28.

Mo., St. Louis—Voted $3,000,000 bonds for railway approaches to municipal bridge.

Ore., Aurora—Marion Co. (Salem) and Clackamas Co. (Oregon City) had plans prepared and take bids about April 1, 120 ft. steel bridge, concrete piers, over Pudding River, here. $37,500-$40,000. State Hy. Comn., Salem, engrs.

Canada—See "Railways."

BIDS DESIRED

N. J., Trenton—Feb. 27, by Bd. Freeholders Mercer Co., Bridge 216.6 steel I-beam encased in concrete over Woolseys branch of Jacobs Creek on road from Washingtons Crossing to Pennington. C. H. Reichert, dir. dept. bridges; adv. this issue.

West Virginia—See "Streets and Roads."

Ind., Indianapolis—March 1, by Comrs. Marion Co., bridge over Eagle Creek on Crawfordsville Pike. $44,027. L. K. Fesler, aud.

Wis., Merrill—Feb. 20, by H. R. Allen, city clk., rein.-con. bridge, three 70 ft. spans, West Main St. $30,000-$35,000. Wisconsin Hy. Comn., Madison, engrs.

Ia., Northwood—Feb. 20, by Auditor Worth Co., 14 concrete box culverts and 10 extensions, 3 I beam and 3 pony truss spans. Will exceed $25,000. F. R. Lyford, Northwood, co. engr.

Minn., Brainerd—March 21, by C. W. Mahlum, aud. Crow Wing Co., Bridge 3721 on State Rd. 8, over Mississippi River, two 60 ft. steel spans, one 140 ft. center steel span, 2 concrete piers, two concrete abutments, about 205,000 lb. steel, 45,000 lb. reinforcing, 370 cu.yd. concrete. $30,000. State Hy. Dept., 1246 University Ave., St. Paul, engrs. Noted Nov. 23.

Ore., Portland—Feb. 26, repairing steel truss bridge, 202,000 lb. steel. $50,000. O. Laurgaard, city engr.

BIDS RECEIVED

North Carolina — State Hy. Dept., Raleigh, rein.-con. bridges and culverts on (1) State Project 147, Bertie and Hertford Counties (2) State Project 671, Rowan Co. (3) State Project 991, Transylvania Co. (4) State Project 815, Burke Co. (5) State Project 363, Onslow Co. (6) State Project 107, Bertie Co., from G. T. Gwathmey, Seaboard Bank Bldg., Norfolk, Va., (1) $35,-984; Atlantic Bridge Co., Roanoke, Va., (1) $37,559 (2) $34,706 (4) $40,984 (5) $81,452 (6) $50,128; Pittsburgh-Des Moines Steel Co., Richmond, Va. (street address not available), (1) $37,699 (5) $79,698 (6) $50,-720; Luten Bridge Co., 405 East 4th Ave., Knoxville, Tenn., (2) $34,981 (3) $40,071; Concrete Steel Bridge Co., Clarksburg, W. Va., (2) $36,139 (3) $41,451; Gibson Constr. Co., Holston Bank Bldg., Knoxville, Tenn., (3) $39,920; J. L. Von Glahn, Spartanburg, S. C., (4) $39,457; Geer & Wilson, Rutherfordton, (4) $42,447; Eagle Eng. Co., New Bern, (5) $80,849.

Ia., Des Moines—Widening roadway of present bridge over Des Moines River, on 6th Ave., incl. 700 cu.yd. concrete, 40 ton steel bars, 1,745 sq.yd. roadway pavement, etc., from Alexander & Higbie, 2733 6th Ave., $27,492; F. E. Marsh & Co., 206 Masonic Temple, $30,500; Des Moines Steel Co., South 5th and Tuttle Sts., $31,-400. Noted Nov. 16.

Missouri—State Hy. Dept., Jefferson City, opened bids Feb. 2, (1) two 60 ft. and one 80 ft. steel truss spans, 20 ft. roadways, 2 rein.-con. piers and 2 rein.-con. abutments, over Grande Glaize River on Sta. 144 plus 92, on road east and west of Zebra, State Project Route 15, Sect. 63, Camden Co. (2) one 80 ft. steel truss and four 20 ft., rein.-con. slab spans, 2 rein.-con. piers, 4 rein.-con. bents, etc., over Palmer Creek, on Sta. 194 plus 31, on road east of Brunswick, State Project Route 10, Sect. 24, Charitan Co. (3) one 120 ft. and two 76 ft., steel truss and fourteen 25 ft. I-Beam spans, over River Diversion Channel, on Sta. 738 plus 00, on road south of Marble Hill, State Project Route 51, Sect. 24, Bollinger Co. (4) four 30 ft. rein.-con. deck girder spans, 20 ft. roadway, 2 rein.-con. abutments, over Cowskin Creek, on Sta. 835 plus 00, on road from Ozark to Ava, State Project Route 40, Sect. 20, Douglas Co., (5) 0.568 mi. road northwest of Lebanon, 34 ft., incl. one 30 ft. rein.-con. deck girder and one 80 ft. steel truss spans, State Project Route 15, Sect. 36, Laclede Co., from Pioneer Constr. Co., 101 New York Life Bldg., Kansas City, (1) $43,860 (3) $57,-268 (5) $19,793; Kansas City Bridge Co., 510 Orear-Leslie Bldg., Kansas City, (1) $43,880 (3) $59,403; Missouri Bridge & Iron Co., Fullerton Bldg., St. Louis, (1) $44,454; C. Parker, Keytesville, (2) $15,-674; Joyce & Co., Keokuk, Ia., (2) $18,201; Cook & O'Brien Constr. Co., 305 Ry. Exch., Kansas City, (2) $18,432; Vincennes Bridge Co., Vincennes, Ind., (3) $59,526; Allhands & Davis, 705-6 Frisco Bldg., Joplin, (4) $18,070; Republic Concrete Constr. Co., Republic, (4) $19,524; Summerfield Jones Co., Springfield, (street address not available) (4) $19,526; General Constr. Co., Syndicate Trust Bldg., St. Louis, (5) $19,-388; St. Louis Foundation Co., St. Louis (street address not available) (5) $19,415. Noted Jan. 25.

CONTRACTS AWARDED

Connecticut—See "Streets and Roads."

West Virginia—State Rd. Dept., Charleston, Burlington Bridge 735, Project 3010, across Patterson Creek, Mineral Co., steel substructure to McClure & Bingner Co., Johnstown, Pa., $9,396, steel superstructure to Oregonia Bridge Co., Lebanon, O., $13,-134; Heath Bridge 873, Project 3155, across Heath Creek, Cabell Co., concrete deck girder, to Huntington Concrete Co., 14th St. W., Huntington, $9,778; Hartland Bridge 805, Project 3037, across Elk River, Clay Co., steel superstructure to Roanoke Bridge Wks., Roanoke, Va., $58,300; Amigo Bridge 833, Project 3133, across Devil's Fork, Raleigh Co., concrete, to Concrete Steel Bridge Co. Clarksburg, $13,141. Noted Jan. 11 under Streets and Roads.

W. Va., Parkersburg—Baltimore & Ohio R.R., Baltimore and Ohio Bldg., Baltimore, Md., sub-structure for 600 ft. steel bridge over Little Kanawha River, to Vang Constr. Co., Cumberland, Md. Engs. est. $35,000.

S. C., Converse—State Hy. Comn., at office Spartanburg Co. Highway Comn., Spartanburg, constructing bridge over Pacolet River, here, to W. M. Orr, Hendersonville, N. C., $73,051. Noted Feb. 1.

Ga., Columbus—Muscogee Co., 2 concrete bridges one on Glad Rd., other on Cusseta Rd. to Municipal Eng. & Constr. Co., Empire Bldg., Atlanta, $29,934.

Ohio—See "Streets and Roads."

O., Cleveland—See "Industrial Works."

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, to L. Clotfelter, Hillsboro, 2 concrete bridges, Route 1, Sect. 13-B, Wabash Co. and 1 concrete Route 1, Sect. 15-B, Lawrence Co., $15,629 and $17,783 respectively. Noted Jan. 11.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, following bridges (1) concrete approach spans and substructure for 1 steel and concrete, Route 2, Sect. 52-B, De Witt Co. (2) superstructure for 1 steel and concrete, Route 2, Sect. 52-C, De Witt Co. (3) 5 concrete Route 3, Sect. 9-B, Rock Island Co. (4) concrete approach spans and substructure for steel and concrete bridge, also 1 concrete bridge, Route 12, Sect. 24-B, Clinton Co. (5) superstructure for steel and concrete bridge Route 12, Sect. 24-C, Clinton Co. (6) 2 concrete Route 16, Sect. 13-B, Shelby Co. (7) substructure for steel, Project 25, Sect. 6-B, Grundy Co. (8) superstructure for steel, Project 25, Route 6-C, Grundy Co. to Love-Richards, Hoopeston, (1) $17,072 (2) $6,966; A. A. Reschke, Geneseo, (3) $13,413; W. H. Shons, 109 Spring St., Freeport, (4) $83,297 (5) $5,928 (6) $12,645 (7) $7,274 (8) $11,-931. Noted Nov. 16.

Ia., Marshalltown—Marshall Co., 32 concrete box and 22 concrete circular culverts, 4 concrete culvert extensions, one 36 x 20 ft. deck girder and one 70 x 20 ft. steel pony truss, Primary Bridge Project 159, to Ingersoll & Stouffer, Marshalltown, $43,900. Noted Feb. 8.

Missouri—State Hy. Dept., Jefferson City, one 140 ft. steel truss and three 20 ft. rein.-con. slab spans, 20 ft. roadways, concrete piers and bents, on road from Fairfax to Tarkio, State Project Route 1, Sect. 7, Atchison Co., to W. R. Larson Constr. Co., 519 Secy. Natl. Bank Bldg., Sioux Falls, S. D., $29,108; one 40 ft. rein.-con. deck girder and one 50 ft. steel truss spans, 20 ft. roadways, concrete abutments, over Spring Creek, on road from St. Louis to Springfield, State Project Route 14, Sect. 66, Franklin Co., to Frazier Davis Constr. Co., Arcade Bldg., St. Louis, $14,802; one 50 ft. and one 60 ft. steel truss and one 30 ft. rein.-con. deck girder spans, 20 ft. roadways, concrete abutments, on road from Jackson to Perry Co. line, State Project Route 25, Sect. 19, Cape Girardeau Co., to Carroll, Bedwell & H. Cortell, Cape Girardeau, $14,-536; one 80 ft. steel truss and two 20 ft rein.-con. slab spans, 20 ft. roadways, concrete piers and abutments, over Dry Fork of Meramec River, on Sta. 349 plus 59, on road from Salem to Licking, State Project Route 32, Sect. 4, Dent Co., to Illinois Steel Bridge Co., Laclede Gas Bldg., St. Louis, $14,341. Noted Jan. 25.

Colo., Denver—Rein.-con. river spans for 16th St. viaduct, to C. S. Lamble, Tramway Bldg., $37,000. Noted Jan. 18.

Dams

PROPOSED WORK

Pa., Tyrone — Penna. Sabbath School Assn., R. A. Zentmyer, pres., Municipal Bldg., plans 10,000,000 gal. dam across Warriors Mark Run, 365 ft. long, 17 ft. high, masonry and earth, Franklin Twp., Huntingdon Co.

Ark., Van Buren—Plans to vote on $210,000 bond issue, constructing dam for water Dist. Impvt. on Lee Creek. W. L. Winters, 700 South 20th St., Ft. Smith, consult engr.

Calif., Sacramento — See "Industrial Works."

BIDS DESIRED

Calif., Oroville—See "Excavation, Drainage, Irrigation."

Railways

PROPOSED WORK

Oklahoma—Missouri, Kansas and Texas R.R., Ry. Exch. Bldg., St. Louis, Mo., plans large railway yard west of Tulsa, incl. large repair station shop, enlarging freight and passenger depots at Tulsa. $1,500,000. F. Ringer, ch. engr.

California—City and San Francisco Co. soon take bids constructing municipal railway from Sloat Blvd. to Farallones St. and Plymouth Ave., San Francisco. $265,000. M. M. O'Shaughnessy, city engr.

Canada—Canadian Pacific Ry., Windsor St., Montreal, Que., will undertake following program of construction during coming season: additional trackwork in yards at Upsala, Dymont, Dryden and Port Arthur in Ontario; at Rennie, St. Claude Burnside, Ameer, Murray Park, Springstein, and Fannystelle, in Manitoba; in Regina Beach, Killaley, Frys, Falcon, Dingley and Lemberg, in Saskatchewan; in Coaldale, Coutts, Magrath, Stirling, Raymond, Glenbaw, Bankhead, Eldon, Lake Louise, Red Deer, Lacombe, Pomoka, and Strathcona, in Alberta; Ruby Creek and Mara in British Columbia; building lunch room at Ignace and improving repair shops at Weston in Ontario; new stations at Darlingford and Arden, repairing shops at Reston and Minnedosa, improving refrigerators at Brandon and Winnipeg in Manitoba; new stations at Carnduff and Congress, new lunch room at Swift Current, repairing shops at Regina, Broadview and Neudorf refrigerating improvements at Sutherland, in Saskatchewan; extending engine house at Hardisty and improving shops at Calgary, in Alberta; new station at Lake Windermere, new terminal office at Victoria, in British Columbia; water supply improvements at Newdale and Birtle Stations, in Manitoba, Kirriemuir Sta., in Alberta, at Fry's, Weyburn, Sutherland, Oxbow and Wawota stations in Saskatchewan; new steel water tanks at Moosejaw and Outlook in Saskatchewan; other miscellaneous work, incl. coal plant extensions at Ft. William, automatic signals at McGregor, in Ontario; repairs and extensions to pier at Winnipeg Beach Stockyards at Broomhill, in Manitoba; stockyards at Carstairs, Nightingale and Spring Coulee in Alberta; stockyards at Broadacres, Frobisher, Revenue and Wolfe in Saskachewan; automatic signals at Pelain Sta. and through Kicking Horse Pass between Field and

Railways (Continued)

Golden, grade revisions near Golden, relining Connaught Tunnel and Loop Tunnel on Crows Nest Pass Line, completing ocean pier at Vancouver in British Columbia. Also plans to replace number of bridges with concrete and steel structures on Kettle Valley Line and on Esquimalt & Nanaimo Branch in British Columbia.

CONTRACTS AWARDED

Montana—Great Northern Ry., 4th and Jackson Sts., St. Paul, Minn., 25 mi. tracks from Java to East Nyack, to A. Guthrie & Co., Inc., 366 Jackson St., St. Paul, Minn., $500,000.

Excavation, Drainage, Irrigation

PROPOSED WORK

Tex., El Paso—Voted $50,000 bond issue for irrigation improvements in Vinton Irrigation Dist. 30 of El Paso Co. Address E. B. McClintock, co. judge.

Colo., Ordway—Numa D. D. sold $150,000 bonds for system to drain seepage water in Crawly Co. Portion of work let to Martin-Day Co., 310 Little Bldg., Lincoln, Neb. B. A. Sawyer, Ordway, engr.

Calif., Montebello — Montebello Irrigation Dist. having plans prepared irrigation system, incl. 53,000 lin.ft. 4-18 in. riveted steel pipe, 2 turbine pumping plants, capacity 100 sec.ft., 250,000 gal. steel tank, $125,000. Olmsted & Gillelen, Hollingsworth Bldg., Los Angeles, engrs.

Calif., Venice—Feb. 20, to vote on $350,000 bonds for harbor development improvements.

BIDS DESIRED

Ill., Beardstown — Feb. 22, by Comrs. South Beardstown Drainage and Levee Dist., First State Bank, raising and widening levees from Station 0-18, Station 18-67 and Station 67-329, etc. L. B. Kinney, Pekin, engr.; adv. this issue.

Wis., Manawa—March 3, by C. W. Ross, secy. Waupaca Co. Drainage Bd., Main 1 of Waupaca Co. Farm Drainage 2, 4.2 mi. open ditch, 4 ft. bottom, 1-1 side slopes, average depth 6 ft. 6 in., maximum 9 ft., involving 58,000 cu.yd. excav. L. M. Schindler, 721 Clark St., Appleton, engr.

Wis., Watertown—Feb. 27, by Jefferson Co. Farm Drainage Bd., 4,335 ft. 6-8 in. and 11,415 ft. 12-18 in. tile drain, 26,000 cu.yd. excav. for shallow outlet ditch, $25,000. J. W. Puerner, secy. Private plans.

Minn., Redwood Falls—March 1, by Redwood and Brown Counties, Judicial Ditch 24, Sect. 1, 17,490 cu.yd. excav., Sect. 2, 36,709 lin.ft. 6-30 in. drain tile, 8 bulkheads, 64 inlets, 57 c.i. grates. $55,326. F. B. Forbes, Redwood Falls, engr. Noted Nov. 23.

Minn., Redwood Falls—March 2 (change of date), by Redwood Co., Co. Ditch 52, 182,570 lin.ft. 6-36 in. tile. $133,000. B. J. Reynolds, Redwood Falls, engr. Noted Jan. 25.

Mo., Whitham — Feb. 27, by Whitham D. D., cleaning 12 mi. drainage ditch, about 50,000 cu.yd. excav., also 2½ mi. levee, about 130,000 cu.yd. excav. S. P. Sorensen, Brunswick, engr.

Calif., Fall River Mills — Fall River Irrigation Dist., plans 15 or 20 mi. canals. S. McArthur, Mills Bldg., San Francisco, trustee. F. H. Tibbetts, Alaska Commercial Bldg., San Francisco, consult. engr.

Calif., Oroville — Feb. 23, by Trustees Oroville-Wyandotte Irrigation Dist., storage and ditch work, involving 20,100 cu.yd. earth excav., 14,500 cu.yd. sort or loose rock excav., 11,500 cu.yd. solid rock excav., 48,300 cu.yd. embankment, 1,500 cu.yd. rip rap, 132 cu.yd. concrete, 1,100 ft. earth-filled dam, 42 ft. high. S. J. Norris, Oroville, engr.

BIDS RECEIVED

Md., Baltimore — Bd. Awards, dredging and making fill for McComas St. bulkhead, from Arundel Corp., Pier 2, Pratt St., Item (1) $.199, (2) $.199, (3) $.275. Noted Jan. 11.

CONTRACTS AWARDED

Colo., Ordway—See "Proposed Work."

Streets and Roads

PROPOSED WORK

Conn., Bridgeport—Plans concrete paving about 2 mi. Stratford Ave., $31,500; grading various streets and sidewalk during coming season, $50,000. J. A. McElroy, City Hall, city engr.

Conn., Bridgeport—Plans asphalt pavements on Jones Ave. and Oak St., also on North Ave. from Dewey St. to city line. $28,500. J. A. McElroy, City Hall, city engr.

New York—H. S. Sisson, comr. State Hy. Dept., Albany, received no bids Feb. 7, reconstructing 1.5 mi. Repair Contr. 3047, Highway 541, Mayfield-Northville, Part 2, Fulton Co., $48,284; 3.88 mi. Repair Contr. 3048, Highway 5166, Saugerties-Catskill, Part 2, Greene Co., $140,355. Noted Jan. 18.

N. Y., East Aurora—Plans widening Main St. from Whaley Ave. to Pine St. $30,000. G. C. Diehl, Ellicott Sq., Buffalo, engr.

N. J., Mt. Holly—Burlington Co. plans improving Jacksonville Rd. from Burlington to Masonic Home. $50,000. H. B. Smith, Mt. Holly, engr.

Pa., Scranton—Plans paving North 9th St. and River Ave., $25,000, also Meridian Ave. and Division St., $30,577, sheet asphalt on concrete. W. La Fontaine, dir. pub. wks.

Pa., Stormboro—Village Clerk takes bids in March improving 1,925 ft. Lake and Walnut Sts., 5,900 sq.yd. concrete, 3,800 lin.ft. concrete curb, 800 ft. 24 in. and 400 ft. 18 in. pipe. $25,000. T. F. Pattinson, town engr.

Md., Baltimore — Paving Comn. soon takes bids paving with sheet asphalt, Overland Ave. from Lauretta to Forest View Aves., New Pittsburgh Ave. from 5th Ave. to new city line, Clarendon Ave. from Kathland Ave. to New Blvd., Elmora and Ravenwood Aves. from Greenview to St. Cloud Aves., South Ave. from Hill Top Rd. to Green Spring Ave.; paving with granite blocks, York St. from Sharp to Charles Sts. R. K. Compton, chn.

North Carolina—State Hy. Dept., Raleigh, received no bids Feb. 1, grading and concrete or asphaltic paving 13.8 mi. State Project 275, Sampson Co. $195,583. Will readvertise. C. M. Upham, state highway engr. Noted Jan. 11.

N. C., Asheville—Buncombe Co. plans improving highway system. $200,000. E. M. Lydia, chn. Bd. Co. Comrs.

N. C., Greensboro—City soon lets contract paving various streets. $300,000. P. C. Painter, city mgr.

Kentucky—State Hy. Dept., Frankfort, having plans prepared grading and surfacing 4.3 mi. Albany-Monticello Rd., State Project 27, Sect. A, Clinton Co. J. S. Boggs, state highway engr.

Ky., Elizabethtown—Hardin Co. Fiscal Court plans improving Dixie Highway between here and Hart Co. line, $50,000; Bardstown Rd. to Nelson Co. line, $30,000; Leitchfield Rd. to Grayson Co. line, $30,000.

O., Dayton — Plans paving and setting concrete curb and gutter on 1,500 ft. Irwin St. from 3rd to Springfield Sts., 30 ft., 5,000 sq.yd. vitr. brick, $24,970; 800 ft. Red Haw Ave., 30 ft., 2,800 sq.yd. sheet asphalt or rein.-con., $14,970; 2,500 ft. Wilmington Ave. from Wayne to Irving Sts., 30 ft., 8,500 sq.yd. vitr. brick on concrete, $45,481. I. E. Houk, city engr.

Indiana—State Ry. Dept., Indianapolis, plans paying 30,000 ft. Dixie Bee Line, 16 ft., Vanderburg Co., 53,334 sq yd. concrete on concrete. C. Gray, state highway engr.

Ind., Fort Wayne—Allen Co. received no bids Feb. 5, grading and graveling 16,450 ft. Reynolds Rd., and 16,300 ft. Adams Rd., 16 ft., $27,000 and $28,200 respectively. Will readvertise. O. M. Darling, Ft. Wayne, engr.

Mich., Detroit—Plans resurfacing with 3½ in. sheet asphalt Frederick St. from Russell to Dequindre Sts. and from Chene to Mt. Elliott Sts.; Hilliger St. from Edlie to Jefferson Sts. and from Kercheval St. to Old City Line, Hancock St. from LaSalle to Scotten Sts. and from Russell to St. Aubin Sts., Leland St. from Dequindre to St. Aubin Sts., from McDougall to Elmwood Sts., and from Moran to Gratiot Sts., Military St. from Dix to Toledo Sts., from Federal to Ranspach Sts. and from Buchanan to Ironside Sts., Maxwell St. from Gratiot to Medbury Sts. and from Medbury to Kellogg Sts., Pulford St. from Gratiot to Mt. Elliott Sts. and from Beaufait St. to Belt Line R.R., Seminole St. from Waterloo to Charlevoix Sts. and from Mack to Canfield Sts., Springwells St. from Fort St. to railroad tracks, and from Chamberlain to Ferndale Sts., Waterloo St. from Mt. Elliott St. to Belt Line R.R., from McClellan to Hart Aves., and from Connors St. to railroad tracks, Watson St. from Russell to Riopelle Sts. and from Grand Trunk R.R. to Chene St., also resurfacing Dix, Dickerson, Drexel, Driggs, Engle, Ellery, Elm, Euclid, Fort, Forest, Forman, Fischer, Garfield, Gibson, Goethe, Glynn, Glover, Garland, Goodwin, Hubbard, Harding, Hobart, Hudson, Harbaugh, Hurlburt, Helen, Hooker, Holcomb, Hogarth, Horatio, Iroquois, Illinois, Isabella, Junction, John R., Kales, King, Larned, LeMay, Leigh, Livingstone, Lawrence, Lovett, Leicester, Lyman, Lillibridge, Lawndale, Mohawk, Meadowbrook, Mechanic, Meldrum, Maryland, Montclair, Marsden, May, Mt Vernon, McClellan, McKinley, McKinstry, Northwestern, Nall, Navarre, Osborn, Philadelphia, Pacific, Perry, Poplar, Parker, Peterson, Philip, Putnam, Porter, Roby, Railroad, Rohns, Roosevelt, Seyburn, Stanton Superior, Sherman, Seneca, St. Clair, Stanley, Seward, Sixth, Tireman, Toledo, Tillman, Trumbull, Theodore, Trombley, Townsend, Visger, Williams, Woodbridge, Watson, Willis, Waterman, Warsaw, Woodmere, Ward, Wellington and Zender Sts. J. W. Reid, city engr.

Mich., Mt. Clemens—Plans paving 2,500 sq.yd. Jones St., 9,000 sq.yd. South Wilson Blvd., and 6,000 sq.yd. Church St., concrete, concrete asphalt, creosote block, asphalt block, brick or bituminous. $200,000. A. A. Devantier, city clk.

Ill., Springfield—Had plans prepared 18,200 sq. yd. brick pavement on 6 in. concrete, 40 ft., concrete curbs and gutters. W. Seeley, city engr.

Wisconsin—State Hy. Comn., Madison, has selected the following Federal Aid road construction jobs.

Div. 1, 1.9 mi. Waterloo-Hubbleton Rd., and 2.9 mi. Columbus-Beaver Dam Rd., both 18 ft. concrete, Dodge Co., 2.6 mi. Hubbleton Cutoff, 18 ft. concrete, Jefferson Co., 4.3 mi. Clinton-Darien Rd., 18 ft. concrete, Rock Co., A. L. Hambrecht, Madison, div. engr.

Div. 2, 2.75 mi. Lakeshore Rd., 18 ft. concrete, Ozaukee Co., 7.5 mi. Kilbourn Rd., 18 ft. concrete, Racine Co., 2.5 mi. Kilbourn Rd. from State Trunk Highway 57, north, Kilbourn Rd. from Racine Co. line south, both 18 ft. concrete, Kenosha Co., widening 4 mi. Blue Mounds Rd., Milwaukee Co., 4.5 mi. State Trunk Highway 61, Elkhorn-East Troy Rd., 18 ft. concrete, Walworth Co., 5 mi. Brown Deer Rd., 18 ft. concrete, Milwaukee Co., C. R. Weymouth, Milwaukee, div. engr.

Div. 3, 2.2 mi. De Pere-Greenleaf Rd., 2.1 mi. Askeaton-Greenleaf Rd., both 18 ft. concrete, Brown Co., 13 mi. Mountain-Lakewood Rd., gravel surfacing, Oconto Co., 6 mi. Amberg-Beacher Lake Rd., gravel, Marinette Co., O. C. Rollman, Green Bay, div. engr.

Div. 4, Friendship-Kilbourn Rd., clay and gravel surfacing, Adams Co., 20 mi. Kilbourn-Mauston Rd. and 7 mi. New Lisbon-Sparta Rd., both gravel, Juneau Co., 5 mi. Stevens Point-Wausau Rd., 18 ft. concrete, Portage Co., 2 mi. Coloma-Wautoma Rd., gravel, Waushara Co., 4.8 mi. Sherry-Auburndale Rd., 18 ft. concrete, Wood Co., A. F. Mengel, Wisconsin Rapids, div. engr.

Div. 5, 1.1 mi. Winona-Bluff Siding, gravel, Buffalo Co., 4.2 mi. Bluff-Siding-Marshland Rd., concrete and gravel, Buffalo and Trempealeau Counties, 6.3 mi. Hustler-Sparta Rd., 11.1 mi. Mauston-Sparta Rd., 4.6 mi. Mauston-Sparta Rd., and 4.5 mi. Hustler-Sparta Rd., all gravel, and 2.8 mi. La Crosse-Sparta Rd., 18 ft. concrete, foregoing in Monroe Co. T. M. Reynolds, La Crosse, div. engr.

Div. 6, 1.1 mi. Wilson-Knapp Rd., gravel, St. Croix Co., 3.8 mi. Wilson Knapp Rd., gravel, Dunn Co., 2 mi. Baldwin-Knapp Rd., gravel, St. Croix Co., 3.1 mi. Chelsea-Westboro Rd., gravel, Taylor Co., 1.7 mi. Red Wing-Hager City Rd., Pierce Co., 0.8 mi. Chelsea-Westboro Rd., Taylor Co., H. W. Vroman, Eau Claire, div. engr.

Div. 7, 9 mi. Koepenick-Pelican Lake Rd., and 5.7 mi. Aniwa-Antigo Rd., both gravel, Langlade Co., 7.2 mi. Woodruff-Eagler River Rd., gravel, Vilas Co., 12 mi. gravel road, Lincoln and Oneida Counties, F. M. Sergeant, Rhinelander, div. engr.

Div. 8, Odanah Rd. and bridge, Ashland Co., 5.8 mi. road from Canton to east county line, gravel, 4.3 mi. road from Chetek to join Project 186, gravel, Barron Co., 21.1 mi. State Trunk Highway 19 and 10 mi. State Trunk Highway 24, both gravel, Bayfield Co., 7 mi. Ladysmith-Tony Rd., gravel, Rusk Co., 7.2 mi. State Trunk Highway 11, gravel, Sawyer Co., 3.75 mi. State Trunk Highway 124, gravel, Washburn Co., J. R. McLean, Superior, div. engr.

Div. 9, 12 mi. Fennimore-Montford Rd., mine tailings, Grant Co., 5.5 mi. road from Foley School to county line, crushed stone, Lafayette Co., T. W. Rielly, Lancaster, div. engr.

Wis., Watertown—Soon takes bids paving West Milwaukee, Milwaukee, North 6th and North 4th Sts. and Milford Ave., various types. $80,000. A. Kraeft, City Hall, engr.

Ia., Clinton—Plans 130,000 sy. yd. pavement, various types, and 90,000 lin. ft. curb and gutter. $450,000. B. R. Anderso, 410 Weston Bldg., city engr.

Minn., Austin—Comrs. Mower Co. levied $120,000 for road and bridge construction during 1923. A. C. White, Austin, engr.

Minn., Glencoe—Comrs. McLeod Co. levied $75,000 for road and bridge construction in 1923. I. C. Christlieb, Hutchinson, engr.

Minn., Mankato—Comrs. Blue Earth Co. levied $130,000 for road and bridge construction during 1923. J. W. Hruska, Mankato, engr.

Streets and Roads (Continued)

Minn., Winona—Winona Co. levied $80,000 for road and bridge construction in 1923. E. P. Effertz, Winona, engr.

Kan., Emporia—Plans paving 35 blocks, various types. R. J. Paulette, Emporia, engr.

Kan., Holton — Jackson Co. had plans prepared and soon takes bids constructing earth road on 8.797 mi. Federal Aid Project 149, Sects. A and B, 29½ ft.

Kan., Seneca — Nemaha Co. had plans prepared and soon takes bids constructing earth road 6.226 mi. Federal Air Project 152, Sect. A, 27½ ft. E. C. L. Brown, 609 Kemper Bldg., Kansas City, Mo., engr.

Neb., Lincoln—City soon takes bids paving various streets, asphaltic concrete. $25,000. G. W. Bates, city engr.

Neb., Lincoln—Plans paving 13th St., various types. $40,000. G. W. Bates, city engr.

South Dakota—State Hy. Dept., Pierre, takes bids about March, grading and gravel surfacing 14.5 mi. Federal Aid Project 135, Minnehaha Co., incl. 101,500 cu.yd. excav., 26,100 cu.yd. gravel, 435 cu.yd. Class A concrete, 42,000 lb. reinforcing steel, etc. $90,310. F. D. Hudgins, ch. engr.

S. D., Pierre—Having plans prepared paving Pierre St., incl. 15,650 sq.yd. concrete or vibrolithic concrete, 13,100 sq.yd. bitulithic, sheet asphalt or asphaltic concrete, 75 sq.yd. concrete pavement in alley approach, 3,150 lin.ft. concrete curb; Dakota Ave., incl. 10,200 sq.yd. concrete or vibrolithic concrete, 7,800 sq.yd. bitulithic, sheet asphalt or asphaltic concrete, 225 sq.yd. concrete in alley approach, 3,000 lin.ft. concrete curb. T. H. Johnson, 319 Iowa Bldg., Sioux City, Ia., engr.

Mo., Chillicothe—Plans paving 11 blocks, in early spring. $45,000. J. Broaddus, Chillicothe, engr.

Mo., St. Louis—Voted $1,000,000 bonds for power and service building, incl. machine shop, garage, and laundry for municipal requirements.

Mo., Springfield—G. W. Culler, city engr., takes bids in early spring graveling 1½ mi. road, 30 ft. wide, also paving South Side Dist., 11,000 sq.yd. vertical fibre brick.

Tex., Cameron—Milam Co. making plans grading and gravel surfacing 10.5 mi. Ben Milam Highway from Little River to Ash Hill, 16 ft. $130,000. A. F. Mitchell, co. engr.

Tex., Columbus — Colorado Co. having plans prepared grading and gravel surfacing 4 mi. State Highway 3, between Weimar and Shatto, 16 ft., $40,000. B. H. Faber, co. engr.

Tex., Eldorado — Schleicher Co. making plans grading, gravel surfacing and asphalt topping 9.86 mi. State Highway 4, 16 ft., 903 cu.yd. concrete, 42,621 cu.yd. roadway and 16,151 cu.yd. borrow excav., 74,349 gal. bituminous macadam, 15,385 cu.yd. gravel and 15,385 cu.yd. crushed rock, 74,045 lb. reinforcing. $133,935. J. L. Niell, co. engr.

Tex., Groesbeck—Limestone Co. making plans grading and paving, etc., with rein.-con. 4 mi. Bates Sect., State Highway 14, east from Mexia, 16 ft. $100,000. J. G. McIntosch, co. engr.

Tex., McKinney—Collins Co. having plans prepared surfacing 2.17 mi. State Highway 1, 18 ft., 22,590 sq.yd. rein.-con. $65,000. F. W. Cawthon, co. engr.

Tex., Palo Pinto—Palo Pinto Co. making plans surfacing with 1 in. bituminous topping 10.87 mi. State Highway 1 from Strawn to Meetcalfe Gap, 18 ft., 114,738 sq. yd. bituminous macadam, $95,000; 4 mi. Bankhead Highway from Mineral Wells to Parker Co. line, 18 ft., 42,180 sq. yd. bituminous macadam. $35,000. G. W. Courter, co. engr.

Nev., Reno — Making plans 700,000 sq. ft. 5 in. asphaltic concrete pavement. H. Chism, city engr

Calif., Auburn—Had plans prepared improving East Placer St. between Pine and High Sts., 20,000 sq. ft. 5 in. concrete pavement, 20,000 sq. ft. grading, 2,000 lin. ft. concrete curb and gutter; Finley St. between Orange and High Sts., 8,400 sq. ft. grading, paving with 5 in. hydraulic concrete, 1,800 lin. ft. curb and gutter; Almond St. between Lincoln and East Placer Sts., 14,000 sq. ft. grading, paving with 5 in. hydraulic concrete, 1,400 lin. ft. curb and gutter; Pine St. between Lincoln and East Placer Sts., 14,000 sq. ft. grading, paving with 5 in. concrete, 1,400 lin.ft. curb and gutter; portion High St., 10,500 sq. ft. grading and paving with 5 in. hydraulic concrete, 840 lin.ft. curb and gutter; High St. between East Placer and El Dorado Sts., 50,000 sq. ft. grading paving with 5 in. hydraulic concrete, 1,500 lin. ft. curb and gutter; Agard St. between Orange and High Sts., 12,200 sq. ft. grading, paving with 5 in. hydraulic concrete, 1,000 lin. ft. curb and gutter; El Dorado St. between High St. and Southern Pacific R. R., 3,000 sq. ft. grading, paving with 5 in. hydraulic concrete. J. Barleau, city engr.

Calif., San Francisco — Had plans prepared improving Gilman Ave. between 3rd and Griffith Sts., 4,822 cu.yd. excav., 328 cu.yd. fill, 2,548 lin.ft. concrete curb, 1,320 sq.ft. artificial stone walks, 67,826 sq.ft. asphaltic concrete, etc., $29,635; Santa Rosa Ave., etc., in Mission Terrace, 816 cu.yd. excav., 615 cu.yd. fill, 1,199 lin.ft. concrete curb, 792 sq.ft. artificial stone walks, 15,940 sq.ft. asphaltic concrete, 8,750 sq.ft. concrete pavement, etc., $10,900; Gilman Ave. between Ingalls and Griffith Sts., 2,973 cu.yd. excav., 1,446 cu.yd. fill, 2,588 lin.ft. concrete curb, $6,000; 24th Ave. between Judah and Kirkham Sts., 1,200 lin. ft. concrete curb, 24,000 sq.ft. asphaltic concrete pavement, $8,400; Thomas Ave. between Ingalls and Jennings Sts., 4,990 cu.yd. fill, $5,000. M. M. O'Shaughnessy, city engr.

Calif., San Jose—Supervs. Santa Clara Co. received no bids Feb. 5, improving Campbell Ave. I. Ryder, co. surv. Noted Jan. 18.

Calif., Santa Barbara—Santa Barbara Co. having plans prepared grading and paving San Marcos Rd. $25,000. O. H. O'Neill, co. surv.

Calif., Sausalito—Plans paving Princess St., etc., probably concrete. To exceed $150,000.

Calif., Stockton—Had plans prepared improving East St. between Main and Scott Sts., 3,970 cu.yd. excav., 2,373 lin.ft. combined curb and gutter, 4,474 sq.ft. concrete walks, 71,123 sq.ft. 3 in. asphaltic base with 1½ in. asphalt surface laid on 2½ in. gravel. W. B. Hogan, city engr.

Que., Montreal — Takes bids early in spring asphalt pavements on 1,524 ft. Rozel St. from Hibernia to Charlevoix Sts., 33 ft., $14,625, 809 ft. Soulanges St. from Contre to Grand Trunk Sts., 33 ft., $7,871, 3,850 ft. St. Charles St. from Laprairie to D'Argenson Sts., 30 ft., $36,720, 750 ft. Berri St. from Champ de Mars to Craig Sts., 45 ft., $15,270, 375 ft. Trudel St. from St. Martin to Richmond Sts., 25 ft., $4,052, 2,250 ft. Notre Dame St. from Fulford to Atwater Aves., 45 ft., $37,367, 2,250 ft. Notre Dame St. from Atwater Ave. to St. Henri Sq., 50 ft., $44,173, 2,070 ft. D'Argenson St. from St. Patrick to Butler Sts., 35 ft., $29,841, 1,744 ft. Davidson St. from Ontario to Rouen Sts., 35 ft., $19,220, 720 ft. Tracey St. from Charlevois to Levis Sts., 20 ft., $5,052, 1,010 ft. Centre St. from D'Argenson St. to Atwater Ave., 45 ft., $15,330, 1,758 ft. Chambord St. from Grand Blvd. to Prieur St., 30 ft., $11,457, 3,269 ft. St. James St. from Guy to Fulford Sts., 50 ft., $43,378, 12,300 ft. St. Denis St. from Guizot St. to Cremazie Blvd., 56 ft., $220,395, 3,750 ft. Notre Dame St. from St. Henri Pl. to Cote St. Paul Rd., 40 ft., $73,617, 5,000 ft. Butler St. from D'Argenson St. to Dyke, 30-36 ft., $73,028; waterbound macadam on 1,390 ft. St. Clothilde St. from St. Remi St. to western city limits, 22-36 ft., $5,670; block and asphalt on 1,513 ft. Osborne St. from Windsor to Mountain Sts., 37 ft., $26,570. H. A. Terreault, ch. engr. Dept. Pub. Wks.

Ont., Atwood—Elma Twp. (Atwood) and Wallace Twp., (Gowanstown) plan 1½ mi. concrete pavement, probably 20 or 24 ft. wide. $75,000. G. Lockhead, clk. of former; D. Greer, clk. of latter.

Ont., Ottawa — Ottawa Suburban Rd. Comn., 26 Wellington St., takes bids early in year for asphalt surface on macadam roads as follows: 2 mi. Metcalfe Rd., 1½ mi. Bowesville Rd., ¾ mi. Merivale Rd., also improving road at Billings Bridge. $240,000. A. K. Hay, 26 Wellington St., engr.

BIDS DESIRED

N. Y., New York—Feb. 19, by H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., grading, curbing, laying sidewalks, etc., on Bogart, Buhre, Crosby, Gleason, Jervis, Hobart, Middletown, Gainsborg and Yates Aves.; curbing and laying sidewalks on Fieldston Rd.

Pa., Phila.—Feb. 20, by F. H. Caven, dir. pub. wks., paving, curbing and sidewalks on Delaware Ave. from Snyder to Bigler Sts., $35,000, granite block pavement on Sansom St. from 23rd to 24th Sts. and 15th St. from Spring Garden to Girard Sts., 13,082 sq.yd. granite block, 1,665 cu.yd. concrete base, $135,000, asphalt pavements on Mulberry St. from Harrison to Wakeling Sts., Oxford St. from Columbia Ave. to 54th St., Robinson St. from Haddington to Jefferson Sts., 3,989 sq.yd. asphalt, 540 sq.yd. concrete base, $35,000, Howard St. from Clearfield to Lippincott Sts., 1,760 sq.yd. asphalt, 320 sq.yd. vitr. brick, 500 cu.yd. concrete base, $27,000, Broad St. from 70th Ave. to Fracker St., 6,130 sq.yd. asphalt, 340 sq.yd. vitr. brick, 1,078 cu.yd. concrete base, $30,000; Almond St. from Buckins to Ash Sts., Barbara St. from Moyamensing Ave. to 18th St., Bermuda St. from Orthodox to Duncan Sts., 3,415 sq.yd. asphalt, 600 sq.yd. vitr. brick, 653 cu.yd. concrete base, $25,000. F. C. Dunlap, City Hall, engr.

D. C., Washington—March 1 by Dist. Comrs., 509 Dist. Bldg., 140,000 sq. yd. concrete paving. For detailed information apply to Room 427 Dist. Bldg., adv. this issue.

West Virginia—March 6, by State Rd. Comn., Charleston, grading Project 3151 B, Boone Co., Project 3180, Nicholas Co., Project 3170 B, Clay Co., Project 121, Mercer Co., Project 3199 Webster Co., Project 126, Preston Co., Project 3146 Grant Co.; grading and paving Project 3039, Fayette Co., Project 3041, Greenbrier Co., Project 3201, Lincoln Co., Project 3068, Ritchie Co., Project 3241, Ohio Co., Project 3227, Wood Co., Project 3084 B, Wood Co., Projects 3038 and 3009 A, Wirt Co., Project 3240 Roane Co., Project 125, Taylor Co., Project 3159, Lewis Co., Project 3011 B, Hampshire Co., Project 3010, Mineral Co., Project 125, Taylor Co., cleaning and tar cold surface application on Projects 2039, 2040, 2041, 2042, 2043, 2044, and 3060, Mercier Co., Project 87, Mason Co.; grading and gravel surfacing Project 3132 A, Jackson Co., Project 3081, Wetzel Co., Projects 58 A and B, 3092, 3080, 103 A and B, Tyler and Pleasants Counties; constructing bridges on Project 116, Kanawha Co., Project 2100, Gilmer Co., Project 3149, Grant Co. E. B. Carskadon, secy.; adv. this issue.

O., Ravenna—Feb. 26, by A. S. Helbig, dir. Pub. Serv., grading, laying sewers and 11,000 sq.yd. rein.-con., brick or asphalt paving.

Ill., Chicago—Feb. 20, paving Hopkins St. from Hamilton to Pleasant St., $14,500; Randolph St. from Sangamon to Ogden Sts., $419,000; Berwyn St. $13,100; Fairfield St. from Arthington to Taylor Sts., $5,700; 21st St. from Western to Rockwell Sts., $19,600; Manistee St. from 92nd to 94th Sts., $23,000; Long St. from Grace St. to Irving Park Blvd., $30,500; Foster St. $13,000; Ravenswood St. from Pratt to Estes St., $40,000; Marmora St. from Lawrence to Montrose Sts., $64,000; Farwell St. from Ridge to Pingree Sts., $31,000; Clarendon St. from Lakeside to Lawrence Sts., $27,500. C. D. Hill, city engr. Noted Jan. 11.

Ind., Goshen—Feb. 26, by Comrs. Elkhart and Kosciusko Counties, (Goshen), paving 15,840 ft. road in Benton and Turkey Creek Twps., 19,596 sq.yd. concrete on concrete. $74,460. C. L. Kinney, Goshen, engr.

Ind., Indianapolis—March 1, by Comrs. Marion Co., constructing and improving Crawfordsville Pike. $191,059. L. K. Fesler, aud.

Wis., Green Bay—Feb. 27, by Brown Co. State Road and Bridge Com., grading and surfacing 10.23 mi. Blake Rd., towns of De Pere, Rockland and Wrightstown, 40,771 cu.yd. unclassified excav., 97,195 sq. yd. 16 ft. concrete surfacing, 159,198 lb. reinforcing, etc. G. J. Corimer, co. highway comr.

Wis., Jefferson—Feb. 23, by Jefferson Co. State Road and Bridge Com., grading and surfacing 1.3 mi. Madison St., State Trunk Highway 107, Lake Mills, incl. 0.51 acres clearing and grubbing, 6,047 cu.yd. earth excav., 16,341 sq.yd. concrete surfacing, etc.; Milwaukee and Watertown Sts., Johnson Creek, 2,144 cu.yd. unclassified excav., 7,803 cu.yd. concrete surfacing, etc., 1.11 mi. Portland-Waterlo Rd., comprising 3 sections, beginning at Dodge Co. line and extending southwesterly on State Trunk Highway 19 to Dane Co. line, Sect. A, Dodge Co. line to Madison St., 3,723 cu.yd. earth excav., 11,882 sq.yd. 18 ft. concrete pavement, etc., Sect. C, Stone Arch bridge, southwesterly to Dane Co., 0.89 mi. 7,136 cu.yd. earth excav., 9,369 sq.yd. 18 ft. concrete pavement, etc.; 3.68 mi. Oconomowoc-Watertown Rd., from Waukesha Co. line to concrete pavement west of Ixonia, 18,476 cu.yd. earth excav., 1,133 cu.yd. borrow, 39,834 sq.yd. 18 ft. concrete surfacing, etc.; 3.7 mi. Helenville-Sullivan Rd., Sullivan, 6,500 cu.yd. earth excav., 39,000 sq.yd. 18 ft. concrete pavement, etc.; R. D. Royce, co. comr. Bids will be received on following by Village of Waterloo at Courthouse, Jefferson, grading and surfacing Sect. B, Portland-Waterloo Rd., Junction Trunk Highways 19 and 107 west to Stone Arch Bridge, 3,410 cu.yd. unclassified excav., 13,110 sq.yd. concrete pavement, etc. E. H. Hazel, village clk.

Wis., Kenosha—Feb. 24, by Kenosha Co. State Road and Bridge Com., Court House, grading and surfacing 1.75 mi. Antioch-Salem Rd. beginning at Illinois State line and extending northwesterly along State Trunk Highway 116, 9,962 cu.yd. earth excav., 18,598 sq.yd. 18 ft. concrete surfacing, etc.; Geneva Rd. beginning at west town line of Pleasant Prairie and extend-

Streets and Roads (Continued)

ing east 2 mi. or as far as funds available ($30,000) will construct, 10,500 sq.yd. paving, 10,500 sq.yd. earth excav., etc., J. F. Herzog, co. highway comr.

Wis., Mayville—March 14, by A. Lentz, clk., paving 17,155 sq.yd. Horicon, School, Allen and William Sts., 25 ft., rein.-con., asphalt or bitulithic. $35,000. J. Donohue Co., 608 North 8th St., Sheboygan, engrs.

Wis., New London—Feb. 20, by C. J. Thompson, city clk., paving Cemetery Rd. from Wyman to Jennings St. and from Jennings St. to city limits, 10,000 sq.yd. rein.-con. pavement. $30,000. H. R. Albert, c/o Court House, Green Bay, engr.

Wis., Port Washington — Feb. 21, by Ozaukee Co. State Road and Bridge Com., Court House, grading and surfacing Cedarburg-Grafton-Saukville Rd., State Trunk Highway 57, beginning 1 mi. east from limits of Cedarburg and extending northerly 5.2 mi. to paving east at Saukville, 17,722 cu.yd. earth excav., 1,455 cu.yd. borrow, 54,600 sq.yd. 18 ft. concrete surfacing, etc. W. C. Bartlet, co. highway engr.

Wis., Racine—Feb. 20, by Racine Co. State Road and Bridge Com., grading and paving River Rd., 19,652 cu.yd. earth excav., 43,160 sq.yd. concrete surfacing, etc. W. A. Bechthold, co. highway comr.

Wis., Waukesha—Feb. 28, by Waukesha Co. State Road and Bridge Com., grading and surfacing Templeton-Menomonee Falls Rd., extending from Soo Line R.R. in Templeton east along State Trunk Highway 74 to Fond du Lac Ave. in village of Menomonee Falls, village quantities include 1,004 cu.yd. earth excav., 3,280 lin.ft. concrete curb and gutter, 1,710 sq.yd. concrete surfacing, etc., county and state aid quantities include 24,399 cu.yd. earth excav., 2,489 cu.yd. borrow, 66,080 sq.yd. 18 ft. concrete surfacing, etc. C. J. Hahn, co. highway comr.

Wis., Wisconsin Rapids—Feb. 21, by F. G. Gilkey, city clk., paving various streets, 22,400 sq.yd. concrete, 13,880 lin.ft. combined concrete curb and gutter. $50,000 to $60,000. E. H. Aldrich, City Hall, engr.

Ia., Gowrie—Feb. 26, by T. E. Johnson, clk., 20,000 cu.yd. gravel surfacing, 8,000 lin.ft. curb and gutter. $30,000. Bruce & Grupe, 408 Finance Bldg., Omaha, Neb., engrs.

Ia., Northwood — Feb. 20 by Auditor Worth Co., grading 9.5 mi. Primary Rd. Project 216, through Fertile west and Northwood west, 113,112 cu.yd. excav., 1,100 lin.ft. 6 in. and 2,565 ft. 12 in. tile. $28,000. F. R. Lyford, Northwood, co. engr. Noted May 11.

Minn., Fergus Falls—Feb. 27, by city, improving 20,009 sq.yd. various streets, bids on asphaltic concrete, wood block, vitr. brick, rein.-con., vibrolithic concrete and bitulithic, 2,093 lin.ft. reset curb, 1,315 lin. ft. straight and 375 lin. ft. curved curb, 735 lin.ft. 8 in. vitr. tile, 34 inlets and 10 catchbasins. $90,000. S. J. Sieverts, Jr., 1001 Plymouth Bldg., Minneapolis, engr. Noted May 18.

Minn., Hibbing—Feb. 20, by city, paving 40 blocks, various types, also concrete curb and gutter. $170,000. E. J. Hawley, city engr. Noted Jan. 25.

Kan., Fredonia — Feb. 20, by W. O. Starns, city clk., constructing 46 blocks gravel macadam with concrete intersections and concrete curbs and gutters. Noted Feb. 8.

Kan., Leavenworth—Feb. 28, by J. E. Voorhees, engr., 516 North 5th St., concrete paving 4.55 mi. Fort to Fort Rd., Federal Aid Project 13, Sects. D and F. 18 ft., 5,600 cu.yd. earth and 200 cu.yd. rock excav., 48,427 sq.yd. concrete, 7,000 lb. steel reinforcing, etc.

Wyo., Casper—March 5, for 577,500 sq. ft. 4 in. and 8,000 sq.ft. 6 in. concrete sidewalks, 4,700 lin.ft. concrete cross-walks 5 ft. wide, 6 in. thick, 4,000 lin.ft. concrete curb 18 in. high, 6-9 in. thick and necessary grading. $127,000. F. S. Knittle, city engr. Noted Feb. 8.

N. D., Wahpeton — Feb. 26, by S. H. Murray, city clk. paving curbing and guttering 37 blocks, Portland cement concrete, bituminous concrete, vibrolithic concrete, bituminous macadam, bitulithic, wood blocks and brick. $155,000. L. W. Burdick, city engr.

Tex., Abilene—Feb. 23, by D. G. Hill, judge Taylor Co., grading 11.32 mi. and gravel surfacing 8½ mi. State Highway 7, Federal Aid Project 182, 16 ft., 17,414 cu. yd. gravel, 1,582 cu.yd. concrete, 51,202 cu.yd. roadway and 14,632 cu.yd. borrow excav., 2,134 sq.yd. concrete pavement, 151,343 lb. reinforcing. W. A. Riney, co. engr.

Tex., Bastrop—Feb. 21, by J. B. Price, judge Bastrop Co., grading and bridging 6.25 mi. State Highway 3 A, Federal Aid Project 283, 24 ft., 31,418 cu.yd. roadway and 13,443 cu.yd. borrow excav., 342 cu.yd. concrete, 35,132 lb. reinforcing. $25,000. R. E. Shiller, engr.

Calif., San Diego—Feb. 26, by A. H. Wright, city clk., improving Laurel, Curlew, Brant, Union, Kalmia and 3rd Sts., 281,189 sq.ft. 1½ in. asphaltic concrete on 4 in. cement concrete, 285 lin.ft. concrete curb, 2,189 sq.ft. 1½ in. asphaltic concrete surfacing for gutters, etc.; Maple, Nutmeg and Olive Sts., 178,918 sq.ft. 1½ in. asphaltic concrete on 2½ in. bituminous, 389 lin.ft. concrete curb, 1,033 sq.ft. concrete sidewalks, 1,128 sq.ft. asphaltic concrete for gutters. F. A. Rhodes, city engr. Noted Nov. 30 and Dec. 28.

BIDS RECEIVED

New York—H. S. Sisson, comr. State Hy. Dept., Albany, opened bids Feb. 7, improving (1) 2.7 mi. Highway 5684, Chatham-Valatie, Part 1, Columbia Co., engrs. est. $112,254, (2) 1.33 mi. Highway 1544, Hyde Park-East Park, Dutchess Co., engrs. est. $56,560, (3) 6.61 mi. Highway 8150, Collins Center-Hamburg, Part 1, Erie Co., engrs. est. $272,680, (4) 4.84 mi. Highway 8151, Collins Center-Hamburg, Part 2, Erie Co., engrs. est. $223,993, (5) 10.07 mi. Highway 8152, Indian Lake-North River, Hamilton Co., engrs. est. $462,793, (6) 0.08 mi. Highway 1117-A, Rexford Clats-Hamlet, Saratoga Co., engrs. est. $4,391, (7) 0.11 mi. Highway 1662, Saratoga Lake Outlet, Saratoga Co., engrs. est. $8,943, (8) 3.47 mi. Highway 1665, Odessa-Mecklenburg, Part 1, Schuyler Co., engrs. est. $138,232, reconstructing (9) 4 mi. Repair Contrs. 3036 and 3037, Highways 155 and 152, Fonda East and Fonda West, Montgomery Co., engrs. est. $150,-292, (10) 4.24 mi. Repair Contr. 3049, Highway 340, Saratoga-Corinth, Saratoga Co., engrs. est. $92,474, from D. B. McGrath, Inc., Adams, Mass., (1) $107,664; Berkshire Constr. Co., Inc., Lee, Mass., (1) $110,474; S. Menaguale, Stockbridge, Mass., (1) $111,733; H. G. Strong, 151 East 38th St., New York City, (2) $48,-268; Spoor Lasher Co., Inc., 54 Market St., Poughkeepsie, (2) $51,610; J. E. Flood Co., Hudson Falls, (2) $53,285; Cold Spring Constr. Co., Ellicott Sq., Buffalo, (3) $247,280 (4) $201,706; J. Serio & Son, Jamestown (street address not available), (3) $263,426; Bewley-O'Reilly Co., Inc., Lockport (street address not available), (3) $267,063 (4) $215,076; S. Gamble Co., Carnegie, Pa., (4) $219,116; Bricon Constr. Co., Inc., 73 West Eagle St., Buffalo, (5) $405,345; L. Mayersohn, 6 Catalpa Dr., Albany, (5) $411,933; E. J. Anderson, Albany (street address not available), (5) $427,852; J. McLane, Rexford, (6) $3,784; J. Noonan, Saratoga Spa., (6) $4,191; F. F. Baker, Mechanicville, (6) $4,221; J. W. Flynn, 141 Broad St., Waterford, (7) $7,900; J. B. Dower, Ballston Spa., (7) $8,162 (10) $84,253; E. J. Doyle and E. B. Sanford, Albany (street address not available), (7) $8,353; W. Curtis & Co., Geneva (street address not available), (8) $125,042; Frost & Lowman, Watkins, (8) $128,644; L. D. Sullivan Co., Inc., White Bldg., Utica, (9) $147,617; C. T. Hookway, Bastable Bldg., Syracuse, (9) $149,-950; Rochester Vulcanite Paving Co., Rochester (street address not available), (9) $150,292; R. Hopkins Co., Albany (street address not available), (10) $83,-333; Ribstein-Holter Co., Inc., Rochester (street address not available), (10) $86,-914. Noted Jan. 18.

N. Y., Brooklyn—Dept. Parks, Municipal Bldg., New York, opened bids Feb. 8, improving Bay Parkway, here, from Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., $106,984; Cranford Co., 52 9th St., $110,650; Borough Asphalt Co., 1301 Metropolitan Ave., $11,157. Noted Feb. 1.

N. Y., Long Island City — M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., opened bids Feb. 8, grading roadway, sidewalk space and laying sidewalks on (1) 4th St., grading, curbing and laying sidewalks on (2) 50th St. (3) 116th St. (4) Jamaica Ave. (5) 42nd St. (6) 103rd Ave., grading sidewalk space and removing trees, etc., on (7) Burling Ave., grading, removing and replacing trees on (8) Tieman Ave., sheet asphalt paving (9) 116th St., grading and laying sidewalks on (10) Lewis St., from Welsh Bros. Contg. Co., 32 Queens St., (1) $3,871 (4) $7,719 (5) $7,610 (8) $14,875; F. J. Clancy, Corona, (1) $3,890 (2) $10,707 (4) $8,460 (5) $7,460 (8) $15,025; E. Block, (1) $4,348 (2) $11,345 (3) $8,280 (4) $8,978 (5) $7,686 (7) $863 (8) $16,300, (10) $1,100; Peace Bros., 57 North Laurence St., Flushing, (2) $12,215 (10) $1,050; Kennedy & Smith, 93 Amity St., Flushing, (3) $8,250 (6) $10,883 (7) $940; Soviero & Britten, 10111 114th St., Richmond Hill, (3) $7,928 (6) $9,735; J. J. O'Brien, Jr., William St., Jamaica, (6) $10,465 (10) $1,028; Tuohey & Upton, Inc., 129 Bway., Flushing, (7) $678; Borough Asphalt Co., 1301 Metropolitan Ave., Brooklyn, (9) $14,-073; Cleveland Trinidad Paving Co., Flushing, (9) $14,850; W. P. McDonald Constr. Co., 17 West 42nd St., New York, (9) $14,970; H. J. Mullin Contg. Co., Jamaica Ave. and 144th St., Jamaica, (10) $1,050. Noted Feb. 1.

N. Y., New York—Dept. Parks, Municipal Bldg., opened bids Feb. 8, repaving Split Rock Rd., heavy traffic asphalt on concrete, Bronx Boro, from Asphalt Constr. Co., 2197 Madison Ave., $19,608; C. D. Beckwith, Inc., 2875 Bway., $18,897; Interborough Asphalt Co., 2306 Creston Ave., $27,481. Noted Feb. 1.

North Carolina—State Hy. Dept., Raleigh, opened bids Feb. 1, clearing, grading and concrete or asphaltic paving (1) 6.94 mi. State Project 429, Granville Co. (2) 7.34 mi. State Project 671, Rowan Co. (3) 19.31 mi. State Project 155 B, Martin and Pitt Counties (4) 14.96 mi. State Project 163, Nash Co. (5) 0.3 mi. State Project 291 B, Wilson Co. (6) 1.03 mi. State Project 391 A, Robeson Co. (7) 11.35. mi. State Project 743, Forsythe Co. clearing, grading and topsoiling (8) 20.55 mi. State Project 555, Montgomery Co. (9) 11.63 mi. State Project 815, Burke Co. (10) 17.36 mi. State Project 147, Bertie and Hertford Counties (11) 9.67 mi. State Project 752, Stokes Co. (12) 7.01 mi. State Project 403, Chatham Co. (13) 15.22 mi. State Project 363, Onslow Co. (14) 9.04 mi. State Project 486, Wake Co. clearing and grading (15) 19.43 mi. State Project 107, Bertie Co., clearing, grading, topsoiling and rein.-con. bridges and culverts on (16) 11.67 mi. State Project 512, Caswell Co., grading, concrete or asphaltic paving, rein.-con. bridges and culverts on (17) 8.94 mi. State Project 273, Sampson Co., clearing, grading and waterbound macadam paving (18) 7.31 mi. State Project 991, Transylvania Co., from A. B. Sandidge, Georgetown, Del., (1) $231,352; J. A. Kreis, 307 Burwell Bldg., Knoxville, Tenn., (1) $241,290 (7) $387,667 (8) $85,403 (16) $53,216 (18) $200,928; Pittman Constr. Co., Rhodes Bldg., Atlanta, Ga., (1) $244,337 (17) $87,519; Thompson-Caldwell Constr. Co., Mooresville, (2) $246,441; Stearns Bros., Inc., Statesville, (2) $258,197 (5) $28,635; Caughman Paving Co., Columbia, S. C., (2) $277,660 (4) $419,345; W. T. Hadlow, Baldwin Bldg., Jacksonville, Fla., (3) $493,900 (4) $400,458; Groves Co. & Shepard, 120 Manhattan Bldg., Duluth, Minn., (3) $524,492; C. S. Luck & Sons, 1617 Brook Rd., Richmond Va., (3) $562,-658; Public Service Production Co., Terminal Bldg., Newark, N. J., (4) $416,660; P. R. Ashby, Tucker Bldg., Raleigh, (5) $26,861; R. G. Lassiter & Co., Citizens Bank Bldg., Raleigh, (6) $40,120; Norfolk Equipment Co., Paul-Gale Greenwood Bldg., Norfolk, Va., (6) $42,553; Noll Constr. Co., Gastonia, (6) $44,039; Atlantic Bitulithic Co., Wash., D. C., (7) $376,441; Roger-Ferguson Co., High Point, (7) $400,371; Mayfield Constr. Co., Lakeview, (8) $82,-646; C. B. Hester, Greensboro, (8) $86,598; Geer & Wilson, Rutherfordton, (9) $89,446; Michaux Constr. Co., Morganton, (9) $93,-255 (11) $99,575; J. L. Carrol, Orangeburg, (9) $97,854; N. L. Teer, Durham, (10) $74,454 (15) $70,898 (16) $52,048; Porter & Peck, Greenville, (10) $76,853; W. E. Graham, Mt. Ulla, (11) $96,867; J. T. Plott, Greensboro, (11) $99,093 (16) $49,432; C. G. Kershaw Contg. Co., Woodward Bldg., Birmingham, Ala., (12) $40,567; Austin & Ritchie, Richfield, (12) $42,767; Ford & Tuck, Virgilina, Va., (12) $44,661; Newell Contg. Co., 3828 Ave. A, Birmingham, Ala., (13) $104,576; Duplin Constr. Co., Warsaw, (13) $114,723; Eagle Eng. Co., New Bern, (13) $126 036 (17) $88,610; W. W. Tuck & Son, Virgilina, Va., (14) $36,289; H. M. Beasley, Lumberton, (14) $36,739; O. A. Mann & Co., La Grange, Ga., (14) $36,932; Bacon & Moore, Norfolk, Va., (15) $59,838; J. F. Mulligan, North Wilkesboro, (15) $76,-262; General Constr. Co., Raleigh, (street address not available) (17) $89,542; Gibson Constr. Co., Holston Bank Bulg., Knoxville, Tenn., (18) $166,991; Hardaway Contg. Co., 909 Elizabeth Ave., Charlotte, (18) $201,014. Noted Jan. 11.

Fla., Sanford—City opened bids paving 13,110 sq.yd. Elm St., 14,443 sq.yd. Palmetto Ave., 13,638 sq.yd. Sanford Ave. and Magnolia St., 12,335 sq.yd. 4th and Myrtle Sts., (a) asphaltic concrete (b) sheet asphalt (c) rock base, from Hutton Eng. & Contg. Co., c/o F. T. Williams, Sanford, (a) $1.05 (b) $0.99 (c) $0.76; F. W. Long & Co., Realty Bldg., Jacksonville, (a) $0.93 (b) $0.92 (c) $0.89; J. F. Morgan Paving Co., Woodward Bldg., Birmingham, Ala., (a) $1.15 (b) $0.99 (c) $0.78. Noted May 11.

Alabama—State Hy. Dept., Montgomery, opened bids Feb. 2, grading and gravel surfacing 6.681 mi. road from Houston Co. line to Choctawhatchee River, Dale Co., from Dale Co. Court Comrs., Ozark, $52,-735; Lawrence, Nixon and Smith, Jackson, Miss., $61,712; Nichols Contg. Co., Trust

Streets and Roads (Continued)

Co. of Georgia Bldg., Atlanta, Ga., $75,-135. Noted Jan. 11.

O., Cleveland—Commissioner Purchases & Supplies, 219 City Hall, opened bids Jan. 31, grading, curbing and paving (1) Ada Ave. (2) Arbor Ave. (3) Elk Ave. (4) Gray Ave. (5) Gruss Ave. (6) Iroquois Ave. (7) Oakview Ave. (1-7 inclusive involve) 4,030 lin.ft. stone curb and 4 in. tile drain gutter, 6,600 cu.yd. earth excav., 13,900 sq.yd. vitr. brick (8) East 117th St. (9) East 130th St. (10) East 124th St. (11) East 127th St. (12) East 129th St. (8-12 inclusive involve) 4,650 lin.ft. stone curb and 4 in. tile drain gutter, 10,030 cu.yd. rock excav., 8,670 sq.yd. vitr. brick, from O. G. Leach, Eddy Rd., (1) $6,722 (2) $16,236 (10) $14,678; Baldwin Bros., 4500 Euclid Ave., (2) $21,931; River Constr. Co., 2402 Mapleside Rd., (3) $5,502 (4) $5,743 (6) $13,372 (8) $6,725 (11) $15,-275; Rieley Bros., The Arcade, (3) $5,531 (5) $15,572 (7) $9,700 (8) $7,986 (9) $13,739 (10) $15,905 (11) $18,224 (12) $5,403; Roehl Bros., West 25th St. and Lorain Ave., (4) $6,471; H. G. Herring, c/o Pavers Exch., Society for Savings Bldg., (5) $15,534; Gould & Maybach, 823 East 150th St., (6) $10,858 (7) $9,878 (9) $13,-545 (12) $5,308. Noted Jan. 25.

Indiana—State Hy. Dept., Indianapolis, opened bids Jan. 30, paving 6.063 mi. Lincoln Highway and 6.78 mi. Lincoln Highway, 16 ft., in Allen Co., from Williams & Baldwin Co., Cleveland Heights, O., $126,-907 and $128,005 respectively, M. D. Putnam, Ft. Wayne, $198,907 and $211,482 respectively. Engrs. est. $143,035 and $144,-666 respectively; 6,471 mi. French Lick Rd. and Vanderburg Co., from J. D. Shelby, Lebanon, $123,257, Pfizenmeyer Constr. Co., Terre Haute, (street address not available), $149,943, engrs. est. $133,802; 6.95 mi. Boot Jack Rd., Laporte Co., from Municipal Constr. and Supply Co., 128 West 9th St., Gary, $139,823, Gerhart Constr. Co., Chicago, (street address not available), $174,823, engrs. est. $154,502. Noted Jan. 18.

Wis., Fond du Lac—Fond du Lac Co. State Road and Bridge Com. opened bids Jan. 31, concrete surfacing, etc., 5.1 mi. Ladoga-Brandon-Ripon Rd., from Kroening Constr. Co., 221 Grand Ave., Milwaukee, $124,530; F. Doherty, 753 47th St., Milwaukee, $143,137; Froeming Bros., 1326 Humboldt Ave., Milwaukee, $144,541. Noted Jan. 25.

Ia., Colfax—For 22,447 sq.yd. pavement, etc., 16,898 lin. ft. curbing, from Lambert Constr. Co., 715 21st St., Des Moines, vitr. brick on 5 in. base with asphalt filler, $3.29 per sq.yd.; J. Horrabin & Co., 1422 Walnut St., Des Moines, 2 in. asphaltic concrete on 5 in. base, $2.96; Union Constr. Co., 1829 East 12th St., Des Moines, 6 or 7 in. plain concrete $2.20. Noted Jan. 25.

Ia., Des Moines—See "Bridges."

Neb., Omaha—C. F. Bossie, city clk., opened bids Jan. 30, paving, curbing, etc., with (a) asphalt (b) asphaltic concrete (c) vitr. brick blocks type J (d) vitr. brick (e) vitr. brick block type D (f) vitr. block type E (g) vitr. brick block type K (h) artificial stone, in following districts:

Dist. 1748, 5,855 yd., from Natl. Constr. Co., 511 Federal Reserve Bank Bldg., (a) $2.85 (b) $2.69 (c) $3.42, 200 lin.ft. natural stone curb $1.25; J. H. McDonald, 3169 Farnam St., 741 ft. artificial stone curb $0.65; J. Sherlock, 301 Karbach Bldg., (d) $4.09; Amer. Paving Corp., 1325 Grace St., (e) $3.50 (c) $3.42.

Dist. 1749, 3,638 yd., from Natl. Constr. $2.88 (b) $2.69 (c) $3.42; J. Sherlock, 301 Karbach Bldg., (d) $3.84; Amer. Paving Corp., 1315 Grace St., (c) $3.42 (e) $3.50, 2,140 lin.ft. natural stone curb $1.35; J. H. McDonald, 3169 Farnam St., 2,140 lin.ft. artificial stone curb $0.65; H. Murphy Constr. Co., 204 Karbach Bldg., 2,740 ft. artificial combined curb and gutter $0.63.

Dist. 2019, 3,494 yd., from Natl. Constr. Co., 511 Federal Reserve Band Bldg., (a) $2.33 (b) $2.03 (f) $3.54 (g) $3.39; H. Murphy Constr. Co., 204 Karbach Bldg., 2,538 lin.ft. artificial stone combined curb and gutter $0.53.

Dist. 2053, 4,553 yd., from Natl. Constr. Co., 511 Federal Reserve Bank Bldg., (a) $2.33 (b) $2.03 (f) $3.48 (g) $3.36; H. Murphy Constr. Co., 204 Karbach Bldg., 2,981 lin.ft. artificial combined curb and gutter $0.53.

Dist. 2117, 7,467 yd., from H. Murphy Constr. Co., 204 Karbach Bldg., (a) $2.44 (b) $2.09, 5,237 lin.ft. artificial stone combined curb and gutter $0.53; Natl. Constr. Co., 511 Federal Reserve Bank Bldg., (f) $3.62 (g) $3.36.

Dist. 2122, 3,181 yd., from H. Murphy Constr. Co., 204 Karbach Bldg., (a) $2.44 (b) $2.09, 2,336 lin.ft. artificial stone combined curb and gutter $0.53; Natl. Constr. Co., 511 Federal Reserve Bank Bldg., (g) $3.42; J. H. McDonald, 3169 Farnam St., (f) $3.55.

Dist. 2209, 8,463 yd., from Natl. Constr. Co., 511 Federal Reserve Bank Bldg., (a) $2.43 (b) $2.03 (f) $3.48 (g) $3.36; H. Murphy Constr. Co., 204 Karbach Bldg., (h) $2.43; White Constr. Co., 15th and Marcy St., 6,200 lin.ft. artificial stone combined curb and gutter $0.50.

Dist. 2219, 20,619 yd., from Natl. Constr. Co., 511 Federal Reserve Bank Bldg., (a) $2.53 (b) $2.03 (f) $3.49 (g) $3.19; H. Murphy Constr. Co., 204 Karback Bldg., (h) $2.43; White Constr. Co., 15th and Marcy Sts., 14,575 lin.ft. artificial stone combined curb and gutter $0.50.

Dist. 2225, 3,125 yd., from Natl. Constr. Co., 511 Federal Reserve Bank Bldg., (a) $2.33 (b) $2.03 (f) $3.48 (g) $3.36; H. Murphy Constr. Co., 204 Karbach Bldg., 2,310 lin.ft. artificial stone combined curb and gutter $0.53.

Dist. 2236, 12,084 yd., from Natl. Constr. Co., 511 Federal Reserve Bank Bldg., (a) $2.43 (b) $2.03 (f) $3.48 (g) $3.49; H. Murphy Constr. Co., 204 Karbach Bldg., (h) $2.43; White Constr. Co., 15th and Marcy Sts., 8,670 ft. artificial stone curb and gutter $0.50. Noted Jan. 25.

Missouri—See "Bridges."

Missouri—State Hy. Dept. Jefferson City opened bids Feb. 2, (1) 2.789 mi. road on Laclede Co. line, east, 34 ft., State Project Route 14, Sect. 40, Pulaski Co. (2) 5 mi. road south of Steelville, 16 ft., State Project Route 19, Sect. 4, Crawford Co. (3) 3.087 mi. road on Stone Co. line. 12 ft., State Project Route 3, Sect. 112, Taney Co. (4) 3.03 mi. road on Laclede Co. line, east, 34 ft., State Project Route 14, Sect. 39, Pulaski Co. (5) 3.707 mi. road south of Rolla, 12 ft., State Project 7, Sect. 65, Phelps Co. (6) 0.568 mi. road west of Moberly, 18 ft., State Project Route 10, Sect. 37, Randolph Co. (7) 3.833 mi. road south of Forsythe, 12 ft., State Project Route 78, Sect. 3. Taney Co., from S. T. Rollins, Waynesville, (1) $9,402 (4) $8,515; J. P. Lyon, Robinson, Ill., (1) $15,571 (4) $14,283; Powell Gaven Co., Collinsville, Ill., (2) $28,926; Jours & Lenox, Rolla, (2) $30,769; H. Kassman, Union, (2) $33,608; E. A. Luck, Black Rock, Ark., (3) $17,312; Kerr, Moore & Logan Co., Ozark, (3) $17,421; Springfield Constr. Co., Springfield (street adress not available), (3) $17,602; M. E. Gillioz, Monett, (5) $22,701; Rolla Constr. Co., Rolla, (5) $23,018; Allhands & Davis, 705 Frisco Bldg., Joplin, (5) $23,047; Lynch McDonald Contsr. Co., Moberly, (6) $32,086; J. E. Hartley, Mt. Vernon, (7) $15,227; Cox & Chaney, Branson, (7) $15,366; Pityley & Bickley, Walnut Ridge, Ark., (7) $18,302. Noted Jan. 25.

Missouri — State Hy. Dept., Jefferson City, opened bids Feb. 2, improving (1) 2.5 mi. road east and west of Zebra, 24 ft., State Project Route 15, Sect. 63, Camden Co. (2) 4.318 mi. road east of Brunswick, 30 ft., State Project Route 10, Sect. 24, Chariton Co. (3) 4.452 mi. Mound City Rd., 30 ft., State Project Route 1, Sect. 13, Holt Co. (4) 2.548 mi. road from Mound City northwest, 30 ft., State Project Route 1, Sect. 14, Holt Co. (5) 4.962 mi. road on Jasper Co. line east, 34 ft., State Project Route 14, Sect. 5, Lawrence Co. (6) 2.897 mi. road on Jasper Co. line east, 34 ft., State Project Route 14, Sect. 8, Lawrence Co. (7) 4.986 mi. road on Jasper Co. line east, 34 ft., State Project Route 14, Sect. 6, Lawrence Co. (8) 1.082 mi. road northwest of Hannibal, 18 ft., State Project Route 9, Sect. 26, Marion Co. (9) 3.238 mi. road from Stone Co. line south, 12 ft., State Project Route 3, Sect. 113, Taney Co., from Pioneer Constr. Co., 101 New York Life Bldg., Kansas City, (1) $22,798; General Constr. Co., Syndicate Trust Bldg., St. Louis, (1) $22,887; M. E. Gillioz, Monett, (1) $23,939; C. Parker, Keytesville, (2) $14,658; Joyce & Co., Keokuk, Ia., (2) $18,681; Maloney & Whalen, St. Louis, (street address not available), (2) $18,733; Roberts & Reynolds Constr. Co., Sabetha, Kan., (3) $33,810 (4) $25,913; Cook & O'Brien Constr. Co., 305 Ry. Exch., Kansas City, (3) $34,805; E. Euler, Troy, Kan., (3) $35,394; Pittsburg Des Moines Steel Co., Tuttle and S. W. 10th Sts., Des Moines, Ia., (4) $24,700; F. E. Marsh & Co., Des Moines, Ia., (street address not available), (4) $26,856; Carterville Constr. Co., Carterville, (5) $18,679 (6) $22,037 (7) $32,214; Kelley & Underwood, Granby, (5) $19,094 (7) $35,947; T. E. Rock, Joplin (street address not available), (5) $20,737; J. E. Hartley, Mt. Vernon, (6) $20,356 (9) $18,552; Coopers Constr. Serv. Co., Federal Reserve Bank Bldg., St. Louis, (6) $22,818 (8) $40,823; M. A. Holman Constr. Co., Carterville, (7) $33,009; H. C. Harbicht & Co., Hannibal, (8) $36,737; Cox & Chaney, Branson, (9) $17,897; Springfield Constr. Co., Springfield (street address not available), (9) $18,713. Noted Jan. 25.

Mo., St. Louis — Bd. Pub. Serv., 208 City Hall, opened bids Feb. 6, improving (1) 5,600 Arsenal St., 36 ft., concrete, engrs. est. $77,900, (2) 2,250 ft. Taylor Ave., 36 ft., warrenite, engrs. est. $53,350, (3) 3,100 ft. 7th St., 36 ft., recut granite, engrs. est. $83,680, (4) $5,202 ft. Clayton Ave., 36 ft., asphalt, engrs. est. $54,800, (5) 1,900 ft. Chouteau Ave., 26 ft., asphalt, engrs. est. $16,400, (6) 5,140 ft. West Florissant Ave., 50 ft., asphalt on concrete, engrs. est. $132,000, from Skrainka Constr. Co., Security Bldg., (1) $86,637 (3) $99,-463; G. Eyerman & Bros., 1216 South Grand Ave., (1) $92,533 (3) $97,926; F. Stiers Constr. Co., 4500 Enright St., (1) $90,122; Granite Bituminous Paving Co., Railway Exch. Bldg., (2) $54,842; O. S. Brighton, 4115 McRee Ave., (2) $57,444 (4) $59,249 (5) $18,264 (6) $166,800; Independent Quarry & Constr. Co., 4875 Ashland St., (3) $86,654 (4) $53,015; Trinidad Asphalt Mfg. Co., Title Guaranty Bldg., (4) $60,941 (6) $139,084; A. V. Wills & Son, Title Guaranty Bldg., (5) $18,386 (6) $167,033; Fuller Constr. Co., 828 Chestnut St., (5) $18,766. Noted Jan. 18.

Oklahoma—State Hy. Dept., Oklahoma City, paving (1) 11.5 mi. Federal Aid Project 100, Okfuskee Co. (2) 7.436 mi. Federal Aid Project 75, Okfuskee Co. (3) 10.026 mi. Federal Aid Project 76, Okfuskee Co. (4) 12.204 mi. Federal Aid Project 64, Okfuskee Co., (a) gravel (b) bituminous macadam (c) rock asphalt, from Meyer & Greenwald, Muskogee, (1a) $167,628 (2b) $104,534; Forbes-Graville-Hamblin Co., Muskogee, (1b) $124,996; Maney Bros., 304 Empire Bldg., Oklahoma City, (1c) $134,782 (2c) $132,480; Ellis & Lewis, Muskogee, (2a) $108,246; P. Laro & Sharp, Okemah, (3a) $145,370 (3b) $114,605 (3c) $134,782; A. A. Davis & Co., 301 West 119th St., Oklahoma City, (4a) $205,642. Noted Jan. 18.

Calif., Los Angeles—City opened bids improving 1st St. between Rampart Blvd. and Vermont St., 300,176 sq.ft. grading, 271,465 sq.ft. asphalt paving, 25,405 sq.ft. concrete paving, 1,057 sq.ft. asphalt remodeling, 3,306 ft. warrenite-bitulithic paving, 8,187 lin.ft. concrete curb, 47,057 sq.ft. walks, 8,789 sq.ft. concrete gutters, 2,222 lin.ft. house sewers, etc., from Warren Constr. Co., 5444 Hollywood Blvd., $138,150; G. R. Curtis, 2440 East 26th St., $140,837; G. H. Oswald, 366 East 58th St., $146,465.

Calif., San Diego — Common Council opened bids Feb. 5, improving Imperial Ave. and 14 other Streets, from J. Engebretsen, McNeece Bldg., 15,352 cu.yd. earth excav. at $0.87 per cu.yd., 8,993 cu.yd. earth embankment $0.15, 20,663 lin.ft. cement concrete curb $0.67, 101,100 sq.ft. cement concrete sidewalks $0.23, 2,115 sq. ft. cement concrete gutters $0.29, total $56,369; H. G. Fenton, 168 10th St., $58,-067; J. Hansen, 3168 J St., $58,530. Noted Jan. 25.

Calif., San Jose—Santa Clara Co. opened bids Feb. 5, improving (1) King Ave. in Superv. Dist. 2 (2) Naglee Ave. in Superv. Dist. 4, from San Jose Paving Co., Dupont and San Carlos Sts., (1) $19,470 (2) $13,-190; J. Doyle, San Jose, (1) $23,442 (2) $15,457; A. J. Raisch, 46 Kearny St., San Francisco, (1) $24,500 (2) $17,200. Noted Jan. 18.

CONTRACTS AWARDED

Connecticut—State Hy. Dept., Hartford, paving 19,470 ft. Shore Rd., in Guilford, plain and rein.-con., to C. W. Blakeslee & Sons, Inc., 58 Waverly St., New Haven, $174,686 (cement to be furnished by State), Engrs. est. $225,000; concrete substructure, retaining walls and cement floors for 80 ft. steel truss bridge, over West River, in Guilford, to J. G. Holbrook, R. D. Westbrook. Engrs est. $15,000. Noted Jan. 25.

N. Y., Jamestown—Will pave Sampson St. and Hall Ave., brick on 5 in. concrete, by day labor, under supervision of L. O. Bergman, city engr. $25,000. Noted Feb. 8.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., grading, curbing and flagging Sickles St., etc., to T. Di Roma, 33 Evelyn Pl., $42,344; Dongan Pl., to F. Gasparine, $32,258; paving Ft. Washington Pl., to C. D. Beckwith, 2187 Bway., $8,140. Noted Feb. 1.

Pa., Phila.—Grading and paving G St., to Lombardi & Co., Inc., Lincoln Bldg., $65,323. Noted Feb. 8.

West Virginia—State Rd. Dept., Charleston, grading 7.2 mi. Philippi-Taylor Co. Line Rd., Project 3184, Barbour Co., 37,938 lin. ft. clearing, 110,000 cu.yd. unclassified, 158 cu.yd. wet, 3,733 cu.yd. dry and 17,461 cu. yd. borrow excav., 2,738 sta.yd. overhaul, 1,117 cu.yd. concrete, 22,385 lb. reinforcing, 3,264 lin.ft. 18-36 in. rein.-con. pipe, etc., to C. E. Price, 2750 Division St., Huntington, $126,530, 3 mi. Cameron-Littleton Rd., Project 3167 A. Marshall Co., 15,850 lin.ft. clearing, 30,000 cu.yd. unclassified, 660 cu.yd. dry and 350 cu.yd. borrow excav., 450 cu.yd. concrete, 2,500 lb. reinforcing, 1,326 lin.ft. 15-24 in. corrugated metal pipe, etc., to Stringer & Springer, Wheeling, $34,-000, 5 mi. New Martinsville-West Union Rd.,

Streets and Roads (Continued)

Project 3163, Tyler Co., 25,730 lin.ft. clearing, 48,000 cu.yd. unclassified, 300 cu.yd. dry and 9,600 cu.yd. borrow excav., 690 cu.yd. concrete, 11,600 lb. reinforcing, 1,414 lin.ft. 15-36 in. rein.-con. pipe, 626 lin.ft. 15-18 in. corrugated metal pipe, etc., to C. V. Walker, Fremont, Mich., $67,200, 5 mi. Frenchburg-Virginia Rd., Project 3147 A, Hampshire Co., 26,920 lin.ft. clearing, 39,800 cu.yd. unclassified, 350 cu.yd. wet and 1,350 cu.yd. dry excav., 3,380 sta. yd. overhaul, 1,060 cu.yd. concrete, 19,320 lb. reinforcing, 2,190 lin.ft. 15-24 in. corrugated metal pipe, etc., to McClure & Bingner Co., Johnston, Pa., $62,725, 2.25 mi. Seng Creek-Seth Rd., Project 3205 A, Boone Co., 11,800 lin.ft. clearing, 34,000 cu.yd. unclassified and 370 cu.yd. dry excav., 376 cu.yd. concrete, 6,825 lb. reinforcing, etc., to Goda & Nash, Huntington, $48,049, 5 mi. Berkeley Springs-Great Cacapon Rd., Project 3198, Morgan Co., 26,000 lin.ft. clearing, 77,000 cu.yd. unclassified, 160 cu.yd. wet and 1,900 cu.yd. dry excav., 1,250 sta.yd. overhaul, 670 cu.yd. concrete, 4,600 lb. reinforcing, 2,300 cu.yd. dry rubble masonry, 1,950 lin.ft. 15-24 in. corrugated metal pipe, 2,200 cu.yd. shale surfacing, etc., to Monongahela Constr. Co., Fairmont, $121,628, 5 mi. Cottageville-Mason Co. Line Rd., Project 3074 C, Jackson Co., 24,800 lin.ft. clearing, 45,100 cu.yd. unclassified, 630 cu.yd. dry and 208 cu.yd. borrow excav., 220 cu.yd. concrete, 2,900 lb. reinforcing, 1,230 lin.ft. 15-18 in. rein.-con. pipe, 546 lin.ft. 15-24 in. corrugated metal pipe, to C. F. McQueen, Charleston, $39,100, 8.3 mi. Sunset-Greenbank Rd., Project 3182 B, Pocahontas Co., 42,900 lin.ft. clearing, 51,000 cu.yd. unclassified, 630 cu.yd. wet, 920 cu.yd. dry and 8,700 cu.yd. borrow excav., 1,098 cu.yd. concrete, 23,600 lb. reinforcing, 105 cu.yd. cement rubble masonry, 1,860 lin.ft. 18 in. vitr. clay pipe, to Battershill & Goode, Virgilina, Va., $77,065, 2 mi. Marlinton-Buckeye Rd., Project 3171, Pocahontas Co., 11,160 lin.ft. clearing, 33,350 cu.yd. unclassified and 265 cu.yd. dry excav., 282 cu.yd. concrete, 4,300 lb. reinforcing, 350 cu.yd. cement rubble masonry, 660 lin.ft. 18 in. vitr. clay pipe, to Waugh Bros., St. Albans, $39,487, 5.3 mi. Union-Rock Camp Rd., Project 3045 D, Monroe Co., 25,675 lin.ft. clearing, 64,100 cu.yd. unclassified, 415 cu.yd. wet, 845 cu.yd. dry and 3,050 cu.yd. borrow excav., 1,071 cu.yd. concrete, 21,150 lb. reinforcing, 235 cu.yd. cement rubble masonry, 1,990 lin.ft. 18 in. vitr. clay pipe, to Roberts Constr. Co., Pulaski, Va., $88,268, 3.5 mi. Northwestern Turnpike, Project 3204 A, Preston Co., 17,880 lin.ft. clearing, 60,000 cu.yd. unclassified, 934 cu.yd. dry and 1,062 cu.yd. borrow excav., 544 cu.yd. concrete, 1,207 lin.ft. 18-24 in. corrugated metal pipe, etc., to W. J. and J. T. Gephart, Elkins, $62,473, 6 mi. Shady Springs-Summers Co. Line Rd., Project 3052, Raleigh Co., 32,810 lin.ft. clearing, 66,460 cu.yd. unclassified, 335 cu.yd. wet, 835 cu.yd. dry and 4,840 cu.yd. borrow excav., 1,025 sta. yd. overhaul, 636 cu.yd. concrete, 19,030 lb. reinforcing, 198 cu.yd. cement rubble masonry, 2,240 lin.ft. 18 in. vitr. clay pipe, to A. Keathly, Charleston, $91,521, 5 mi. Franklin-Elkins Rd., Project 3175, Pendleton Co., 23,120 lin.ft. clearing, 39,500 cu.yd. unclassified, 160 cu.yd. wet and 900 cu.yd. dry excav., 1,200 sta.yd. overhaul, 480 cu.yd. concrete, 7,250 lb. reinforcing, 560 cu.yd. dry rubble masonry, 5,200 cu.yd. gravel surfacing, 1,120 lin.ft. 15-24 in. corrugated metal pipe, etc., to Dayton Constr. Co., Elkins, $77,519, 8.5 mi. Moorefield-Petersburg Rd., Project 3148, Hardy Co., 46,000 lin.ft. clearing, 42,000 cu.yd. unclassified, 320 cu.yd. wet and 1,600 cu.yd. dry excav., 1,300 sta.yd. overhaul, 1,400 cu.yd. concrete, 28,300 lb. reinforcing, 400 cu.yd. dry rubble masonry, 1,760 lin.ft. 15-24 in. corrugated metal pipe, etc., to L. J. Chandler, Virgilina, Va., $68,738, 12.5 mi. Northwestern Turnpike, Project 122, Sects. B and C, Grant Co., 64,800 lin.ft. clearing, 90,600 cu.yd. unclassified, 870 cu.yd. wet and 2,900 cu.yd. dry excav., 23,450 sta.yd. overhaul, 2,060 cu.yd. concrete, 38,600 lb. reinforcing, 4,580 lin.ft. 18-18 in. corrugated metal pipe, etc., to H. W. Kaylor, Cumberland, Md., $153,004; grading and concrete paving 1 mi. New Martinsville - Wileyville Rd., Project 47, Wetzel Co., 2,000 cu.yd. unclassified and 500 cu.yd. dry excav., 180 cu.yd. concrete, 17,200 lb. reinforcing, 1,150 cu.yd. one course cement concrete pavement, 33,030 lb. metal reinforcing for cement concrete paving, 3,700 cu.yd. borrow, etc., to Ritchie & Ritchie, Ravenswood, $30,600, 2.8 mi. Flat Run-Metz Rd., Project 3187, Marion Co., 5,384 cu.yd. one course cement concrete, 14,987 lin.ft. clearing, 60,000 cu.yd. unclassified, 1,218 cu.yd. dry and 790 cu.yd. borrow excav., 3,714 sta.yd. overhaul, 229 cu.yd. concrete, 2,631 lb. reinforcing, 309 cu.yd. cement rubble masonry, 1,374 lin.ft. 18-24 in. rein.-con. pipe, etc., to Seiple-Wolfe Co., Youngstown O., (street address not available), $155,675; grading and paving with bituminous macadam 8 mi. Lewisburg-Camp Ground Rd., Project 127, Greenbrier Co., 40,500 lin.ft. clearing, 86,800 cu.yd. unclassified, 155 cu.yd. wet, 1,185 cu.yd. dry and 7,100 cu.yd. borrow excav., 55,000 sta.yd. overhaul, 1,261 cu.yd. concrete, 14,750 lb. reinforcing, 2,430 lin.ft. 18 in. vitr. clay pipe, 18,300 cu.yd. broken stone base course, 82,300 sq.yd. bituminous macadam, 185,200 gal. bituminous material for penetration macadam, etc., to Dougher Boone Constr. Co., Charleston, $305,532; grading and paving with waterbound macadam 7 mi. Charlestown-Kearneysville Rd., Project 3026, Jefferson Co., 35,000 lin.ft. clearing, 38,200 cu.yd. unclassified, 100 cu.yd. wet and 200 cu.yd. dry excav., 1,500 sta.yd. overhaul, 320 cu.yd. concrete, 1,800 lb. reinforcing, 1,490 lin.ft. 15-24 corrugated metal pipe, 8,600 cu.yd. stone subbase course, 8,900 cu.yd. broken stone base course, 62,200 sq.yd. waterbound macadam, etc., to Moore & Lessley, Staunton, Va., $145,047. Noted Jan. 11.

Georgia—State Hy. Dept., Atlanta, 2.61 mi. F. P. Benning Rd. from city limits of Columbus to Bull Creek, Federal Aid Project 288, Muscogee Co., sheet asphalt, to S. E. Finley, 210 West North Ave., Atlanta, $59,125.

Fla., Crestview — Comrs. Okaloosa Co., grading 17 mi. road from Milligan to Alabama State line, preparatory to sand clay dressing, to J. B. Corley, Crestview, $0.25⅝ per cu.yd.

Ohio—Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving roads in following counties:

Fulton Co., Sect. "Wauseon" Bryan-Wauseon Rd., 0.619 mi., rein.-con., to Lynn Constr. Co., Paulding, $25,338.

Geauga Co., Sect. "K-2" Cleveland-Meadville Rd., 2.536 mi. asphalt macadam, oil, to Central Paving Co., Hamilton (street address not available), $79,816.

Geauga Co., Sect. "A" Euclid-Chardon Rd., 4.06 mi. asphalt macadam, oil, to Central Paving Co., Hamilton (street address not available), $98,425.

Jackson Co., Sect. "L" Jackson-Ironton Rd., 4.433 mi. rein.-con., to O. M. Junk, Chillicothe, $137,974.

Montgomery Co., Sect. "R" Dayton-Greensville Rd., 3.965 mi., Kentucky rock asphalt, to McArthur Constr. Co., Kenton, $131,923.

Morrow Co., Sect. "L" Mt. Gilead-Mansfield Rd., 6.322 mi., Kentucky rock asphalt, to McArthur Constr. Co., Kenton, $168,229.

Trumbull Co., Sect. "P" Youngstown-Conneaut Rd., 2.80 mi., brick and bituminous macadam, tar, to Evans & Evans, Hubbard, $137,161.

Holmes Co., Sect. "L-2" Mansfield-Millersburg Rd., 1.678 mi., grading only, to C. Drake, Nashville, $15,195.

Holmes Co., Sec. "K" Mansfield-Millersburg Rd., constructing superstructure and grading, to Stout & Stout, Stoutsville, $18,981. Noted Feb. 1.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, paving (1) 4.88 mi. Route 2, Sect. 52, De Witt Co. (2) 3.04 mi. Route 3, Sect. 8, Rock Island Co. (3) 3.95 mi. Route 3, Sect. 9, Rock Island Co. (4) 2.37 mi. Route 3, Sect. 10, Rock Island Co. (5) 5.12 mi. Route 3, Sect. 18, Rock Island Co. (6) 6.82 mi. Route 4, Sect. 5, Grundy-Will Co. (7) 4.53 mi. Project 25, Sect. 6, Grundy Co. (8) 1.66 mi. Route 6, Sect. 29, Whiteside Co., (9) 7.49 mi. Route 9, Sect. 6, Tazewell Co. (10) 3.71 mi. Route 14, Sect. 1, Perry Co. (11) 5.24 mi. Route 14, Sect. 3, Perry-Franklin Co. (12) 3.22 mi. Route 15, Sect. 19, Wayne Co. (13) 3.55 mi. Route 15, Sect. 20, Wayne Co. (14) 7.99 mi. Route 17, Sect. 3, Marshall Co. (15) 5.85 mi. Route 17, Sect. 4, Marshall Co. (16) 4.12 mi. Route 18, Sect. 13-C, Kendall Co. (17) 2.29 mi. Route 18, Sect. 14-C, Kendall Co. (18) 5.82 mi. Route 25, Sect. 33, Iroquois-Ford Co. (19) 5.98 mi. Route 25, Sect. 34, Iroquois Co. (20) 5.7 mi. Route 25, Sect. 35, Iroquois Co. (21) 3.93 mi. Route 25, Sect. 38, Kankakee-Iroquois Co. (22) 4.73 mi. Route 25, Sect. 39, Kankakee Co. (23) 2.92 mi. Route 29, Sect. 3, Knox Co. (24) 6.87 mi. Route 37, Sect. 4, Franklin Co. (25) 3.64 mi. Project 38, Sect. 46, Schuyler Co. (26) 2.63 mi. Project 38, Sect. 47, Schuyler Co.; grading (27) 93,316 cu.yd. Route 3, Sect. 23-A, Mercer Co. (28) 263,700 cu.yd. Route 12, Sect. 24-A, Clinton Co. (29) 20,375 cu.yd. Route 15, Sect. 19-A, Wayne Co. (30) 28,285 cu.yd. Route 15, Sect. 20-A, Wayne Co. (31) 46,700 cu.yd. Route 16, Sect. 13-A, Shelby Co. (32) 28,610 cu.yd. Route 25, Sect. 12-A, Effingham Co. (33) 39,630 cu.yd. Route 25, Sect. 13-A, Effingham-Shelby Co. (34) 13,460 cu.yd. Route 25, Sect. 14-A, Shelby-Cumberland Co. (35) 15,267 cu.yd. Project 25-A, Sect. 6-A, Grundy Co. (36) 50,000 cu.yd. Project 38, Sect. 46-A, Schuyler Co., to L. S. Kuhn, Bloomington, (1) $109,445 (23) $56,451.

W. O'Neil Sons Co., Earlbault, Minn., (2) $107,100 (3) $81,344 (4) $54,151.

H. W. Horst Co., Horst Bldg., Rock Island, (5) $117,961.

Powers-Thompson Constr. Co., Joliet, (6) $124,997 (7) $78,256 (35) $8,665.

Cook County Constr. Co., 2315 North Seeley Ave., Chicago, (8) $37,351.

Hoffman & Small, Lincoln, (9) $153,798.

H. H. Hall Constr. Co., Murphy Bldg., East St. Louis, (10) $72,171 (11) $110,975.

French Constr. Co., Fairfield, (12) $53,436 (13) $56,230.

W. D. Lonergan Constr. Co., New Madrid, Mo., (14) $137,244 (15) $105,788.

Trompeter & Sons, Peru, (16) $79,512 (17) $46,713.

C. W. Clark Co., Clinton, Ind. (street address not available), (18) $104,369 (19) $111,991 (20) $122,997.

Shanks & Gannon Constr. Co., Watseka, (21) $60,567 (22) $98,433.

O. Arnold, Casey, (24) $118,276.

F. B. Rees, 1710 Lind St., Quincy, (25) $85,853 (26) $61,557.

Lamoreaux Bros. Co., 805 Brandeis Theatre Bldg., Omaha, Neb., (27) $43,994.

M. D. Gates, Lincoln, (28) $55,338.

D. C. Jordan & Sons, Fairfield, (29) $11,542 (30) $14,621.

Alzina Constr. Co., Springfield, (31) $16,503.

Mautz & Oren, Effingham, (32) $17,269.

C. B. Mautz, Benton, (33) $25,916 (34) $11,834.

A. O. McCoy, Rushville, (36) $19,545. Noted Nov. 16.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, paving with monolithic brick (1) 5.71 mi. Route 1, Sect. 8, Edwards-Wabash Co. 4 in. (2) 4.48 mi. Route 15, Sect. 21, Edwards Co. concrete paving (3) 4.6 mi. Route 1, Sect. 9, Wabash Co. (4) 6.74 mi. Route 1, Sect. 10, Wabash Co. (5) 3.43 mi. Route 1, Sect. 17, Lawrence Co. (6) 5.55 mi. Route 1, Sect. 18, Lawrence-Crawford Co. (7) 6.27 mi. Route 3, Sect. 15, Whiteside Co. (8) 5.07 mi. Route 3, Sect. 38, McDonough Co. (9) 7.38 mi. Route 8, Sect. 7, Henderson Co. (10) 7.11 mi. Route 8, Sect. 33, Woodford Co. (11) 6.18 mi. Route 16, Sect. 12, Shelby Co. (12) 5.17 mi. Route 28, Sect. 9, Henry Co. (13) 4.15 mi. Route 44, Sect. 17-A, Will Co. (14) 3.22 mi. Route 11, Sect. W-1, Fayette Co. (15) 0.74 mi. Route 4, Sect. 20, Logan Co. (16) 6.76 mi. Route 4, Sect. 23, Logan Co. (17) 6.5 mi. Route 4, Sect. 24, Logan Co. (18) 5.28 mi. Route 8, Sect. 36, Tazewell Co. (19) 5.7 mi. Route 9, Sect. 28, Hancock Co. (20) 9.62 mi. Route 3, Sect. 4, Cass Co. (21) 3.08 mi. Route 8, Sect. 11, Peoria Co. (22) 1.87 mi. Route 8, Sect. 13, Peoria Co. (23) 2.97 mi. Route 8, Sect. 16, Peoria Co. (24) 3.85 mi. Route 8, Sect. 17, Peoria Co. (25) 1.76 mi. Route 8, Sect. 37, Tazewell Co. (26) 6.59 mi. Route 25, Sect. 19, Coles Co. (27) 7.42 mi. Route 25, Sect. 20, Cole-Douglas Co. (28) 4.65 mi. Route 9, Sect. 5, Woodford Co.; grading (29) 57,830 cu.yd. Route 1, Sect. 13-A, Wabash-Lawrence Co. (30) 22,645 cu.yd. Route 1, Sect. 15-A, Lawrence Co. (31) 32,000 cu.yd. Route 8, Sect. 34-A, Woodford Co., to A. J. Parrish, Paris, (1) $170,743 (2) $132,227 (3) $107,426 (4) $169,742.

R. F. Conway Co., 133 West Washington St., Chicago, (7) $152,827 (8) $127,601 (9) $173,182 (12) $138,132 (13) $111,633 (18) $120,861 (21) $87,605 (22) $60,738 (23) $83,812 (24) $116,166 (25) $43,466.

Stressenreuter Bros., 3020 Halsted St., Chicago, (5) $86,749 (6) $124,781.

Hedges Constr. Co., Chamber of Commerce Bldg., Chicago, (10) $183,127 (28) $109,393.

L. Clotfelder, Hillsboro, (11) $140,916.

W. C. Johnson, 512 South High St., Belleville, (14) $68,151.

H. K. Rhoades, Lincoln, (15) $18,782.

Chicago Heights Coal Co., Chicago Heights, (16) $171,472 (17) $170,258.

Cameron, Joyce & Co., Keokuk, Ia., (19) $146,351.

W. C. Meneely, Frankfort, Ind., (20) $233,404 (26) $155,590 (27) $174,647.

Morris & Barthelmy, St. Francisville, (29) $25,872.

D. C. Jordan & Sons, Rinard, (30) $8,732.

New Era Constr. Co., 5548 Bosworth Ave., Chicago, (31) $8,572. Noted Jan. 4.

Ill., East St. Louis—Paving 2,000 ft. St. Clair Ave., 1st St. to Collinsville Ave., 50-60 ft., 8,940 sq.yd. asphalt on present brick, to O. S. Brighton, 4115 McRee St., St. Louis, Mo., $32,435. Noted Nov. 2.

Ia., Idagrove—For 54,000 sq.yd. paving and 29,000 lin.ft. curbs and gutters to Bryant Asphalt paving Co., Waterloo, $2.62 per sq.yd. for streets, $2.27 for alleys, $0.80 per ft. for curbs and gutters.

Tex., Center—Shelby Co. clearing, grading, and gravel surfacing 6 mi. Highway 35, Federal Aid Project 280, 16. ft., to B. Latimer, Garrison, $47,581. Engrs. est. $78,935. Noted Feb. 8.

Tex., Dallas — Dallas Co. grading and bituminous topping 13 mi. Beckley Rd., 18

Streets and Roads (Continued)

it., to Hill, Wilson & Watson, North Texas Bldg., $116,003, engrs. est. $150,000; grading and bituminous topping 5 mi. Bonnie View Rd., 18 ft., to Miller Constr. Co., North Texas Bldg., Dallas, $69,067, engrs. est. $75,000.

Tex., Tyler—Smith Co. grading, gravel surfacing and 1½ in. bituminous topping on 8.8 mi. State Highway 3, Chandler Rd., Federal Aid Project 316, 18 ft., to Smith Co., c/o W. B. Marsh, agent, or D. R. Pendleton, co. judge, Tyler, $120,433. Engrs. est. $132,476. Noted Jan. 25.

Calif., Crescent City—Paving, curbing, guttering and laying sewers in various streets, to J. A. Dowling, Call Bldg., San Francisco, $170,655. Noted Feb. 8.

Calif., Fresno—Improving portion M St., to Thompson Bros., G. and Davisadero Sts., $31,780. Noted Jan. 4.

Industrial Works

PROPOSED WORK

Mass., Salem—P. A. Sweeney, et al., 246 Essex St., plan 4 story cold storage plant, $150,000. Engineer or architect not announced.

Mass., Springfield—Springfield Gas Light Co., West State St., plans 1 story, 60 x 100 ft. gas purifying plant, brick and steel, Water St., to replace one recently wrecked by explosion. $50,000-$100,000. Private plans.

R. I., Providence—J. Bartley, 67 Washington St., plans 1 story garage and service station, brick and concrete, Dean and Washington Sts. $40,000.

Conn., East Norwalk (South Norwalk P. O.)—Crofut & Knapp, Water and Tolles Sts., South Norwalk, having plans prepared by Fletcher-Thompson, Inc., archts. and engrs., 542 Fairfield Ave., Bridgeport, 2, 3 and 4 story factory, rein.-con., steel and brick. $800,000.

Conn., Hartford—Standard Mattress Co., 71 North St., having plans prepared by Golden-Storrs & Co., archts. and engrs., 118 Asylum St., 4 story, 40 x 52 ft. factory, rein.-con. and brick, plain foundation, North St. $40,000.

N. Y., Buffalo—Standard Oil Co. of New York, 103 Elk St., plans barrel plant in rear of present station and office building. $175,000. Engineer or architect not selected.

Pa., Farrell—J. B. Roux having plans prepared by W. A. Ullom, archt., Horton Bldg., 4 story and basement, 22 x 155 ft. brick and tile freight and warehouse, Bway. $150,000.

Pa., Hollidaysburg—Wright Laundry plans 3 story and basement, 80 x 95 ft. laundry and store building, brick, Juniata and Hickory Sts. $60,000.

Pa., Monaca—Nichols Wire & Sheet Co., Rochester, plans 1 story, 80 x 300 ft. factory, Penna. Ave. and 17th St., here. $50,000. Private plans.

Pa., New Castle—Standard Wire Co., 716 West Brant St., plans 1 story, 40 x 135 ft. concrete factory, Sampson St. Private plans.

Md., Baltimore—Union Bros., 2119 East Fayette St., had plans prepared by S. Russell, archt., 11 East Lexington St., 4 story, 50 x 140 ft. factory, brick, Cross St. near Hanover St. $50,000.

N. C., Rockingham—Leak Mfg. Co., having plans prepared by Robert & Co., engrs. and archts., Tuft Bldg., Atlanta, Ga., for cotton mill. $750,000.

Ky., Brownsville—Rock Asphalt Co., Bowling Green, plans asphalt refinery along Green River, here. $200,000. Engineer or architect not announced.

O., Cleveland—Commercial Bookbinding Co., 2231 West 110th St., soon lets contract 1 story, 120 x 156 ft., brick and steel factory. $50,000. A. E. Fowler, secy. Private plans.

O., Cleveland—Ohio Provision Co., Clark Ave. along tracks of Cleveland, Cincinnati, Chicago & St. Louis R.R., had plans prepared by Anders & Reimers, archts., Erie Bldg., 1 story, 25 x 126 ft. cooler building, brick, steel and concrete. $40,000.

O., East Cleveland (Cleveland P. O.)—City having plans prepared by M. B. Garnett, archt., City Hall, 1 story, brick, steel and concrete garage, Marloes Ave. $50,000.

Ill., Chicago—Reo Motor Car Co., 2417 Michigan Ave., plans 2 story, 85 x 125 ft. auto sales and service station, rein.-con., brick and steel, Bway. and Early Ave. $100,000. E. B. Press, 4909 Bway. archt.

Minn., Minneapolis—See "Buildings."

Minn., Minneapolis—Olson & Serley, 2901 Bryant Ave. S., had plans prepared by P. E. Crosier, archt., 916 New York Life Bldg., 3 story and basement, 38 x 65 x 80 ft. warehouse, brick and concrete, 2909 Bryant Ave. S. $40,000.

Minn., St. Paul—S. K. Fitch, 519 Montrose Ave., having plans prepared by W. M. Ingeman, archt., 637 Endicott Bldg., 1 story, 56 x 198 ft. garage, brick and steel, Rice St. and Como Ave. $50,000.

Minn., St. Paul—Waldorf Paper Products Co., Myrtle St. and Hampden Ave., having plans prepared by H. A. Sullwood, archt., 641 Endicott Bldg., 5 story and basement, 84 x 193 ft. and 1 story, 63 x 193 ft. factory, rein.-con., brick and tile, Myrtle St. and Hampden Ave. $175,000.

Neb., Omaha—S. L. Collins Oil Co., Knoxville, Ia., plans 7 fireproof filling stations and 1 warehouse, capacity 100,000 gal. oil and 250,000 gal. gasoline with trackage space, etc., here. $250,000. Private plans.

Mo., St. Louis—United Bakeries Corp., Grand Blvd. and Natural Bridge Rd., soon takes bids 1 and 2 story, 75 x 130 ft. bakery, rein.-con. and brick, plain foundation, Benton St. $100,000. A. J. Tuchschmidt, Rialto Theatre Bldg., archt.

Mo., St. Louis—Voted $8,650,000 bonds (city's share) for street opening and widening and $5,800,000 for paving, repaving and improving streets.

Okla., Tulsa—See "Railways."

Okla., Weatherford—See "Waterworks."

Calif., Fresno—Fresno Evening Herald, L and Inyo Sts., plans 1 story addition to publishing plant. To exceed $50,000. Engineer or architect not selected.

Calif., Los Angeles—R. Arnold c/o J. M. Cooper, archt., Marsh Strong Bldg., having plans prepared 5 story, 132 x 417 x 464 x 775 ft., rein.-con. warehouse, Alameda St.

Calif., Sacramento—Having plans prepared Silver Creek Municipal Power Project, incl. 3 power plants, 150,000 hp. dam, tunnels, etc. Cost to exceed $5,000,000. A. Given, city engr.

Calif., South San Francisco (San Francisco P. O.)—Metal and Thermit Corp., 120 Bway., New York City, having plans prepared rolling mill, on 14 acre site, Swift St., here. $1,500,000-$2,000,000. E. W. Kardos, c/o Swift & Co., South San Francisco, dist. mgr.

Canada—See "Railways."

BIDS DESIRED

N. Y., Brooklyn—Simon Knitting Mills, c/o H. J. Nurick, archt. and engr., 44 Court St., 4 story, 65 x 100 ft., brick, steel and concrete factory, plain foundation, Hart St. $65,000. Work will be done by separate contracts under supervision of architect.

N. Y., New York—Claremont Palace Garden, Inc., c/o M. W. Del Gaudio, archt. and engr., 160 West 45th St., 1 story, 200 x 210 ft., brick, steel and concrete garage, plain foundation, 170th St. and 3rd Ave. $100,000. D. C. Piciujo, pres. Work will be done by separate contract under supervision of architect.

Pa., Barnesboro—Feb. 23, by M. Strollo & Sons, 2 story and basement, 80 x 130 ft. rein.-con., brick and steel warehouse, 17th St. $150,000. I. J. Pfeister, Spangler, archt.

Pa., Brackenridge—Atlantic Bottle Co. will build 1 story, 50 x 180 ft. factory. $300,000. Work will be done by separate contracts. Structural steel, to Pittsburgh Bridge & Iron Co., Bessemer Bldg., Pittsburgh.

Pa., Chambersburg—D. P. Minick, 147 East Queen St., taking bids 3 story, 40 x 115 ft. cold storage plant and power house, brick, East Queen St. $75,000. J. Crowe, Hartman Bldg., York, archt.

Pa., Etna (Pittsburgh P. O.)—Seyler Mfg. Co., Butler Plank Rd., and B. H. Prack, archt. and engr., Keystone Bldg., Pittsburgh, will build 1 story, 60 x 150 ft. concrete and steel factory, by separate contracts. Structural steel let to Memphis Steel Constr. Co., Magee Bldg., Pittsburgh, roofing to C. D. Wallace Co., 525 1st Ave., Pittsburgh.

O., Cincinnati—Feb. 19, by A. M. Allen & Co., archts., 7016 Euclid Ave., Cleveland, 7 story and basement, 175 x 600 ft., brick, steel and concrete terminal warehouse, Front and Central Aves., here, for Cincinnati Terminal Warehouse Co. $2,000,000. Noted May 4.

O., Cleveland—Fisher Bros. Co., 2323 Lakeside Ave., taking bids and opens same about Feb. 22, 1 and 2 story, 117 x 120 ft., brick, steel and concrete, garage and machine shop, Lakeside Ave. near East 22nd St. $60,000. W. S. Lougee, Marshall Bldg., archt. Noted Jan. 11.

O., Cleveland—Lindsay Wire Weaving Co., 14025 Aspinwall Ave., taking bids 2 story and basement, 120 x 200 ft., brick, steel and concrete factory and office building, $100,000. H. L. Lindsay, pres. Bohnard & Parsson, 1900 Euclid Ave., archts.

Mich., Jackson—Feb. 19, by H. Mead, archt., Michigan Trust Bldg., Grand Rapids, 5 story and basement, 88 x 133 ft. and 72 x 133 ft. brick additions to factory, plain foundations, for Michigan Seating Co., Jackson. $250,000.

Mich., River Rouge—Feb. 20, by A. Kahn, archt., 1000 Marquette Bldg., Detroit, 6 story, 107 ft. high, 24 x 75 ft. sintering plant, rein.-con. and steel, for Ford Motor Co., Highland Park (Detroit P. O.) $50,000.

Wis., Markesan—River View Canning Co., c/o W. A. Miller, taking bids 3 story, 40 x 96 ft. main factory, 2 story, 40 x 80 ft. warehouse, 1 story, 34 x 34 ft., cook room, brick and timber, plain foundation. $60,000. Private plans.

Wis., Oshkosh—Auler & Jensen, archts., F. R. A. Bldg., taking bids rebuilding 3 story and basement, 42 x 140 ft., brick and concrete warehouse, Algoma St., recently destroyed by fire, for Medberry-Findeisen Co., 58 Algoma St. $45,000.

Minn., Minneapolis—Feb. 20, by Murphy Transfer Co., 309 3rd Ave. N., 4 story and basement, 114 x 119 ft. warehouse, rein.-con., brick and tile, and 1 story and basement, 68 x 149 ft. garage and office, brick and concrete, 4th St. and 9th Ave. N., $100,000 and $40,000 respectively. Lang, Raugland & Lewis, 627 Metropolitan Bank Bldg., archts. Noted Jan. 5, 1922.

BIDS RECEIVED

Pa., Phila.—Bd. Educ., 17th and Chestnut Sts., opened bids Feb. 8, 3 and 4 story, 87 x 150 ft. brick and steel warehouse and plant, Front and New Sts., from Kober Constr. Co., Middle City Bldg., $107,977; Barnes & McLaughlin, 17 South 17th St., $117,564; Cramp & Co., Denckla Bldg., $118,765. Noted Feb. 1.

CONTRACTS AWARDED

R. I., Pawtucket—Tubular Woven Fabric Co., Pawtucket Ave., 1 story and basement, 45 x 60 ft. and 40 x 90 ft. mill addition, brick and timber, plain foundation, Pawtucket Ave., to O. D. Purington & Co., Inc., 49 Westminster St., Providence. Archts. est. $40,000.

N. Y., Brooklyn—A. L. Jaffe, c/o Seelig & Finkelstein, archts. and engrs., 44 Court St., 1 story, 25 x 100 ft., brick, steel and concrete garage, plain foundation, 14th St., by day labor. $50,000.

N. Y., New York—E. E. Smathers, c/o J. M. Felson, archt. and engr., 1133 Bway., 1 story, 150 x 200 ft., brick, steel and concrete garage, plain foundation, 4353 Bway., by day labor. $75,000.

Pa., Pittsburgh—Linde Air Products Co., 30 East 42nd St., New York City, 1 and 2 story, 101 x 161 ft., 14 x 60 ft. and 26 x 52 ft. plant, Westfall St., to Cuthbert Bros., Bessemer Bldg. Noted Jan. 25.

Pa., Pittsburgh—Amer. Metallic Packing Co., 3621 Mexico St., 2 story and basement, 30 x 34 ft. brick factory, Mexico St., to F. Westphal, 3241 McClure Ave. Archts. est. $50,000.

Pa., Pittsburgh—B. H. Prack, archt. and engr., Keystone Bldg., 5 story and basement, 80 x 300 ft. factory, Susquehanna Ave., to J. F. Love Co., Arrott Bldg., for Pittsburgh Meter Co., East Pittsburgh. Archts. est. $350,000. Noted Jan. 25.

Pa., Warren—Conewango Furniture Co., 115 South Carver St., 2 and 3 story, 50 x 300 ft. brick addition to factory, Carver St., to G. Brown, Warren.

Ga., Atlanta—See "Buildings" under office.

Ala., Albany—Cooper-Wells Hosiery Co., 2 story, 100 x 160 ft., hosiery mill, to Baxter Bros. Constr. Co., Huntsville, $50,000.

O., Cleveland—Cleveland Metal Products Co., 7600 Platt Ave., altering brick and timber factory and constructing railroad trestle, 7609 Platt Ave., to Hunkin-Conkey Constr. Co., Century Bldg. Archts. est. $60,000. Noted Feb. 8.

O., Dayton—Johnson Watson Printing Co., East 3rd St., 4 story and basement, 59 x 162 ft., printing plant and office building, rein.-con., brick and steel, North Jefferson St., to H. K. Ferguson Co., 6523 Euclid Ave., Cleveland, $150,000. Noted Jan. 18.

O., Lakewood (Cleveland P. O.)—R. G. Curren, Leader News Bldg., Cleveland, 1 story, 41 x 100 ft., brick and steel garage, 18123 Detroit Ave., here, to Heman Eng. & Constr. Co., 1412 Orchard Grove Ave. Archts. est. $40,000.

Ind., Evansville—General Cigar Co., 2 Upper 2nd St., 4 story and basement, 75 x 75 ft. factory, brick and heavy timber, 2nd St., to M. J. Hoffman Constr. Co., Furniture Bldg., $60,000. Noted Oct. 5.

Ill., Chicago—E. J. Brach & Sons, 3 story, 60 x 100 ft., rein.-con., brick and steel factory addition, 401-53 North Kilpatrick Ave., to R. F. Wilson & Co., 1851 Elston Ave. Archts. est. $75,000. Noted Aug. 31.

Ill., Chicago—Bike Web Mfg. Co., 29 South Clinton St., 1 story, 80 x 164 ft. factory, rein.-con., brick and steel, 4115-21 Ravenswood Ave., to Dahl-Stedman Co., 11 South La Salle St. Archts. est. $40,000. Noted Feb. 1.

Ill., Chicago—J. Wolff, c/o R. G. Wolff, archt., 400 North Michigan Ave., 6 story, 48 x 105 ft., rein.-con., brick and steel warehouse, 3165-67 Lincoln Ave., to A. Brundage, 110 South Dearborn St. Archts. est. $150,000.

Wis., Milwaukee—Kremers Urban Co., 529 Market St., 3 story, 50 x 150 ft. warehouse, brick and timber, Sherman St., to

Industrial Works (Continued)

H. Danischefsky, 1484 Humboldt Ave. Archts. est. $45,000.

Wis., Milwaukee—Milwaukee Gas Light Co., 182 Wisconsin St., 1 story, 60 x 220 ft., brick and timber addition to warehouse, Erie St., to H. Schmitt & Sons, 430 Farwell Ave. Archts. est. $42,000.

Wis., Sheboygan—Badger State Tanning Co., South Water St. and Maryland Ave., 4 story, 50 x 95 ft., tannery and warehouse, brick and steel, plain foundation, to Truscon Steel Co., 415 M. M. Bank Bldg., Milwaukee. Noted Jan. 4.

Minn. Minneapolis—I. S. Whitman, 932 Hennepin Ave., 1 story, 55 x 110 ft., and 3 story, 55 x 65 ft. garage and office, rein.-con. and brick, 216 South 10th St., general contract to M. Glassberg, 2 North 10th St. Archts. est. $60,000.

Mo., St. Louis—Polar Wave Ice & Fuel Co., Olive St. near Grand Blvd., 1 and 2 story, 60 x 123 ft., rein.-con. and brick garage, plain foundation, 12th St., to Duffner & Strecker, 119 North 7th St. Archts. est. $40,000.

Okla., Oklahoma City—L. Perrine 130 West 1st St., 2 story and basement, 60 x 140 ft., garage, 6th St., to Crissman & Santee, Southwest Natl. Bank Bldg., $39,800.

Calif., Pittsburg—Columbia Steel Corp., Balboa Bldg., San Francisco, group of 5 steel and corrugated iron buildings, erecting frame and walls, to Union Constr. Co., Key Route Fill, Oakland. Other work will be done by owners. Noted Jan. 18, under Portland, Ore.

Calif., Sacramento—Consumers Ice and Cold Storage Co., 8th and D Sts., rein.-con. addition to ice plant, general contract to D. R. Wagner, Call Bldg., San Francisco, $40,700; equipment to Gay Eng. Co., 336 California St., San Francisco.

Calif., San Francisco—L. R. Lurie Co., Mills Bldg., 2 story, 120 x 192 ft. rein.-con. garage, Fell and Gough Sts., to Vukicevich and Bagge, 180 Jessie St., $125,000. Pacific Telephone & Telegraph Co., 333 Grant Ave., lessee. Noted Feb. 8.

Ont., Toronto—Ford Motor Co. of Canada, 672 Dupont St., 1 story, 400 x 500 ft. assembly building and 1 story, 50 x 120 ft. power house, (1st unit), rein.-con., brick and steel, Danforth Ave., to Anglin-Norcross Ltd., Temple Bldg., $400,000. Noted Nov. 2.

Buildings

PROPOSED WORK

Mass., Northampton—Hotel—Playmouth Inn Associates, plans 7 story addition to present Inn, (126 rooms), West St. $560,000. Mowil & Rand, 21 School St., Boston, archts.

R. I., Central Falls—Hospital—Notre Dame Hospital, c/o Franco-American Society of Rhode Island, plans 3 story, brick, Hunt and Broad Sts. $250,000. C. H. Boucher, Broad St., member of hospital com. Engineer or architect not announced.

R. I., Providence—College—College Hill Land Co., c/o L. Jacobs, pres., having revised plans prepared by G. F. Hall, archt., Union Trust Bldg., 3 story, 90 x 140 ft., brick and steel, College St. $200,000. Bryant & Stratton Business College, lessee. Noted April 20.

N. Y., Brooklyn — Apartment — Kenmore Trading Corp., c/o W. T. McCarthy, archt. and engr., 159 Remsen St., having plans prepared, 178 x 222 ft., brick, steel and stone, plain foundation, Kenmore Pl. and Caton Ave. $1,000,000.

N. Y., Brooklyn—Exchange—New York Telephone Co., 15 Dey St., New York, having plans prepared by McKenzie, Voorhies & Gmelin, archts. and engrs., 342 Madison Ave., New York, 3 story, 100 x 250 ft., brick, steel and stone, plain foundation, Carroll St. and Troy Ave., here. $650,000.

N. Y., Brooklyn—School—B. Balktowsky, c/o E. M. Adelsohn, archt. and engr., 1778 Pitkin Ave., having plans prepared 4 story, 75 x 75 ft., brick, steel and stone, plain foundation, 79th St. $200,000.

N. Y., Fairport—High School—Bd. Educ. having plans prepared by O. W. Dryer, archt., 310 Cutler Bldg., Rochester, 2 story and basement, 134 x 166 ft., rein.-con. and steel, West Main St.

N. Y., Mayville—High School—Plans election to vote on $160,000 bonds for brick high school. Engineer or architect not announced.

N. Y., New York — Theatre — Weber & Fields, c/o C. C. Weber & Co., archts. and engrs., 3rd and Walnut Sts., Cincinnati, O., having preliminary plans prepared, brick, steel and stone, plain foundation, West 43rd St., here. $2,000,000.

Pa., Aspinwall—School—Bd. Educ. of O'Hara Twp. having plans prepared by J. T. Steen & Son, archts., Vandergrift Bldg., Pittsburgh, 2 story and basement, 62 x 85 ft., near here. $150,000.

Pa., Clearfield—Temple—Loyal Order of Moose having plans prepared by W. V. Justus, archt., Punxsutawney, 3 story and basement, 70 x 100 ft. brick and tile, Market St. $150,000.

Pa., Indiana—High School—Bd. Educ. having plans prepared by Thayer & Johnson, archts., 39 North Jefferson St., New Castle, 2 story and basement, brick, steel and stone. $350,000.

Pa., Pittsburgh—Temple—Islam Grotto, Montgomery Ave., receiving competitive sketches 2 story, 90 x 160 ft. and 40 x 60 ft., brick, steel and tile, Montgomery Ave. $300,000.

Md., Baltimore — Community — Baltimore Properties Co., c/o A. D. Le Esperande, Cambridge Apartments, plans 4 story store, office, market, theatre, hotel, etc., rein.-con., and brick, Maryland and North Aves. $1,750,000. B. H. Prack, Keystone Bl., Pittsburgh, Pa., archt.

D. C., Wash.—Apartment—H. A. Kite, 1514 K St., N. W., had plans prepared by A. H. Sonneman, archt., 1518 K St., N. W., apartment house, 100 apartments. $2,000,000.

D. C., Wash. — Hotel — Lincoln Hotel Corp., 10th and H Sts., having plans prepared by C. McLane, archt., 127 North Dearborn St., Chicago, for New Lincoln Hotel, (300 rooms) 12th and H Sts., here. $1,000,000.

D. C., Wash.—Synagogue—Washington Hebrew Congregation, 8th St. between H and I Sts., plans synagogue. $500,000. Engineer or architect not selected.

D. C., Wash.—Temple—Natl. Literary Society, Inc., International Bldg., having plans prepared by W. Douden, archt., 501 7th St., N. W., for temple. $1,250,000.

W. Va., Huntington—Office—Coal Exch. Bldg. Corp., having plans prepared by Meanor & Handloser, archts., Robson-Prichard Bldg., 14 story, 60 x 170 ft., concrete and steel, 4th Ave. and 11th. St. $700,000.

La., Baton Rouge — Bank — Louisiana Natl. Bank having plans prepared by Sanguinette & Staats, archts., 1st Natl. Bank Bldg., Fort Worth, Tex., and E. F. Neild, archt., Shreveport, 8 story, (ultimately 12 story) 3rd and Convention Sts. $750,000.

O., Akron—School—Plans brick, Brown and Archwood Sts. $800,000. M. M. Konarski, 102 South Union St., archt.

O., Cleveland—Hotel—Brownell Building Co., c/o S. Kaplan, 1418 Prospect Ave., plans 10 or 11 story, 140 x 148 ft., brick, steel and concrete, East 14th St. and Prospect Ave. $1,500,000. Engineer or architect not selected.

Mich., Detroit — Apartment — R. D. French, 4841 Iroquois Ave., having plans prepared by F. E. Hill, archt., 711 Empire Bldg., 4 story and basement, 50 ft. high, 81 x 90 ft. brick and steel, plain foundation, East Grand Blvd. $150,000.

Mich., Detroit — Apartment — Williams Bros., archts., 1111 Kresge Bldg., preparing plans 4 story and basement, 100 x 107 ft. rein.-con., brick and steel, plain foundation, Hazelwood Ave. $150,000. Owner's name withheld.

Mich., Detroit—Church—St. Matthias Episcopal Church, A. S. Gill, pastor, Vinewood and Grand River Aves., having plans prepared by Verner, Wilhelm & Molby, archts., 602 Book Bldg., 2 story, 60 x 150 ft., rein.-con., brick and steel, plain founadtion, Grand River Ave. $175,000.

Mich., Detroit—Office—Buhl Land Co., Buhl Blk., having plans prepared by Smith, Hinchman & Grylls, archts., 800 Marquette Bldg., 26 story and basement, 320 ft. high, 120 x 187 ft. rein.-con., brick, steel and stone, Griswold and Congress Sts.

Ill., Chicago — Apartment — Fugard & Knapp, archts., 219 East Superior St., preparing plans 13 story, 94 x 100 ft., rein.-con., brick and steel, Bitter Sweet Pl. and Lake Shore Dr. $400,000. Owner's name withheld.

Ill., Chicago—Apartment—W. Pickel, c/o P. F. Olsen, archt., 127 North Dearborn St., having plans prepared 3 story, 108 x 152 ft., rein.-con., brick and steel, Cornella and Pine Grove Aves. $250,000.

Ill., Chicago — Apartment-Hotel — Halperin & Braun, archts., 19 South La Salle St., preparing plans 10 story, 200 x 300 ft., rein.-con., brick and steel, Sheridan Rd. near Grace St. $5,000,000. Owners name withheld.

Wis., Madison—Hotel—H. Fauerback, 938 Spaight St., plans 5 story, brick, rein.-con. and steel, plain foundation, Monona St. $200,000. Engineer or architect not selected.

Wis., Manitowoc—Bank and Office—Manitowoc Savings Bank, South, 8th and Jay Sts., having plans prepared by W. J. Raeuber, archt., 8th & Jay Sts., 3 story, 50 x 92 ft., brick, rein.-con. and stone, plain foundation, South 8th St. $150,000.

Wis., Milwaukee—Bank—Amer. Exch. Bank, Plankinton Arcade, having revised plans prepared by Kirchoff & Rose, archts., 221 Grand Ave., 3 story and basement, 65 x 102 ft., brick, concrete and steel, plain foundation, Grand Ave. $300,000.

Ia., Burlington—High School—Bd. Educ. having plans prepared by Burrows & Temple, archts., Davenport, 2 story and basement, 2 wings, rein.-con., brick, tile and stone. $300,000. D. S. Cooper, secy.

Ia., Cedar Rapids—Lodge—Independent Order of Odd Fellows, Temple Assn., c/o W. L. Sleight, chn., 1511 Washington Ave., plans 3 story and basement, rein.-con., brick, tile and stone. $150,000. Architect or engineer not selected.

Ia., Council Bluffs—Office—M. Wollman, 606 Oakland St., had plans prepared by C. Jensen, archt., 4th St. and Bway., 6 story and basement, rein.-con., brick, tile and stone. $225,000.

Ia., University Park—Gymnasium, etc.—Holmes University plans 2 story and basement, 40 x 120 ft. gymnasium, $100,000, and 2 story and basement, 40 x 100 ft. science hall and library, $50,000, both rein.-con., brick and tile. J. L. Brosher, pres.

Minn., Minneapolis—Office, etc.—G. P. Newell & Co., c/o A. B. Newell, 1st Ave. N. and 3rd St., having plans prepared by W. H. Wheeler, archt., 1110 Metropolitan Life Bldg., 5 story and basement, office and warehouse, about 122 x 140 ft., rein.-con., brick and tile, 6th Ave. N. and 3rd St. $175,000.

Minn., St. Paul—Hospital—Comrs. Ramsey Co. plans 3 or 4 story, rein.-con., brick and tile, Jefferson and Colborne Sts. $200,000. F. W. Matson, Courthouse, secy.

Kan., Coffeyville—Hotel—H. Powell having plans prepared by Shephard & Wiser, archts., 302 R. A. Long Bldg., Kansas City, Mo., 5 story and basement, 100 x 140 ft., terra cotta, rein.-con. and stone. $300,000.

Kan., Hays—Schools—Capauchin Fathers c/o L. Lief, Concordia, having plans prepared by C. A. Smith, archt., 109½ Sante Fe Ave., Salina, 4 school buildings. $1,000,000.

Kan., Sabetha—Hospital—St. Anthony Hospital having plans prepared by C. A. Smith, archt., 109½ Santa Fe St., Salina, 3 story and basement, 44 x 140 ft., brick. $150,000.

Kan., Topeka—Hospital—Christ Hospital, 10th and West Sts., having plans prepared by Garden & Martin, archts., 104 Michigan Ave., Chicago, 4 story and basement, stucco, brick and hollow tile. $500,000.

Kan., Topeka—Hotel—Topeka Hotel Co. had plans prepared by T. W. Williamson & Co., archts., 312 Central Natl. Bank Bldg., 10 story and basement, 100 x 150 ft., 200 rooms, brick and stone, 7th and Jackson Sts. $600,000. Noted Oct. 5.

Neb., Lincoln—Hotel—Fleisher Constr. Co., 606 Builders' Exch. Bldg., Minneapolis, Minn., is representing owner who plans 8 story, fireproof, (280 rooms) $1,000,000. Private plans.

Mo., Kansas City—Hospital—Methodist Episcopal Church having plans prepared by R. E. Peden, archt., 945 New York Life Bldg., and takes bids early in spring 5 story and basement, 100 room, rein.-con., brick and cut stone, 13th and Tracy Sts. $150,000.

Mo., Kansas City—Hotel—C. E. McLaughlin, c/o Sunderland & Bescke, archts., 406 Interstate Bldg., having plans prepared 4 story, 84 x 100 ft., rein.-con., brick and stone, 16th and Central Sts. $135,000-$160,000.

Mo., Kansas City—Theatre—E. J. Willett and H. W. Pennach, c/o Lodge & Gornall, archts., 1505 Commerce Bldg., having plans prepared 2 story and basement, 110 x 192 ft., rein.-con., 36th St. and Bway. $250,000.

Mo., St. Louis—Auditorium, etc.—Voted $5,000,000 bonds for auditorium and community center, $4,500,000 for additions to hospitals, $4,000,000 for new court house and site, $1,250,000 for reconstruction public markets, $772,500 for fire engine houses and equipment and $400,000 for aquarium.

Tex., Austin—College—State Legislature, Austin, passed bill providing for Texas Technological College, appropriating $150,000 for site, $500,000 for buildings for fiscal year 1923-24, $350,000 for buildings fiscal year 1924-25, and $2,500 for site purchasing commission.

Okla., Tulsa — Passenger Depot — See "Railways."

Colo., Canon City—High School, etc.—School Dist. having plans prepared by E. Groves, archt., Foster Bldg., Denver, 2 story and basement, 60 x 192 ft. high school and 53 x 80 ft. gymnasium and auditorium, brick or terra cotta. $228,000.

Colo., Denver — Physicians — Imperial Bldg. Assn., 14th St. and Court Pl., having preliminary plans prepared by Varian & Varian, archts., Denver Gas & Electric Bldg., addition to physicians' building. $380,000.

Buildings (Continued)

Ore., Portland—Apartment—J. H. Grant, archt., Henry Bldg., takes bids in about 4 weeks, 4 story, 93 x 105 ft., rein.-con., 20th and Madison Sts., for J. Moore, 766 East Burnside St. $200,000.

Ore., Portland — Office — United Cigar Stores of America, 557 Howard Bldg., San Francisco, Calif., plan office building on Washington St. and Bway., here. $2,000,000.

Calif., Auburn—Jail, Hospital, etc.—Bd. Supervs. Placer Co. appointed committee to select architect who shall present estimates of cost for county jail, hospital and hall of records building. Jail and records building will probably be combined. To exceed $150,000.

Calif., Los Angeles—School—City having plans prepared by Noerenberg & Johnson, archts., Los Angeles Ry. Bldg., 3 story, fireproof, 16th St. To exceed $300,000.

Calif., Redondo—High School—Redondo Union High School Dist. to vote on $195,-000 bonds for additions to high school.

Calif., Sacramento—High School—City rejected bids opened Jan. 15, 1 and 2 story, brick, steel, concrete and terra cotta. Will readvertise. Mathews & Simpson, Call Bldg., San Francisco, archts. Noted Feb. 8.

Calif., San Francisco—Home, etc.—French Hospital, Anza and 6th Aves., having plans prepared by Fabre & Hildebrand, archts., 110 Sutter St., 4 story and basement, nurses' home, and 2 story, maternity pavilion, both brick. $150,000.

Calif., San Francisco—Hotel and Store—A. B. Grosse, 795 Sutter St., having plans prepared by V. W. Houghton, archt., 275 Post St., 6 story and basement, rein.-con., Turk and Jones Sts. $150,000. Noted Feb. 8.

Calif., San Francisco—School—City and San Francisco Co. having plans prepared by A. G. Headman, archt., Call Bldg., school, 16 class rooms and auditorium, Sommerset and Bacon Sts. $250,000.

Calif., San Francisco—Store and Loft—L. H. and E. Allyne, 2609 Gough St., having plans prepared by Reid Bros., archts., 105 Montgomery St., 5 story and basement, rein.-con., Mission, Ecker and Jessie Sts. $150,000.

Calif., San Francisco—Store and Office—L. R. Lurie, Mills Bldg., having preliminary plans prepared by O'Brien Bros., Inc., archts., 315 Montgomery St., 2 story and basement, rein.-con., California St. near Kearny St. $150,000.

Calif., San Francisco—War Memorials—City and San Francisco Co. plan war meomrials, incl. opera house, conservatory of music, dramatic club, clubhouse for American Legion, and art museum, on 4 blocks bounded by McAllister, Grove, Franklin Sts. and Van Ness Ave. To exceed $2,500,000. Engineer or architect not selected.

Calif., San Rafael—Schools—San Rafael School Dist. plans to vote on $210,000 bonds for elementary schools and $290,000 bonds for high school. Engineer or architect not selected.

Canada—Lunch Rooms, Stations, etc.—See "Railways."

BIDS DESIRED

N. Y., Albany—Bank—March 5, by M. T. Reynolds, archt., 100 State St., 10 story and court, 24 x 175 ft., with 200 ft. steel tower in center, brick, steel and terra cotta, for City Savings Bank, 100 State St. $850,000. Noted Oct. 5.

N. Y., New York—Schools—Feb. 23, by W. H. Gompert, archt. Bd. Educ., Flatbush Ave. Extension and Concord St., Brooklyn, for addition to P. S. 12, Frisby Ave. and Overing St.; additions to P. S. 33, Jerome and Walton Aves. between East 184th St. and Fordham Rd., Bronx Boro.

N. Y., Niagara Falls—Bank and Office—Feb. 25, by Niagara Falls Trust Co., 45 Falls St., 10 story, 45 x 145 ft., Falls St. $300,000. Noted Dec. 14.

Pa., Bradd ck—Bank—Feb. 26, by W. L. Stoddart, archt. and engr., 9 East 40th St., New York City, brick, steel and stone, plain foundation for 1st Natl. Bank. $200,-000. Noted Jan. 18.

Pa., Bryn Mawr — Hospital — A. N. Brockie, archt., 254 Soutn 15th St., Phila., taking bids 2 story and basement, 40 x 117 ft. brick, steel and stone, plain foundation for Bryn Mawr Hospital. $200,000.

Pa., Erie—March 19, by W. F. Thompson, archt., 342 Madison Ave., New York City, 3 story, brick, steel and stone, plain foundation, West 7th St., here, for Y.W.C.A., 134 East 44th St., New York City. $200,000.

Pa., Phila. — Hall — Feb. 28, by F. H. Caven, dir. pub. wks., City Hall, 3 story and basement, 80 x 150 ft. concrete, brick, steel, tile and marble, plain foundation, Germantown Ave. and Haines St. $450,000. P. B. Sinkler, 1225 Chestnut St., archt.

Pa., Phila.—F. E. Hahn, archt., 1112 Chestnut St., taking bids 5 story and basement, 141 x 150 ft. rein.-con., brick and steel, Broad and Pine Sts., for Y.M.H.A. A. M. Greenfield, 15th and Chestnut Sts., pres. Noted Nov. 30.

Md., Baltimore—Apartment—Feb. 19, by T. W. Pietsch, archt., American Bldg., 4 story, 112 x 116 ft., brick, 39th St. and University Parkway, for Carolina Apartments Co., Gaither Estate Bldg. $150,000. H. F. Doeleman, 507 North Charles St., engr.

Tenn., Johnson City—Hotel—Feb. 26, by W. L. Stoddart, archt. and engr., 9 East 40th St., New York City, 10 story, brick and stone, concrete foundation, for Johnson City Hotel Co.

O., Cleveland—Apartment—M. Margolin, 548 East 112th St., taking bids 4 story, 37 x 124 ft., brick and steel, 1944 East 75th St. $150,000. M. Weis, 617 Union Bldg., archt. Noted Jan. 25.

O., Gambier—Dormitory—Feb. 19, by A. Garfield, archt., Natl. City Bldg., Cleveland, constructing Leonard Hall, 4 story and basement, brick, steel and concrete, here, for Kenyon College, c/o W. T. Pierce, pres. $200,000. Noted Nov. 30.

O., Greenfield—High School—March 10, by School Bd., 2 story, concrete and brick, plain foundation. $200,000. W. B. Ittner, 911 Locust St., St. Louis, Mo., archt.

O., Lorain — Clubhouse — Feb. 24, by P. Rissman, archt., Lorain, 5 story, 50 x 200 ft., brick, steel and concrete addition, Bway., for F.O.E., c/o P. Cook, chn. building com. $200,000.

Ill., South Chicago (Chicago P. O.)—Hospital—E. E. Hall, archt., 123 West Madison St., Chicago, receiving bids 4 and 5 story, 125 x 149 ft. rein.-con., brick and steel, 11th and Perry Sts., here, for South End Hospital Asn., 11212 South Michigan Ave., Chicago, $300,000. Noted Feb 1.

Wis., Green Bay—Office—Oppenhamer & Obel, archts., Nicollet Bldg., taking bids additional story to present 7 story, 100 x 160 ft., rein.-con. and brick, Washington St., for J. J. Bellin, Bellin Bldg. $150,000.

Wis., Milwaukee—Apartment—Rosman & Wierdsma, archts., 424 Jefferson St., taking bids and opens same about Feb. 19, for 3 story and basement, 55 x 110 ft., brick, tile and concrete, plain foundation, Cass St., for Ranco Corp., c/o architects. $150,000.

Wis., Wausau—Club House—Feb. 20, by Elks Building Corp., c/o J. Lull, 622 1st St., and Oppenhamer & Obel, archts., Spencer Bldg., 3 story and basement, 64 x 112 ft., brick, tile and concrete, plain foundation, Scott and 4th Sts. $150,000.

Ia., State Center—High School—Feb. 26, by Bd. Educ., 2 story and basement, rein.-con., brick, tile and stone. $150,000. H. E. Reimer, Marshalltown, archt. Noted Nov. 17, 1921.

Ia., Wapello—School—March 9, by Bd. Educ., 2 story and basement rein.-con. brick tile and stone. $150,000. Keffer & Jones, 204 Masonic Temple, Des Moines, archts. Noted Jan. 25.

Ia., Cedar Falls—High School—Feb. 27, by Bd. Educ., 3 story and basement, 115 x 146 ft., rein.-con., brick, tile and stone. $150,000. V. W. Johnson, secy. J. G. Ralston Co., Waterloo, archts. Noted Jan. 25.

Minn., Minneapolis—High School—Feb. 23 (change of date), by Bd. Educ., 305 City Hall, 3 story and unfinished basement, 45 x 250 x 300 ft., with 1 story, 60 x 80 ft. wing, rein.-con., brick and tile, 26th St. and Emerson Ave. S. $550,000. Div. Design and Inspection, 245 9th Ave. N., archts. Noted Feb. 1.

Minn., Minneapolis—Office—Feb. 19, by Northwestern Natl. Life Insurance Co., 11 St. and Nicollet Ave., 3 story and basement, 58 x 113 x 118 x 137 x 175 ft., rein.-con., brick, tile and Indiana limestone, 15th and Oak Grove Sts. $400,000. Hewitt & Brown, 1200 2nd Ave. S., archts. Noted March 2.

Kan., Wichita—Jail—March 12, by F. Horn, clk. Sedgwick Co., 3 story, brick and steel, plain foundation, Court House Grounds. $200,000. M. Roseberry, co. engr. W. N. Bowman, Central Savings Bank Bldg., Denver, Colo., archt. Noted Jan. 4.

Calif., Los Angeles—Office—J. C. Austin, archt., Baker-Detwiler Bldg., receiving bids 8 story and basement, rein.-con. and brick, 12th St. for Chamber of Commerce, Chamber of Commerce Bldg.

Calif., Mountain View—High School—Feb. 24, by Trustees Mountain View High School Dist., 2 story, rein.-con. To exceed $150,000. W. H. Weeks, 369 Pine St., San Francisco, archt. Noted Jan. 25.

Ont., Uxbridge—High School—Feb. 21, by T. F. Thompson, secry. Bd. Educ., 2 story, 8 room, concrete, brick and steel. $150,000. D. R. Franklin, 587½ Yonge St., Toronto, archt.

BIDS RECEIVED

N. Y., Jamestown — High School — Bd. Educ., East 2nd St., opened bids Feb. 9, general contract Junior High School, Front St., from Warren Constr. Co., Gobey Bldg., $263,800, C. C. Haas, Monroe and 10th Sts., $279,283, Mullen, Guinane & Ludwig, 10 Prendergast Bldg., $291,423; heating and ventilating, from F. W. Asker, 851 Spring St., $38,320, French & Keith, Randolph, $41,645, Johnson Heating Co., New York City (street address not available) $44,268. Noted Jan. 11.

Pa., Phila.—Schools—Director Bd. Educ., 19th and Chestnut Sts., opened bids Feb. 8, for two 4 story and basement, 148 x 172 ft. brick, steel and stone schools, on (1) Large and Wakeling Sts. and (2) Knoor and Cottman Sts., from McCloskey & Co., 1620 Thompson St., (1) $442,322 (2) $476,-572; Cramp & Co., Denckla Bldg., (1) $448,765 (2) $443,931; Kober Constr. Co., Middle City Bldg., (2) $457,600. Noted Feb. 1.

CONTRACTS AWARDED

Conn., Hartford—Bank and Office—Phoenix Natl. Bank, Main St., 7 story, 60 x 170 ft., stone, marble and concrete, City Hall Sq., to Marc Eidlitz, 30 East 42nd St., New York City. Archts. est. $500,000. Noted Feb. 8.

N. Y., New York—Apartment—A. Bricken Constr. Co., c/o Gronenberg & Leuchtag, archts. and engrs., 450 4th Ave., 6 story, 75 x 75 ft., brick, steel and stone, plain foundation, 130 West 16th St., by day labor. $150,000.

N. Y., New York—Apartment—M. Smoleroff, c/o Goldner & Goldner, archts. and engrs., 47 West 42nd St., two 6 story, 100 x 100 ft., brick, steel and stone, plain foundations, Wadsworth Ave. and 176th St., by day labor.

N. Y., New York—Apartment—M. Silberman, c/o Goldner & Goldner, archts. and engrs., 47 West 42nd St., 5 story, 100 x 125 ft., brick, steel and stone, plain foundation, West 97th St., by day labor.

N. Y., New York—Apartment—J. Wacht c/o J. M. Felson, archt. and engr., 1133 Bway., 5 story, brick, steel and stone, plain foundation, Sedgwick Ave., by day labor. $300,000.

N. Y., New York—Y.M.C.A., 2 West 45th St., 20 story, 75 x 100 ft., brick, steel and stone, plain foundation. 333 West 56th St., to G. A. Fuller Co., 175 5th Ave. Archts. est. $1,200,000. Noted June 29.

N. Y., Niagara Falls—High School—Bd. Educ., general contract brick and steel high school to replace one recently destroyed by fire, to Laur & Mack, 1400 College Ave., $534,000; plumbing work, to Gormley Heating & Plumbing Co., 1912 Lockport Ave., $24,880; heating and ventilating work, to Danforth Co., St. Louis, Mo. (street address not available) $60,375. Noted Jan. 11.

N. J., Trenton—High School—Committee of Buildings and Grounds of Bd. Educ. in meeting room of Bd. Administration, 9 South Stockton St., general contract Junior High School 3, to C. J. Smith Constr. Co., 292 Academy St., $778,000; heating and ventilating work, to E. G. Woolfolk, & Co., 17 West 38th St., New York City, $93,464; plumbing, to N. Connolly, 1404 North 13th St., Phila., $51,192; electrical work, to A. W. Bensel, Virginia Ave., Atlantic City, $27,514. Noted Jan. 18.

Pa., Middletown—Home—I. O. O. F., 17th and Tioga Sts., Phila., 3 story and basement, 38 x 299 ft. with 2 wings, 33 x 154 ft., brick, steel and stone, plain foundations, here, to Shamokin Lumber Co., Shamokin. $309,000. Noted Feb. 8.

Pa., Phila.—Apartment—T. H. Hargest, 501 North 52nd St., 6 story and basement, 208 x 214 ft., 46th and Walnut Sts., to J. R. Wiggins Co., 18th and Cherry Sts., $900,000. Noted Feb. 8.

N. C., Raleigh—School—City, 3 story and basement, brick, Wiley School, Morgan St., to C. V. York, Citizens' Bank Bldg., $151,-884. Noted Sept. 7.

W. Va., Huntington—High Schools—Bd. Educ., constructing Lincoln Jr. High School, (20 rooms) brick, 25th St. and 10th Ave., to R. M. Bates, Jr., 416 11th St., $150,000; Douglass Jr. High School, (15 rooms) brick, 10th Ave., to W. F. Diehl, Robson-Prichard Bldg., $110,000.

Ga., Atlanta—Office—Glenn Estate 10 story and basement, rein.-con. and steel, rock foundation, Marietta and Spring Sts., to George A. Fuller Co., Munsey Bldg., Wash., D. C., $400,000. Noted Jan. 25.

Ga., Atlanta—Office, etc.—Massell Realty Co., Healey Bldg., will build 6 story and basement, warehouse and office building, rein.-con., steel, brick and concrete, rock foundation, Marietta and Jones Sts., by day labor. $175,000.

Ga., Atlanta—Office—McGlawn & Bowen, 11 story and basement, rein.-con., steel and brick, rock foundation, Fairlee and

Buildings (Continued)

Luckie Sts., to Gude & Co., Candler Bldg., $200,000.

Fla., Bradentown—Pos Office, etc.—C. H. Ewing, 5 North La Salle St., Chicago, and Sarasota, Fla., 1 and 2 story, rein.-con. and stucco, post office, store and office building, Manatee and Florida Aves., to T. W. Hullinger & Son, Bradentown, $200,000.

O., Dayton — Office — See "Industrial Works."

Mich., Detroit — Mercantile — Smith, Hinchman & Grylls, archts., 800 Marquette Bldg., 10 story, basement and sub-basement, 36 x 100 ft. rein.-con., brick and steel, plain foundation, Woodward Ave., to Bryant & Detwiler, 2336 Dime Bank Bldg., for J. L. Hudson Co., Woodward Ave. Noted Dec. 21.

Ill., Chicago—Apartment—J. H. Larson, 7303 Exchange Ave., 3 story and basement, 80 x 153 ft., rein.-con., brick and steel, 4540-46 Woodlawn Ave., to Turnquist Bros. Constr. Co., 217 East 69th Pl. Archts. est. $150,000.

Ill., Chicago—Apartment—M. McHugh, 6226 Ellis Ave., 3 story, 97 x 134 ft., rein.-con., brick and steel, 1821-31 East 72nd St., to Turnquist Bros. Constr. Co., 217 East 69th Pl. Archts. est. $150,000.

Ill., Chicago—Apartment—R. W. Matteson, 140 South Dearborn St., 3 story, 122 x 126 ft., rein.-con., brick and steel, 900-18 George St., to A. Lindstrom, 30 North Dearborn St. Archts. est. $150,000.

Ill., Chicago—Apartment—E. A. Sward, 6830 Chappel Ave., 3 story, 127 x 141 ft., rein.-con., brick and steel, 2301-13 East 70th St., to Rune & Son, 6142 Rhodes Ave. Archts. est. $175,000.

Ia., Des Moines—Office—Silverberg & Lince, S. and L. Bldg., superstructure 6 story and basement, 67 x 130 ft., rein.-con., brick, tile and stone, 5th and Walnut Sts., general contract, to A. H. Neumann & Co., 519 Hubbell Bldg., about $185,000. Total cost $500,000. Noted Feb. 1.

Minn., Minneapolis — Hotel — Nicollet Hotel Corp., 520 1st Natl.-Soo Line Bldg., 10 story and basement, rein.-con., brick and tile, Washington and Hennepin Aves., general contract to C. F. Haglin & Sons Co., 226 Lumber Exchange. Archts. est. $3,000,000.

Minn., Minneapolis—Store and Apartment—I. S. Whitman, 932 Hennepin Ave., 4 story and basement, 110 x 159 ft., rein.-con., brick and tile, 11th St. and 2nd Ave. S., general contract to M. Glassberg, 2 North 10th St. Archts. est. $150,000.

Kan., Hutchinson—Hotel—The 5th Ave. Bldg. Corp., general contract 5 story and basement, 50 x 150 ft., brick and steel, to Stamey-Mackey Constr. Co., Hutchinson, $200,000. Archts. est. $225,000.

Neb., Omaha — Club — B.P.O.E., Elks Bldg., 8 story and basement, 132 x 132 ft., rein.-con., brick, stone, terra cotta and steel, 18th and Dodge Sts., general contract to Vaughn Constr. Co., 322 W.O.W. Bldg., $516,762; heating and ventilating to J. J. Hanighen Co., 617 South 14th St. Total cost $1,500,000. Noted Feb. 8.

Ore., Eugene — Hospital — Eugene Bible University Assn., will build 5 story, 53 x 124 ft., wood, cement foundation, by day labor under supervision of J. R. Ford, archt., Eugene. $150,000.

Calif., Glendale—High School—Glendale High School Dist., 2 story, administration, auditorium and classroom building, 2 story, rein.-con. science building, general contract to North-Pacific Constr. Co., Baker-Detwiler Bldg., Los Angeles, $457,-865. Noted Jan. 18.

Calif., Long Beach—Store—Buffum Dept. Store, Bway., 6 story and basement, concrete and steel, to W. G. Reed, Brook Bldg., $350,000.

Federal Government Work

BIDS DESIRED

R. I., Providence—Dredging—March 7, at office U. S. Engineer, Providence, dredging in Connecticut River, Conn.; adv. this issue.

N. Y., New York—Dredging—March 15 at office U. S. Engineer, 710 Army Bldg., 39 Whitehall St., dredging in Newtown Creek; Adv. this issue.

W. Va., Huntington—Houses—March 17, at office U. S. Engineer, lockkeepers double houses at Dams 14 and 26, Ohio River; adv. this issue.

Ala., Florence—Barge—March 12 at office U. S. Engineer, 1 steel barge; adv. this issue.

Miss., Gulfport—Stack—Spec. 4781—Feb. 21 by Bureau Yards & Docks, Navy Dept., Wash., D. C., radial brick stack at U. S. Veterans Hospital, here; adv. this issue.

Wyo., Riverton—Turbine and Generator, etc.—March 13 at office U. S. Recl. Serv., Denver, Colo., furnishing 1 hydraulic turbine, generator etc., for Pilot Butte power plant, here; adv. this issue.

Calif., Mare Island—Riprapping—Spec. 4775—March 7, by Bureau Yards & Docks, Navy Dept., Wash., D. C., furnishing and placing approximately 50,000 ton hard stone riprap to form embankment along longitudinal dike, Navy Yard, here. L. E. Gregory, ch. of bureau. Noted Feb. 1.

Cuba., Guantanamo — Distilling Apparatus, etc.—Spec. 4769—Feb. 28, by Bureau Yards & Docks, Navy Dept., Wash., D. C., distilling apparatus and heater, at Naval Station, here. L. E. Gregory, ch. of bureau; adv. this issue. Noted Dec. 21.

BIDS RECEIVED

N. Y., Chelsea—Mechanical Equipment—Treas. Dept., Wash., D. C., mechanical equipment in administrative building, mess hall, etc., U. S. Veterans Hospital, here, from S. W. Ritenhouse, 1327 Taylor St., N. W., Wash., D. C., $44,377; S. Faith & Co., 2427 Pennsylvania Ave., Phila., $47,-000; Noland-Clifford Co., 322 28th St., Newport News, Va., $50,656. Noted Jan. 25.

Va., Norfolk — Dredging — Spec. 4771 — Bureau Yards & Docks, Navy Dept., Wash., D. C., opened bid Feb. 7, dredging approximately 14,000 cu.yd. at Navy Yard, here, (1) work complete, from Norfolk Dredging Co., Campostella Wharf, (1) $0.395 per cu. yd. (30 days) (2) same as (1). Noted Feb. 1.

Wash., Puget Sound—Fuse and Detonator House—Spec. 4750—Bureau Yards & Docks, Navy Dept., Wash., D. C., fuse and detonator house, here, from Miller Bros., 221 Burwell Ave., Bremerton, $6,674 (60 days); C. F. Martin, 204 Seaboard Bldg., Seattle, $7,413 (59 days); A. H. Kopper, 322 10th St., Port Angeles, $7,735 (60 days). Noted Jan. 11.

Calif., San Diego — Water Softening Plant—Spec. 4768—Bureau Yards & Docks, Navy Dept., Wash., D. C., water-softening plant at Naval Base, here, from International Filter Co., 333 West 21st St., Chicago, $2,169; Permuttit Co., 440 5th Ave., New York City, $3,680; G. E. Eng. Co., 449 West 42nd St., New York City, $4,233. Noted Jan. 25.

Calif., Tiburon—Water Supply System—Spec. 4716—Bureau Yards & Docks, Navy Dept., Wash., D. C. water supply system at Naval Fuel Depot, here, from J. Pringle, Burlingame, $4,800 (90 days); Marin Municipal Water Dist., 425 5th Ave., San Raphael, $5,572; J. T. Walsh, 73 Tremont St., San Francisco, $5,692. Noted Jan. 11.

Miscellaneous

PROPOSED WORK

Gas Mains—Raleigh, N. C.—Carolina Power & Light Co., Raleigh Banking and Trust Co. Bldg., plans laying new high pressure gas mains across western and northern sides of city to improve general pressure throughout company's distribution system. Will feed into present distribution system at number of points through pressure reducing valves. P. A. Tillery, genl. mgr.

Wharf and Shed—New Orleans, La.—Bd. Port Comrs. Eng. Dept., 1 Canal St., preparing preliminary plans for wharf and shed at foot of St. Joseph St., 790 ft. long, 225 ft. wide, front of wharf may be built of concrete and steel, rear paved slab on fill. $600,000.

Stadium—Danville, Ky.—Athletic Assn. of Center College having plans prepared by Osborn Eng. Co., engrs., 2848 Prospect Ave., S. E., Cleveland, O., rein.-con. stadium, 8,000 seating capacity. Address C. B. Moran, dir.

Stadium — East Cleveland (Cleveland, P. O.) **O.**—Bd. Educ. retained Osborn Eng. Co., archts. and engrs., 2848 Prospect Ave. S. E., Cleveland, to prepare plans for stadium, (10,000 seating capacity) on Shaw Field. C. A. Tilden, dir. schools.

Transmission Lines — Minnesota — Little Falls Water Power Co., Little Falls, plans transmission line from Lastrup (R. D. Pierz) to Onamia, Wahkon and Isle. A. V. Taylor, Little Falls, mgr.

Swine Barn—St. Paul, Minn.—State Fair Bd., State Fair Grounds, plans brick, concrete and steel. $150,000. T. H. Canfield, secy. C. H. Johnston, 715 Capital Bank Bldg., archt.

Transmission Line—Kanorado, Kan. City—had plans prepared transmission line. $25,000 bonds voted W. B. Rollins & Co., 521 Railway Exch. Bldg., Kansas City, Mo., engrs. Noted Jan. 18.

Swimming Pool—Wichita, Kan.—Ordinance passed for rein.-con. swimming pool in South Riverside Park. $55,000. P. L. Brockway, city engr.

Electric Lights and Standards—St. Louis, Mo.—Soon lets contracts price lights and concrete standards on Watson Rd. and Clara Ave., $35,000. R. Toensfeldt, City Hall, engr.

Fire Equipment — St. Louis, Mo. — See "Buildings."

Street Lighting Equipment, etc. — St. Louis, Mo. — Voted $8,000,000 bonds for street lighting equipment, $6,000,000 for plaza and buildings, $2,500,000 for new public parks, playgrounds, recreation fields and swimming pools, land buildings, etc., $1,300,000 for improvements to old parks, etc., $2,600,000 for Union Sta. plaza and $1,600,000 (citys share) for grade crossing elimination.

Dock, etc.—Portland, Ore.—Union Oil Co., 611 Yeon Bldg., having plans prepared and takes bids in about 60 days, for dock 300-350 ft. long, oil tanks, pumping plant, pipe lines, tracks and small buildings. $500,000. Company engineers will supervise work. V. H. Kelley, mgr.

Estuary Tube—Oakland, Calif.—Alameda Co. plans election to vote on $3,500,000 bonds for tube under Oakland estuary at Webster St. G. A. Posey, Co. surv.

Tunnel—Sacramento, Calif.—See "Industrial Works."

Tunnel — Santa Barbara, Calif. — See "Waterworks."

Tunnel, Pier, etc.—Canada—See "Railways."

Grain Elevator—Montreal, Que.—Harbor Comrs. soon take bids grain elevator on Tarte Pier, at foot of Micolet St., 10,000,000 bu. capacity, incl. marine towers, track sheds, receiving house, storage house, shipping houses, etc. $10,000,000. M. P. Fennell, genl. mgr. J. S. Metcalfe Co. Ltd., 54 St. Francois Xavier St., engrs.

Subway—Montreal, Que.—Had plans prepared for rebuilding Ontario St. subway. $300,000 bonds will be voted on in March. H. A. Tetreault, dir. pub. wks.

BIDS DESIRED

Cement, Trap Rock, etc—Holyoke, Mass.—Feb. 27, by Bd. Pub. Wks., furnishing seasons supply of cement, trap rock, pitch, cold patch and curbing, in carload lots. G. F. Stone, assistant clk.

White and Rock Oak Plank, etc.—Elmira, N. Y.—Feb. 19, by Bd. Pub. Wks., furnishing 50,000 ft. of 3 x 6, 3 x 8, 3 x 10 and 3 x 12 white and rock oak plank, 12-16 ft. lengths, also 150,000 gal. road oil. G. W. Jarchow, city clk.

Scarifier—Leroy, N. Y.—Town Bd. receiving bids road scarifier. $1,000. Address H. B. Ward, mayor.

Sanitary Work, etc.—Middletown, N. Y.—Feb. 28, by State Hospital Comn., Albany, sanitary work, additional fire protection and water supply, at Middletown State Homeopathic Hospital, here. L. F. Pilcher, Albany, state archt.; adv. this issue.

Corporation Cocks, etc.—New York, N. Y.—Feb. 21, by Bd. Purch., Municipal Bldg., furnishing and delivering corporation cocks and hydrant repair parts to Dept. Water Supply, Gas and Electricity. G. A. Whalen, chn.

Power Development—Watertown, N. Y.—Feb. 24, to vote on $365,000 bonds to develop municipal power at Delano Falls. Address J. Ackerman, city mgr.

Bricks—Wilkinsburg, Pa.—Feb. 26, by W. N. Baker, boro. secy., 400,000 or more vitr. repressed lug bricks, 3.5 x 4.5 x 8.5 in. C. E. Sperling, boro. engr.

Gas Extensions, etc.—Tampa, Fla.—Tampa Gas Co., 201 Madison St., receiving bids extending present system and installing new gas equipment, 2,500,000 cu.ft. daily capacity. $175,000. R. Nettles, 703 South Newport St., engr.

Lime Dust, etc.—Cleveland, O.—Feb. 23, for 500 ton lime dust, 4,000 bbl. Portland cement, 10,000 ton asphalt sand, 1,000 ton asphalt, 1,500 ton bituminous filler, 60,000 ton shale, 530,000 five in. standard, 270,000 five in. repair, 200,000 four in. standard and 100,000 four in. repair paving bricks.

Steam Roller, etc.—Cleveland, O.—Commissioner of Purchases & Supplies, taking bids one 2½ ton steam roller and one ⅝ ton motor truck.

Dredge—Fond du Lac, Wis.—A. M. Hunter, secy. Bd. Park Comrs., taking bids ¾ to 1 yd. bucket dredge, caterpillar type, drag line, to be used on floating barge.

Lumber and Culvert Metal—Marion, Ia.—Feb. 21, by Auditor Linn Co., furnishing 5 cars full sawed Douglas fir, 2 cars full

Construction News

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Feb. 26	Wynnewood, Okla.	Feb. 22
Feb. 27	Canton, Ill.	Feb. 1
Feb. 27	La Porte, Ind.	Feb. 8
Mar. 1	Hartford, Wis.	Feb. 22
Mar. 1	Cincinnati, O.	Feb. 22
Mar. 2	Piggott, Ark.	Feb. 22
Mar. 2	Cleveland, O.	Feb. 22
Mar. 5	Bay City, Mich.	Feb. 15
Mar. 5	Slayton, Minn.	Feb. 22
Mar. 6	Toronto, Ont.	Feb. 1
Mar. 7	Rawlins, Wyo.	Feb. 1
Mar. 7	Baltimore, Md. Adv. Feb. 15 and 22.	Feb. 15
Mar. 8	Ft. Stockton, Tex.	Feb. 22
Mar. 20	Brooklyn, N. Y. Adv. Feb. 22.	Feb. 22

SEWERS

Feb. 26	Blasdell, N. Y.	Feb. 15
Feb. 26	Monroe, Mich.	Feb. 22
Feb. 26	Royal Oak, Minn.	Feb. 22
Feb. 27	Springwells, Mich.	Feb. 22
Feb. 27	Neosho, Mo.	Feb. 22
Feb. 28	Harrisonville, Mo.	Feb. 22
Mar. 2	Milwaukee, Wis. Adv. Feb. 15 and 22.	Feb. 22
Mar. 2	Almont, Mich.	Feb. 22
Mar. 2	Beloit, Wis.	Feb. 22
Mar. 5	Portland, Ore.	Feb. 22
Mar. 12	New Castle, Pa.	Jan. 25
Mar. 13	Matawan, N. J. Adv. Feb. 15 and 22.	Feb. 15

WASTE DISPOSAL

Feb. 26	Tulsa, Okla.	Feb. 1
Mar. 1	Spokane, Wash.	Jan. 18
Mar. 1	Fresno, Calif.	Feb. 22
Mar. 2	Piggott, Ark.	Feb. 22
Mar. 22	Marion, Wis.	Feb. 22

BRIDGES

Feb. 26	Massena, N. Y.	Feb. 8
Feb. 26	Portland, Ore.	Feb. 15
Feb. 27	Trenton, N. J.	Feb. 15
Feb. 28	Black River Falls, Wis.	Feb. 22
Mar. 1	Indianapolis, Ind.	Feb. 15
Mar. 8	Columbus, Kan.	Feb. 22
Mar. 15	Oskaloosa, Kan.	Feb. 22
Mar. 20	Manchester, N. H. Adv. Feb. 22.	Feb. 22
Mar. 21	Brainerd, Minn.	Feb. 15
Apr. 1	Wilkes-Barre, Pa.	Dec. 14
Sept. 1	Sydney, New South Wales, Australia	Aug. 3

DAMS

Feb. 26	Napa, Calif.	Feb. 8
Feb. 28	Illinois Adv. Feb. 1 to 22.	Feb. 1

EXCAVATION, DRAINAGE, IRRIGATION

Feb. 27	Watertown, Wis.	Feb. 15
Feb. 27	Whitham, Mo.	Feb. 15
Feb. 27	Jefferson, Wis.	Feb. 22
Mar. 1	Redwood Falls, Minn.	Feb. 15
Mar. 2	Redwood Falls, Minn.	Feb. 15
Mar. 3	Manawa, Wis.	Feb. 15
Mar. 5	Oregon	Feb. 22

STREETS AND ROADS

Feb. 26	Tekamah, Neb.	Feb. 8
Feb. 26	Ontario	Feb. 1
Feb. 26	Madison, S. D.	Feb. 8
Feb. 26	Goshen, Ind.	Feb. 15
Feb. 26	Wahpeton, N. D.	Feb. 15
Feb. 26	San Diego, Calif.	Feb. 15
Feb. 26	Gowrie, Ia.	Feb. 15
Feb. 26	Ravenna, O.	Feb. 15
Feb. 26	Goshen, Ind.	Feb. 15
Feb. 26	Wichita, Kan.	Feb. 22
Feb. 26	Ravenna, O.	Feb. 22
Feb. 26	Duluth, Minn.	Feb. 22
Feb. 26	Milwaukee, Wis.	Feb. 22
Feb. 27	Green Bay, Wis.	Feb. 15
Feb. 27	Fergus Falls, Minn.	Feb. 15
Feb. 27	Columbus, O.	Feb. 22
Feb. 27	Chariton, Ia.	Feb. 22
Feb. 27	Ionia, Mich.	Feb. 22
Feb. 28	Leavenworth, Kan.	Feb. 15
Feb. 28	Waukesha, Wis.	Feb. 15
Feb. 28	Laurens, S. C.	Feb. 22
Feb. 28	Brooklyn, N. Y.	Feb. 22
Feb. 28	Cleveland, O.	Feb. 22
Feb. 28	Waukesha, Wis.	Feb. 22
Feb. 28	Wichita, Kan.	Feb. 22
Mar. 1	Marshall, Minn.	Jan. 25
Mar. 1	Columbus, O.	Feb. 8
Mar. 1	Indianapolis, Ind.	Feb. 15
Mar. 1	Wash., D. C.	Feb. 15
Mar. 1	Hartford, Wis.	Feb. 22
Mar. 2	Ebensburg, Pa.	Feb. 22
Mar. 2	Evansville, Wis.	Feb. 22
Mar. 2	West Bend, Wis.	Feb. 22
Mar. 3	Mason, Mich.	Feb. 22
Mar. 5	Hillsdale, Mich.	Jan. 25
Mar. 5	Casper, Wyo.	Feb. 15
Mar. 6	West Virginia Adv. Feb. 15 and 22.	Feb. 15
Mar. 6	Norwalk, Conn. Adv. Feb. 22.	Feb. 22
Mar. 6	Louisiana	Feb. 22
Mar. 6	Royal Oak, Mich.	Feb. 22
Mar. 6	Michigan	Feb. 22
Mar. 7	Quebec	Feb. 22
Mar. 7	Ontario	Feb. 22
Mar. 8	Columbus, Kan.	Feb. 22
Mar. 14	Mayville, Wis.	Feb. 15
Mar. 20	Alabama	Feb. 22
Mar. 21	Madison, Wis.	Feb. 22
Mar. 22	Madison, Wis.	Feb. 22
Mar. 23	Madison, Wis.	Feb. 22
Apr. 1	Huntingdon, Pa.	Feb. 8
Apr. 3	Amsterdam, N. Y.	Feb. 1
Apr. 23	Spokane, Wash.	Feb. 1

INDUSTRIAL WORK

Feb. 27	New York, N. Y.	Feb. 22
Mar. 1	Cincinnati, O.	Feb. 22
Mar. 1	Rochester, N. Y.	Feb. 22
Mar. 6	De Quincy, La.	Feb. 22

BUILDINGS

Feb. 26	New Brunswick, N. J.	Feb. 8
Feb. 26	Attica, N. Y.	Feb. 1
Feb. 26	Whitehall, N. Y.	Feb. 1
Feb. 26	Johnson City, Tenn.	Feb. 15
Feb. 26	State Center, Ia.	Feb. 15
Feb. 26	Braddock, Pa.	Feb. 15
Feb. 27	Roosevelt, N. Y.	Feb. 1
Feb. 27	Troy, Pa.	Feb. 8
Feb. 27	Cedar Falls, Ia.	Feb. 15
Feb. 27	Massillon, O.	Feb. 22
Feb. 28	Memphis, Tenn.	Feb. 8
Feb. 28	Phila., Pa.	Feb. 15
Feb. 28	New York, N. Y.	Feb. 22
Feb. 28	Cincinnati, O.	Feb. 22
Mar. 1	Red Lion, Pa.	Jan. 18
Mar. 1	Denver, Colo.	Jan. 18
Mar. 1	Chico, Calif.	Feb. 8
Mar. 1	Boulder, Colo.	Feb. 22
Mar. 1	Macon, Ga.	Feb. 22
Mar. 2	Hamtramck (Detroit P. O.), Mich.	Feb. 22
Mar. 5	Albany, N. Y.	Feb. 15
Mar. 5	Oakland, Calif.	Feb. 22
Mar. 5	Tuscon, Ariz.	Feb. 22
Mar. 9	Wapello, Ia.	Feb. 15
Mar. 10	Greenfield, O.	Feb. 15
Mar. 10	Cortland, N. Y.	Feb. 22
Mar. 12	Wichita, Kan.	Feb. 15
Mar. 14	Buffalo, N. Y. Adv. Feb. 22.	Feb. 22
Mar. 14	Duncannon, Pa.	Feb. 22
Mar. 15	Duluth, Minn.	Jan. 18
Mar. 15	Trenton, N. J.	Jan. 11
Mar. 19	Erie, Pa.	Feb. 15
Mar. 20	Stockton, Calif.	Feb. 22
Mar. 23	Shreveport, La.	Nov. 9
Apr. 1	Oil City, Pa.	Jan. 18

FEDERAL GOVERNMENT WORK

Feb. 24	Quarter-boat and Barges — Wilmington, Del. Adv. Jan. 25 to Feb. 22.	Jan. 25
Feb. 26	Hospital—Gulfport, Miss.	Feb. 1
Feb. 28	Extension — Mare Island, Calif.	Feb. 1
Feb. 28	Distilling Apparatus, etc. — Guantanamo, Cuba Adv. Feb. 15 and 22.	Feb. 15
Feb. 28	Heaters—New York, N. Y. Adv. Feb. 22.	Feb. 22
Mar. 2	Stone—Eureka, Calif.	Feb. 1
Mar. 2	Dredging—New York, N. Y. Adv. Feb. 8 to 22.	Feb. 8
Mar. 5	Protection, etc. — Boston, Mass.	Feb. 8
Mar. 6	Towboat—Nashville, Tenn. Adv. Feb. 8 to 22.	Feb. 8
Mar. 7	Dredging — Providence, R. I. Adv. Feb. 8 to 22.	Feb. 15
Mar. 7	Riprapping — Mare Island, Calif.	Feb. 15
Mar. 7	Alterations, etc.—Brooklyn, N. Y.	Feb. 22
Mar. 12	Barge—Florence, Ala. Adv. Feb. 15 and 22.	Feb. 15
Mar. 13	Turbine and Generator, etc.—Riverton, Wyo.	Feb. 15
Mar. 14	Storehouse — San Diego, Calif.	Feb. 22
Mar. 14	Cranes — Puget Sound, Wash.	Feb. 22
Mar. 15	Dredging—New York, N. Y. Adv. Feb. 15 and 22.	Feb. 15
Mar. 17	Houses — Huntington, W. Va. Adv. Feb. 15 and 22.	Feb. 15
Mar. 20	Dredging—Detroit, Mich. Adv. Feb. 22.	Feb. 22
Mar. 21	Dredging—Phila., Pa. Adv. Feb. 22.	Feb. 22
Mar. 21	Dredging—Detroit, Mich. Adv. Feb. 22.	Feb. 22
May 10	Post Office — Cordova, Alaska	Jan. 25

MISCELLANEOUS

Feb. 24	Bulkhead and Pier—Baltimore, Md.	Feb. 22
Feb. 26	Street Lighting System — Plattsmouth, Neb.	Feb. 8
Feb. 26	Brick—Wilkinsburg, Pa.	Feb. 15
Feb. 26	Docks, etc. — Pensacola, Fla.	Feb. 22
Feb. 26	Lumber — Guthrie Center, Ia.	Feb. 22
Feb. 27	Cement, Trap Rock, etc.—Holyoke, Mass.	Feb. 15
Feb. 27	Lumber and Metal—Hampton, Ia.	Feb. 22
Feb. 27	Highway and Roofing Materials—New York, N. Y.	Feb. 22
Feb. 28	Sanitary Work, etc.—Middletown, N. Y.	Feb. 15
Feb. 28	Paving Sand, etc. — Brooklyn, N. Y.	Feb. 22
Feb. 28	Wrought Iron, Couplings, etc. —Baltimore, Md.	Feb. 22
Mar. 1	Steel, Cement, etc.—Waukon, Ia.	Feb. 22
Mar. 1	Cast Iron Pipe—Montreal, Que.	Feb. 22
Mar. 2	Portland Cement — Evansville, Wis.	Feb. 22
Mar. 5	Portland Cement—Waterloo, Wis.	Feb. 22
Mar. 5	Trailers—San Jose, Calif.	Feb. 22
Mar. 5	Supplies—Hamilton, Ont. Adv. Feb. 22.	Feb. 22
Mar. 6	Road Maintenance Machine—Stillwater, Minn.	Feb. 15
Mar. 6	Lumber, etc.—Council Bluffs, Ia.	Feb. 22
Mar. 15	Dry Dock Machinery—Esquimalt, B. C.	Feb. 22

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Pa., Phila.—F. H. Caven, dir. pub. wks., City Hall, soon takes bids laying mains in various streets. $150,000. C. E. Davis, City Hall, engr.

N. C., Asheville—See "Streets and Roads."

Tenn., Union City—Plans to expend $50,000 for water main extension. J. N. Woolsey, mayor.

Wis., New Holstein—See "Sewers."

Wis., Oshkosh—Water Dept. had plans prepared additions to pumping station 27 x 60 ft. and 27 x 30 ft., both brick and concrete, two 10 in. pumps each 10,000 gal. daily capacity, one 8 in. pump, 3,750,000 gal. daily capacity, electrically operated. $80,000. W. A. Baehr, 122 South Michigan Ave., Chicago, engr. J. Dreger, Oshkosh, archt.

Wis., Sheboygan Falls—See "Sewers."

Wis., Sheboygan Falls—Having plans prepared watermains and sewers in Park, Main, Detroit, Chicago, Adams, Hickory and Washington Sts., incl., 10,000 ft. 6 in. c.i. watermains, 10 hydrants, new well, and auxiliary pumping unit, 1 mi. 8-10 in. sewers, 11 manholes. $35,000. J. Donohue & Co., 602 North 8th St., Sheboygan, engrs.

Ia., What Cheer—Making plans for impounding reservoir and filtration plant. $20,000. Brown & Cook, Ottumwa, engrs.

Kan., Smith Center—Had plans prepared waterworks system. $200,000. Black & Veatch, 701 Mutual Bldg., Kansas City, Mo., engrs. Noted Feb. 15.

Waterworks (Continued)

Mo., Kirksville—Feb. 24. to vote on $200,000 bonds for new pumps, filtration plant, tank, tower, new electrical plant and transmission line. Total cost $275,000. Black & Veatch, 701 Mutual Bldg., Kansas City, engrs.

Mo., Kirkwood—Voted $105,000 bonds for new waterworks. Plan is to pump water from deep wells on Meramec River to Kirkwood. C. E. Smith, Ry. Exch. Bldg., St. Louis, consult. engr. Noted Feb. 8.

Mo., Lathrop—Election soon to vote on $75,000 bonds complete waterworks system. Preliminary plans in progress. A. T. Archer & Co., 609 New England Bank Bldg., Kansas City, engrs.

Mo., Westplains—Voted $25,000 bonds to drill 1,800 ft. well. Will also purchase new pump.

Tex., Canton—Attorney Generals Dept., Austin, approved $23,000 bond issue for waterworks improvements. Address Mayor. Noted Nov. 30.

Tex., Knox City—Plans waterworks improvements. $45,000. Address A. E. Arnold, mayor.

Tex., Rotan—Plans waterworks improvements. $50,000. Address L. C. Miller, mayor.

Okla., Clinton—Defeated $45,000 bonds for waterworks and electrical extensions. New election later. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs. Noted Dec. 28.

Okla., Snyder—City rejected bids extending waterworks system, incl. one well 20 ft. diameter, 45 ft. deep, pump house complete, one 250 gal. per minute triplex motor driven outfit complete. Will readvertise. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs. Noted Dec. 28.

Okla., Wynnewood—Voted $85,000 bonds for extensions to water works plant and electrical system. Noted Dec. 21.

Colo., Calhan—See "Industrial Works."

Ont., Belleville—Soon receives bids waterworks improvements, incl. steel intake pipe, gasoline driven motor supply mains and purification plant. $300,000. Gore, Nasmith & Storrie, Confederation Life Bldg., Toronto, engrs. Noted Feb. 1.

Que., Montreal—Plans to expend $1,000,000 for improvements to city aqueduct system, chiefly reservoirs and filtering basins. H. A. Terreault, dir. pub. wks., engr.

Ont., Toronto—Plans duplicate waterworks capable of handling 100,000,000 imperial gal. per day, incl. intake, filters, chlorination apparatus, pumps, domestic and fire connections, reservoir, etc. $12,000,000-$14,000,000. R. C. Harris, City Hall, engr.

Ont., Toronto—Dept. Pub. Wks., City Hall, plans to extend high pressure water system in Sherbourne St. Dist. incl. 10.000 lin.ft. pipe, 12 in. up, hydrants, valves, etc. $198,027. R. C. Harris, city engr.

BIDS DESIRED

N. Y., Brooklyn—March 20, by Bd. Water Supply, Municipal Bldg., New York, constructing Park Slope and Ft. Hamilton conduits, etc., here, Contr. 197. B. F. Einbigler, secy.; adv. this issue

La., DeQuincy—See "Industrial Works."

O., Cincinnati—March 1, by A. Hornberger, dir. Pub. Serv., reinforcing two 40 x 70 ft. tanks by sand blasting on inside, spot welding reinforcing mesh to same, gunite the surface, reinforce concreting and brick facing outside. $75,000. A. Hiller, supt. Water Wks. Dept.

O., Cleveland—March, 2, c.i. mains in Muskoka Ave. N. E. from East 185th St. to point 1,180 ft. westerly, Neff Rd. N. E. from Lake Shore Blvd. N. E. to point 480 ft. southerly, Rosecliff Ave. N. E. from Lake Shore Blvd. N. E. to point 750 ft. northerly, Rosena Ave. N. E. from point 367 ft. west of East 185th St. westerly 1,070 ft., Angelus Ave. S. E. from point 205 ft. east of East 120th St. to point 111 ft. east of East 123rd St., Greenwich Ave. S. E. from point 7 ft. east of W. L. E. 109th St. to pipe in East 114th St., Lenacrave Ave. S. E. from point 188 ft. west of East 120th St. to point 138 ft. east of East 123rd St., Manor Ave. S. E. from point 296 ft. east of East 90th St. to west line of East 109th St., East 143rd St. from Benwood Ave. S. E. to Harvard Ave. S. E., Biddulph Ave. S. W. from West 58th St. westerly to city limits, Bangor Ave. S. W. from Fulton Rd. S. W. to West 58th St., West 54th St. from Biddulph Ave. S. W. to Bangor Ave. S. W., West 56th and West 57th Sts. from Biddulph Ave. S. W. to pipe n Bangor Ave. S. W., Natchez Ave. S. W. rom pipe in Bway. Rd. S. W. to point 1' ft. east of West 28th St., Wetzel Ave. S. W. from Pearl Rd. S. W. to West 44th Pl., West 116th St. from pipe in Bellaire Rd. S. W. to Highland Rd., S.W. R. Hoffman, City Hall, engr.

Wis., Hartford—March 1, 150,000 gal. rein.-con. reservoir, alternate bids on rectangular reservoir, containing 233.3 cu.yd. concrete and 7,385 sq.yd. earth excav. and on circular concrete reservoir, 212.2 yd. concrete and 684 yd. excav. J. Donohue & Co., 608 North 8th St., Sheboygan, engr. Noted Feb. 15.

Minn., Slayton—March 5, 1 deep well pump, 2 plunger, belt driven, for 8 in. well, 90 in. 2 plunger steel rods, capacity of pump 120 gal. per min. against head of 200 ft. B. Tietema, city clk.

Ark., Piggott—March 2, by City Clerk, drilling 2 deep wells and casing same complete. Pumping equipment, laying of mains, building power house, tower and tank, will be let at later date. A. C. Moore, 221 West 3rd St., Joplin, Mo., engr.

Tex., Ft. Stockton—March 8, waterworks improvements, incl. c.i. pipe, appliances, pumps, constructing pump houses, concrete ground storage reservoir, tank foundations, furnishing and erecting 75,000 gal. elevated steel tank and tower. Terrell, Bartlett Engineers, 612 Calcasieu Bldg., San Antonio, consult, engrs.

Okla., Wynnewood—Feb. 26, by City Clerk, 100,000 gal. tank and tower, power plant, pipe lines, wells and electric distribution system, involving 175 cu.yd. concrete, 8,000 ft. 8 in., 120 ft. 6 in. and 120 ft. 4 in. c.i. pipe, 2 tripler pumps, two 350 hp. oil engine generator sets complete with switchboards. $85,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Ont., Weston—A. G. Pierson, supt. Water, Power & Light Comn., receiving bids auxiliary pump in connection with waterworks system, probably 1,000 g.p.m. 3 stage centrifugal pump for fire purposes.

BIDS RECEIVED

N.Y., St. George—N. J. Hayes. comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, opened bids Feb. 13, mains in Decker, Forest, Lexington, Post, Richmond and Washington Aves., etc., from N. De Stefano, 257 Glenn Ave., Tompkinsville, $102,000; Paladino Contg. Co., 437 East 120th St., New York, $129,000; Knight & Demicco, 448 East Tremont Ave., New York, $131,000. Noted Feb. 8.

O., Bexley (Columbus P. O.) — See "Streets and Roads."

O., Cleveland—Cuyahoga Co. for 16.160 ft. 6 and 8 in. c.i. mains in Impvt. 16C of Co. Water Dist., from Langahan Constr. Co., Marshall Bldg. $40,197, (90 days); Kassouff & Co., 3182 West 25th St., $41,509, (60 days).

CONTRACTS AWARDED

N. Y., Binghamton—Bd Contr. & Supply, to R. D. Wood & Co., 400 Chestnut St., Phila., 1,000 lin.ft. 4 in. pipe $61.50 per ton, 4,000 lin.ft. 6 in. pipe $57.90 per ton. Noted Feb. 1.

O., Cleveland—Cuyahoga Co. installing 31,800 ft. 6-10 in. c.i. mains in Impvt. 16B of County Water Dist., to Gantose Constr. Co., Columbia Bldg., $176,647 Noted Feb. 15.

O., Sandusky—Erie Co., 23,600 ft. 4 and 6 in. c.i. mains in Co. Sewer Dist. 2, to Homberger & Wagar, Camp and Fillmore Sts., $66,112. Noted Feb. 1.

Wis., Fond du Lac—To Natl. Cast Iron Pipe Co., 122 South Michigan Ave., Chicago, 1,000 ft. 4 in. pipe in 12 ft. lengths $54.45 per ton, 12,000 ft. 6 in. pipe in 16 ft. lengths $55.45, 3,000 ft. 8 in. pipe in 12 ft. lengths $54.45, 4 in. special castings $111.20, 6 in. and larger special castings $101.20.

Wis., Milwaukee—Corporation. curb and meter cocks, and meter couplings, to H. Mueller Mfg. Co., 517 Cerro Gordo St., Decatur, Ill., $9,485; 6 in. gate valves, to B. Hoffmann Mfg. Co., 257 6th St., $4,300; fire hydrants, to R. D. Wood, 2100 Locust St., Phila. $15,350. Noted Feb. 1.

Wis., Milwaukee—Furnishing c.i. water pipe and castings to U. S. Cast Iron Pipe & Fdry. Co., 122 South Michigan Ave., Chicago, $134,000; sluice gates and valves, to Chapman Valve Mfg. Co., Indian Orchard, Mass. $38,000. Noted Feb. 1.

Kan., Alma—To C. J. McCoy Constr. Co., Emporia, waterworks, incl. 30,360 ft. 2, 4 and 6 in. c.i. pipe $0.50, $0.95 and $1.20, concrete reservoir $2,500, standpipe $4,000, etc., sewers incl. 22,141 ft. 8, 10 and 12 in. vitr. pipe $0.45, $0.55 and $0.75, flush tanks $90, manhole $50, drop manholes $75, 12 in. c.i. pipe $3.50, etc.; totals $34,907 and $30,186 respectively. Noted Jan. 25.

Mo., Kansas City—J. R. Daniels. Purch. Agt., City Hall, to U. S. Cast Iron Pipe & Fdry. Co., Interstate Bldg., 600 ton 6 in. Class C and 250 ton 8 in. Class C c.i. pipe $54.60 per ton, 100 ton 12 in. Class B and 150 ton Class C $54.10, 420 ton 16 ft. length pipe $54.90; to Michigan Valve & Hydrant Co., 3631 Parkinson St., Detroit, Mich., 150 fire hydrants $63.75 each.

Tex., Quanah—For 6 mi. pipe line and 50,000 gal. concrete reservoir, to James Constr. Co., Southwestern Life Bldg., Dallas, $60,000; 2 pumping stations, to L. Martin, Quanah, $4,000. Noted Feb. 1.

Okla., Guthrie—Extending water mains, sewers, etc., to Municipal Excavator Co., 200 East Main St., Oklahoma City, $15,972 and $17,419 respectively. Noted Feb. 1.

Okla., Morris—Filter plant, pipe line, pumping machinery and earthen dam, incl. 6,000 ft. of 6 in. c.i. pipe, 22,000 cu.yd. excav., etc., to Sherman Iron Wks., 10 East Main St., Oklahoma City, $43,084. Noted Jan. 18.

Okla., Oklahoma City—For one 5,600 gal. per minute centrifugal pump to Allis-Chalmers Mfg. Co., West Allis, Milwaukee, Wis., $1,485; one 8,400 gal. per minute centrifugal pump to N. S. Sherman Machine & Iron Co., 18-32 East Main St., $1,450.

China, Manchuria—See "Railways."

Sewers

PROPOSED WORK

N. Y., Endicott—See "Streets and Roads."

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., rejected bids opened Jan. 16, storm water sewer and appurtenances in 25th St. Will readvertise. Noted Jan. 25.

N. C., Raleigh—See "Buildings."

Wis., New Holstein—Preliminary plans in progress for sewer and water systems. $125,000. J. Donohue & Co., Acker Bldg., Sheboygan, engrs.

Wis., Sheboygan Falls — See "Waterworks."

Neb., Omaha—Soon takes bids constructing storm sewers in Grace St. from 8th to 15th Sts., 11th and Grace Sts. to 13th and Locust Sts., extending Saddle Creek, Mud Creek and Minn Luca sewers. $875,000. H. Beal, city engr.

Tex., Elgin—Plans sanitary sewer improvements. $35,000. Address Mayor.

Tex., Stamford—Having preliminary plans prepared disposal plant complete. $40,000-$50,000. J. B. Hawley, Cotton Exch. Bldg., Ft. Worth, engr.

Calif., Los Angeles — See "Streets and Roads."

BIDS DESIRED

O., Bexley (Columbus, P. O.)—See "Streets and Roads."

Mich., Almont—March 2, by H. F. Bowman, clk., 3,745 ft. 6 in., x 1,130 ft. 8 in., 4,070 ft. 10 in., 1,660 ft. 12 in., 850 ft. 15 in., 300 ft. 18 in. and 350 ft. 24 in. storm and sanitary sewers in various streets and alleys. R. E. Harrison, 351 Summit-Cherry Bldg., Toledo, O., engr.

Mich., Monroe—Feb. 26 by F. M. Kressbach, clk., 4,070 ft. storm sewers in East 3rd, Scott and Wadsworth Sts., vitr. crock and concrete. $35,000.

Mich., Royal Oak — Feb. 26, by P. H. Beauvais, city mgr., 13,430 ft., 10-30 in. vitr. sewer. $40,000. Hoad, Decker, Shoecraft & Drury, Ann Arbor, engrs. Noted Nov. 30.

Mich., Springwells—Feb. 27 by B. P. Esper, clk., 1,348 ft. 66 in., and 2,280 ft. 60 in. brick, concrete or rein.-con. sewer in Sewer Arm, Sect. 34. $70,000. C. W. Hubbell, 2348 Penobscot Bldg., Detroit, consult. engr.

Wis., Beloit—March 2, by Pub. Wks. Com., 1,267 ft. sanitary outfall sewer in State St. from State line to Broad St., bids on precast concrete or vitr. clay pipe, 1,027 ft. 8-27 in. in 10-12 ft. cut, 50 ft. 24 in. in 12-14 ft. cut, 95 ft. 6 in. curb services in 8-12 ft. cut, 95 ft. 6 in. curb services in 10-12 ft. cut. G. E. Heebink, City Hall, engr.

Wis., Marion—March 22, by J. K. Buhr, village clk., sanitary sewers in various streets, incl. 8,311 ft. 8-12 in. vitr. pipe, also 6 in. house connections. $25,000. O. F. Weissgerber, City Hall, Appleton, engr.

Wis., Milwaukee—March 2, by Sewerage Comn., 508 Market St., extending intercepting sewerage system. J. H. Fowles, secy.; adv. this issue. This corrects report in Feb. 15 issue.

Mo., Harrisonville—Feb. 28, by C. A. Burke, city clk., rein.-con. disposal plant, 45,000 ft. 6-12 in. sewers, 19 flush tanks, etc. W. B. Rollins & Co., 521 Ry. Exch. Bldg., Kansas City, engrs. Noted Feb. 1.

Sewers (Continued)

Mo., Neosho—Feb. 27, by H. A. F. Cloud, city clk., sanitary sewers in Sect. 1 (Pub. Sewers) 32,561 lin.ft. 8-15 in. pipe, 8,306 lin.ft. 0-6 ft., 13,543 lin.ft. 6-8 ft., 7,663 lin.ft. 8-10 ft., 2,278 lin.ft. 10-12 ft., 796 lin.ft. 12-14 ft. 161 lin.ft. 14-16 ft., 7 lin. ft. 16-18 ft. and 35 lin.ft. 18-20 ft. trenching, 825 cu.yd. rock excav., etc.; Sect. 2 (Dist. 1) 13,081 lin.ft. 8 in. pipe, 4,262 lin.ft. 0-6 ft., 6,909 lin.ft. 6-8 ft., 1,834 lin.ft. 8-10 ft. and 176 lin.ft. 10-12 ft. trenching, 845 cu.yd. rock excav., 2,400 lin.ft. ¾ in. galvanized iron pipe laid; Sect. 3 (Dist. 2) 1,956 lin.ft. 8 in. pipe, 425 lin.ft. 6-8 ft., 970 lin.ft. 8-10 ft. and 561 lin.ft. 10-12 ft. trenching, 400 lin.ft. ¾ in. galvanized pipe laid, etc.; Sect. 4 (Dist. 3) 52,667 lin.ft. 8 in. pipe, 1,770 Y branches, 11,503 lin.ft. 0-6 ft., 19,862 lin.ft. 6-8 ft., 14,017 lin.ft. 8-10 ft., 4,943 lin.ft. 10-12 ft., 2,153 lin.ft. 12-14 ft., 258 lin.ft. 14-16 ft. and 15 lin.ft. 16-18 ft. trenching, 6,975 cu.yd. rock excav., 6,300 lin.ft. ¾ in. galvanized iron pipe laid. Black & Veatch, 701 Mutual Bldg., Kansas City, engrs. Noted Jan. 4.

Ark., Piggott—March 2, by City Clerk, 10 mi. 8-15 in. sanitary sewers. A. C. Moore, 221 West 3rd St., Joplin, Mo., engr.

Ore., Portland—March 5 for 6-18 in. cement, tile or concrete sewers in Hyland St., $2,962, 64th St. $2,615, 65th St. $2,193, 86th St. $1,565, 41st St. $15,967, 45th St. $9,925, 32nd St. $680, Morgan St. $899, and Powell Valley Rd., $2,539, total length 22,966 ft. O. Laurgaard, city engr.

Calif., Fresno—March 1, by City Council, sewers in Stanislaus and H Sts., etc., 1,162 lin.ft. 24 in., 397 lin.ft. 22 in., 400 lin.ft. 20 in. and 400 lin.ft. 18 in. concrete pipe, 400 lin.ft. 12 in., 937 lin.ft 10 in and 435 lin.ft. 8 in. vitr. pipe, etc. W. F. Stranahan, city engr. Noted Feb. 8.

BIDS RECEIVED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, opened bids Feb. 14, sewers in (1) East New York Ave., engrs. est. $8,773, (2) East 7th St., engrs. est. $8,517, (3) East 12th St., engrs. est. $7,990, (4) Ocean Ave., engrs. est. $4,122, (5) Crown St., engrs. est. $3,473, (6) Cleveland St., engrs. est. $2,296, (7) Belmont Ave, engrs. est. $1,663, (8) Colonial Rd., engrs. est. $989, (9) Ave. O, engrs. est. $350, from A. Mannino, 263 86th St., (1) 97.49% of engineers estimate, (4) 99.97% (5) 95%; Tomasetti & Co., Inc., 1133 60th St., (1) 104.5% (2) 125% (4) 99.97% (9) 97%; C. F. Vacharias, 643 40th St., (1) 109% (2) 95% (3) 90.7% (4) 93% (8) 107%; Nazzaro & Querrier, (2) 114% (3) 94% (8) 109% (9) 115%; B. Peconi & Son, (2) 125% (6) 115%; G. L. Schrade, 693 Flatbush Ave., (3) 90.4% (4) 96% (5) 114.4% (6) 76% (7) 94% (8) 109% (9) 119%; J. Jennings, Belle Harbor, (5) 97% (6) 109% (7) 124% (8) 125%; S. Ambrosio, 1016 60th St., (6) 115% (7) 125%. Noted Feb. 8.

N. Y., St. George—J. A. Lynch, pres. Richmond Boro, Boro Hall, opened bids Feb. 13, temporary sanitary sewer in Sand Lane, etc., from J. W. Murphy, $59,645; J. Johnson Sons, 455 Bway., West New Brighton, $60,294; Giovanni Orrico & Co., $60,221. Noted Feb. 8.

Colo., Denver—Opened bids (1) ½ mi. sg. South Side Special Sanitary Sewer Dist. 7, 27,000 ft. 8 in. vitr. pipe, (2) 5 mi. Eastern Capital Hill Special Sanitary Sewer Dist., 8-12 in. vitr. pipe, from Gibbons & Lawrence Constr. Co., 1041 Galapage St., (1) $25,794, (2) $24,108; Standard Eng. Co., S & C Bldg., (1) $26,546, (2) $21,283; J. Collier, 63 South Logan St., (1) $27,178, (2) $24,368. Noted Jan. 18.

Utah, Ogden—Opened bids Feb. 6, 8-12 in. vitr. sewers in Dist. 147, from Wheelwright Constr. Co., 2476 Washington Ave., $59,000; Taylor & Child, Ogden (street address not available), $61,300; Security Bridge Co., Ogden (street address not available), $62,500. Noted Jan. 25.

Calif., Los Angeles—Grading site for outfall sewer treatment plant, involving grading and disposal of 709,000 cu.yd. sand, from J. Balch, 696 12th St., San Pedro, $97,704; E. C. Breedlove, Los Angeles (street address not available), $102,900; C. R. Ross, Los Angeles (street address not available), $107,800.

CONTRACTS AWARDED

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sewers in Hemlock and Justice Sts., to J. Gallo, 203 Division St., Brooklyn, $8,712 and $2,851 respectively; 89th, 92nd and 115th Sts., to Napolitano Constr. Co., $7,916, $3,704 and $3,365 respectively; 114th St., to Spinella & Muccini, $2,944. Noted Feb. 15.

N. Y., New York—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., sewers in Bronx and Pelham Parkway, to C. W. McDonald, 1010 Webster Ave., $107,515; Edenwald Ave., to Gregorio & Babriele, 1129 8th Ave., $27,692; Barkley Ave., to Knight & Demicco, 448 East Tremont Ave., $48,130; Williamsbridge Rd., to McDonald Wilson Co., 1803 Gleason Ave., $7,880; Hobart Ave. and Odell St., to C. E. Farrell Contg. Co., 1981 Pilgrim Ave., $5,003 and $4,513 respectively. Noted Feb. 15.

O., Sandusky—Erie Co., 16,915 ft. 15 in. vitr. clay sewer in Co. Sewer Dist. 2, to United Eng. & Constr. Co., Sandusky (street address not available) $29,774. Noted Feb. 1.

Kan., Alma—See "Waterworks."

Kan., Pittsburg — Intercepting sewers, pumping station and sewage disposal plant, to Beeson Mchy. Co., 308 Mutual Bldg., Kansas City, Mo., $98,801. Noted Jan. 25.

Kan., Wichita—For 4,610 ft. 30-66 in. segment block sewer, 8,275 ft. 12-27 in. D.S. tile sewer, 60 manholes, 103 inlets, 2,990 yd. paving, 1 outlet protection, 4,200 ft. walk removed and renewed, in Storm Sewer Dist 24, to Foster & Skaer, Wichita, (street address not available), $85,140.

Ark., Van Buren — Sanitary sewers in Sewer Imprvt. Dist. 4, to Eads Constr. Co., P. O. Box 1215, Oklahoma City, Okla., $22,974. Noted Jan. 25.

Okla., Guthrie—See "Waterworks."

Okla., Tulsa — Constructing concrete storm sewer in Dist. 51 S, Katy Relief, to J. K. Roach, 1003 South Quincy St., $13,825.

Bridges

PROPOSED WORK

N. Y., Arkport—See "Excavation, Drainage, Irrigation."

N. Y., Binghamton—Making plans concrete and steel bridge, on Riverside Dr. $500,000. W. Meuser, c/o Concrete Steel Eng. Co., 21 Park Row, New York City, engr. W. E. Weller, city engr. Noted Dec. 28.

O., Columbus—See "Streets and Roads."

Minn., Blakeley—State Hy. Dept., St. Paul, plans steel bridge, concrete abutments, over Minnesota River, here, between Scott and Sibley Counties. $40,000. Scott and Sibley Counties to prepare preliminary plans; final plans by State Hy. Dept., 1246 University Ave., St. Paul. D. Childs, Shakopee, engr. Scott Co. E. R. Patterson, Gaylord, engr. Sibley Co.

Mo., Mexico—Plans election to vote on $100,000 bonds for 300 ft. steel and rein.-con. bridge, 20 ft. roadway, over tracks of Chicago & Alton R.R. and Wabash R.R. R. S. McKinney, Mexico, engr.

Calif., Nicolaus—Sutter Co. (Yuba City), having plans prepared rein.-con. bridge, 2,201 ft. long, 40 ft. spans, concrete piles, over Feather River, here. $188,000. E. L. Cope, 58 Sutter St., San Francisco, engr.

Calif., San Anselmo—Election in March to vote on $75,000 bonds constructing bridges, probably concrete. Noted Sept. 14.

Calif., Yuba City — See "Excavation, Drainage, Irrigation."

Ont., Toronto—Having surveys made for replacing Glen Rd. Bridge at Rosedale Ravine with 600 ft. concrete and steel structure, 66 ft. wide, probably steel arch construction with concrete abutments and piers. $600,000. R. C. Harris, city engr.

Ont., Toronto—Plans to replace present bridge on Spadina Ave. with 300 ft. steel or concrete structure, 66 ft. wide. $87,400. R. C. Harris, city engr.

BIDS DESIRED

N. H., Manchester—March 20, by Surveyor of Dept. Highways, South End Bridge over Merrimack River and Boston & Maine R.R. Fay, Spofford & Thorndike, 200 Devonshire St., Boston, Mass., engrs.; adv. this issue.

Wis., Black River Falls—Feb. 28, by Wisconsin Hy. Comn., at Courthouse, Black River Falls, 591 ft. deck plate girder bridge 27 ft. roadway, two 6 ft. sidewalks, seven 84 ft. spans, 2 rein.-con. abutments, 5 combination solid and pedestal piers, etc., here. W. C. Buetow, Madison, bridge engr.

Kan., Columbus — March 8, by Comrs. Cherokee Co., 2 arch bridges, one 80 ft., other 130 ft., also 2 slab bridges, one 18 ft., other 16 ft., on Spring Valley Rd., 1,590 cu.yd. rein.-con. and 67½ ton steel. $50,000. H. W. Tyrell, Columbus, engr.

Kan., Oskaloosa—March 15, by Comrs. Jefferson Co., 130 ft. span Marsh arch bridge on Golden Belt Highway, 20 ft. $30,000. R. C. Ham, Oskaloosa, engr.

BIDS RECEIVED

Florida—See "Streets and Roads."

Ohio—See "Streets and Roads."

Wis., Appleton—Two rein.-con. and steel bridges across Fox River, (1) at Lawe St. (2) at Cherry St., from Stein Constr. Co., 204 Grand Ave., Milwaukee, (1) $58,831, (2) $123,551; Wausau Iron Wks., Wausau, (1) $62,881 (2) $207,770; Zendala Constr. Co., Manitowoc, concrete work $28, concrete in abutments $22. Noted Jan. 11.

Missouri — State Hy. Dept., Jefferson City, opened bids Feb. 2, (1) one 140 ft. steel truss and twelve 20 ft. I beam spans, 20 ft. roadway, 2 rein.-con., piers, etc., over west fork of Grand River, State Project Route 4, Sect. 18, Gentry Co. (2) one 100 ft. and two 50 ft. steel truss spans, 20 ft. roadway, 2 rein.-con. piers and 2 rein.-con. bents, over Middle Fork Grand River, State Project Route 4, Sect. 18, Gentry Co. (3) five 40 ft. I-beam and one 20 ft. rein.-con. slab spans, 20 ft. roadway, 2 rein.-con. abutments, etc., State Project Route 4, Sect. 18, Gentry Co. (4) one 30 ft. rein.-con. deck girder and one 80 ft. steel truss spans, 20 ft. roadway, 4 rein.-con. abutments, State Project Route 14, Sect. 36, Laclede Co. (5) one 60 ft. steel truss span, 20 ft. roadway, 2 rein.-con. abutments, over Crooked Creek, State Project Route 9, Sect. 52, Lincoln Co. (6) one 100 ft. steel truss span, 2 rein.-con. bents, 20 ft. roadway, over Salt Fork, State Project Route 20, Sect. 22, Saline Co. (7) three 30 ft. and four 20 ft. I-beam and one 70 ft. steel truss spans, 20 ft. roadways, 8 rein.-con. bents, and 2 rein.-con. piers, etc., over Drainage Ditch, State Project Route 9, Sect. 151, Pemiscot Co. (8) fourteen 25 ft. I-beams, one 120 ft. and two 76 ft. steel truss spans, 20 ft. roadway, 2 rein.-con. piers, etc., over Castor River Diversion Channel, State Project Route 51, Sect. 24, Bollinger Co. (9) five 80 ft. rein.-con. spandrel filled arch spans, 4 concrete piers, over Robidoux Creek, near Waynesville, State Project Route 14, Sect. 42, Pulaski Co. (10) one 140 ft. steel truss span, 2 rein.-con. abutments, over north fork of South Fabius River, State Project Route 15, Sect. 11, Knox Co. (11) one 40 ft. deck girder and one 50 ft. steel truss spans, 20 ft. roadways, 4 rein.-con. abutments, State Project Route 14, Sect. 7, Lawrence Co. (12) one 60 ft. low steel truss span with one 20 ft. rein.-con. slab approach span each end, 2 rein.-con. piers, 2 rein.-con. bents, etc., over east fork of Little Blue River, State Project Route 2, Sect. 4, Jackson Co. (13) one 100 ft. high truss steel span and one 50 ft. low truss steel approach span, 20 ft. roadway, 2 rein.-con. piers and 2 rein.-con. bents, over Little Blue River, State Project Route 2, Sect. 4, Jackson Co. (14) three 50 ft. steel truss and one 25 ft. rein.-con. deck girder spans, 20 ft. roadways, 2 concrete piers, 2 rein.-con. bents and 2 rein.-con. abutments, State Project Route 2, Sect. 6, Jackson Co. (15) one 35 ft. rein.-con. deck girder and one 80 ft. steel truss spans, 20 ft. roadways, concrete abutments, etc., State Project Route 8, Sect. 12, Caldwell Co., from:

General Constr. Co., Syndicate Trust Bldg., St. Louis, (1) $29,599 (5) $23,137 (7) $24,433.

List & Weatherly Constr. Co., 416 Ry. Exch. Bldg., Kansas City, (1) $30,340 (2) $25,020 (3) $$22,082.

Illinois Steel Bridge Co., Jacksonville, Ill., (1) $30,439.

Cook & O'Brien Constr. Co., 305 Ry. Exch. Bldg., Kansas City, (2) $23,998 (14) $21,948.

Kansas City Bridge Co., 510 Orear-Leslie Bldg., Kansas City, (2) $25,084 (8) $59,403.

Monarch Eng. Co., Fall City, Neb., (3) $21,166.

Cameron Joyce & Co., Keokuk, Ia., (3) $22,399.

General Constr. Co., Mammoth Spring, (4) $19,388.

St. Louis Foundation Co., St. Louis, (street address not available), (4) $19,414.

Pioneer Constr. Co., 101 New York Life Bldg., Kansas City, (4) $19,793 (6) $12,642 (8) $57,268.

Enterprise Constr. Co., 1236 Syndicate Trust Bldg., St. Louis, (5) $20,847.

J. P. Sparks, Kirkwood, (5) $20,818.

J. H. Hartman, St. Joseph (street address not available) (6) $12,948.

Western Bridge Co., Harrisonville, (6) $12,953.

Reynolds, Blaker & Crews, Carterville, (7) $22,834.

Hogan & Humphreys, Fredericktown, (7) $24,330.

Vincennes Bridge Co., Vincennes, Ind., (8) $59,526.

Hedges & Weeks Constr. Co., Springfield (street address not available), (9) $42,757.

Koss Constr. Co., 2818 5th St., Des Moines, Ia., (9) $44,035 (12) $13,322 (13) $25,938 (14) $23,212 (15) $25,861.

J. P. Lyon, Robinson, Ill., (9) $45,280.

Bridges (Continued)

W. H. and G. H. Turner, Memphis, (10) $19,437.

Palmer, Girton & Duffey, Logansport, Ind., (10) $21,363.

A. P. Munsen, 1185 4th Ave., Marion, Ia., (10) $21,369.

Kelly & Underwood, Granby, (11) $19,-444.

Carterville Constr. Co., Carterville, (11) $19,598.

Baker & Keontz, Carthage, (11) $20,106.

J. Stanton, 6th and Kiowa Sts., Leavenworth, Kan., (12) $13,427.

W. A. Ross, Kansas City, (street address not available), (12) $13,448 (13) $26,009 (14) $23,103.

Alzina Constr. Co., Unity Bldg., Springfield, Ill., (13) $25,914.

Harrison Eng. & Constr. Corp., Wichita, Kan. (street address not available), (15) $23,331.

Highway Constr. Co., Tulsa, Okla. (street address not available), (15) $25,561. Noted Jan. 25.

CONTRACTS AWARDED

S. C., Darlington — See "Streets and Roads."

Ill., Burnham—Cook Co. Highway Dept., Chicago, Rall type bascule bridge over Little Calumet River, here, in line of Torrance Ave., to Strobel Steel Constr. Co., 53 West Jackson Blvd., Chicago. $173,462. Noted Jan. 4.

Ia., Sac City—Sac Co. one 8-x 8 ft. and one 8 x 10 ft. box culvert, 7 I-beam spans 22-36 ft. long, 2 pony trusses, 80 ft. spans, to Lundgren-Reis Co., 65 College St., Des Moines, $47,500.

Wyo., Green River — State Hy. Dept., Cheyenne, 286 ft. steel truss bridge, 3 spans, cantilever arch, concrete abutments, here, to Allied Contractors, Inc., 404 Peters Trust Bldg., Omaha, Neb., $39,622. Noted Feb. 1.

Oregon—See "Streets and Roads."

Dams

PROPOSED WORK

N. C., Hickory—J. D. Elliott plans dam, 65 ft. high, on Catawba River, 3 mi. from here, known as Thorton power site, to develop 33,000 hp. A. M. Kistler, Morganton, is also interested.

Calif., Oroville—Oroville-Wyandotte Irrigation Dist. soon takes bids constructing Los Creek Dam, Jorgensen constant angle arch type, 112 ft. high, 480 ft. long on top radius, 40 ft. long on bottom, 6 ft. wide at top, 23½ ft. wide at bottom, involving 9,500 cu.yd. plain concrete, $125,000, sluice gates $3,000, headgates for flumes $3,000, rights of way $16,000, road changes $5,000. S. J. Norris, Oroville, engr.

Calif., Placerville — See "Excavation, Drainage, Irrigation."

Ont., Thessalon—Garden River Improvement Co., Ltd., received charter from Government to build dams, slides, booms and improve river, to handle saw logs. $40,000. C. N. Carrey, dir.

CONTRACTS AWARDED

Okla., Morris—See "Waterworks."

Railways

PROPOSED WORK

Wisconsin—Milwaukee-Western Electric Ry. Co., 253 3rd St., Milwaukee, plans new electric railway to Fox Point via Juneau, Beaver Dam, etc., 65 mi. long. $1,500,000.

Kansas — See "Industrials" under Emporia.

California—Market Street Ry. Co., 58 Sutter St., San Francisco, plans double track from Pacific City to San Mateo, $150,000; single track from Pacific City to San Mateo, $68,500; double track from San Mateo to Beresford, $355,000; substation, $30,000.

California—Union Pacific Ry. Co., 610 South Main St., Los Angeles, plans railroad tracks in and about Belvedere Gardens, on an industrial tract recently acquired by company for shop buildings, etc. To exceed $25,000. R. L. Huntley, Omaha, Neb., ch. engr.

South Dakota—See "Buildings under Sioux Falls."

Nevada—Betty O'Neal Mines, Battle Mountain, plan railroad from Lewis Junction on Nevada Central R. R., to Austin, approximately 9 mi.

Washington — Longview, Portland & Northern Ry. Co., Kelso, soon takes bids constructing railway grade over 25 mi. proposed road from Kelso.

BIDS DESIRED

Quebec—L. D. Hudon, 116 Mountain Hill, Quebec, receiving bids 25 mi. portable track, 24 or 36 in. gauge, weight 16 to 20 lb. per yd., also 80-100 side dump cars, V shaped or hinged box type, 1½-3 yd. capacity.

GATE VALVES AND HYDRANTS—BROOKLYN, N. Y.

Bids were opened Jan. 30, by Bd. Water Supply, Municipal Bldg., New York City, for furnishing and delivering gate valves and hydrants for Mt. Prospect, Park Slope, Fort Hamilton and Clove Conduits and Narrows Siphon No. 2 of Catskill Aqueduct, (A) Michigan Valve and Fdry. Co., Detroit, Mich.; (B) F. Ferguson & Son, 12th and Clinton Sts., Hoboken, N. J.; (C) Caldwell-Wilcox Co., Newburg; (D) Coffin Valve Co., Neponset, Mass. The unit bids were as follows:

		A	B	C	D
4	48-in. turbine-driven gate-valves	$4,416.65	$4,500.00	$4,800.00	$5,000.00
29	48-in. hand-operated gate-valves	3,286.64	3,300.00	3,800.00	3,875.00
15	36-in. gate-valves	2,410.69	2,250.00	2,350.00	2,477.00
14	24-in. gate-valves	1,486.38	1,575.00	1,500.00	1,653.00
33	20-in. gate-valves	1,023.07	1,080.00	1,160.00	1,192.00
2	16-in. gate-valves	1,083.91	990.00	950.00	1,185.00
40	12-in. gate-valves	359.09	490.00	500.00	535.00
2	8-in. gate-valves	34.98	45.00	50.00	59.00
50	6-in. gate-valves	24.48	30.00	29.00	27.00
9	5-in. gate-valves	24.88	30.00	29.00	27.00
45	6-in. hydrants	56.90	62.00	66.00	56.00
	Extended totals	$224,320	$231,370	$250,611	$259,949

WATER-WORKS IMPROVEMENTS—RAPID CITY, S. D.

Bids were opened Jan. 3, by city, for water-works improvements, (1) concrete reservoir, (A) Concrete Eng. Co., Rapid City, Ia., (awarded contract); (B) Pittsburgh-Des Moines Co., Des Moines, Ia.; (C) Ward & Weighton, Sioux City, Ia. (2) trenching and pipe laying, (A) A. H. Dobson, First Natl. Bank Bldg., Lincoln, (awarded contract); (B) Camden Constr. Co., Bensen, Minn.; (C) Pittsburgh-Des Moines Co., Des Moines (3) furnishing c.i. pipe, (A) Dunhamel Co., Rapid City, (awarded contract); (B) Hendrie & Bolthoff Co., Denver, Colo.; (C) U. S. Pipe & Fdry. Co., Kansas City, Mo. The unit bids were as follows:

	A	B	C
4,250 cu.yd. earth excavation exclusive of trench	$0.75	$0.30	$1.00
1,140 cu.yd. furnishing material and placing concrete	22.20	25.00	35.00
187,000 lb. furnishing and placing reinforcing bars and miscellaneous steel	4.95	9.00	.85
Extended totals	$37,752	$36,900	$37,752

	A	B	C
990 lin.ft. hauling and laying 4-in. c.i. pipe 12 ft. lengths	$0.24	$0.26	$0.45
26,150 lin.ft. hauling and laying 6 in. c.i. pipe 12 ft. lengths	.32½	.31	.45
5,735 lin.ft. hauling and laying 8 in. c.i. pipe 12 ft. lengths	.30	.42	.45
5,375 lin.ft. hauling and laying 10 in. c.i. pipe 12 ft. lengths	.30½	.53	.47
16,436 lin.ft. hauling and laying 12 in. c.i. pipe 12 ft. lengths	.54	.65	.50
450 lin.ft. hauling and laying 16-in. c.i. pipe 12 ft. lengths	.45	1.00	1.00
990 lin.ft. hauling and laying 4 in. c.i. pipe 16 ft. lengths	.22	.25	1.00
26,150 lin.ft. hauling and laying 6 in. c.i. pipe 16-ft. lengths	.30	.30	1.00
5,735 lin.ft. hauling and laying 8 in. c.i. pipe 16 ft. lengths	.27	.40	1.00
5,375 lin.ft. hauling and laying 10 in. c.i. pipe 16 ft. lengths	.28	.50	1.00
16,436 lin.ft. hauling and laying 12 in. c.i. pipe 16 ft. lengths	.51	.60	1.00
450 lin.ft. hauling and laying 16 in. c.i. pipe 16 ft. lengths	.43	2.00	1.00
52 hauling and setting new fire hydrants	11.25	10.00	15.00
14 hauling and resetting old fire hydrants	18.50	11.00	15.00
26 hauling and setting 4 in. gate valves—boxes	5.00	5.00	6.00
57 hauling and setting 6 in. gate valves—boxes	5.00	6.00	6.00
7 hauling and setting 8 in. gate valves—boxes	6.25	7.00	6.00
10 hauling and setting 10 in. gate valves—boxes	6.90	10.00	10.00
4 hauling and setting 12 in. gate valves—boxes	6.90	10.00	12.00
1 hauling and setting 16 in. gate valves—boxes	10.00	....	....
2,800 lin.ft taking up, hauling and relaying 4 in. cast iron pipe	.32	.35	.40
675 lin.ft taking up, hauling and relaying 8 in. kalamein	.40½	.50	.50
Taking up, hauling and relaying 9 in. kalamein	.40½	.55	.50
500 cu.yd. rock excavation in trenches	2.00	3.00	2.00
Rapid Creek Crossing (lump sum)	2,000.00	750.00	1,125.00
Extended totals 12 ft. lengths	$26,753	$29,691	$31,244
Extended totals 16 ft. lengths	$25,276	$28,772	$31,244

	A	B	C
10.7 tons furnishing 4 in. "class B" B. & S. c.i. pipe 12 ft. lengths	$65.50	$65.50	$68.50
1,130 tons furnishing 6 in. and larger B. & S. c.i. pipe 12 ft. lengths	61.50	61.50	64.50
278.1 tons furnishing 6 in. "class A" B. & S. c.i. pipe 12 ft. lengths	64.50	64.50	67.50
35,200 lb. furnishing B. & S. special castings	.04¾	.04¾	123.50
Extended totals	$89,805	$89,805	$94,563

China, Manchuria—Municipality of Harbin, waterworks and 20. mi. street car system (30 cars will operate over same), to Beckman & Linden Eng. Corp., Santa Fe Bldg., San Francisco, Calif., $3,000,000. Contractor taking bids for rails, rail equipment, trolley poles, copper wire, electrical and steel equipment, (as much material as is possible will be purchased on Pacific Coast).

Florida—See "Miscellaneous."

BIDS RECEIVED

California—Pacific Southwest R.R., Lompoc, constructing 4 mi. standard gage railroad from Lompoc to White Hills, (1) Proposition A, complete construction using new rails, (2) Proposition B, only such work as will be necessary to prepared roadbed for track laying, from Willett & Burr, 512 Mission St., San Francisco, (1) $160,000 (2) $120,000.

CONTRACTS AWARDED

Washington — Longview, Portland & Northern Ry. Co., Kelso, will build 8¾ mi. (first unit of proposed 30 mi. railroad), by day labor. Noted Dec. 7.

Excavation, Drainage, Irrigation

PROPOSED WORK

N. Y., Arkport—Steuben Co., Courthouse (Bath) plans draining 1,000 acres of muck land by constructing 12 to 18 ft. ditch. Project also includes 2 bridges, costing $15,-000. W. Stempfe, c/o Co. Farm Bureau, Bath, comr.

Calif., Palo Alto—Having plans prepared developing Mayfield Slough, 42 acre site, roadway on levee to landing, $5,550; timber quay wall, 500 ft. long, $8,214; dredging channels, $2,600; grading and graveling landing, $2,750; warehouse, $5,400, etc. J. F. Bxybee, Jr., city engr.

Calif., Placerville—El Dorado Irrigation Dist. had preliminary plans prepared constructing canals and storage dams for district, comprising 78,000 acres. R. W. Hawley, Claus Spreckels Bldg., San Francisco, consult. engr.

Calif., Yuba City—Recl. Dist. 1550 had plans prepared reconstructing levees and enlarging canals, new bridges and culverts, installing telephone system, river bank protection, etc. To exceed $500,000. J. Crowley, California Fruit Bldg., Sacramento, engr.

BIDS DESIRED

Wis., Jefferson—Feb. 27, by J. W. Buerner, secy. Jefferson Co. Drainage Bd. 16,750 ft. tile drain in Farm Drain 5, in Watertown and Farmington Twps., incl., 4,325 lin.ft. 6-8 in. and 11,415 lin.ft. 12-18 in. tile drainage and 26,000 cu.yd. excav. for shallow outlet ditch. Private plans.

Oregon—March 5, by State Hy. Dept., Salem, grading (dredger work) Coquille-Fat Creek Sect., Roosevelt Coast Highway, Coos Co., 20,000 cu.yd. excav., 198,000 cu. yd. dredger excav., etc.

BIDS RECEIVED

Calif., Terra Bella—Terra Bella Irrigation Dist., furnishing well casing, 14 gage, 300 lin.ft. of each of following sizes, 10, 12, 14 and 16 in., from Montague Pipe & Steel Co., Hobart Bldg., San Francisco, $530; Western Pipe and Steel Co., 444 Market St., San Francisco, $530; Consolidated Pipe Co., Bakersfield, $530. Noted Jan. 18.

Railways (Continued)

CONTRACTS AWARDED

Calif., Merced—Merced Irrigation Dist., constructing North Side Canal, in Div. 1, 145,000 cu.yd. excav., to C. R. Adams, Planada, $94,120.

Streets and Roads

PROPOSED WORK

N. Y., Endicott—Had plans prepared and plans election to vote on $35,107 bonds for brick pavements, $27,257 bonds warrenite pavements and $6,777 bonds sewers. C. F. Hunt, village engr.

N. Y., Westfield—Plans paving Union St. between 2nd and Main Sts., brick. $25,000. Engineer not announced.

Pa., Altoona—Plans to open and extend 13th Ave. 50 ft., include removal of houses, excav., etc. City's share of cost $20,000 to $25,000. H. J. Baum, city engr.

Pa., Scranton—Plans paving Hampton St. from Meridian to South Main Sts., sheet asphalt and stone blocks. $34,085. W. La Fontaine, dir. pub. wks.

W. Va., Clarksburg—Harrison Co. plans constructing road from Goosman Bridge to Lewis Co. line, $40,000; from West Milford Pike to Country Club line, $30,000; from Lumberport to Laura Lee, $40,000; from Wallace to Irving Siding, $20,000; from Bridgeport to Booth Creek, $20,000; from Bridgeport to Taylor Co. line, $5,001; Pikedown Ten Mile Creek, $50,000; Manayaka for 1 mi. $5,000. G. L. Coyle, co. engr.

W. Va., Parkersburg—April 3, to vote on $300,000 bonds for paving various streets. L. G. Merrill, Parkersburg, engr.

N. C., Asheville—City plans to expend $550,000 during year for constructing sidewalks, streets and waterworks. G. Roberts, mayor.

N. C., Lincolnton — Lincoln Co. voted $500,000 bonds hardsurfacing various roads. J. B. Johnston, comr.

Fla., West Palm Beach—Palm Beach Co. having plans prepared and soon takes bids paving with local material 13 mi. road between the lack and west end of Jupiter-Indiantown Highway. $33,000. C. Holstlaw, co. engr.

Ala., Birmingham—Plans widening 2 mi. 1st Ave. from 41st to 61st Sts. $80,000. A. J. Hawkins, City Hall, engr. Jefferson Co. Bd. Revenue to appropriate toward cost.

Tennessee—State Hy. Comn., Nashville, making plans grading and surfacing 2½ mi. road from Academy Ave. at Clarksville to bridge over Cumberland River, 16 ft., Montgomery Co., probably river gravel. $70,000. D. Q. McComb, Nashville, ch. engr.

Tenn., Nashville—Takes bids in early summer paving 2 blocks Cedar St. from Public Sq. to 4th Ave. and 6 blocks Cedar St. from 4th to 10th Aves., both granite block on cement. W. W. Southgate, city engr.

O., Columbus—Franklin Co. making plans grading, bridging and paving 0.45 mi. Alkire Rd. 2.16 ft., Pleasant Twp., bituminous macadam, $9,301; 0.53 mi. Norton Rd. 2.16 ft., Pleasant Twp., waterbound macadam. $9,665; 1.93 mi. Rose Hill Rd., 16 ft., Truro and Jefferson Twps., waterbound macadam, $40,835; 2.78 mi. Harbord Rd., 18 ft., Sharon and Blendon Twps., bituminous macadam, $83,668. C. C. Lattimer, co. surv.

O., Dayton — Plans curbing, guttering, laying storm sewer and paving 3,300 ft. Riverview Ave. from Yuncker to Vermillion Rds., 30 ft., 6,500 lin.ft. concrete curb and gutter, 3,500 lin.ft. 18 in. vitr. pipe, 11,000 sq.yd. vitr. brick or asphalt, $58,749, 3,700 ft. Richmond Ave. from Five Oaks to Marathon Sts., 30 ft., 8,000 lin.ft. concrete curb and gutter, 4,000 lin.ft. 18 in. vitr. sewer, 12,300 sq.yd. vitr. brick, wood block, asphalt or concrete, $73,882; paving, curbing and guttering 1,700 ft. Fairview Ave. from Main St. to Darr Ave., 40 ft., 3,500 lin.ft. concrete curb and gutter, 7,600 sq.yd. vitr. brick, $31,705. I. E. Houk, city engr.

Ind., Boonville—Warrick Co. plans grading and graveling 19,008 ft. Susott Rd., 16 ft. $27,500. S. Bohanon, Boonville, engr.

Ind., Evansville—Vanderburg Co. plans rock screening 14,921 ft. Koring Rd., 16 ft., $26,501; grading and graveling 13,685 ft. Covert and Hege Rds., 16 ft., $25,181. R. W. Meissinger, Evansville, engr.

Ind., Huntingburg — Dubois Co. plans grading and surfacing with crushed stone, 14,360 ft. John Steineker Rd., 16 ft. $25,635. E. Pickhardt, Huntingburg, engr.

Ind., Logansport—Cass Co. plans graveling 17,128 ft. Martin Kesling Rd., 16 ft. $27,181. J. Bennett, Logansport, engr.

Ind., Valparaiso—Porter Co. plans concrete paving 3.494 mi. Theodore Gloyeske Rd., 16 ft., $51,591; 2.505 mi. Edward Esserman Rd., 16 ft., $29,244; 1.167 mi. Horace Payne Rd., 18 ft., $32,916; 1.368 mi. Charles O. Carlson Rd., 18 ft., $26,101. F. R. McNeice, Valparaiso, engr.

Ind., Warsaw—Kosciusko Co. plans grading and graveling 15,460 ft. John W. Mauzy Rd., $26,146; 16,237 ft. Henry Ulmer Rd., $26,684; 14,960 ft. John M. Tuttle Rd., $25,727; graveling 17,132 ft. James H. Stinson Rd., $28,552, all foregoing 16 ft. S. S. Boggs, Warsaw, engr.

Ill., Columbia—City and State soon take bids paving and curbing 6,000 ft. Main St., 36 ft., 24,000 sq.yd. 7 in. concrete, 12,000 lin.ft. concrete curbing, 4,618 cu.yd. excav., etc. $30,000 (city's share). Total $50,000. Former bids rejected. W. A. Fuller, 1917 Ry. Exch., St. Louis, Mo., engr. Noted Dec. 14.

Wis., Beloit—Takes bids early in March paving Dewey St. from Wisconsin St. to White Ave., Bushnell St. from Prospect Ave. to College St., Emerson St. from Milwaukee Rd. to Sherwood Dr., Eaton St. from White Ave. north, Gerald St. from Park to Wisconsin Aves., Harrison St. from Emerson to Keeler Sts., Hinsdale St. from Strong Ave. to Keeler St., La Salle St. from White Ave. to Keeler St., Randall St. from Park to Porter Aves., Sherwood Dr. S. from Emerson St. to city limits, Tower St. from Church to College Sts., Kenwood St. from 8th to Bluff Sts., Merrill St. from McKinley Ave. to 4th St., Middle St. from Bluff to 4th Sts., Moore St. from Shirland to West Grand Aves., North St. from Bluff to 6th Sts., Oak St. from Locust to Liberty Sts., Rouse St. from 4th to 3rd Sts., Roosevelt St. from Bluff to 4th Sts. Bids on 1 course rein.-con., 3 in. vertical fibre brick, sheet asphalt, asphaltic concrete and vibrolithic concrete. G. E. Heebink, City Hall, engr.

Wis., Oshkosh—Had plans prepared and soon takes bids paving Arlington Pl., Elm, Cleveland, Grove, Lemmer, 9th, 6th and 16th Sts., Ashland and Monroe Aves., bids on concrete, tar filled macadam, asphalt or tar bituminous macadam, vibrolithic and 2 course rein.-con., 53,309 sq.yd. pavement, 41,576 lin.ft. concrete curb and gutter, 17,296 cu.yd. earth excav., etc. $200,000.

Neb., Fremont—Having plans prepared and soon takes bids concrete paving 2nd St. from Main to Bell Sts., Dist. 55, also 5th to 10th Sts., also Dist. 56. L. M. Roessler, Fremont, engr.

South Dakota—State Hy. Dept., Pierre, takes bids about March grading 14.5 mi. Federal Aid Project 141, Hughes Co., 101,500 cu.yd. excav., 310 cu.yd. Class A concrete, 3,000 lb. reinforcing steel, etc. $75,290. F. D. Hughes, ch. engr.

S. D., Aberdeen—Takes bids latter part of March, paving about 75 blocks. $300,000. F. Le Cocq, city engr.

N. D., Grand Forks—Grand Forks Co. plans to grade 10.5 mi. dirt road on Federal Aid Project 117. $26,000. J. Ingram, co. surv.

Mo., Kirksville — Takes bids March 5, paving about 40 blocks, different types, incl. concrete and brick. B. Crabtree, Kirksville, engr.

Tex., Beaumont—City Com. takes bids within 30 days improving Pine, Mariposa, Fannin and Railroad Sts. $125,000. R. M. Fulweiler, city engr.

Tex., Daingerfield — Morris Co. making plans, grading and gravel surfacing 5.21 mi. State Highway 35, 16 ft. $26,835. McClendon & Purnell, co. engrs.

Okla., Barnsdall—City Clerk takes bids about April 1, paving Main and 5th Sts., 10,000 sq.yd. vertical fibre brick on concrete. $60,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Colo., Denver—Making plans and takes bids in about 3 months concrete paving 12 blocks in Alley Paving Dist. 92, $19,318; 12 blocks in Alley Paving Dist. 93, $21,468; 12 blocks in Alley Paving Dist. 94, $25,860; 12 blocks in Alley Paving Dist. 95, $19,258. A. K. Vickery, City Hall, engr.

Utah, Ogden—Weber Co. plans hard surfacing 2 mi. road from Ogden City limits to sugar factory at West Ogden, 18 ft. $50,000.

California—Sacramento Co. (Sacramento) and Sutter Co. (Yuba City), plan paving 26.48 mi. Natomas Blvd. to Oswald, probably concrete. State will appropriate $100,000, land owners $150,000, Sutter and Sacramento Counties $175,000 each. C. W. Deterding, Courthouse, Sacramento, engr.

Calif., Auburn—Placer Co. plans 8 mi. road between Colfax and Iowa Hill. $30,000. Supervs. Placer Co. will appropriate $10,000, government like amount, and balance will be raised by private subscription.

Calif., Burlingame — Having plans prepared paving 6 blocks San Mateo Ave. between Oak Grove Ave. and Easton St., 36 ft. To exceed $30,000. C. Torello, city engr.

Calif., Fresno—Takes bids about March 1, improving Woodward St. between Bway. and Anna Sts., 16,838 sq.ft. grading, 14,400 sq.ft. asphalt paving, 1,231 sq.ft. concrete pavement, 1,129 sq.ft. concrete gutter, 487 ft. concrete curb, 2,700 sq.ft. walks; Home Ave. between Lucerne and Van Ness Sts., 62,728 sq.ft. grading, 48,035 sq.ft. asphalt paving, 5,396 sq.ft. concrete gutter, 22,895 lin.ft. concrete curb, 11,083 sq.ft. walks, etc. W. F. Stranahan, city engr.

Calif., Grass Valley—Plans paving various streets. To exceed $25,000. Engineer not selected.

Calif., Los Angeles—Soon takes bids improving Railroad Ave. between north city limits and Anaheim St., 216,778 sq.ft. 8 in. concrete pavement, 193,283 sq.ft. grading and oil, 15,050 cu.yd. excav., 2,346 cu. yd. fill, 43,000 lb. reinforcing; Compton Ave. between Vernon St. and city limits, 306,386 sq.ft. 6 in. concrete pavement, 6,891 cu.yd. excav., 1,560 ft. house sewers, etc.

Calif., Los Angeles—Union Pacific Ry. Co., 610 South Main St., plans 2 mi. asphalt or concrete pavement and 1 mi. sewers in industrial tract in vicinity of Belvedere Gardens. R. L. Huntley, Omaha, Neb., ch. engr.

Calif., Oroville—Butte Co. having plans prepared gravel surfacing 3 mi. and paving with asphalt macadam 9 mi. Chico-Butte City Rd.; grading and surfacing with crushed rock 16 mi. Humboldt Rd.; paving with asphalt macadam 9 mi. Palermo-Honcut Rd., 5.2 mi. Neal Rd. to Paradise; constructing 3 mi. road between Doe Mill and Humboldt. H. H. Hume, co. engr.

Calif., Palo Alto — See "Excavation, Drainage, Irrigation."

Calif., San Francisco — City and San Francisco Co. having plans prepared reducing sidewalk width from 15 ft. to 12 ft. on Valencia St. between Market and Mission Sts., involves resetting of curbs, sidewalk repairs, etc. $70,000. M. M. O'Shaughnessy, city engr.

Calif., Santa Ana—Election in March to vote on $30,000 bonds paving West 5th St. W. G. Knox, city engr.

Calif., Santa Barbara—Santa Barbara Co. plans grading and oil macadam paving roads in Santa Ynez Valley Sect. Ultimate cost $2,000,000. O. H. O'Neill, co. surv.

Calif., Santa Rosa—City plans paving 10 mi. streets. L. L. Mills, city engr.

Ont., Toronto—Toronto & York Good Rds. Comn., 57 Adelaide St., plans 85 mi. new road incl. bridges, culverts and probably some macadam pavements. E. A. James, 57 Adelaide St. E., engr.

BIDS DESIRED

Conn., Norwalk—March 6, by C. L. Barton, mayor, and City Council, constructing road leading to new park, known as Calf Pasture Beach; adv. this issue.

N. Y., Brooklyn—See "Miscellaneous."

N. Y., Brooklyn—Feb. 28, by E. Riegelmann, boro pres., Boro Hall, paving roadway of Dumont Ave. from Tapscott St. to Howard Ave., preliminary second-hand granite on sand, roadways of Tapscott St. from Blake Ave. to East 98th St. and Blake Ave. from Tapscott St. to Howard Ave., permanent asphalt on 6 in. concrete; grading, curbing and flagging New Utrecht Ave. from 80th to 86th Sts., Parrott Pl. from 90th to 92nd Sts., 66th St. from 18th to 19th Aves.

Pa., Ebensburg—March 2 by Supervs. West Carroll Twp., J. Shero, chn., c/o Cambria Co. Controller, Ebensburg, reconstructing 8,135 ft. brick road from Barr Twp. line to Bakerton in West Carroll Twp., 18 ft. $70,000. F. A. Kline, Bank Bldg., Carrolltown, engr.

S. C., Laurens — Feb. 28, by Supervs. Laurens Co., grading and topsoiling 6 mi. State Route 10, from survey station 15-00 to survey station 341-00, 35,606 cu.yd. excav., 19,332 cu.yd. topsoil.

Alabama—March 20, by W. S. Keller, state highway engr., Montgomery, grading, gravel surfacing and constructing creosote timber bridges on 23.649 mi. road from Tuscaloosa Co. line to Reform and Carrollton, 78 acres clearing, 222,769 cu.yd. common and 8,964 cu.yd. solid rock excav., 256,588 sta.yd. overhaul, 2,000 lin.ft. 6 in. pipe for subdrains, 3,104 lin ft. 15-24 in. pipe, 915 cu.yd. concrete, 60,648 lb. reinforcing, 63,650 cu.yd. imported gravel surfacing, within 1 mi. haul, 176,000 units, half mile additional haul, 309,278 ft. treated timber bridges, 15,010 lin.ft. treated timber piles, 2,456 sq.yd. 2 in. bituminous surfacing, cold mix, 10,803 lb. structural steel, etc. Noted Jan. 25.

Louisiana—March 6 by State Hy. Comn., Reymond Bldg., Baton Rouge, constructing 4.96 mi. New Orleans-Mississippi Highway, from Pearl River Station to East Pearl River, Federal Aid Project 126-B, St. Tammany Parish. J. M. Fourmy, ch. engr.

O., Cleveland—Feb. 28, grading, curbing and paving Marvin Ave. S.W. from West 44th to West 46th Sts., Scovill Ave. S.E. from East 26th to East 55th Sts., Tampa Ave. S.W. from West 21st to West 30th Sts., East 117th St. from Union Ave. S.E. to Craven Ave. S.E., East 117th St. from Kinsman Rd. S.E. to Union Ave. S.E., East

Streets and Roads (Continued)

118th St. from Havel Ave. S.E. to Imperial Ave. S.E., East 145th St. from Kinsman Rd. S.E. to Milverton Rd. S.E., West 33rd St. from Broadview Rd. S.W. to Devonshire Rd. S.W., West 48th and West 49th Sts., from Memphis Ave. S.W. to Park Dr. S.W., West 71st and West 73rd Sts. from Wakefield Ave. N.W. to Franklin Ave. N.W., West 115th and West 116th Sts., from Madison to Locust Aves. R. Hoffman, City Hall, engr.

O., Columbus—Feb. 27, grading, curbing, laying water services and sewer connections, and paving 2,021 ft. Belmont Ave. from High St. to Pacemont Rd., 24 ft., asphalt $30,135, brick $33,520; 575 ft. Redland Alley from Blackberry Alley to Bruck St., 19½ ft., concrete $4,255, brick $5,420. R. H. Simpson, 262 South High St., city engr.

O., Ravenna—Feb. 26, grading and paving Meridan St., brick, concrete, asphaltic concrete or asphalt. $58,000. A. S. Helbig, city engr. and dir. Pub. Serv.

Michigan—March 6 by State Hy Dept., Lansing, grading, surfacing and building structures on 3.726 mi. Assessment Dist. Rd. 448, 16 ft., Clinton and Ionia Counties; 2.205 mi. Assessment Dist. Rd. 431, 16 ft., Ionia Co. F. F. Rodgers, state highway engr.

Mich., Ionia—Feb. 27 by Comrs. Ionia Co., grading, gravel surfacing and building structures on 3.013 mi. Assessment Dist. Rd. 18, 12 ft. R. N. Williams, Ionia, engr.

Mich., Mason—March 3 by Comrs. Ingham Co., grading, gravel surfacing and building structures on 3.222 mi. Lansing-Pine Lake Rd. 3, 9 ft. B. M. Murray, Mason engr.

Mich., Royal Oak—March 6 by H. P. Oliver Land Co., Royal Oak, grading and paving 16,000 sq.yd. streets in Watch Farm Subdivision of H. R. Oliver Land Co. tract, 7 in. concrete $70,000. J. F. Paddock, 507 Fine Arts Bldg., Detroit, engr.

Wis., Evansville—March 2, by Bd. Pub. Wks., paving, etc., East Main St. from east end of present pavement to east city limits, 10,692 sq.yd. pavement, 2,320 cu.yd. earth excav., 4,325 lin.ft. concrete curb and gutter, 1,505 lin.ft. concrete gutter, etc.; West Main St. from west end of present pavement to 4th St., 5,208 sq.yd. pavement, 1,460 cu.yd. earth excav., 1,300 lin. ft. concrete curb and gutter, 1,625 lin.ft. concrete gutter, etc. Bids on rein.-con. or vibrolithic concrete. E. B. Parsons, Jefferson, engr.

Wis., Hartford—March 1, paving Union, State, Main, Branch and Grand Sts., 25 ft., 35,103 sq.yd. 2 course rein.-con. with granite top, 1 course rein.-con. or vibrolithic rein.-con., 16,938 lin.ft. concrete curb and gutter, 9,785 cu.yd. grading. $30,000. J. Donohue & Co., 608 North 8th St., Sheboygan, engrs.

Wis., Madison—March 21, 22 and 23, paving various streets, 25 ft., concrete and asphalt, concrete curb and gutter. $461,742. E. E. Parker, City Hall, engr. Noted Jan. 25.

Wis., Milwaukee — Feb. 26, by W. J. Cary, clk. Milwaukee Co., concrete surfacing, etc., 2 mi. Lisbon Rd. 1 commencing at junction with South Fond du Lac Rd., 24 ft., 27,600 sq.yd. concrete, 3,600 cu.yd. earth excav., etc. Wisconsin Hy. Comn., Madison, engrs.

Wis., Waukesha—Feb. 28, by Waukesha Co. Road and Bridge Com., concrete surfacing, etc., State Trunk Highway 83, 18 ft., 28,325 sq.yd. concrete, 14,096 cu.yd. earth excav., 1,135 cu.yd. borrow, 3,545 lb. reinforcing, etc. Wisconsin Hy. Comn., Madison, engrs.

Wis., West Bend—March 2, by Washington Co. State Road and Bridge Com., grading and surfacing 3.4 mi. Milwaukee-Germantown Rd., beginning at Waukesha Co. line and extending northwesterly along county Trunk B to South Germantown, 40,136 cu.yd. earth, 1,293 cu.yd. solid rock and 12,220 cu.yd. borrow excav., 35,700 sq. yd. 18 ft. concrete paving, etc. C. A. Distelhorst, co. highway engr.

Ia., Chariton—Feb. 27, by City Clerk, paving 43 blocks City Project 24, 3,784 cu.yd. excav., 3,336.4 sq.yd. pavement, etc. Iowa Hy. Comn., Ames, engrs.

Minn., Duluth—Feb. 26, by J. A. Farrell, city comr., paving with concrete on macadam and laying concrete sidewalks on 2,330 ft. Glendale St. from 49th Ave. east to 50th Ave. E., 4,720 lin.ft. 6 in. concrete curbing, 22,900 sq.ft. concrete sidewalks, 4,500 cu.yd. excav., 8,420 sq.yd. concrete, 1,150 ft. 12-24 in. sewer pipe, 1,000 ft. 3 in. drain tile. $39,119; Regent St. from 40th Ave. east to 45th Ave. E., 4,090 lin.ft. 6 in. integral concrete, 1,500 sq.yd. concrete sidewalks, 5,900 sq.yd. concrete, 805 ft. 15-36 in. sewer pipe, etc., $27,293; 2,330 ft. Tioga St. from 49th to 54th Aves. E., 4,560 lin.ft. 6 in. concrete curbing, 4,560 sq.ft. concrete gutter, 13,850 sq.ft. concrete sidewalk, 5,050 cu.yd. earth excav., 5,550 sq.yd. concrete, 1,310 ft. 15-24 in. sewer pipe, etc., $30,923; 1,864 ft. Dodge St. from 43rd Ave. east to 47th Ave. E., 3,486 lin.ft. 6 in. concrete curbing, 17,000 sq.ft. concrete sidewalk, 3,020 cu.yd. earth excav., 5,040 sq.yd. concrete, etc., $25,333. E. K. Coe, city engr.

Kan., Columbus—March 8, by Comrs. Cherokee Co. paving and grading 4.634 mi. Spring Valley Rd., Federal Aid Project 142, 18 ft., 48,796 sq. yd. concrete, 75,000 cu.yd. earth and 480 cu.yd. rock excav. H. W. Tyrrell, Columbus, engr. Former bids rejected. Noted Jan. 4.

Kan., Wichita—Feb. 26, by City Com., 30,000 sq.yd. concrete, 10,000 sq.yd. sheet asphalt, 18,000 sq.yd. asphaltic concrete, and 15,000 sq.yd. brick pavement, 23,000 cu.yd. excav., 30,000 lin.ft. combined curb and gutter, 1,100 ft. single curb, 4,600 ft. gutter. P. L. Brockway, City Bldg., engr.

Kan., Wichita—Feb. 28, by City Clerk, paving 46 blocks, incl. 30,000 yd. concrete, 10,000 yd. sheet asphalt 18,000 yd. asphaltic concrete, 15,000 yd. brick, 23,000 yd. dirt excav., 4,600 ft. gutter, 1,100 ft. curb. P. L. Brockway, city engr.

Oregon—See "Excavation, Drainage, Irrigation."

Quebec—March 7, by I. L. Boulanger, Dept. of Rds., Quebec, oil macadam roadway on 30,406 ft. Levis-St. Lambert Highway, Parish of St. Angele de Laval, 16 ft. M. Nectkar, engr. Dept. of Rds.

Ontario — March 7, by W. A. McLean, deputy minister of Highways, University Ave. and Dundas St., Toronto, concrete paving 3.11 mi. from Kitchener, west, Contr. 916, 1.4 mi. from Welland, westerly, Contr. 862, mostly 24 ft., $250,000; asphaltic concrete paving on 7.5 mi. road from Stittsville to Bells Corners, Contr. 939, 24 ft., $400,000; macadam base course on 3.7 mi. from Farrans Point westerly, incl. some grading, Contr. 865, 5.5 mi. Clarence-North Plantagenet Rd., Contr. 866, 3 mi. from Farrans Point easterly, incl. some grading, Contr. 876, 4.8 mi. Cayuga-Nelles Corners Rd., Contr. 941, 5 mi. from Perth northeasterly, incl. some grading, Contr. 960, 1.9 mi. from point 1.25 mi. west of Summerstown, westerly, incl. some grading, Contr. 942, all 20 ft. wide, $360,000; grading, 7.1 mi. from Walkerton westerly, Contr. 867, 4.8 mi. from Harriston, westerly, Contr. 868, 1 mi. St. David-Queenstown Rd., Contr. 869, 2.3 mi. Beckettes Bridge-Forks Rd., Contr. 871, 0.4 mi. in Delhi, Contr. 872, 9.4 mi. St. Thomas-Aylmer Rd., Contr. 873, 1.6 mi. Proof Line, from Sarnia gravel road north, Contr. 874, 4 mi. Caledonia-Hagersville Rd., Contr. 875, 5.1 mi. Hagersville-Jarvis Rd., Contr. 914, Sligo Hill, Contr. 877, North Creek, Contr. 878, 3 mi. from Chatsworth, S. E., Contr. 880, 3.6 mi. from Chatsworth, northerly, Contr. 881, 4.7 mi. from Washage south, Contr. 961, 4.8 mi. from St. Marys, east and west, Contr. 848, total 400,000 cu.yd., $300,000; surface treating following macadam roads with tar, 13.2 mi. Niagara Falls-Welland Rd., Contr. 882, 16.4 mi. Dunnville-Cayuga Rd., Contr. 883, 7.9 mi. Caledonia-Hagersville Rd., Contr. 884, 9.5 mi. from Peterboro south, Contr. 885, $150,000; following bridge superstructure and overhead crossings, Arthur Bridge, Contr. 933, 3 bridges over Credit River, in Norval, Contr. 934, over Canadian Pacific R.R. on Clappison Hill, Contr. 935, Aux Sable River Bridge, Contr. 936, 2 bridges south of Brampton, and Sligo Hill Bridge, Contr. 917, (separate steel contracts); concrete culverts in Carrick Twp., Contr. 886, in Brant, Greenock and Kinloss, Contr. 887, in Kincardine, Contr. 888, in Holland, Sullivan, Derby and Sydenham, Contr. 889, in Artemesia, Glenelg and Holland, Contr. 890, in Holland, Contr. 891, in Melancthon, Contr. 892, in Proton, Artemesia and Melancthon, Contr. 893, in Artemesia and Glenelg, Contr. 940, in Normandy, Egremont, Bentinck and Glenelg, Contr. 956, $200,000, cement and reinforcing steel supplied by owner. G. Hogarth, University Ave. and Dundas St., ch. engr. dept. pub. wks.

BIDS RECEIVED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, opened bids Feb. 14, recurbing and paving (1) Bay 23rd St., grading, curbing and flagging (2) Conselyea St. (3) Maple St., asphalt paving (4) Conselyea St. (5) Ave. D, curbing and asphalt paving (6) Livonia Ave., grading, curbing, flagging and laying sidewalks on (7) 72nd St., fencing vacant lots on (8) Fulton St., cement sidewalks on (9) Warehouse Ave. (10) West 5th St. (11) West 30th St. (12) 18th Ave., etc., from Cranford Co., 52 9th St., (1) $5,126 (4) $4,745 (5) $8,497 (6) $7,186; Borough Asphalt Co., 1301 Metropolitan Ave., (1) $5,268 (4) $4,680 (5) $8,614 (6) $6,995; G. H. Cooper, 1674 Bway., New York, (2) $2,909 (3) $7,912 (8) $523 (9) $1,742 (10) $1,347 (11) $1,641 (12) $1,688; Simonelli & Sons, Inc., 26 Conselyea St., (2) $2,949 (3) $8,035 (7) $3,416 (9) $1,555 (10) $1,203 (11) $1,465 (12) $1,596; E. Balaban, 92 Morningside Ave., New York, (2) $5,225; J. P. Norton, 26 Sterling Pl., (3) $8,521; Cleveland Trinidad Paving Co., Flushing, (5) $9,369 (6) $7,784; F. Persicano, 350 Fulton St., (7) $3,881 (9) $2,033 (10) $1,588 (11) $1,324 (12) $2,226; T. B. Scott, 671 Halsey St., (7) $3,806; L. Stein, (8) $643; O. White, (8) $674. Noted Feb. 8.

Md., Baltimore—Grading, curbing and paving various streets, cement concrete and old granite blocks, Contr. 229 OCNA, from Aiello Constr. Co., Knickerbocker Bldg., $29,673; D. Marine, 8 East Lexington St., $30,611; T. F. Leonard, Brehms Lane near Belair Rd., $30,900. Noted Feb. 8.

Florida — State Hy. Dept., Tallahassee, surfacing 3.975 mi. Rd. 5 from Bradentown to Sarasota Co. line, Project 579, Manatee Co., (a) bituminous macadam (b) sheet asphalt, from J. F. Morgan Paving Co., Jacksonville, (street address not available) (a) $154,584; W. P. McDonald Constr. Co., Orlando, (b) $173,383; Barber-Fortin Co., Gainesville, (a) $187,630. Noted Feb. 1.

Florida—State Hy. Dept., Tallahassee, clearing, grading and surfacing 3 mi. road from Pensacola to Nunez Ferry, Escambia Co. (1) 26 acres clearing (2) 26,588 cu.yd. excav. (3) 52,800 sq.yd. plain cement surface (4) 140 cu.yd. concrete (5) 11,860 lb. reinforcing, etc., from Hancock Bros., Mobile, Ala., (1) $30 (2) $0.30 (3) $2.36 (4) $18 (5) $0.05, total $138,556. J. Gerkins, Pensacola, (1) $40 (2) $0.37 (3) $2.34 (4) $18 (5) $0.06, total $140,997. C. H. Turner, Pensacola, (1) $89 (2) $0.38 (3) $2.59 (4) $23.45 (5) $0.08, total $172,099; clearing, grading and broken stone base course on 5.378 mi. road from Sta. 422 south of Lake Stearns to Twps. 35 and 36, Highlands Co., from McCormick & Delaney, La Belle, $42,345; culverts on Project 505, Columbia Co., from Luten Bridge Co., York, Pa., $19,598. Noted Feb. 1 and 8.

Ohio—Dept. Highways and Pub. Wks., Columbus, opened bids Feb. 9, grading, bridging and paving roads with (a) asphalt macadam, oil (b) asphalt macadam, lake (c) tar macadam (d) brick (e) rein.-con. (f) bituminous concrete and brick, oil (g) bituminous concrete and brick, lake (h) warrenite bitulithic and brick (i) sheet asphalt, oil (j) sheet asphalt, lake, in following counties:

Crawford Co., Sect. "C" Bucyrus-Crestline Rd., 1.69 mi., from Losey Road Constr. Co., Kenton, (a) $46,580 (b) $50,567 (c) $46,580; H. Candell, Chatfield, (a) $47,940 (c) $47,940; W. Sousley Co., Ada, (a) $49,144; J. W. Carey, Ada, (b) $49,807; T. S. Constr. Co., Upper Sandusky, (b) $51,398; N. B. Putnam, Van Wert, (c) $48,118.

Cuyahoga Co., Sect. "A" Solon-Willoughby Rd., and Sect. "B-1" Chagrin Falls-Cuyahoga Falls Rd., 2.52 mi., from Ohio Contg. Co., Elyria (street address not available) (d) $152,736 (e) $121,932 (f) $133,177 (h) $144,847; McHugh Bros., Springfield (street address not available), (d) $156,948 (e) $125,281; Freshwater Constr. Co., Natl. Bldg., Cleveland, (d) $157,339; G. A. Stein, Niles (e) $121,343; Dorsey Constr. Co., Findlay, (f) $146,208 (g) $148,515 (h) $155,536; High Constr. Co., 903 Lorain Co. Bank Bldg., Elyria, (f) $152,111; Cleveland Trinidad Paving Co., The Arcade, Cleveland, (g) $156,082; Hinkle & Sullivan, Cincinnati (street address not available) (h) $156,269. Geauga Co., Sect. "J" Chagrin Falls-Greenville Rd., 2.182 mi., from J. A. Westrick, Napoleon, (d) $41,437; C. G. Fuller, Dover, (d) $42,798.

Meigrs Co., Sect. "M" Pomeroy-Athens Rd., 4.009 mi., from S. A. Palmer, Marietta, (e) $122,647; Ebersach Co., Pomeroy, (e) $123,068.

Mercer Co., Sect. "H-2" Celina-Greenville Rd., 4.28 mi., from R. Douast, Defiance, (e) $113,295; Hinton & Smalley, Celina, (e) $117,398; Eldorado Paving Co., Eldorado, (e) $117,448.

Sandusky Co., Sect. "S-2" Lima-Sandusky Rd., 2.349 mi., from J. H. Murphy Sons, Burgoon, (d) $96,825; Modern Constr. Co., Fremont, (d) $98,931 (i) $94,620 (j) $98,599; Franklin Asphalt Paving Co., 209 South High St., Columbus, (i) $99,577 (j) $105,428.

Huron Co., Sect. "K" and "J-1" Bellevue-Norwalk Rd., rein.-con. bridge, from W. A. Yeagle, Clyde, $15,646; Stout & Stout, Stoutsville, $15,995; Noble Bridge Co., Columbus (street address not available), $16,670.

Lorain Co., Sects. "D2 and "E" Cleveland-Elyria Rd., constructing extension and wings of 16 ft. arch culvert, from Elyria Constr. Co., 220 Elyria Blk., Elyria, $973; B. Sooy, Wellington, $1,061; C. W. Watson, Lorain, $1,143. Noted Feb. 1.

O., Bexley (Columbus P. O.) — S. W. Roderick, village clk., opened bids Feb. 13, grading, curbing, laying 8 in. mains, making necessary sewer connections and paving (1) 2,200 ft. Ardmore Rd., 24 ft. (2)

Streets and Roads (Continued)

2,200 ft. Cassingham Rd., 24 ft. (3) 2,000 ft. Fair Ave., 36 ft. (4) 550 ft. Seneca Park Pl., 24 ft.. (a) Trinidad asphalt (b) Mexican asphalt (c) Aztec asphalt, from Cleveland Trinidad Paving Co., Grand Theatre Bldg., Columbus, (1a) $48,571 (2a) $43,039 (3a) $50,783 (4a) $8,398; Franklin Asphalt Paving Co., 209 South High St., Columbus, (1a) $48,615 (1b) $47,769 (2a) $43,121 (2b) $42,302 (3a) $51,289 (3b) $49,952 (4a) $8,586 (4b) $8,393; A. G. Pugh, Columbus (street address not available), (1a) $47,636 (2a) $42,193 (3a) $50,062 (4a) $8,273; Grant-Boulton Co., Central Natl. Bank Bldg., Columbus, (1c) $44,366 (2c) $39,836 (3c) $49,443 (4c) $8,432. Noted Feb. 1.

O., Canton—Stark Co. opened bids grading and paving (1) 1.74 mi. Canton-Sherman Church Rd., 16 ft., (a) bituminous macadam, engrs. est. $53,950 (b) monolithic brick, engrs. est. $77,767 (c) brick combination concrete base and curb, engrs. est. $83,392 (2) 5 mi. Canton-Navarre Rd., 18 ft. (c) brick with combination concrete base and curb, engrs. est. $272,418 (d) slag base brick top, engrs. est. $271,912 (e) rein.-con., engrs. est. $243,888 (f) bituminous monolithic, engrs. est. $252,915. (g) bituminous concrete, engrs. est. $252,915, from P. Christenson & Sons, Yale Ave. N. W., (1a) $52,763 (2c) $235,021 (2d) $248,928 (2e) $207,678; Wise Bros., Canton (street address not available), (1a) $53,071; Urban Bros., Massillon, (1b) $65,683 (1c) $71,990; Mann Constr. Co., Canton (street address not available), (1b) $67,618 (1c) $72,411 (2c) $238,146; Garaux Bros., 735 Market Ave. S., (2c) $249,368 (2f) $251,419 (2g) $214,636; H. Corl, Canton (street address not available) (2d) $254,935 (2f) $252,915; Burd Constr. Co., 1043 Spring Ave. N. E., (2d) $260,594; Holmes Constr. Co., Canton (street address not available) (2e) $226,911; General Asphalt Paving Co., Canton (street address not available) (2g) $217,498. Noted Jan. 11.

Ind., Evansville—Vanderburgh Co., surfacing with crushed stone 16,400 ft. Green River Rd., from O. Edmon, Evansville, $25,795; Coulson & Reinicke, Evansville, $26,640; M. & P. Contract. Co., Evansville, $27,453. Engrs. est. $27,706. Noted Jan. 25.

Ind., Peru—Bd. Pub. Wks., paving 5,300 ft. 5th St., 7,973 lin.ft. combined concrete curb and gutter, 20,476 sq.yd. concrete, from Pike Constr. Co., Wabash, $68,300; C. P. Burke, Peru, $72,829; McCoun Constr. Co., Peru, $74,510. Engrs. est. $96,751. Noted Jan. 18.

Ind., Princeton — Gibson Co. surfacing with crushed stone (1) 40,112 ft. Graper Rd. (2) 5 mi. Barrett Rd., from F. H. Hull Co., Tipton, (1) $61,469 (2) $40,873; George & Thomas, Princeton, (2) $40,869. Noted Jan. 25.

Ind., Versailles—Ripley Co. opened bids Feb. 5, paving 9,061 ft. John Bland Rd., 16 ft., from H. Dobson, Osgood, $31,135. Engrs. est. $37,000. Noted Jan. 25.

Missouri — State Hy. Dept., Jefferson City, opened bids Feb. 2, improving with (a) asphaltic concrete (b) rock asphalt (c) brick (d) concrete, (1) 4.942 mi. road Kansas City east on Sni-a-bar Rd., 18 ft., State Project Route 2, Sect. 5, Jackson Co. (2) 4.964 mi. road west of Hamilton, 18 ft., State Project Route 8, Sect. 12, Caldwell Co. (3) 4.974 mi. road from St. Louis to Kansas City, 18 ft., State Project Route 2, Sect. 6, Jackson Co. (4) 4.1 mi. road from St. Louis to Kansas City, 18 ft., State Project Route 2, Sect. 3, Jackson Co. (5) road on Kansas City east on Sni-a-bar Rd., State Project Route 2, Sect. 4, Jackson Co. (6) 1.161 mi. road east of Brunswick, 30 ft., State Project Route 10, Sect. 25, Chariton Co. (7) 3.562 mi. road south of Hayti, 34 ft., State Project Route 9, Sect. 147, Pemiscot Co. (8) 0.665 mi. road south of Steele, 34 ft., State Project Route 9, Sect. 149, Pemiscot Co. (9) 3.383 mi. road south of Hayti, 34 ft., State Project Route 9, Sect. 146, Pemiscot Co. (10) 3,631 mi. road south of Holland, 34 ft., State Project Route 9, Sect. 151, Pemiscot Co. (11) 3.5 mi. road from Albany to Stanberry, 34 ft., State Project Route 4, Sect. 18, Gentry Co. (12) 4.702 mi. road east of Silvia, 30 ft., State Project Route 34, Sect. 13, Wayne Co. (13) 0.786 mi. road east of Novinger, 18 ft., State Project Route 6, Sect. 41, Adair Co. (14) 3.5 mi. road north of Edina, State Project Route 15, Sect. 11, Knox Co. (15) 3.379 mi. road west of Odessa, 34 ft., State Project Route 2, Sect. 8, Lafayette Co. (16) 1.278 mi. road from Waynesville southwest, 34 ft., State Project Route 14, Sect. 42, Pulaski Co. (17) 4.794 mi. road east of Carthage, 34 ft., State Project Route 14, Sect. 3, Jasper Co. (18) 4.938 mi. road from Jasper Co. line east, 34 ft., State Route 14, Sect. 7, Lawrence Co., from

ROAD WORK—WISCONSIN

Following are lowest three bids opened Jan. 31, by Fond du Lac County State Rd. & Bridge Comn., for improving 5.10 mi. Ladoga-Brandon-Ripon Rd., (A) Kroening Constr. Co., 221 Grand Ave.; (B) F. Doherty, 753 47th St.; (C) Froemming Bros., 1236 Humboldt Ave. Contractors all of Milwaukee. The unit bids were as follows:

	A	B	C
21,373 cu.yd. earth excavation	$0.79	$1.00	$0.95
1,000 cu.yd. loose rock excavation	2.00	1.75	2.00
100 cu.yd. solid rock excavation	6.00	4.00	4.00
47,890 sq.yd. concrete surface, exclusive of cement, inclusive of joints	1.69	2.03	2.10
16,202 bbl. handling cement	.55	.33	.40
209 cu.yd. culverts, exclusive of cement	25.00	24.00	23.00
154.7 cu.yd. bridges, exclusive of cement	25.00	30.00	26.00
395 lin.ft. standard guard rail	.90	.50	.60
25 posts	3.00	2.00	1.20
146,304 lb. reinforcing in place in pavement ½ in. and ¾ in.	.04	.05	.04
Extended totals	$124,530	$143,137	$144,541

ROAD WORK—KENTUCKY

Bids were opened Jan. 23, by State Highway Comn., Frankfort, for grading and draining 14.815 mi. State Project No. 5, Sect. B, Barbourville-London Rd., Knox Co., Federal Aid Project No. 61. (A) Costello Bros., Henson Bldg., Knoxville, Tenn.; (B) J. D. Crippen Constr. Co., Mercantile Bldg., Knoxville, Tenn.; (C) Ellis & Smeathers, Owensboro. The unit bids were as follows:

	A	B	C
104,851 cu.yd. earth excavation	$0.34	$0.35	$0.35
41,591 cu.yd. solid rock excavation	.70	.80	1.00
1,738 cu.yd. loose rock excavation	.70	.60	1.00
49,587 cu.yd. borrow excavation	.32	.35	.35
871 cu.yd. excavation for structures	.90	.75	1.00
235 cu.yd. foundation excavation, wet earth	2.00	2.00	2.00
707 cu.yd. foundation excavation, dry earth	.90	.75	1.00
80,984 yd. sta. overhaul	.02	.04	.02
11.44 acres clearing and grubbing	40.00	40.00	60.00
251 removing trees and stumps	3.50	3.00	6.00
200 lin.ft. removing existing pipe	.60	1.00	.50
12 cu.yd. class D concrete	60.00	50.00	50.00
1,524 lin.ft. 18 in. standard vitrified pipe	.....	1.90	2.00
592 lin.ft. 24 in. standard vitrified pipe	.....	2.90	2.75
1,104 lin.ft. 18 in. D. S. vitrified pipe	.....	2.15	2.25
596 lin.ft. 24 in. D. S. vitrified pipe	.....	3.15	3.00
200.38 cu.yd. 1:3:6 concrete	.....	17.00	18.00
2,628 lin.ft. 18 in. reinforced concrete pipe	2.15	.....	2.50
1,188 lin.ft. 24 in. reinforced concrete pipe	3.20	3.15	3.75
449.9 cu.yd. class A concrete	21.00	19.50	19.00
19.5 cu.yd. class B concrete	20.00	19.00	19.00
78,178 lb. reinforcement	.055	.06	.06
1,954.46 cu.yd. cement rubble masonry	10.00	10.00	9.00
1,425.39 cu.yd. class A concrete	23.50	19.50	19.00
820 cu.yd. class B concrete	21.00	18.50	19.00
113,090 lb. reinforcement	.06	.06	.06
Extended totals cement rubble masonry and concrete pipe	$130,214	$137,666	$145,662
Extended total concrete masonry and concrete pipe	$154,034	.....	.....
Extended totals concrete masonry and vitrified pipe	.....	$156,915	.....

J. Stanton, 6th and Kiowa Sts., Leavenworth, Kan., (1a) $170,139 (1c) $207,891 (1d) $139,347 (3a) $175,333 (3c) $216,529 (4a) $134,482 (4c) $168,927 (4d) $113,230 (5a) $152,175 (5c) $187,929.

Cook-O'Brien Constr. Co., 305 Ry. Exch. Bldg., Kansas City, (1a) $184,984 (1c) $223,548 (1d) $138,304 (3a) $184,958 (3c) $218,587 (3d) $138,284 (4b) $142,445 (4c) $161,152 (5a) $158,515 (5c) $189,715 (6) $5,584 (15) $34,020.

Koss Constr. Co., 2818 5th St., Des Moines, Ia., (1b) $170,835 (2d) $145,627 (3b) $173,362 (3d) $142,459 (4b) $141,126 (5b) $154,439.

W. A. Ross, Kansas City (street address not available), (1d) $135,694 (4c) $159,102 (4d) $110,262 (5d) $117,754.

E. L. Meek, Kansas City (street address not available), (2a) $153,005.

Haller & Davis, Boonville, (2d) $146,149.

Highway Constr. Co., Tulsa, Okla. (street address not available), (2d) $149,803.

Alzina Constr. Co., Unity Bldg., Springfield, Ill., (4d) $115,351 (5d) $122,283.

J. O. Patterson & Constr. Co., 310 Ridge Bldg., Kansas City, (5d) $124,548.

C. Parker, Keytesville, (6) $5,233.

Woodsmall & Woodsmall, Matshall, (6) $5,513.

Reynolds, Blakers & Crews, Cartersville, (7) $14,061 (9) $13,312 (10) $14,293.

Hogan & Humphreys, Fredericktown, (7) $14,548 (8) $2,192 (9) $13,002 (10) $13,983.

Eihle & Morgan, Hayti, (7) $15,126.

F. D. Harvey & Co., Memphis, Tenn. (street address not available), (8) $1,889.

Little & Morgan, Hayti, (8) $2,052.

Muskogee Contg. Co., 223 Cole Bldg., Tulsa, Okla., (9) $13,413 (10) $14,922 (12) $30,823.

Cameron Joyce & Co., Keokuk, Ia., (11) $32,008.

List & Weatherly Constr. Co., 416 Ry. Exch. Bldg., Kansas City, (11) $34,417.

Illinois Steel Bridge Co., Jacksonville, Ill., (11) $34,766.

E. A. Luck, Black Rock, Ark., (12) $41,273.

Harrison Constr. Co., 413 Kraft Blk., Des Moines, Ia., (13) $40,432.

Lynch McDonald Constr. Co., Moberly, (13) $41,534.

J. L. Simmons, Laplata, (13) $44,945.

A. P. Munsen, 1185 4th Ave., Marion, Ia., (14) $25,877.

W. H. and G. H. Turner, Memphis, (14) $26,505.

Frazier Davis Constr. Co., Arcade Bldg., St. Louis, (14) $27,518.

Tibbetts Constr. Co., 428 East Walnut St., Independence, (15) $34,269.

M. Hoose, Trenton, (15) $34,314.

R. S. Morrow & Sons, 5006 Burt St., Omaha, Neb., (16) $15,438.

Riley & Bailey Constr. Co., 318 International Life Bldg., St. Louis, (16) $16,492.

M. E. Gillioz, Monett, (16) $17,572.

Highway Constr. Co., Webb City, (17) $24,478.

Carterville Constr. Co., Carterville, (17) $24,630 (18) $27,479.

V. E. Kock, Carthage, (17) $25,271.

Baker & Keontz, Carthage, (18) $27,666.

V. E. Koch, Box 604, Joplin, (18) $30,176. Noted Jan. 25.

Tex., Clarksville—Red River Co., grading, gravel surfacing, etc., 5.74 mi. Highway 5, Federal Aid Project 315, 12 ft., 593 cu.yd. concrete, 16,976 cu.yd. roadway and 19,620 cu.yd. borrow excav., 55,555 lb. reinforcing, from Womack Constr. Co., Sherman, $29,245; McGuire & Cavender, Clarksville, $31,519; McClung Constr. Co., Cleburne, $32,082. Engrs. est. $56,745.

Oregon—State Hy. Dept., Salem, grading 6 mi. Tygh Valley Sect., The Dalles-California Highway, Wasco Co., from Elliott, Scoggins & Pacquet, McKay Bldg., Portland, concrete pipe $71,470, corrugated pipe $68,640, Johnston Constr. Co., 311 Lumber Exch. Bldg., Portland, concrete $71,580, corrugated $71,040, Bauers & Bauers, Dayton, Wash., concrete $76,360, corrugated $73,662, broken stone surfacing 11.4 mi. Hepner-Jones Hill Sect., Oregon-Washington Highway, Morrow Co. from General Constr. Co., Tacoma, Wash., (street address not available), $51,592. Carlson & Nieberg, Spokane, Wash., (street address not available), $51,833. Ridgon & Lewis, Woodburn, $53,914.

Calif., Fresno—Opened bids improving (1) Belmont Ave. between North 1st St. and Fresno Ave. (2) Florodora St. between Lucerne Lane and Van Ness Ave., from California Road & Street Impvt. Co., Bank of Italy Bldg., (1) $38,831 (2) $35,606; Thompson Bros., G and Divisadero Sts., (1) $39,731 (2) $36,463; W. F. Hanrahan, 1361 P St., (1) $40,224 (2) $36,685. Noted Jan. 18.

Calif., Fresno—Supervs. Fresno Co. opened bids Feb. 6, paving (1) highway near Reedley, (a) 7,000 cu.yd. excav. (b) 531,900 sq.ft. 5 in. asphaltic concrete pavement (2) highway near Clovis (c) 6,900

Streets and Roads (Continued)

cu.yd. excav. (d) 280,300 ft. 5 in. asphaltic concrete pavement, from T. A. Hanrahan, 1361 P St., (1a) $0.50 (1b) $0.1926; California Constr. Co., Mattei Bldg., (1a) $0.70 (1b) $0.1894 (2c) $0.90 (2d) $0.2313; J. A. Dowling, Bakersfield, (1a) $0.55 (1b) $0.1998; Clark & Henery Constr. Co., 38 South Sutter St., Stockton, (2c) $1.25 (2d) $0.2175. Noted Feb. 1.

Calif., Oroville—Supervs. Butte Co. opened bids Feb. 6, improving (1) Oroville-Chico Rd., Route 20, Sect. B, (a) 18,500 yd. excav., (b) 8,920 ton broken stone (c) 530 ton asphaltic oil E, (d) 2,100 yd. bank gravel per yd. mi. haul and spread, county to furnish asphaltic oil, (2) Nelson-Blavo Rd., (e) 10,657 yd. excav., (f) 9,950 ton broken stone (g) 240 ton asphaltic oil E (h) 3,000 ton screen gravel, county will furnish broken stone, stone screenings, screen gravel and asphaltic oil E, from T. H. and M. C. Polk, Chico, (1a) $1.75 (1b) $2.49 (1c) $11.50 (1d) $0.80 (2e) $1.35 (2f) $1.54 (2g) $11 (2h) $0.65; Heafey, Moore & McNair, 2030 High St., Fruitvale, (1a) $1.53 (1b) $3 (1c) $11.50 (1d) $0.75; Collins & Seppi, Ione, (2e) $0.80 (2f) $2.15 (2g) $20 (2h) $1; Blumenkranz & Vernon, Farmers and Merchants Bldg., Stockton, (2e) $0.90 (2f) $2.35 (2g) $25 (2h) $1.50. Noted Jan. 18.

Calif., San Diego—Common Council opened bids Feb. 13, improving Silverado St., Ivanhoe Ave. and Torrey Rd., (a) 192,016 sq.ft. 5 in. Portland cement concrete (b) 1,140 lin.ft. cement concrete curb (c) 5,746 sq.ft. cement concrete sidewalk, etc., from Cushing Constr. Co., c/o F. A. Rhodes, city engr., (a) $0.249 (b) $0.65 (c) $0.22; L. Salcido, La Jolla, (a) $0.249 (b) $0.70 (c) $0.22; H. H. Peterson, Loma Portal, (a) $0.25 (b) $0.62 (c) $0.20. Noted Feb. 8.

Calif., San Diego—Grading, curbing, gutters and laying sidewalks on 37th, 39th, 40th Sts., et al., from J. Englebretson, 641 12th St., $56,369; H. G. Fenton, Dewey St., $58,067; J. Hansen, 3168 J St., $58,530.

Calif., Stockton—San Joaquin Co., improving (1) French Camp Rd. (2) Lane (Chandler) Rd., 7,700 cu.yd. grading, 4,970 ton gravel, 4,080 ton crushed rock, etc., (3) Bixler Rd., 13,000 cu.yd. grading, from C. Moreing, Commercial Savings Bank Bldg., (1) $57,347 (2) $14,320 (3) $5,270; C. W. Wood, Manteca, (2) $15,920; Guy Bros., Stockton, (3) $3,724. Noted Feb. 1.

CONTRACTS AWARDED

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., to Welsh Bros. Contg. Co., 32 Queens St., grading roadway, sidewalk space and laying sidewalks on 4th St., $3,871, grading, curbing and laying sidewalks on Jamaica Ave., $7,719, grading, removing and replacing trees on Tieman Ave., $14,875; to F. J. Clancy, Corona, grading, curbing and laying sidewalks on 50th St., $10,707, 42nd St., $7,460; to Soviero & Britten, 10111 114th St., Richmond Hill, grading, curbing and laying sidewalks on 116th St., $7,928, East 103rd St. $9,735; to Tuohey & Upton, Inc., 129 Bway., Flushing, grading sidewalk space and removing trees, etc., on Burling Ave. $678; to Borough Asphalt Co., 1301 Metropolitan Ave., Brooklyn, paving 116th St., sheet asphalt, $14,073; to J. J. O'Brien, Jr., William St., Jamaica, grading and laying sidewalks on Lewis St. $1,028. Noted Feb. 15.

N. C., High Point—For minimum of 75,000 sq.yd. and maximum of 200,000 sq.yd. street paving, to R. G. Lassiter & Co., Citizens Bank Bldg., Raleigh.

S. C., Darlington—Darlington Co. topsoiling 3.5 mi. road, Project 107, and constructing 3 bridges, to Lillard Laurence Co., Charleston, $12,981 and $7,681 respectively. Noted Feb. 1.

Wis., Elkhorn—Welworth Co. concrete surfacing, etc., Whitewater-Elkhorn Rd., to Fess & Ress, 123 East Doty St., Madison, $84,888; Burlington-Elkhorn Rd., to R. R. Birdsall Constr. Co., 1025 12th St., Racine, $113,379. Noted Feb. 1.

Wis., Fond du Lac—Concrete surfacing, etc., Fond du Lac-Calumetville Rd., to Jorgenson Constr. Co., Denmark, $118,627.

Wis., Wausau—Marathon Co., Marshfield-Stratford Rd., to Wausau Iron Works, Wausau, 6,000 cu.yd. earth excav. $0.84, 21,613 sq.yd. concrete surfacing $1.45, etc., total $41,147.

Wis., Wisconsin Rapids—Wood Co. State Road and Bridge Com., to Bossert Coal Co., Wisconsin Rapids, Rudolph Wisconsin Rapids Rd., 3,053 cu.yd. earth excav. $0.90, 9,422 sq.yd. concrete surfacing $1.49, etc., total $18,054. Portage Rd., earth excav. $0.75, concrete surfacing $1.54, etc., total $16,782, Seneca Corners-Wisconsin Rapids Rd., 8,000 cu.yd. earth excav. $0.85, 25,680 sq.yd. concrete surfacing $1.54, etc., total $53,478; Babcock Pittsville Rd., 2,795 cu.yd. earth excav. $0.75, 9,931 sq.yd. concrete surfacing $1.51, etc., total $18,002, Nekoosa-Necedah Rd., 2,137 cu.yd. earth excav. $0.75, 9,700 sq.yd. concrete surfacing $1.49, etc., total $17,107; to Brogan & Shafer, Green Bay, Wisconsin Rapids-Sherry Rd., 7,998 cu.yd. earth excav. $0.95, 22,400 sq.yd. concrete surfacing $1.91, etc., total $54,233; to Lampert Constr. Co., Oshkosh, Marshfield-Stratford Rd., 1,980 cu.yd. earth excav. $0.86, 9,668 sq.yd. concrete surfacing $1.70, etc., total $19,397.

Ia., Council Bluffs—Paving Pearl St. from Bway. to intersection of Pearl and Main Sts., 8,791 sq.yd. vitr. brick on 6 in. base with asphalt filler, resetting 3,400 lin.ft. curb, etc., to E. A. Wickham & Co., 19 Scott St., $3.79 per sq.yd. for paving, $0.30 for asphalt filler, $0.25 per lin.ft. resetting curb.

Ia., Keosauqua—Van Buren Co., grading 18.025 mi. primary road between Keosauqua and Davis Co. line, 267,945 cu.yd. excav., to Phelan-Shirley Co., Woodmen of the World Bldg., Omaha, Neb., $35,120, and G. L. Roberts, Chariton, $30,457.

Ia., Red Oak—Grading, paving, etc., 52,-sq.yd. vibrolithic concrete, to J. S. McLaughlin & Son, Mankato, Minn., $2.69 per sq.yd. Noted Jan. 25.

Minn., Austin—Mower Co., gravel surfacing about 68 mi. road, 24 ft., Jobs 2301 to 2308 inclusive, to L. H. Morrill, Buffalo Center, Ia., $61,019. Noted Jan. 25.

Minn., Duluth—Paving 4th St. from 37th to 44th Aves. W., 9,280 sq.yd. concrete, 31,595 lin.ft. concrete sidewalk, 4,600 cu.yd. earth excav., to E. Olson, 112 North 20th Ave. W., $44,315, engrs, est. $44,515; paving 2,696 ft. Warden St. from 59th to 69th Aves. W., 7,000 sq.yd. concrete, 850 cu.yd. earth excav., to Peterson & Thorwold, 1927 East 3rd St., $31,329. Noted Feb. 1.

Kan., Ft. Scott—Paving 18 blocks 6th St. from Margrove to Short Sts., vitr. brick, to Thogmartin & Gardiner, Ft. Scott, $69,656.

Missouri—State Hy. Dept., Jefferson City, state road from Centerville southward, State Project Route 21, Sect. 25, Reynolds Co., to Coopers Constr. Serv. Co., Federal Reserve Bank Bldg., St. Louis, $53,162; road from Festus to St. Genevieve Co. line, State Project Route 25, Sect. 42, Jefferson Co., to Knorpp & J. Richardson, De Sota, $28,902; road from Kansas City to St. Louis, State Project Route 20, Sect. 10, Lafayette Co., to Cook & O'Brien Constr. Co., 305 Ry. Exch. Bldg., Kansas City, $112,535; road from Warrensburg to Clinton, State Project Route 13, Sect. 26, Johnson Co., to A. L. Cook, Ottawa, Kan., $33,-721; road from Ava southeastwardly, State Project Route 5, Sect. 93, Douglas Co. and road from Ava southeastwardly, State Project Route 5, Sect. 94, Douglas Co., to Summerfield, Jones & Co., Springfield, (street address not available) $13,247 and $11,795 respectively; road from Bethany westward, State Project Route 4, Sect. 24, Harrison Co., to Rand Constr. Co., 1007 New York Life Bldg., Kansas City, $142,392. Noted Jan. 25.

Missouri—State Hy. Dept. at div. office Marble Hill, 16.369 mi. road from Marble Hill to Patton, 12 ft., Federal Aid Project 202A, Bollinger Co., to C. P. O'Reilley & Co., Wainwright Bldg., St. Louis, $126,565; 4.943 mi. road from Marble Hill southwardly, 12 ft., Federal Aid Project 208A, Bollinger Co., to M. E. Gillioz, Monett, $48,-465. Noted Dec. 14.

Okla., Oklahoma City—Paving Ave. E, 6,600 yd. 2 in. rock asphalt on 5 in. base, to Western Paving Co., Tradesman Natl. Bank Bldg., $37,029.

New Mexico—State Hy. Dept., Santa Fe, grading, surfacing and building structures on (1) 16.067 mi. Hondo-Picacho Rd., Federal Aid Project 82, Lincoln Co. (2) 16.989 mi. Kenna-Kermit Rd., Federal Aid Project 89, Roosevelt Co. (3) 7.165 mi. Hot Springs-Arrey Rd., Federal Aid Project 104, Sierra Co. (4) 8.005 mi. Meloche-Dedman Rd., Federal Aid Project 93, Colfax Co. (5) 1.562 mi. road 8 mi. west of Roswell, Federal Aid Project 71, Chaves Co. (6) 10.32 mi. Raton-Meloche Rd., Federal Aid Project 92, Colfax Co. (7) 9.927 mi. Elkins-Kenna Rd., Federal Aid Project 103, Chaves Co.; surfacing (8) 14.227 mi. road from 3 mi. west of Lordsburg, Federal Aid Project 87, Hidalgo Co., to H. E. Williams, 2914 Tularosa St., El Paso, Tex., (1) 102,504 cu.yd. Class 1 excav., $0.38, 2,020 cu.yd. Class 2, $0.65, 7,794 cu.yd. Class 3, $1.70, 19,511 cu.yd. Class 1 borrow, $0.20, 6,154 cu.yd. gravel surfacing $1.52, 2,334 lin.ft. 24 in. corrugated metal culverts, $2.77, 1,559 lin.ft. 30 in., $3.25, 374 lin.ft. 36 in., $5, 789 cu.yd. Class A concrete for culverts, $15, 545.95 cu.yd. Class B concrete $14.90, 647.6 cu.yd. Class A concrete for bridges, $15.90, 54,860 lb. reinforcing bars, $0.07, etc., total $120,380; J. F. Hamer, Stop 6, Interurban, Ft. Worth, Tex., (2) 13,165 cu.yd. Class 1 excav., $0.20, 97 cu.yd. Class 2, $0.75, 97 cu.yd. Class 3, $1.50, 18,396 cu.yd. Class 1 borrow, $0.20, 11.85 mi. crowning and shaping, $600, 26,-525 cu.yd. crushed stone surfacing, $1.85, 74.27 cu.yd. Class A concrete, $22.50, etc., total $69,959; J. Mulligan, 4131 Cambridge St., El Paso, Tex., (3) 30,071 cu.yd. Class 1 excav., $0.24, 4,332 cu.yd. Class 2, $0.65, 8,220 cu.yd. Class 1 borrow, $0.24, 826 cu.yd. gravel $1.35, 899.3 cu.yd. Class A concrete, $20, 321.1 cu.yd. Class B, $18, 4,506 ft. asphalt expansion joints, $0.15, 4,081 lb. reinforcing bars, $0.10, etc., total $58,966 (5) 78 cu.yd. excav. $0.20, 20,941 cu.yd. borrow, $0.20, 1,611 cu.yd. one course gravel surfacing $1.25, 333.3 cu.yd. Class A concrete, $16.50, 148.2 cu.yd. Class B, $15.50, 3,344 lin.ft. asphalt expansion joint, $0.15, etc., total $18,788; Morrison & Morrison, Denver, Colo. (street address not available) (4) 7,279 cu.yd. Class 1 excav., $0.28, 261 cu.yd. Class 2, $0.65, 1,933 cu.yd. Class 1 borrow, $0.26, 4.771 mi. crowning and shaping $700, 12,724 cu.yd. crushed stone surfacing, $2.15 44 cu.yd. Class B concrete, $27, etc., total $37,367 (6) 18,468 cu.yd. Class 1 excav., $0.25, 109 cu.yd. Class 2, $0.60, 8,486 cu.yd. Class 1 borrow, $0.24, 3.071 mi. crowning and shaping, $700, 16,116 cu.yd. gravel surfacing, $1.75, 89.57 cu.yd. Class A concrete for culverts $20, 98.69 cu.yd. Class B, $24, 603.11 cu.yd. Class A concrete for bridges, $22, 55,785 lb. reinforcing bars, $0.07, etc., total, $69,-976; Peterson, Shirley & Gunther, Woodmen of World Bldg., Omaha, Neb., (7) 14,470 cu.yd. Class 1 excav., $0.30, 2,559 cu.yd. Class 2, $1, 226 cu.yd. Class 3, $2.25, 8,551 cu.yd. Class 1 borrow, $0.30, 3.597 mi. crowning and shaping, $750, 15,565 cu.yd. crushed stone surfacing, $2.10, 40.68 cu.yd. Class B concrete, $28, etc., total $51,919; O. K. Smith, Denver, Colo. (street address not available) (8) 16,693 cu.yd. crushed stone surfacing $3.33, total, $55,-588. Noted Jan. 18.

Wash., Seattle—Paving Alki Ave. et al., 35,800 sq.yd. 7 in. concrete, 5,500 lin.ft. integral, 3,000 lin.ft. asphaltic concrete and 7,250 lin.ft. concrete curbing, 12,600 cu.yd. earth excav. to Swennson Constr. Co., Arcade Bldg., $111,752. Engrs. est. $120,557. Noted Nov. 30.

Oregon—State Hy. Dept., Salem, grading 8 mi. Allen Ranch-Klamath Co. Line Sect., Unit 1, The Dalles-California Highway, Deschutes Co., to A. E. Doty, Portland, (street address not available) concrete pipe, $22,413; 6 mi. Tygh Grade Sect., The Dalles-California Highway, Wasco Co., to Elliott, Scoggins & Pacquet, McKay Bldg., Portland, cast iron pipe, $194,050; 3 mi. Bear Creek Sect., Oregon-Caves Highway, Josephine Co., to C. F. Rhodes Constr. Co., Medford, $23,954; 8.67 mi. Unit 2, Crooked River-Deschutes Sect., Prineville-Lakeview Highway, Crook Co., to Crook Co. Court, Prineville, corrugated galvanized iron pipe, $76,620; 3.3 mi. of grading and surfacing, and 2.76 mi. surfacing Port Orford-Sixes River Sect., Roosevelt Coast Highway, Curry Co., to J. Hakanson, Oakland, Calif., cedar log culverts, $49,425; 10.98 mi. grading and broken stone surfacing, Keno-Klamath Falls Sect., Ashland-Klamath Falls Highway, Klamath Co., to Dunn & Baker, Klamath Falls, corrugated pipe, $142,054; 9.82 mi. broken stone surfacing Hayden Creek-Jackson Co. Line Sect., Ashland-Klamath Falls Highway, Klamath Co., Harness & Colby, Roseburg, $62,750; Bridge 827 over Basket Slough, Holmes Gap-Rickreall Sect., West Side Highway, Polk Co., to Oregon Constr. Co., Blake-McFall Bldg., Portland, $5,373. Noted Feb. 1.

Calif., Los Angeles—Union Pacific Ry. Co., 610 South Main St., grading industrial tract in vicinity of Belvedere Gardens, to Utah Constr. Co., Phelps Bldg., San Francisco, $100,000.

Industrial Works

PROPOSED WORK

D. C., Wash.—See "Buildings."

N. C., Charlotte—Carolina Baking Co., 602 South Church St., having plans prepared by McCormick Co., archts., 41 Park Row, New York City, 2 story, 100 x 150 ft., bakery. $150,000.

N. C., Goldsboro—Carolina Power & Light Co., Raleigh, plans enlarging 60,000 volt sub-station here and at Selma, and at several other points. P. A. Tillery, genl. mgr.

Tenn., Memphis—Lamar Steam Laundry, 1693 Lamar Ave., having plans prepared by Mahan & Broadwell, archts., Ger. Bank Bldg., 100 x 200 ft., dry cleaning plant, hollow tile and stone.

N. C., Raleigh—See "Buildings."

N. C., Raleigh—Raleigh Material Co. plans several large warehouses. P. R. Ashby, Tucker Bldg., pres.

Tenn., Memphis—Winkelman Baking Co., 93 North Main St., had plans prepared by McCormick Co., Inc., archts. and engrs., 41 Park Row, New York City, baking plant.

Industrial Works (Continued)

concrete and steel, **Madison Ave.** near McNiel St. $250,000.

Tenn., Nashville — Hermitage Portland Cement Co., 174 3rd Ave., N., soon lets contract cement plant, 2,000 bbl. daily capacity, north of here. T. L. Herbert, Jr., vice pres.

Ky., Louisville—Louisville Ry. Co., 314 West Jefferson St., having plans prepared by D. X. Murphy & Bros., archts., Louisville Trust Bldg., rebuilding car shops, 4th Ave. and A Sts., recently destroyed by fire. $100,000.

O., Alliance—See "Buildings."

O., Cleveland—Amer. Stove Co., 4301 Perkins Ave., had plans prepared by Carter-Richards Co., archts., Illuminating Bldg., 1 story, 80 x 140 ft., brick, steel and concrete factory, East 43rd St. and Perkins Ave. $40,000.

O., Cleveland—Arnold Creamery Co., 901 Woodland Ave., having plans prepared by C. Tousley, archt., 4500 Euclid Ave., 3 story, 60 x 90 ft., brick, steel and concrete, 701 Woodland Ave. $50,000.

O., Cleveland—Cleveland Electric Illuminating Co., 74 Pub. Sq., having plans prepared 1 story electric boosting station, brick, steel and concrete, North Woodland Rd. and East 130th St. $50,000. C. L. Stone, asst. genl. mgr. Private plans.

Ind., Anderson—J. Zeigler, c/o G. S. Kingsley, archt., 109 North Dearborn St., Chicago, plans 114 x 200 ft. warehouse, rein.-con., brick and steel. $200,000.

Ill., Chicago—H. I. Dalsey, archt., 2321 West North Ave., preparing plans 100 x 125 ft. rein.-con., brick and steel garage, Chicago and Homan Sts. $55,000. Owner's name withheld.

Ill., Chicago—H. I. Dalsey, archt., 2321 West North Ave., preparing plans 1 story, 50 x 125 ft., rein.-con., brick and steel garage, Fullerton Ave. near Tripp St. $40,000. Owner's name withheld.

Ill., Chicago—S. Karpan & Bros., 22nd St. and Union Ave., plan 4 story factory addition, 50,000 sq.ft. floor space, rein.-con., brick and steel. $200,000. Marshall & Fox, 721 North Michigan Ave., archts.

Ill., Chicago—J. Singer, c/o H. I. Dalsey, archt., 2321 West North Ave., having plans prepared 2 story, 103 x 107 ft., rein.-con., brick and steel, auto sales, service and garage building, 1428-36 West Roosevelt St. $65,000.

Wis., Columbus—Better Products Co. having plans prepared 2 story, 60 x 90 ft., brick, rein.-con. and steel factory. $50,000. Private plans.

Wis., Oostburg—Danish Pride Milk Co., c/o J. Enz, pres., 608 North 8th St., Sheboygan, plans 2 story, condensary and dairy product factory, brick, rein.-con. and steel. $50,000. Engineer or architect not selected.

Wis., Eau Claire—K. N. Knudsen, 107 North Farwell St., having plans prepared 2 story, 55 x 100 ft. machine and forge shop, brick, rein.-con. and steel, plain foundation. $50,000. Private terms.

Wis., Fond du Lac—Dunham-McCumber Co., 28 3rd St., having plans prepared 2 story, 88 x 110 ft., garage and repair shop, brick, rein.-con. and steel. $40,000. Private plans.

Wis., Milwaukee—Lakeside Garage Co., 33 Patton Bldg., plans 5 or 6 story, brick and concrete garage, plain foundation, East Side. $250,000. Engineer or architect not selected.

Wis., Milwaukee — Milwaukee Wadding & Comfort Mills, 415 3rd St., having plans prepared 1 story and basement, 60 x 192 ft. factory, brick and timber, plain foundation, Clybourn St. $40,000. Private plans.

Wis., Milwaukee—Pittsburgh Plate Glass Co., 205-213 Lake St., having preliminary plans prepared by Cahill & Douglas, engrs., 217 West Water St., 60 x 60 ft., brick and concrete power plant, Lake St. $200,000. L. Patton, pres.

Wis., Platteville—Farmers Consumers Exch., c/o A. Benedict, mgr., plans 2 story, 50 x 60 ft., cold storage and refrigeration plant, brick, rein.-con. and steel, plain foundation. $75,000. Engineer or architect not selected.

Wis., Rice Lake—T. H. Field having plans prepared 2 story and basement, 60 x 120 ft. motor factory, brick, rein.-con. and steel, plain foundation. $75,000. Private plans.

Wis., Sheboygan — Eastern Wisconsin Electric Co., 428 North 8th St., having plans prepared by E. A. Stubenrauch, archt., 629 North 8th St., 2 story, 50 x 80 ft., garage and repair shop, brick and rein.-con., plain foundation. $40,000.

Wis., Sheboygan—F. Hensel Co., North 7th St. and Center Ave., having plans prepared by E. A. Juul, archt., 805 North 8th St., 2 story, 60 x 100 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation, Center St. $50,000. Noted Jan. 11.

Wis., Wausau—E. A. Steckel, 320 3rd St., plans 2 story, 50 x 70 ft., printing shop, brick, rein.-con. and steel, plain foundation, Scott St., $50,000. Engineer or architect not selected.

Wis., West Allis—Burbach Auto Co., c/o P. Burbach, mgr., having plans prepared 2 story, 60 x 65 ft., garage and repair shop, brick, rein.-con. and steel. $40,000. Private plans.

Ia., Cedar Rapids—C. S. Krause, 210 Security Bldg., having plans prepared by I. F. McMinds, archt., 1816 Washington Ave., 1 story and basement, 40 x 140 ft. garage, 2nd Ave. and 6th St. $50,000.

Ia., Mason City—Cerro Gordo Brick and Gravel Co. plans brick and concrete factory. $40,000. C. I. Snyder, secy.

Kan., Augusta—Schoeb Motor Co. having plans prepared by E. Forsblom, archt., 405 Sedgwick Bldg., Wichita, 1 story and basement, 125 x 125 ft., brick garage, plain foundation. $40,000.

Kan., Emporia—Atchison, Topeka & Santa Fe Ry., Railway Exch., Chicago, had plans prepared 2 new roundhouses, car repair shop, tracks, also equipment for shops, etc., here. $5,000,000. C. W. Felt, ch. engr.

Kan., Fredonia — Feb. 27, to vote on $150,000 bond issue for electric lighting plant. E. H. Schiek, Fredonia, engr.

Kan., Wichita — McCormick-Armstrong Press, Market and Williams Sts., having plans prepared by Lorentz Schmidt & Co., archts., 516 4th Natl. Bank Bldg., 2 story and basement, 120 x 140 ft. printing plant. $100,000.

Kan., Wichita—Schoeb Motor Co. (street address not available), having plans prepared by E. Forsblom, archt., 405 Sedgwick Bldg., 1 story and basement, 125 x 125 ft. rein.-con. and brick garage. $40,000.

The items in this section are arranged geographically in accordance with the recognized state groups: first New England States, then Middle Atlantic, Southern, Middle West, West of the Mississippi, Far West, and finally Canada. This system was adopted many years ago in the belief that most of our readers are interested in the construction activities of their vicinity.

S. D., Sioux Falls—See "Buildings."

Mo., Kirksville—See "Waterworks."

Tex., Dennison — Missouri, Kansas & Texas R.R. having plans prepared modern freight terminal building. $3,500,000. F. K. Tutt, Denison, mechanical supt. Private plans.

Okla., Clinton—See "Waterworks."

Okla., Wilson—Hewitt Refining Co., Ardmore, plans oil refinery, 1,500 bbl. capacity, here. To exceed $45,000. Engineer or architect not selected.

Okla., Wynnewood—See "Waterworks."

Colo., Calhan—Had plans prepared for electric light plant and waterworks. $50,000. Brew & Sidow Eng. Co., 210 Kittridge Bldg., Denver, engrs.

Nev., Reno—Osen Motor Sales Co. having plans prepared by F. J. De Longchamps, archt., Gazette Bldg., 1 story, brick garage, South Virginia and Moran Sts., $40,000.

Calif., Davis—Pacific Gas & Electric Co., 445 Sutter St., San Francisco, plans machine shop, garage and warehouse, here. Private plans.

Calif., Oroville — Wyandotte Olive Growers Assn. plans olive packing plant. To exceed $50,000. Engineer or architect not announced.

Calif., Palo Alto — See "Excavation, Drainage, Irrigation."

Calif., Pasadena—R. S. McClelland having plans prepared by A. G. Bailey, archt., Junior Orpheum Bldg., Los Angeles, ice plant, brick, Cordova and Vermont Sts. To exceed $50,000.

Calif., Quincy—M. A. Mortenson having plans prepared box factory, 1,000,000 ft. finished box lumber per day. To exceed $50,000. Private plans.

Calif., San Francisco—Boldemann Chocolate Co., 521 Brannan St., plans new factory, present quarters (5 or more stories in excess of 75 x 100 ft.), not large enough to accommodate demand for products. Engineer or architect not selected.

Calif., San Mateo—See "Railways."

Calif., San Pedro—Pacific Coast Borax Co. having plans prepared by A. C. Martin, archt., 430 Higgins Bldg., Los Angeles, addition to borax plant, incl. machine shop, boiler house and generating plant, 1 and 2 story, steel and corrugated iron construction. To exceed $75,000.

Calif., Turlock—Central California Ice Co., Mono and P Sts., Fresno, plans ice plant, 30 ton per day, South 1st and D Sts. $45,000.

Calif., Wilmington — Pacific Coast Borax Co., Central Bldg., Los Angeles, had plans prepared by A. C. Martin, archt., Higgins Bldg., Los Angeles, 2 story, 250 x 450 ft., rein.-con. flat slab type factory, power plant and 900 ft. woodpile wharf, here. $1,000,000.

BIDS DESIRED

Conn., Bridgeport—New Haven Diary Co., 201 Hazel St., New Haven, receiving bids 3 story and basement, 75 x 85 ft. ice cream manufacturing plant, rein.-con., brick and steel, Garden St., Railroad and South Aves. $150,000. F. E. Brown, 11 Autumn St., New Haven, archt. Noted Jan. 18.

Conn., Hartford—J. Dolice, 29 Windsor Ave., receiving bids 1 story, 55 x 152 ft., brick and steel garage, Windsor Ave. $40,000. C. J. Malmfeldt, 118 Asylum St., archt.

Conn., Hartford—A Goldstein, 593 Windsor Ave., receiving bids 1 story, 80 x 210 ft., brick, concrete and steel garage, Windsor Ave. $40,000. F. C. Walz, 407 Trumbull St., archt.

N. Y., New York — Feb. 27, by R. G. Cory, archt. and engr., 30 Church St., 5 story, 127 x 215 ft., brick, steel and concrete machine shop, plain foundation, 12th Ave. and 44th St., for F. L. Smithe Machine Co., 11th Ave. and 21st St. Noted Jan. 25.

N. Y., Rochester—March 1, by Addison Lithograph Co., 299 State St., 130 x 202 ft. printing and lithographing plant, brick, State St. To exceed $50,000. S. Firestone, 59 South Ave., Archt.

Fla., Pensacola—See "Miscellaneous."

La., De Quincy—March 6 by W. W. Tuck, pres. Municipal Waterworks, Light, and Power Plant Bd., electric light and waterworks system, incl. 50 K.W. and 100 K. W. 80 per cent P. F., 2300 volts, 3 phase, 50 cycle, alternating current generators, direct connected to oil engines, switchboard, motor driven pump, rein.-con. reservoir, steel tank and tower, oil storage tank and well, motor driven well pump, c.i. and galvanized iron mains, electric light and power distributing systems, meters, transformers, etc. J. W. Billingsley, 711 Interstate Bank Bldg., New Orleans, consult. engr.

O., Norwood (Cincinnati P. O.)—March 1, by Tietig & Lee, archts., 901 4th Natl. Bank Bldg., 1 story, 70 x 130 ft., rein.-con. and brick factory, plain foundation, Main Ave., for Henderson Lithographing Co., 4530 Main Ave. $150,000.

Ill., Chicago — Lockwood, Green & Co., archts. and engrs., 38 South Dearborn St., receiving bids 3 story, 85 x 165 ft., rein.-con., brick and steel factory addition, 1751 North Central Park Ave., for Geib & Schafer. $200,000.

Wis., Cudahy—E. K. Liebert, archt., 432 Bway., Milwaukee, taking bids 3 story, 100 x 110 ft. yeast house, brick, concrete and steel, plain foundation, here, for Milwaukee Vinegar Co., 79 Buffalo St., Milwaukee. Noted Dec. 28.

Wis., Milwaukee—H. J. Esser, archt., 82 Wisconsin St., taking bids and opens same about Feb. 27, 4 story and basement, 60 x 78 ft., addition to warehouse brick and timber, plain foundation, for Natl. Straw Wks., 449 18th Ave. $50,000.

Wis., Sheboygan — R. R. Jahn, archt., 628 North 8th St., taking bids 2 story, 54 x 61 ft., chair factory, brick and timber, plain foundation, South Water St., for McNeil Chair Co., c/o J. McNeil, pres., South 6th St. $50,000.

Wis., Stevens Point—J. E. Moyer, archt., 230 Madison St., taking bids 2 story and basement, 68 x 124 ft., brick and concrete garage, plain foundation, Church and Main Sts., for R. E. Newby, 201 Clark St. $40,000.

Ark., Piggott—See "Waterworks."

Okla., Wynnewood—See "Waterworks."

Calif., Stockton—H. H. Meyers, archt., Kohl Bldg., San Francisco, receiving bids 1 or 2 story, 80 x 100 x 150 ft., rein.-con. garage, Hunter and Channel Sts., here, for Cowell Lime & Cement Co., c/o W. H. George, purch. agt., 2 Market St., San Francisco. Noted Dec. 28.

CONTRACTS AWARDED

N. Y., Brooklyn—R. G. Cory, archt. and engr., 30 Church St., New York, brick, steel and rein.-con. factory, Lorraine St., here, to J. W. Ferguson Co., 152 Market St., Paterson, N. J., for Gerstendorfer

Industrial Works (Continued)

Bros., 231 East 42nd St., New York. Archts. est. $500,000. Noted Jan. 25.

N. Y., New York—Bridgeman & Russell Co., 1101 West Michigan St., Duluth, Minn., 3 story and basement, 75 x 180 ft., creamery and warehouse, rein.-con., brick and steel, here, to Barney-Ahlers Constr. Corp., 110 West 40th St., New York. $160,000.

N. Y., New York—Rothbart Garage Corp., c/o J. M. Felson, archt. and engr., 1133 Bway., 1 story, 225 x 500 ft., brick and concrete garage, plain foundation, Whitlock Ave., by day labor. $150,000.

N. Y., Syracuse — New Process Geor Corp., 500 Plum St., will build brick addition to plant, by day labor. $40,000. Mills, Rhines, Bellman & Nordhoff, 1234 Ohio Bldg., Toledo, O., archts. Noted Dec. 21.

Pa., Allentown — Allentown Paper Box Co., 10th and Green Sts., 3 story, 80 x 110 ft. brick and timber factory, to Ritter & Smith Co., Allentown. Archts. est. $60,000. Noted Feb. 1.

Pa., West View (Pittsburgh P. O.)—West View Ice Co., 230 Park Ave., 2 story, 40 x 70 ft., ice plant, Perrysville Rd., to A. Friedrick & Sons, 3429 East St., Pittsburgh. Engrs. est. $40,000.

O., Cleveland—New Process Stove Co., 4301 Perkins Ave., 1 story, 80 x 140 ft., brick, steel and concrete factory, 4200 Hough Ave., to H. K. Ferguson Co., 6523 Euclid Ave. Archts. est. $40,000.

O., Cleveland—Ohio Provision Co., Clark Ave. along tracks of Cleveland, Cincinnati, Chicago & St. Louis R.R., 1 story, 25 x 126 ft. cooler building, brick, steel and concrete, to W. I. Thompson & Son Co., 5103 Euclid Ave. Archts. est. $40,000. Noted Feb. 15.

O., Cleveland—Parkbrook Co., 4600 Brook Park Rd., 1 story, 160 x 180 ft., brick, steel and concrete factory, to Hunkin-Conkey Constr. Co., Century Bldg. Archts. est. $60,000.

O., Cleveland—Phoenix Mortgage Co., Natl. City Bldg., 2 story, 72 x 132 ft., garage, factory and commercial building, brick and steel, 1640 Superior Ave., to F. A. Foyle, 947 Chester Ave. Archts. est. $75,000.

O., Cleveland—Union Terminal Bus Line Co., c/o J. L. Dease, 500 Erie Bldg., 2 story, 72 x 180 ft., brick, steel and concrete garage and service building, Bolivar Rd., to J. Neut, 500 Erie Bldg. Archts. est. $60,000. Noted Dec. 7.

O., Cleveland—West 25th St., Scranton Garage Co., c/o H. F. Heilman, secy., 3539 West 25th St., 2 story and basement, 130 x 130 ft., brick, steel and concrete garage and salesroom, 3140 West 25th St., to R. W. Kirchmer, 3700 West 130th St. Archts. est. $60,000.

O., Dayton—Andrews Baking Co., West 3rd St., 2 story, 70 x 120 ft., brick and rein.-con. factory addition, to G. L. Ohmart Co., 416 Mitchell Bldg., Springfield, $50,000.

O., Warren—General Fire Extinguisher Co., 4 story, 80 x 200 ft., brick, steel and concrete factory, to Heller Bros., Thurman St. Archts. est. $300,000.

Ill., Shelbyville—City let following contracts new electric light plant: to Westinghouse Mfg. Co., 12th and Gratiot Sts., St. Louis, Mo., one 150 and one 250 kw. turbine, $19,800, switchboard, station wiring, etc., $4,250; McGraw Co., 2018 Locust St., St. Louis, Mo., line supplies, $6,609; Nixon & Keeley, 2100 State St., East St. Louis, brick smoke stack, $3,950, machinery foundations, etc., $2,782, coal bunker and conveyors, $5,800; Erie City Iron Wks., Erie, Pa., two 214 hp. boilers and equipment, $13,800; T. B. Smith, Decatur, building, $12,300. Noted Jan. 11.

Wis., Ft. Atkinson—Ft. Atkinson Canning Co. general contract 3 story and basement, 48 x 135 ft., main factory, 1 story and basement, 42 x 150 ft. warehouse, 1 story, 50 x 52 ft. cook room, 1 story 30 x 40 ft. power house, 1 story, 54 x 84 ft. vining building, to T. S. Willis Co., 330 Hayes Blk., Janesville. Engrs. est. $150,000. Noted Jan. 25.

Wis., Kenosha—North Side Garage, 603 Milwaukee Ave., 1 story, 82 x 125 ft., garage and repair shop, brick, rein.-con. and steel, to Larson Bros., 1061 Sheridan Rd. Archts. est. $40,000.

Wis., Milwaukee—F. G. Felzman, 174 2nd St., 1 story and basement, 60 x 132 ft. film storage plant, brick and concrete, plain foundation, 9th St., to Hercules Constr. Co., 1612 Teutonia Ave. Archts. est. $45,000. Noted Feb. 1.

Wis., Milwaukee—Rissman-Levey Salvage Co., 93 South Water St., remodeling 4 story, brick and concrete warehouse, to G. E. Kahn, 114 Grand Ave. Archts. est. $150,000.

Wis., Milwaukee—Wisconsin Telephone Co., 418 Bway., 2 and 1 story, 120 x 272 ft., warehouse and garage, brick and concrete, plain foundation, Clybourn St., to W. W. Oeflein, 86 Michigan St. Archts. est. $300,000. Noted Feb. 1.

Wis., Port Edwards—Nekoosa-Edwards Paper Co., 2 story, 158 x 188 ft., paper mill addition, brick, rein.-con. and steel, plain foundation, to C. R. Meyer & Sons Co., 50 State St., Oshkosh. Archts. est. $150,000. Noted Jan. 25.

Ia., Cedar Rapids—Sieg Constr. Co., 5th and Iowa Sts., Davenport, general contract 2 story and basement, 60 x 140 ft. garage and business building, brick and concrete, 2nd Ave. between 6th and 7th Sts., here, to Currie-Simpson Co., Waterloo. Archts. est. $75,000.

Mo., St. Louis—A. B. Groves, archt., 314 North 4th St., 3 story and basement, 130 x 328 ft. annex to chair factory, brick and concrete, plain foundation, 1st St., to Murch Bros., Ry. Exch. Bldg., for Carr, Trombley Mfg. Co., Main and Branch Sts. Archts. est. $50,000. Noted Jan. 18.

Tex., Amarillo—J. H. Bishop, 2 story and basement, 100 x 140 ft., grain warehouse and leatherworking plant, brick and concrete, plain foundation, to A. Randall, Amarillo, $50,000.

Tex., Corsicana—Amer. Well & Prospecting Co., 391-323 North 7th St., general contract for steel foundry, to J. E. Metcalf & Son, Corsicana, $40,000; reinforcing steel, to Mosher Mfg., 900 South Austin St., Dallas, $8,000. Noted Jan. 25.

Calif., San Francisco—Los Angeles Soap Co., 250 Front St., 2 story and basement, soap factory, concrete, Brannan and 2nd Sts., concrete and carpentry work, to Vukicevich & Bagge, 180 Jessie St., $61,211. Noted March 2.

Calif., San Francisco — Pacific Embroidery Co., 130 Sutter St., 2 story, brick addition to factory, Mission and Otis Sts., steel work to Schrader Iron Wks., 18th and Potrero Ave.; concrete to J. Martinelli, 1351 Mason St.; brick work to N. Anderson, 180 Jessie St. Total $45,000. Noted Feb. 8.

Buildings

PROPOSED WORK

Mass., Springfield—Bank and Office—Commercial Trust Co., 226 Main St., plans 8 story, Main St. $300,000-$50,000. Engineer or architect not selected.

Mass., Springfield—Mercantile—H. J. Perkins, Dwight St., having plans prepared by Smith & Annable, Inc., archts., 145 State St., 6 story, 95 x 165 ft., rein.-con., plain foundation, Chestnut St. $275,000.

Mass., Springfield — Office — Terminal Trust Co., c/o N. Blanc, 726 North St., having plans prepared by E. C. and G. C. Gardner, archts., 33 Lyman St., 5 story, brick and concrete, Main and Lyman Sts. $225,000.

Mass., Turners Falls—High School—School Comn. having plans prepared by F. I. Cooper Corp., archts. and engrs., 172 Tremont St., Boston, 3 story, brick, concrete and steel, Main St. $250,000.

Mass., Williamstown—High School—High School Building Com. having plans prepared by F. I. Cooper Corp., archts. and engrs., 172 Tremont St., Boston, 3 story, brick, concrete and steel, School St. $300,000.

R. I., Bristol — High School — School Comn. had plans prepared by Clark & Howe, archts., 1208 Turks Head Bldg., Providence, 2 story, 125 x 155 ft., brick and concrete, plain foundation, Perry St. $225,000.

R. I., Providence—Orphan Asylum—Jewish Orphanage, c/o W. R. Walker & Son, archts., 49 Weybosset St., having plans prepared 2 story, brick and steel, Summitt St. $150,000.

Conn., Bristol—Hospital—Bristol Hospital plans 3 story, brick. $300,000. F. F. Barnes, pres. Engineer or architect not announced.

Conn., Hartford—Bank—Mechanics Saving Bank, Main St., plans brick and stone, Pearl St. $200,000. B. W. Morris, 101 Park Ave., New York City, archt.

Conn., Hartford — Church — First South Baptist Church plans 1 story and basement, brick, stone and steel, Main St. $150,000. H. B. Auston, 64 Russ St., member of com. G. E. Merrill, 23 East 26th St., New York City, archt.

N. Y., Albany — Synagogue — Building Committee of Sons of Abraham, plans new synagogue. $150,000-$175,000. Address D. Rackman, 259 South Pearl St.

N. Y., Bergen — School — Bd. Village Trustees plans rebuilding school recently destroyed by fire. $150,000-$160,000. Address H. L. Carpenter, pres.

N. Y., Jamestown—Church—First Presbyterian Church having plans prepared by Beck & Tinkham, archts., 317 Washington St., new church, East 5th and Prendergast Sts. $150,000. Noted June 1.

N. Y., Tonawanda—City Hall—Plans election in March to vote on $150,000 bonds for new city hall.

N. J., Millington—Club—Kiwanis Club of Newark, c/o M. N. Shoemaker, archt. and engr., 15 Central Ave., Newark, having plans prepared brick, steel and stone, plain foundation, here. $250,000.

Pa., Nanty-Glo — Church — Church of Brethern plans 2 story, 90 x 110 ft. brick and stone. $150,000. S. E. Noffsinger, pastor.

Pa., New Castle—Apartment—E. E. Hileman, 510 North Jefferson St., having plans prepared by Earl & Altschuler, archt., Dean Blk., 3 story and basement, 85 x 88 ft. brick, tile and stone. $150,000.

Pa., Oil City—Church—Holy Trinity Methodist Church plans new church. $200,000. Engineer or architect not announced.

Pa., Phila.—Apartment—Home Builders Co., c/o H. S. Miller, 1484 North 52nd St., having plans prepared by Stettler & Deysher, archts., 1484 North 52nd St., 4 story and basement, 108 x 204 ft., brick, steel and stone, 73 East Market St. $350,000.

Pa., Phila.—Apartment—K. F. Otto, archt., 3 North 19th St., preparing plans 4 story and basement, 40 x 100 ft., brick and stone, 19th and Green Sts. $150,000. Owner's name withheld.

Pa., State College—Educational—Pennsylvania State College, c/o H. S. Holstatter, State College, soon receives bids 2 story, brick and stone, here. $500,000. Day & Klauder, Franklin Bank Bldg., Phila., archts.

D. C., Wash.—Office, etc.—Potomac Electric Power Co., 231 14th St. N. W., plans office building and garage, 13½ and C Sts. N. W. $200,000. Milburn-Heister Co., 710 14th St., N. W., archts.

Md., Towson (Baltimore P. O.)—Dormitories—Bd. Educ., Lexington Bldg., Baltimore, having plans prepared by Smith & May, archts., Calvert Bldg., Baltimore, 2 story, concrete and brick, here. $150,000. A. S. Cook, supt.

N. C., Charlotte—Store—J. B. Ivey & Co., 13 North Tryon St., having plans prepared by W. H. Peeps, archt., 222 Latta Arcade, and H. S. Crowell, engr., Charlotte, 6 story, North Tryon St. $500,000.

N. C., Elon College—Library and Science—Elon College plans library and science building. $150,000. W. A. Harper, pres. Engineer or architect not selected.

N. C., Henderson—Schools—Voted $150,000 bonds for new schools.

N. C., Raleigh—College—North Carolina State College plans new buildings, equipment for vegetable oil, textile and furniture manufacturing departments, extension of steam plant, sewers, etc. $1,000,000-$1,500,000. W. C. Riddick, pres.

N. C., Raleigh—Office—Raleigh Building & Loan Assn., 107 Fayetteville St. plans 11 story and basement, Fayetteville and Exchange Sts. $330,000. Engineer or architect not announced.

Fla., St. Petersburg—Office—C. M. Rosser plans 6 story addition, 120 rooms, concrete and steel, 5th St. S. $175,000.

Miss., Gulfport — High School — Bd. Trustees takes bids in March for 2 story, 166 x 200 ft. $160,000. N. W. Overstreet, Jackson, archt.

O., Akron—School—Bd. Educ. plans brick annex to school, plain foundation, Union St. $150,000. M. M. Konarski, 102 South Union St., archt.

O., Alliance—Hospital, etc.—Homeopathic Hospital Corp., having plans prepared by D. A. Carmichael, archt., 67 East Long St. Columbus, for 12 to 14 buildings on 45 acre site here. $2,225,000. First unit will probably be an administration building. Project will also include factory, hospital, sanitarium, etc.

O., Athens—High School—Bd. Educ. having plans prepared by W. B. Ittner, archt., 911 Locust St., St. Louis, Mo., 2 story, rein.-con. and brick, plain foundation. $300,000.

O., Canton—Jail and Office—Stark Co. plans election to vote on $400,000 bonds for jail and office building. G. Tilden & Son, 334 Schaefer Blk., archts.

O., Canton — Temple — Masonic Temple Assn., c/o H. Ake, chn., 910 8th St., N. W., having revised plans prepared by Osgood & Osgood, archts., Monument Sq. Bldg., Grand Rapids, Mich., and takes bids in January, 5 story and basement, 95 x 185 ft., brick and stone. $500,000. W. H. Adams, 22 Campau Bldg., Detroit, Mich, structural engr. Noted Oct. 26.

O., Cleveland—Apartment—Adele Realty Co., c/o L. M. Rich, 312 Society for Savings Bldg., plans 3 story, brick, East 107th St. and Park Lane. $300,000. Architect not selected.

O., Cleveland — Clubhouse — Cleveland Eng. Society, c/o C. R. Sabin, mgr., Statler Hotel, plans 3 story, brick, steel and concrete. $150,000. Engineer and architect not selected.

O., Cleveland—Commercial—Lower Chestnut Co., c/o L. W. Murfey, 504 Guardian Bldg., plans 8 story, brick, steel and concrete, Chester Ave. east of Dodge Court. $200,000. Architect not selected.

O., Cleveland—Commercial—Ninety-Nine-Year Lease Co., c/o B. Parmely, Jr., Swet-

Buildings (Continued)

land Bldg., plans 8 story and basement, brick, steel and concrete, on lot 116 x 135 ft., Chester Ave. and Dodge Court. $400,000.

O., Cleveland — Commercial — Superior Stores Co., c/o F. J. Teegarden, pres., Guardian Bldg., plans 2 or 4 story and basement, brick, on lot 143 x 213 ft., East 105th St. and Superior Ave. $150,000. Engineer or architect not selected.

O., Cleveland Heights (Warrensville P.O.) — Aparament — I. Koslen, 3167 Euclid Heights Blvd., Cleveland, having plans prepared by M. Weis, archt., 617 Union Bldg., Cleveland, 3 story and basement, 80 x 95 ft., brick and timber, Lenox Rd. $150,000.

O., Cleveland Heights (Warrensville P.O.) —Apartment—Yellowstone Realty Co., c/o M. Levine, Society for Savings Bldg., Cleveland, having plans prepared by Branerman & Havermaet, archts., Ulmer Bldg., Cleveland, 3 story and basement, brick and timber, Superior Rd. near Mayfield Rd., here. $150,000.

O., Lakewood (Cleveland P. O.)—Mercantile—Greenlund-Kennerdell Co., Williamson Bldg., Cleveland, having plans prepared by Lehman-Schmitt Co., archts., Electric Bldg., Cleveland, 5 story, brick, steel and concrete, Detroit Ave. and Detroit Rd., here. $200,000.

O., Logan—Court House—Hocking Co. having plans prepared by F. L. Packard, archt., New Hayden Bldg., Columbus, stone, concrete, marble and brick. $250,000. Noted Nov. 2.

Ind., Evansville—Hospital—J. Y. Welborn, c/o C. Shopbell & Co., archts., Furniture Bldg., plans 3 story and basement, brick, 4th St. $150,000.

Mich., Detroit—Apartment—H. Ferguson, 1018 Penobscot Bldg., having plans prepared by P. R. Rossello, archt., 406 Congress Bldg., 3 story and basement, 115 x 146 ft. cocnrete, brick and steel, plain foundation, Kerwin and Shoemaker Aves. $150,000.

Mich., Detroit—High School—Bd. Educ., 1354 Bway. Ave., having plans prepared by Malcomson, Higginbotham & Palmer, archts., 405 Moffat Bldg., 3 story and basement, rein.-con., brick and steel, plain foundation, Boston Blvd. $1,000,000. Foregoing is first unit of group to cost $10,000,000.

Mich., Holland — Hotel — Boone Bros., Hotel Holland, plan 5 story, 150 x 150 ft. rein.-con., brick and steel. $150,000. G. S. Kingsley, 109 North Dearborn St., Chicago, archt.

Ill., Chicago—Apartment—W. W. Ahlschlager, archt., 65 East Huron St., soon receives bids 18 story, 156 x 160 ft., rein.-con., brick and steel, Sheridan Rd. near Grace St., for A. Willie, c/o architect. $2,100,000.

Ill., Chicago—Apartment—O. E. Gallus, c/o W. L. Wallen & Sons, having plans prepared by McNally & Quinn Co., archts., 10 South La Salle St., 4 story and basement, 173 x 180 ft., rein.-con., brick and steel, Estes St. near Glenwood Ave. $800,000.

Ill., Chicago—Club—Lake Shore Athletic Club, 28 East Jackson Blvd., having plans prepared by J. Hunt, archt., 30 North Michigan Ave., 16 story, 125 x 180 ft., rein.-con., brick and steel, Chestnut St. and Outer Lake Shore Dr. $2,000,000.

Ill., Chicago—Club—Loyal Order Moose of Chicago, c/o W. L. Provol, dist. superv., 67 West Madison St., plans 16 story, rein.-con., brick and steel. $2,500,000. Engineer and architect not selected.

Ill., Chicago—Club—Norwegian Singing Society, c/o O. Van Gunten, archt., 26 East Huron St., plans 3 story, rein.-con., brick and steel, 2606 North California Ave. $150,000.

Ill., Chicago—Hotel—A. S. Hecht, archt., 155 North Clark St., preparing plans 7 story, 250 x 255 ft., rein.-con., brick and steel, Bway. and Buena St. $2,000,000. Owners name withheld.

Ill., Chicago—Office—Union Stock Yards and Transit Co., Union Stock Yards, having plans prepared by A. Epstein, archt., 2001 West Roosevelt Rd., 9 story, 62 x 140 ft., rein.-con., brick and steel, Exchange Ave. $400,000.

Ill., Chicago—Riding Academy—Washington Park Storage Co., 5153 Cottage Grove Ave., plans 108 x 150 ft., rein.-con., brick and steel, 63rd St. and Cottage Grove Ave. $175,000. Harris & Jillson, 190 North State St., archts.

Ill., Chicago—Store, Office, etc.—Butler Building Corp., c/o C. A. Eckstrom, archt., 5 North La Salle St., having plans prepared 16 story, 77 x 80 ft., rein.-con., brick and steel, 168-172 North State St. $1,000,000.

Ill., Kankakee—Hotel—B. K. Gibson Co., archts., 624 South Dearborn St., Chicago, preparing plans 7 story, 60 x 145 ft., rein.-con., brick and steel. $300,000. Owners name withheld.

Wis., Beloit — City Hall — City having plans prepared by F. A. Carpenter, archt., Brown Blk., Rockford, Ill., 3 story and basement, brick, stone and concrete, plain foundation. $150,000. M. B. MacNeill chn. building comn.

Wis., Fond du Lac—School—St. Patricks Congregation, 19 East Follett St., had plans prepared and soon takes bids 2 story and basement, brick, tile and concrete, plain foundation. $150,000. Stepnoski & Mehner, 9 Forest Ave., archts. Noted Jan. 11.

Wis., Manitowoc—Hotel—Manitou Hotel c/o A. B. Dickson, prop., 825-29 South 8th St., having plans prepared by W. J. Raeuber, archt., 8th and Jay Sts., 5 story, 50 x 85 ft., brick, rein.-con. and steel. $150,000.

Wis., Milwaukee—School—School Bd., 10th and Prairie Sts., having plans prepared by Van Ryn & De Gelleke, archts., 114 Grand Ave., 3 story and basement, 130 x 162 ft., brick, tile and concrete, plain foundation, Franklin St. $400,000.

Wis., Rhinelander—High School—Bd. Educ. having plans prepared by Smith & Reynolds, archts., Brandt, Dempsey Bldg., Manitowoc, 3 or 4 story, 75 x 200 ft., brick, rein.-con. and steel, plain foundation. $250,000.

Ia., Ames—Library—Iowa State College rejected bids opened Jan. 30, 4 story and basement, 50 x 165 ft., rein.-con., brick and stone. $500,000. Proudfoot, Bird & Rawson, 810 Hubbell Bldg., Des Moines, archts. Noted Jan. 18.

Ia., Burlington — Store — Chittenden & Eastman Co., 123 South 3rd St., having plans prepared by Temple & Burrows, archts., 63 Davenport Savings Bank Bldg., Davenport, 6 story and basement, rein.-con., brick, tile and stone, $250,000.

Ia., Mason City — Hospital — St. Lukes Hospital, c/o D. E. Weigle, Mason City, plans 3 or 4 story and basement, rein.-con., brick, tile and stone. $150,000. Engineer or architect not announced.

Minn., St. James — High School — Bd. Educ. having plans prepared by Toltz, King & Day, archts., 1410 Pioneer Bldg., St. Paul, 2 story and basement, rein.-con., brick and tile. $150,000.

Minn., St. Paul—Hospital—State Bd. Control, Capitol, plans 3 story and basement, rein.-con., brick and tile addition, to State Hospital for Crippled Children, 1003 Ivy St., $150,000. C. H. Johnston, 715 Capital Bank Bldg., archt.

Kan., Emporia—High School—Bd. Educ. having preliminary plans prepared by J. H. Felt & Co., archts., 800 Grand Ave. Temple, rein.-con. and brick, junior high school. Election in April to vote on $35,000-$400,000 bonds.

Neb., Gordon—School—Bd. Educ. had plans prepared by E. B. Watson, archt., Norfolk, 3 story and basement, 73 x 164 ft., rein.-con., brick and stone. $150,000.

Neb., Grand Island—Schools—Defeated $544,000 bonds for schools. S. E. Sinke, secy. Bd. Educ. Noted Feb. 1.

S. D., Sioux Falls—Passenger Station, etc. Chicago, Milwaukee & St. Paul Ry. Co., East Jackson Blvd., Chicago, had plans prepared passenger station, freight house, round house, ice plant, water treating plant, terminal yard enlargements, here. $500,000.

N. D., Hunter—High School—Bd. Educ. had plans prepared by J. E. Rosatti, archt., 117 Bway., Fargo, 3 story and basement, 59 x 106 ft., rein.-con., brick, tile and steel. $150,000. C. M. Sorensen, clk.

Mo., Kirksville—High School—Plans election in April to vote on $190,000 bonds for high school. C. L. Fink, secy. School Bd. Noted Jan. 18.

Mo., Kirksville—Hotel—B. L. Eason having plans prepared by R. H. Shanneman, archt., Lee Bldg., Kansas City, 4 story and basement, 90 room, rein.-con., brick and steel. $200,000.

Mo., St. Louis—Armory—Defeated $1,000,000 bonds for armory, Grand and Clark Sts., for National Guard. Noted Dec. 7.

Mo., St. Louis — Office — Western Union Telegraph Co., 195 Bway., New York City, plans 8 story, 112 x 135 ft., rein.-con. and brick, concrete pile foundation, Chestnut St., here. $750,000. Architect not named.

Mo., Slater—School—Bd. Educ. takes bids about March 15, 3 story and basement, 90 x 124 ft., rein.-con., brick and steel. $150,000. L.Abt, Moberly, archt.

Ark., El Dorado—Hospital, etc.—Warner-Brown Hospital had plans prepared by A. B. Groves, archt., 314 North 4th St., St. Louis, Mo., 4 story annex to existing hospital and nurses home, rein.-con. and brick, plain foundation. $160,000.

Tex., Houston—Bank and Office—Houston Natl. Bank, 202 Main St., plans 105 x 116 ft., Main and Franklin Sts. $150,000. H. S. Fox, pres. Engineer or architect not selected.

Tex., San Antonio — High Schools — School Bd. takes bids early in March for one 2 story and three 1 story, junior high schools, rein.-con., brick and stone, $150,000-$175,000 each. W. E. Simpson & Co., Natl. Bank Commerce Bldg., engrs., Phelps & Dewees, Gunter Bldg., archts.

Okla., Chickasha—School—Voted $175,000 bonds for rein.-con., brick and stone. B. B. Barefoot, clk. Engineer or architect not selected.

Okla., Oklahoma City—Store and Office—J. D. Mann, 320 West 2nd St., plans 6 story, 100 x 100 ft., rein.-con., 2nd and Harvey Sts. $150,000. Engineer or architect not announced.

Okla., Ponca City—Business and Lodge—A. F. & A. M., having plans prepared by Smith & Senter, archts., Commerce Bldg., Okmulgee, 5 story and basement, 50 x 140 ft., rein.-con. and stone. $200,000. Noted Feb. 1.

Calif., Boyes Springs—Hotel, etc.—Corporation headed by R. Litchenberg, c/o MacDonald and Couchot, archts., 234 Pine St., San Francisco, having plans prepared hotel and Roman baths, on 240 acre site, here. To exceed $150,000.

Calif., Garden Grove—School—Garden Grove School Dist., having plans prepared by A. G. Lindley, archt., Amer. Bank Bldg., Los Angeles, group of school buildings, brick, hollow tile and rein.-con. To exceed $300,000.

Calif., Hollywood — School — Hollywood High School Dist. having plans prepared by N. F. Marsh, archts., 211 Bway., Los Angeles, 2 story and basement, rein.-con. and brick. $200,000.

Calif., Long Beach—Store—J. B. Green, 309 East 4th St., having plans prepared by E. J. Baume and H. R. Davies, archts., Marine Bank Bldg., 10 story and basement, rein.-con., 4th St. To exceed $450,000.

Calif., Los Angeles—Loft—W. W. Paden, Story Bldg., having plans prepared by E. L. Mayberry, archt., Pacific Electric Bldg., 13 story, rein.-con. and terra cotta, Hill St. To exceed $350,000.

Calif., Los Angeles—Loft and Store—J. and D. Parkinson, archts., Title Insurance Bldg., preparing plans 4 story and basement, brick and concrete, 7th St. near Flower St. To exceed $150,000. Owner's name withheld.

Calif., Los Angeles—Office—W. M. Garland, 749 South Spring St., had plans prepared by Curlet & Beelman, archts., Union Bank Bldg., 12 story, rein.-con., brick and steel, Spring and 9th Sts. $850,000.

Calif., Los Angeles—Store and Office—A. C. Bluementhal, et al., Loew State Bldg., plans store and office on 90 x 150 ft. site, 7th and Westlake Sts. To exceed $150,000. Engineer or architect not selected.

Calif., Los Angeles—Store and Office—R. Rosenberg, c/o Eisen & Walker, archts., Pacific Finance Bldg., having plans prepared 13 story, brick and steel, 8th and Olive Sts. To exceed $200,000.

Calif., Oakland—Store and Loft—C. W. McCall, archt., Central Bank Bldg., preparing plans 4 story and basement, rein.-con. and brick, downtown district. $215,000. Owner's name withheld.

Calif., Placerville—High School—School Dist. defeated $160,000 bonds for high school. Trustees will probably call another election. Noted Feb. 1.

Calif., Selma — Auditorium, etc. — Plans election to vote on bonds (to exceed $150,000) for auditorium, community hall and gymnasium.

Calif., San Diego—Hotel—San Diego Hotel Co. had plans prepared by W. H. Wheeler, archt., I. W. Hellman Bldg., Los Angeles, 7 story, rein.-con. addition, State St. $500,000.

Calif., San Diego—Hotel—J. D. Spreckles, Coronado, had plans prepared by W. M. Wheeler, archt., 302 Spreckels Bldg., 7 story and basement, 100 x 115 fe., rein.-con., State St. $350,000. Noted Dec. 7.

Calif., San Francisco—Apartment—Bway. Community Apartments, Inc., c/o F. W. Quandt, archt., Humboldt Bank Bldg., had plans perpared and takes bids about March 6, 10 story, fireproof, Bway. between Octavia and Laguna Sts. $200,000.

Calif., San Francisco—Apartment—W. F. Gunnison, archt., 57 Post St., completing plans 10 story, basement and sub-basement, rein.-con. and steel, Hyde St. near Lombard St. Owners name withheld.

Calif., San Francisco—Hotel and Club—Bliss & Faville, archts., Balboa Bldg., preparing plans 9 story and basement, fireproof, Sutter and Mason Sts. $750,000. Owner's name withheld.

Calif., San Francisco—Office and Store—Crocker Estate Co., Crocker Bldg., having plans prepared by L. P. Hobart, archt., Crocker Bldg., 3 story, rein.-con., Market St. between Kearny and Montgomery Sts. $150,000.

Calif., San Francisco—Store—Kiel Estate plans 3 story and basement, fireproof, Mission St. near 22nd St. To exceed $500,000. Engineer or architect not selected. W. R. Davis & Bro., 2528 Mission St., lessee.

Buildings (Continued)

Calif., San Francisco—Synagogue—Temple Emanuel, Nevada Bank Bldg., having plans prepared by S. Schnaittacher, 233 Post St. and A. Brown, 251 Kearny St., archts., fireproof synagogue, Arguello Blvd. and Lake St. $500,000. C. Block, 248 Battery St., chn. building com. Noted Oct. 12.

Calif., Stockton—Bank and Office—Bank of Italy, Powell and Eddy Sts., San Francisco, plans 12 or 14 story, fireproof, Main and Hunter Sts., here. To exceed $150,000. Engineer or architect not selected.

Que., Ironsides—College—St. Alexander College, takes bids early in spring, 4 story and basement, 36 x 185 ft., brick and steel addition, here. $175,000.

BIDS DESIRED

Conn., New Haven—Orphanage—Norton & Townsend, archts., 839 Chapel St., receiving bids several buildings for orphanage, rein.-con., brick and steel, Whitney Ave., for New Haven Orphan Asylum. $450,000. Noted March 9.

N. Y., Buffalo—High School—March 14, by Bd. Educ., 1401 Telephone Bldg., for Lewis J. Bennett High School, 2885 Main St. J. Storer, secy.; adv. this issue.

N. Y., Cortland—High School—March 10, by Bd. Educ., brick, steel and stone addition, plain foundation. $400,000. G. W. Conable, 45 West 24th St., New York City, archt. and engr. Noted Feb. 1.

N. Y., New York—School—Feb. 28, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, P. S. 63, brick, steel and stone, plain foundation, Franklin Ave. near 168th St., here, for Bd. Educ., 500 Park Ave. $750,000. Noted July 13.

Pa., Duncannon—March 14, by Duncannon School Dist., W. W. Branyan, secy., Lewistown, 3 story and basement, 90 x 120 ft., brick and steel. $150,000. Lawrie & Green, 222 Market St., Harrisburg, engrs.

Ga., Macon—School—March 1, by Bd. Educ. and Bibb Co. Orphanage, 2 story and basement, 70 x 156 ft., brick and concrete. Dunwody & Oliphant, Jaques Bldg., Macon, and Dennis & Dennis, Macon, archts.

O., Cincinnati—Office—Feb. 28, by Rendigs, Panzier & Martin, archts. and engrs., Lincoln Inn Court Bldg., 10 story and basement, 2 courts, 100 x 200 ft., rein.-con. and brick, plain foundation, Court and Main Sts., for Union Savings Bank & Trust Co., Union Trust Bldg. Noted Oct. 19.

Tenn., Chattanooga—Office—Provident Life & Accident Insurance Co., Broad Co., taking preliminary bids from selected contractors namely, G. Becking & Son, Parks & Co., T. S. Moundy Co., M. Wilson, all of Chattanooga, and Turner Constr. Co. of New York and Atlanta, Ga., for 14 story, rein.-con. R. H. Hunt, James Bldg., archt.

O., Cleveland—Apartment—L. H. Katz, Republic Bldg., taking bids and opens same about Feb. 28, 4 story, 57 x 110 ft., brick and timber, Taylor Rd. $150,000. A. F. Janowitz, Permanent Bldg., archt.

O., Massillon—School—Feb. 27, by Bd. Educ., Longfellow School, 2 story, brick, steel and concrete. $350,000. C. W. Bates, 77 12th St., Wheeling, W. Va., and 604 Marshall Bldg., Cleveland, archt. Noted Sept. 28.

Mich., Hamtramck (Detroit P. O.)—School—March 2, by Bd. Educ., 2 story and basement, 35 ft. high, 70 x 200 ft., brick, steel and concrete, plain foundation, Field and Farnsworth Aves. $250,000. J. G. Kastler & Co., Detroit Savings Bank Bldg., Detroit, archts. Noted Dec. 14.

Ill., Chicago—Apartment—I. Jenks, c/o Koenigsberg & Weisfeld, archts., 5 North La Salle St., receiving bids 3 story, 92 x 152 ft., rein.-con., brick and steel, 4401-07 North Winchester Ave. $150,000.

Ill., Chicago—Apartment—Ohrenstein & Hild, archts., 232 East Erie St., receiving bids 3 story, rein.-con., brick and steel, 5662-64 Ridge Ave. $150,000. Owner's name withheld.

Ill., Chicago—Apartment—M. Telechausky, 1565 North Hoyne Ave., receiving bids 3 story and basement, 130 x 138 ft., rein.-con., brick and steel, 55th St. and Drexel Blvd. $175,000. E. J. Patelski, 157 West Randolph St., archt.

Wis., Milwaukee — Aparament — H. G. Lotter, archt., 427 Milwaukee St., taking bids and opens same about Feb. 26, 3 story and basement, 48 x 110 ft., brick and concrete, plain foundation, Cass St., for H. C. Schwartz, 482 Van Buren St. $150,000. Noted Dec. 28.

Wis., Milwaukee — Convent — Brust & Philipp, archts., 405 Bway., taking bids on superstructure 4 story, L shaped, 160 x 179 ft., rein.-con., brick and tile, Greenfield Ave., for St. Josephs Convent, 23rd and Greenfield Aves. $250,000.

Colo., Boulder—High School—March 1, by School Bd., 3 story, brick, terra cotta and concrete, plain foundation. $200,000. R. K. Fuller, Foster Bldg., Denver, archt.

Ariz., Tucson — High School—March 5, by Bd. Educ., c/o Lyman & Place, archts., 79 North Stone Ave., 2 story, rein.-con. and steel, rein.-con. foundation. $750,000. Noted Dec. 7.

Calif., Oakland—Hospital—March 5, by Supervs. Alameda Co., completing 4 story, rein.-con., Highland Hospital, 14th St. $180,000. H. H. Meyers, Kohl Bldg., San Francisco, archt.

Calif., Stockton—Auditorium—March 20, by A. L. Banks, city clk., rein.-con., cement and pre-cast sandstone memorial auditorium, steel dome, Center, Oak, Fremont and Commercial Sts. To exceed $500,000. L. S. Stone, G. Allen and W. J. Wright, 41 South Sutter, archts. Noted May 18.

BIDS RECEIVED

N. Y., Marcy—Hospital—State Hospital Comn., Albany, opened bids Feb. 14, general contract for farm colony building for 125 patients, at Utica State Hospital, Marcy Div., here, from C. J. Burgess, Foster Bldg., Utica, $169,980; R. Richards & Son Co., 246 Elizabeth St., Utica, $172,000; M. Kantrowitz, 20½ Market St., Albany, $177,000. Noted Jan. 25.

Md., Baltimore—School—Bd. Awards, 4 story, 87 x 237 ft. rein.-con. and brick, 36th St., west of Falls Rd., from C. L. Stockhausen Co., Gay and Water Sts., $534,937; P. C. Streett, 3407 Norwood Ave., $538,000; Price Constr. Co., Maryland Trust Bldg., $546,400. Noted Feb. 8.

Mich., Coldwater—High School—R. Leroy, archt., Pratt Bldg., Kalamazoo, opened bids superstructure for high school, for Bd. Educ., from Gratton Bros., Shiawassee St., Lansing, $125,000; W. M. Allen Son & Co., 929 Jefferson Bldg., Peoria, Ill., $127,827; H. Vanderhorst, South Burdick St., Kalamazoo, $128,690.

Mich., Grand Rapids—High School—H. H. Turner, archt., 923 Michigan Trust Bldg., 2 and 3 story, 85 x 178 ft., rein.-con., brick, steel and terra cotta addition for Bd. Educ., from B. Hauser, Wilcox Park Dr., $118,000; H. Vanderhorst, South Burdick St., Kalamazoo, $122,512; J. McNabb, Murray Bldg., $148,000. Noted Dec. 21.

Ia., Mason City — Home — Independent Order Odd Fellows, W. F. Knight, chn. Home Comn., Des Moines, general contract 3 story and basement, 60 x 160 ft., rein.-con., brick, tile and stone, here, from M. M. Moen Co., Mason City, $105,000; Sugarman Constr. Co., 8th and Tuttle Sts., Des Moines, $105,903; J. Maine & Sons, 119 8th St., Des Moines, $106,830. Noted Feb. 1.

CONTRACTS AWARDED

N. Y., Jamestown—High School—Bd. Educ., East 2nd St., general contract Junior High School, Front St., to Warren Constr. Co., Gokey Bldg., $246,900; heating and ventilating work, to French & Keith, Randolph, $42,091. Noted Feb. 15.

N. Y., New York—Apartment—S. Horowitz, c/o J. M. Felson, archt. and engr., 1133 Bway., 6 story, 100 x 200 ft., brick, steel and stone, plain foundation, 188th St. and Webb Ave., by day labor. $250,000.

N. Y., New York—Loft—Kaufman Dress Co., c/o C. B. Meyers, archt. and engrs., 31 Union Sq., 16 story, 100 x 100 ft., brick, steel and stone, plain foundation, West 35th St., by day labor.

N. Y., Perry—School—Bd. Educ. Dist. 6, Towns of Perry and Castile, at office of T. H. Donnelly, High School Bldg., Leicester St., Perry, general contract altering and constructing 2 story, 146 x 150 ft., brick addition, to W. F. Martens, 244 Cutler Bldg., Rochester, $218,000; heating and ventilating work, to Brighton Plumbing & Heating Co., Perry, $43,390. Noted Jan. 18.

N. Y., Saranac Lake—Hotel—Chamber of Commerce, 157 room hotel, Main and River Sts., to J. G. White Eng. Corp., 43 Exch. Pl., New York City. Archts. est. $400,000. Noted May 4.

N. J., Collingswood—High School—Bd. Educ., 2 story and basement 85 x 105 ft., and 1 story 46 x 129 ft., cut stone, brick and steel, plain foundation, to Wells-Bills Co., 1706 Sansom St., Phila. $377,300. Noted Jan. 4.

Pa., Holmesburg (Phila. P. O.)—Hospital—Bureau of Health, City Hall, brick and stone, Byberry Farm, to C. H. Evans Co., 2315 Walnut St., Phila., $294,576.

Del., Dover—School—Dover School Dist. 2 story and basement, 80 x 224 ft., stone and brick, plain foundation, to Barnes & McLaughlin, 17 South 17th St., Phila. Archts. est. $200,000.

Del., Wilmington—Y. W. C. A., 134 East 44th St., New York City, 3 story, limestone, steel and brick, to Smythe Constr. Co., 828 Orange St. Engrs. and archts. est. $200,000.

Ga., Atlanta—Apartment—Black Co., 4 story and basement, containing 40 apartments, rein.-con., at 188 Ponce De Leon Ave., to Gude & Co., Candler Bldg. $200,000.

Fla., Orlando—Hotel—R. E. Grabel and J. N. Wigfall, Jr., 4 story, North Orange Ave., to G. A. Miller, 28 Petteway Bldg., Tampa, $412,000.

Ky., Owensboro — Hotel — Owensboro Hotel Co., 5 story and basement, 84 x 144 ft., rein.-con. and brick, to M. J. Hoffman Constr. Co., Furn Bldg., Evansville, Ind. Archts. est. $450,000.

O., Akron—Store and Office—United Cigar Stores Co. of America, 44 West 18th St., New York City, 8 story, 50 x 75 ft., brick, steel and concrete, Main and Market Sts., here, to Clemmer & Johnson, 406 Metropolitan Bldg. Archts. est. $250,000. Noted Feb. 15.

O., Groveport—High and Grade School—Bd. Educ., 2 story and basement, 90 x 200 ft., brick and concrete, to C. W. Schneider & Son, 633 Linwood Ave., Columbus, $146,598. Noted Feb. 8.

O., Massillon—High School—Bd. Educ., remodeling and building 2 story and basement, 160 x 171 ft., brick and concrete addition to Washington High School, to A. P. Wendling Co., Massillon. $318,000. Noted Jan. 25.

Mich., Detroit—Apartment—L. Schmeid, 12541 Hamilton Blvd., 3 story and basement, rein.-con., brick and steel, plain foundation, Hamilton Blvd., to S. E. Benjamin & Co., 9825 Greeley Ave. Archts. est. $300,000.

Mich., Detroit—Hotel and Store—Dixieland Inn, Farmer St., 10 story and basement, 60 x 60 ft., rein.-con., brick and steel, Farmer St., to O. Misch Co., 159 East Columbia St. Archts. est. $180,000.

Mich., Detroit — Store and Office — A. Schloss, 647 Griswold St., 8 story and basement, 20 x 100 ft., rein.-con., brick, steel and stone, Woodward Ave. and John R St., to M. Bartholomaei Sons & Co., 1574 East Warren Ave. Archts. est. $150,000.

Ill., Chicago—Apartment—J. A. Albert, 1645 Roosevelt Rd., 3 story and basement, 135 x 243 ft., rein.-con., brick and steel, Washington and Parkside Sts., to Douglas Constr. Co., 3939 West Adams St. Archts. est. $450,000.

Ill., Chicago—Apartment—H. Smith c/o Rissman & Hirschfield, archts., 139 North Clark St., 3 story and basement, rein.-con., brick and steel, Central Park and Madison St., to Douglas Constr. Co., 3939 West Adams St. Archts. est. $500,000.

Ill., Chicago—Apartment—Yates Building Corp., c/o Leichenko & Esser, archts., 38 South Dearborn St., 4 story, 200 x 250 ft., rein.-con., brick and steel, Yates St. near 72nd St., to Nelson & Lind, 6404 South State St. Archts. est. $600,000. Noted Dec. 28.

Ill., Chicago—Apartment—B. Weinstein c/o Rissman & Hirschfield, archts., 139 North Clark St., 3 story and basement, rein.-con., brick and steel, Monroe and Homan Sts., to Douglas Constr. Co., 3939 West Adams St. Archts. est. $200,000.

Ill., Chicago—Apartment-Hotel—E. Hall, archt., 123 West Madison St., 10 story apartment-hotel, Stony Island Ave. and 67th St., to E. Bloom, 6711 Stony Island Ave. $3,500,000. Owner's name withheld.

Ill., Chicago—Hotel—Owner c/o W. H. Mulholand, 30 North La Salle St., 7 story, 62 x 160 ft., rein.-con., brick and steel, 5406 North Spaulding Ave., to G. W. Caldwell & Son Co., 508 State Savings and Trust Bldg., Indianapolis, Ind. Archts. est. $500,000.

Ill., Chicago—Hotel—B. L. Steif, archt., 64 West Randolph St., 6 story, 122 x 137 ft., rein.-con., brick and steel, 6400-12 Cottage Grove Ave., to F. A. Siebold, Jr., 3136 Sheffield St. Archts. est. $500,000. Owner's name withheld.

Wis., Fond du Lac—Lodge and Store—Loyal Order of Moose Lodge 281, c/o R. D. Haentze, chn. building com., 3 story and basement, 80 x 84 ft., brick, tile and concrete, plain foundation, to Immel Constr. Co., 200 North Main St., Milwaukee, cost plus percentage basis. Archts. est. $150,000.

Wis., Fond du Lac—Store and Lodge—Loyal Order of Moose, 3 story, 80 x 82 ft., brick, rein.-con., stone and steel, plain foundation, to Immel Constr. Co., 200 North Main St. Archts. est. $150,000.

Wis., Milwaukee—Office and Store—A. J. Straus, 97 Wisconsin St., 11 story and basement, part 13 story, 40 x 100 ft., brick and concrete, plain foundation, Grand Ave. and

Buildings (Continued)

3rd St., to G. E. Kahn, 114 Grand Ave. Archts. est. $400,000.

Wis., Sheboygan—Store—H. C. Prange Co., 731 North 8th St., 4 story, 110 x 120 ft., brick, rein.-con. and steel, plain foundation, to W. Guenther & Sons Co., 1224 North 4th St. Archts, est. $175,000. Noted Jan. 25.

Ia., Webster City—Junior High School—Bd. Educ., 2 story and basement, 164 x 173 ft., general contract, to C. E. Atkinson, Ft. Dodge. Archts. est. $290,000.

Minn., Minneapolis — Apartment — J. H. Davidson, 723 Plymouth Bldg., 5 apartment buildings, each 3 story and basement, rein.-con., brick and tile, Lake Calhoun Blvd., general contract to Fleisher Constr. Co., 1900 Builders Exch. Archts. est. $275,000 each.

Minn., New Prague—School—Bd. Educ. 2 story and basement, rein.-con., brick, tile and stone, general contract, to H. P. Nelson & Son, Red Wing, $81,300. Noted Jan. 25.

Minn., St. Paul—School and Rectory—Church of the Nativity, c/o T. Moore, 2031 Lincoln Ave., school, 2 story and basement, 69 x 142 ft. with 2 wings each 34 x 87 ft., and rectory 2½ story, 50 x 60 ft., general contract to J. A. McDonald Constr. Co., 750 Builders Exch., Minneapolis, $175,000. Total cost $245,000. Noted Jan. 25.

Kan., Leavenworth—School—Bd. Educ., general contract 2 story and basement, 101 x 155 ft. rein.-con. and brick, to G. Walker, Salina, $250,000.

Mo., St. Louis—Hospital—Childrens Hospital Assn., Kingshighway and Forest Park, 1 story, brick addition to west and east buildings of present hospital group, also addition to County Hospital, near Valley Park, to Hall-Mackay Constr. Co., 625 Locust St. Archts est. $200,000.

Tex., Ft. Worth — Auditorium, etc. — First Baptist Church, J. F. Norris, pastor, 1519 Blvd., addition to auditorium, steel and stone, plain foundations, incl. 2 balconies, movable stage, swimming pool in basement, etc., to K. H. Muse, 201 West Railroad St., $150,000.

Tex., San Antonio—High School—School Bd. 1 story, 90 x 140 ft., rein.-con., brick and stone, Pruitt Ave., to J. C. Dielmann, East Commerce St., $157,197. Noted Jan. 18.

Wash., Wenatchee—Courthouse—Chelan Co., 4 story and basement, 78 x 138 ft., granite, brick and terra cotta, to Jarl & Lasker, Great Falls, Mont. (street address not available), $290,000. Archts. est. $300,000. Noted Jan. 11.

Calif., Hollywood—Hospital—Hollywood Hospital Assn., 5 story and basement, rein.-con., Vermont and Sunset Sts., to J. Simpson Co., 701 Antonio St., Los Angeles, $273,235. Noted Feb. 8.

Calif., Long Beach—Apartment—Cooper Arms Building Co., c/o Curlett & Beelman, archts., Union Bank Bldg., Los Angeles, 12 story, rein.-con., Ocean Ave., here, to Scofield Eng. Co., Pacific Finance Bldg., Los Angeles, $1,000,000.

Calif., Los Angeles — Apartment — P. Rutherford c/o L. L. Jones, archt. Groose Bldg., 4 story and basement, brick and concrete, West 9th St., to W. E. Stradley, Stimson Bldg., $215,000.

Calif., San Fernando—Hotel—F. Pesch, 5 story and basement, brick, to Richardson Building & Eng. Co., Story Bldg., Los Angeles, $150,000.

Calif., San Francisco—Store and Theatre—A. E. and J. L. Levin, c/o Reid Bros., archts., 105 Montgomery St., 1 story, rein.-con., Geary and 18th Sts., general contract to G. P. Pasqualetti, 746 Union St., $100,000. Noted Dec. 28.

Calif., Santa Rosa—Theatre—J. Greeott and E. Stroboni, 100 x 170 ft., fireproof, 1,400 seating capacity, B St., to B. Hildebrand, Santa Rosa, $150,000. T. C. Reavis of King-Reavis Amusement Co., lessee.

Federal Government Work

PROPOSED WORK

N. Y., Iona Island—Quarters—Spec. 4743—Bureau Yards & Docks, Navy Dept., Wash., D. C., rejected bids for 1 double set quarters at Naval Ammunition Depot, here. Noted Feb. 8.

BIDS DESIRED

N. Y., Brooklyn—Alterations, etc.—Spec. 4788—March 7 by Bureau Yards & Docks, Navy Dept., Wash., D. C., alterations and improvements to Bldg. 93, incl. shoring of and removal of brick walls, at Navy Yard, here.

N. Y., New York—Heaters—Feb. 28 at office Constructing Quartermaster, Army Bldg., 39 Whitehall St., furnishing and erecting heaters for heating hangars at Mitchel Field; adv. this issue.

Pa., Phila.—Dredging—March 21 at office U. S. Engineer, 815 Witherspoon Bldg., dredging in Delaware River, Philadelphia Harbor; adv. this issue.

Mich., Detroit—Dredging—March 20 at office U. S. Engineer, Detroit, dredging Vidal Shoals, St. Marys River; adv. this issue.

Mich., Detroit—Dredging—March 21 at office U. S. Engineer, Detroit, dredging below Locks, St. Marys River; adv. this issue.

Wash., Puget Sound — Cranes — Spec. 4755—March 14 by Bureau Yards & Docks, Navy Dept., Wash., D. C., crane equipment for Ordnance Building 368 Extension. Noted Nov. 23.

Calif., San Diego—Storehouse—Spec. 4770—March 14 by Bureau Yards & Docks, Navy Dept., Wash., D. C., storehouse for paints and oils at Naval Base, here.

BIDS RECEIVED

N. Y., Chelsea—Refrigerating Equipment—Treas. Dept., Wash., D. C., refrigerating equipment for U. S. Veterans Hospital, here, from Amer. Carbonic Mchy. Co., Wisconsin Rapids, Wis., $12,785 (100 days); De La Vergne Machine Co., foot of East 138th St., New York, $13,300 (70 days); Velter Mfg. Co., Milwaukee, Wis. (street address not available), $13,804 (150 days).

Mich., Battle Creek—Hospital—Director, U. S. Veterans Bureau, at office Quartermaster-General, 2306 Munitions Bldg., Wash., D. C., for Neuro-Psychiatric Hospital at Camp Custer, here (1) work complete, from A. Bentley & Sons Co., 201 Belmont Ave., Toledo, O., (1) $2,174,680 (2) $26,500 (3) $220,000 (4) $54,000 (5) $71,000 (6) $116,000 (7) $60,000 (8) $49,000 (9) $82,000 (10) $21,000 (11) $24,000 (12) $15,000 (13) $120,000 (14) $49,000 (15) $70,000 (16) $13,000 (17) $25,000 (18) $21,000 (19) $24,000 (20) $41,000 (21) $13,500 (22) $20,000 (23) $16,700 (24) $8,000 (25) $5,500 (27) $3,600 (29) $30 (30) $20,000 (31) $7,000, unit prices (1) deduct $1.10 (2) $0.90 (3) $1.10 (4) $0.80 (5) $2.60 (6) $2.20 (7) $2 (8) $16 (9) $21.50 (10) $70 (11) $1.10 (12) $48 (13) $0.34 (14) $0.20 (begin 10 days, complete 500 days); Paul Riesens Sons, 1018 Humbolt Blvd., Milwaukee, Wis., (1) $2,414,000 (2) $29,000 (3) $259,000 (4) $63,000 (5) $95,000 (6) $129,000 (7) $68,000 (8) $58,000 (9) $96,000 (10) $25,000 (11) $29,000 (12) $20,000 (13) $135,000 (14) $56,000 (15) $100,000 (16) $16,000 (17) $28,000 (18) $26,000 (19) $27,000 (20) $7,000 (21) $19,000 (22) $13,000 (23) $17,200 (24) $17,000 (25) $6,000 (26) $1,700 (27) $7,000 (28) $600 (30) $14,000 (31) $8,500, unit prices (1) $1.80 (2) $1.26 (3) $0.60 (4) $1 (5) $2.80 (6) $2 (7) $2.34 (8) $8 (9) $9 (10) $60 (11) $95 (12) $45 (13) $0.35 (14) $0.23 (begin 10 days, complete 450 days); Walbridge-Aldinger Co., Penobscot Bldg., Detroit, (1) $2,425,428 (2) $32,162 (3) $280,295 (4) $68,252 (5) $97,-$36 (6) $141,749 (7) $77,133 (8) $59,723 (9) $96,057 (10) $24,930 (11) $30,792 (12) $19,374 (13) $146,515 (14) $59,211 (15) $85,415 (16) $17,395 (17) $28,695 (18) $30,110 (19) $29,915 (20) $49,683 (21) $12,000 (22) $17,500 (23) $17,000 (24) $18,000 (25) $2,000 (26) $2,500 (27) $1,000 (29) $250 (31) $5,000, unit prices (1) $1 (2) $2.80 (3) varies from $0.30-$3 (4) $1.50 (5) $2.80 for 8 in. thickness (6) $2.12 (7) $2.25 (8) $10 (10) $65 (13) $0.36 (14) $0.20 (begin 14 days, complete 430 days); W. E. Wood Co., 1805 Ford Bldg., Detroit, (1) $2,455,000 (2) $27,000 (3) $260,000 (4) $59,000 (5) $87,000 (6) $125,000 (7) $66,000 (8) $54,000 (9) $89,000 (10) $23,000 (11) $26,000 (12) $17,000 (13) $120,000 (14) $51,000 (15) $78,000 (16) $14,500 (17) $27,000 (18) $24,000 (19) $24,000 (20) $46,000 (21) $13,000 (22) $8,800 (23) $16,000 (24) $10,000 (25) $43,000 (26) $500 (27) $3,500 (28) $40 (29) $30 (31) $8,500, unit prices (1) $1.95 (2) $1.80 (3) $0.70 (4) $0.80 (5) $2.70 (6) $2.16 (7) $2.16 (8) $8.25 (9) $8.75 (10) $64 (11) $90. (12) $55 (13) $0.28 (14) $0.19 (begin 20 days, complete 365 days). - Noted Jan. 18.

CONTRACT AWARDED

N. Y., Chelsea—Mechanical Equipment—Treas. Dept., Wash., D. C., mechanical equipment for administrative building, mess hall, etc. to S. W. Rittenhouse, 1326 Taylor St., N. W., Wash., D. C., $44,377. Noted Feb. 15.

Md., Annapolis—Natatorium—Spec. 4754—Bureau Yards & Docks, Navy Dept., Wash., D. C., 1 story, 89 x 289 ft., rein.-con., brick, steel and granite, here, (1) work complete, from Boyle-Robertson Constr. Co., Evans Bldg., Wash., D. C., (1) $353,858 (1a) $541 (1b) $5,680 (1c) $6,000 (1d) $7,527 (1e) $3,717 (1f) $11,552 (1g) $33,900 (1h) $12,777 (2) $299,676 (2a) $541 (2b) $3,700 (2c) $4,050 (2d) $6,583 (2e) $3,573 (2f) $8,754 (2g) $29,680 (2h) $10,354 (3) add $0.50 deduct $0.10; D. M. Andrews Co., Sisson and 26th Sts., Baltimore, (1) $379,750 (1a) $800 (1b) $6,800 (1c) $4,100 (1d) $12,200 (1e) $3,900 (1f) $11,500 (1g) $25,000 (1h) $12,200 (2) $329,500 (2a) $700 (2b) $5,000 (2c) $3,500 (2d) $9,400 (2e) $3,700 (2f) $8,700 (2g) $21,350 (2h) $10,000 (3) add $0.50; W. F. Martens, Cutler Bldg., Rochester, N. Y., (1) $409,650 (1a) $413 (1b) $7,130 (1c) $10,753 (1d) $2,639 (1e) $3,000 (1f) $13,800 (1g) $38,000 (1h) $17,800 (2) $347,413 (2a) $413 (2b) $5,400 (2c) $7,080 (2d) add $980 (2e) $2,800 (2f) $10,815 (2g) $31,850 (2h) $12,618 (3) add $0.65. Contract awarded to Boyle-Robertson Constr. Co., $355,858. Noted Jan. 25.

D. C., Wash.—Laboratory, etc.—Interior Dept., (1) laboratory (2) isolation building at St. Elizabeth's Hospital, here, to Boyle-Robertson Constr. Co., Evans Bldg., (1) $118,000; M. Serretto, Commercial Natl. Bank Bldg., (2) $26,500. Noted Jan. 25.

Va., Norfolk—Dredging—Spec. 4771—Bureau Yards & Docks, Navy Dept., Wash., D. C., dredging approximately 14,000 cu.yd. at Navy Yard, here, to Norfolk Dredging Co., Campostella Wharf. $0.395 per cu.yd. scow measurement (30 days). Noted Feb. 15.

Ga., Ft. Benning—Houses—Constructing Quartermaster, 23 sets of 2 family houses, here, to A. Bentley & Sons Co., Atlantic Natl. Bank, Jacksonville, Fla., $373,510. Noted Feb. 8.

Ga., Savannah—Ward Building, etc.—Treas. Dept., Wash., D. C., additional ward building, remodeling present building, etc., at U. S. Marine Hospital, here, to Charlottesville Lumber Co., Charlottesville, Va., $114,200 (12 months). Noted Jan. 4.

Wash., Puget Sound—Fuse and Detonator House Bureau Yards & Docks, Navy Dept., Wash., D. C., fuse and detonator house, here, to Miller Bros., 221 Burwell Ave., Bremerton, $6,674 (60 days). Noted Feb. 15.

Calif., Tiburon—Water Supply System—Spec. 4716—Bureau Yards & Docks, Navy Dept., Wash., D. C., water supply system at Naval Training Depot, here, to J. Pringle, 212 Anita Rd., Burlingame $4,800 (90 days). Noted Feb. 15.

FEDERAL POWER COMMISSION

Applications for Licenses and Permits

Applications

365—Little Falls Water Power Co., Little Falls, Minn.—Wants license for dam and power house at upper end of Pike Rapids in Mississippi River near Royalton.

366—Little Falls Water Power Co., Little Falls, Minn.—Wants preliminary permit for dam and power house at Blanchard Rapids just below Pike Rapids in Mississippi River.

367—City of Louisville, Ky.—Wants preliminary permit for dam and power house in Green River about 1 mi. above Mammoth Cave.

368—City of Louisville, Ky.—Wants preliminary permit for dam and power house in Cumberland River, 2.5 mi. above Burnside.

369—D. L. and W. L. Carver, Steamboat Springs, Colo.—Wants preliminary permit for dam, 200 ft. high in Bear River about 15 mi. above here, incl. 2 mi. pipe line to power house, 10,000 hp. capacity.

370—Nevada Power Co., Boise, Idaho—Wants license for 3 mi. transmission line in Northern Nevada.

371—City of Los Angeles, Calif.—Wants preliminary permit to divert rush, Levining, Walker and Parker Creeks from Mono Lake Drainage Basin into Owens Valley to increase flow through proposed plants in Owens River and to irrigate 50,000 acres below Owens Lake.

372—Southern California Edison Co., Edison Bldg., Los Angeles, Calif.—Wants license for Tule River power plant (already constructed.)

373—Summit Power Co., Gas and Electric Bldg., Denver, Colo.—Wants license for 2 short transmission lines in Leadville Natl. Forest.

374—Nevada-California Power Co., c/o W. L. Huber, 1st Natl. Bank Bldg., San Francisco, Calif.—Wants license for 0.7 mi. transmission line in Inyo National Forrest near Bishop, Inyo Co.

375—A. E. Humphreys, 1st Natl. Bank Bldg., Denver, Colo.—Wants license for minor power project at dam constructed primarily for fish hatchery.

376—W. Neumann and D. Hirstel, 411 Delger Bldg., San Francisco, Calif.—Wants

Federal Power Commission (Continued)

preliminary permit for storage dam and reservoir in San Benito River at Hernandez Valley, incl. canal and tunnel to power house in another watershed in Pancho Creek, to develop 10,000 hp.

377—Southern Alaska Canning Co., Central Bldg., Seattle, Wash.—Wants license for minor development at Big Port Walter Falls at Port Walter, Baranoff Island, Sitka Precinct, Alaska.

378—Beaver Gold Mining Co., 1410 Yeon Bldg., Portland, Ore.—Wants license for short transmission line near Granite, Grand Co., from an existing line to the applicant's mine.

379—Virginia Power Co., Charleston, W. Va.—Wants preliminary permit for dam 140 ft. high, and power house at junction of New and Bluestone Rivers, above Hinton, and in Summers, Mercer, Fayette and Monroe Counties, W. Va. and Giles Co., Va.

380—Burbank Irrigation Dist., Burbank, Wash.—Wants license to construct removable crib dam in Snake River just above its confluence with Columbia River for purpose of increasing diversion of water during low water season through its existing canal and power house.

381—Tennessee Hydro-Electric Co. c/o C. B. Hawley, 450 Munsey Trust Bldg., Wash., D. C.—Wants preliminary permit for 5 power dams, 4 on Clinch River and one on Powell River in Anderson, Campbell, Union, Claiborne, Granger, Hancock, Roane and Knox Counties, Tenn., and Lee and Scott Counties, Va.

382 — Southern California Edison Co., Edison Bldg., Los Angeles, Calif.—Wants license for power plant on Kern River, known as Borel Plant, in Kern and Los Angeles Counites.

Miscellaneous

PROPOSED WORK

Pipe and Equipment—Buffalo, N. Y.—Dept. Pub. Wks. soon takes bids pipe and equipment for gas well, now drilling. $10,000. A. W. Kreinheder, comr.

Street Lighting — Shorewood (Milwaukee P. O.), **Wis.**—Village having plans prepared for electric lighting distribution system. $75,000. A. J. Sweet, 531 Grand Ave., Milwaukee, engr. Noted Nov. 23.

Transmission Line — Kirksville, Mo. — See "Waterworks."

Quay Wall—Palo Alto, Calif.—See "Excavation, Drainage, Irrigation."

Pipe Line—Petaluma, Calif.—Pacific Gas & Electric Co., 445 Sutter St., San Francisco, plans 22 mi. gas pipe line from here to San Rafael. Private plans.

Police Call and Fire Alarm Systems—Santa Ana, Calif.—Election in March to vote on $25,000 bonds for police call system and $25,000 for fire alarm system. W. G. Knox, city engr.

Street Equipment—Santa Ana, Calif.—Election in March to vote on $15,000 bonds to purchase street equipment. W. G. Knox, city engr.

Wharf — Wilmington, Calif. — See "Industrial Works."

Telephone System—Yuba City, Calif.—See "Excavation, Drainage, Irrigation."

Street Lighting System—Lansing, Ont.—North York Twp. having plans prepared for 2 hydro electric areas, preparatory to installing street lighting and power system. $50,000. James, Proctor & Redfern, 36 Toronto St., engrs. Noted Jan. 4.

Edectric Lighting System—Norwich, Ont.—Voted $25,000 bonds for electric lighting and power distribution system. A. E. Roth, town clk.

Ferry Landings—Toronto, Ont.—City and Bd. Harbor Comrs., Harbor Bldg., plans new ferry landings at foot of York St. and at Toronto Island, $26,000 and $38,000 respectively. R. C. Harris, city engr. E. L. Cousins, Harbor Bldg., engr. Harbor Bd.

Subway—Toronto, Ont.—Having plans prepared subway, 66 ft. roadway, under Grand Trunk R.R. tracks at Gerard St. and Carlaw Ave., rein.-con. deck, concrete abutments and piers, steel girders and posts. $312,000. R. C. Harris, city engr.

BIDS DESIRED

Paving Sand—Brooklyn, N. Y.—Feb. 28, by E. Riegelmann, boro pres., Boro Hall, furnishing and delivering 7,000 cu.yd. paving sand, 5,000 cu.yd. 1½ in. gravel or 5,000 cu.yd. 1½ in. broken stone, 400 ton paving pitch, 3,000 cu.yd. paving gravel; furnishing, delivering and applying 35,000 gal. asphalt road binder upon streets to be designated, in amounts of not less than 1,000 gal. at any time.

Street Sweeper—Elmira, N. Y.—Bd. Pub. Wks. taking bids motor driven street sweeper. Address G. W. Jarchow, city clk.

Highway and Roofing Materials—New York, N. Y.—Feb. 27, Bd. Purch., Municipal Bldg., furnishing and delivering highway and roofing materials to Depts. Correction, Health, Parks—Brooklyn, Parks, Bronx, Parks—Queens, Dept. Water Supply, Gas & Electricity, and Police Dept. G. A. Whalen, chn.

Bulkhead and Pier — Baltimore, Md. — Feb. 24, by Consolidated Gas, Electric Light & Power Co., Lexington Bldg., bulkhead and pier, 200 ft. long, wood pile, timber and concrete. $100,000. Private plans.

Wrought Iron Couplings, etc. — Baltimore, Md. — Feb. 28, by W. A. Megraw, water engr., City Hall, furnishing and delivering galvanized wrought iron couplings and malleable iron fittings, $20,000; pig lead, $26,000.

Locomotive and Dump Cars—Lillington, N. C.—Standard Sand and Gravel Co., in market 20 ton, 36 in. guage locomotive, fourteen 6 cu.yd. 36 in. guage dump cars.

Steam Shovel—Jacksonville, Fla.—H. W. Dexter, 16th St., in market for 1 cu.yd. caterpillar steam shovel.

Dock, etc.—Pensacola, Fla.—Feb. 26, by Bd. City Comrs., constructing dock, bulkhead and steel frame warehouse on east side of Palafox wharf, also timber trestle and necessary fill for railroad tracks which are to be constructed to connect dock and warehouse with tracks of Louisville and Nashville R.R. at intersection of Pine and Jefferson Sts. J. E. Frenkel, city clk. F. Jarrett, city engr.

Power Distribution System—De Quincy, La.—See "Industrial Works."

Portland Cement — Evansville, Wis. — March 2, by N. Gillman, city clk., 6,500 bbl. Portland cement. E. B. Parsons, Jefferson, engr.

Portland Cement — Waterloo, Wis. — March 5, by E. H. Hagel, village clk., 6,000 bbl. Portland cement. E. B. Parsons, Jefferson, engr.

Lumber, etc.—Council Bluffs, Ia.—March 6, by Auditor Pottawattamie Co., furnishing 141,900 ft. lumber, 9,375 ft. piling and 1,000 ft. concrete pipe. H. H. Dean, Council Bluffs, co. engr.

Lumber—Guthrie Center, Ia.—Feb. 26, by Auditor Guthrie Co., furnishing 166,400 ft. bridge lumber. A. McKeel, Guthrie Center, co. engr.

Lumber and Metal—Hampton, Ia.—Feb. 27, by Auditor Franklin Co., furnishing 3 cars lumber and 4,224 ft. corrugated culvert metal. M. E. Hickethier, Hampton, co. engr.

Steel, Cement, etc.—Waukon, Ia.—March 1, by Auditor Allamakee Co., furnishing steel, cement, lumber and oil. H. Orr, Waukon, co. engr.

Electric Distribution System—Wynnewood, Okla.—See "Waterworks."

Trailers—San Jose, Calif.—March 5, by Supervs. Santa Clara Co., 2 or more 4 yd. 5 ton trailers, chrome nickel, drop forge. H. A. Pfister, clk.

Cast Iron Pipe—Montreal, Que.—March 1, by Executive Com., City Hall, 13,308 ft. 48 in., 3,840 ft. 30 in., 100 lengths or approximately 55 ton 22 in., 200 lengths or 85 ton of 10 in., 1,500 lengths or 469 ton of 8 in., 50 lengths or 7 ton of 4 in. c.i. Class C pipe. H. A. Terreault, dir. pub. wks. L. O. Pion, purch. agt.

Dump Cars—Quebec—See "Railways."

Supplies—Hamilton, Ont.—March 5, by S. H. Kent, city clk., broken stone and screenings, asphalt cement, limestone dust, asphalt sand, sand and gravel, creosoted wooden blocks, sewer piper, iron castings (ordinary) c.i. pipe and special castings, valves, extension boxes, fuel oil, road oil, concrete and garbage duck covers, waterproof clothing, bass brooms, sectional sweepers, brass work, incl. ordinary and special brass and bronze castings for Water Dept., special iron hydrant casings and bronze and manganese castings for same. T. W. Jutten, mayor; adv. this issue.

Dry Dock Machinery—Esquimalt, B. C.—March 15 (change of date), by R. C. Desrochers, secy. Dept. Pub. Wks., Ottawa, Ont., machinery for dry dock, here. Noted Jan. 4.

Rails, Rail Equipment, etc.—Manchuria, China—See "Railways" under Contracts Awarded.

BIDS RECEIVED

Swimming Pool, etc.—Cortland, N. Y.—Commissioner of Education, Albany, opened bids Feb. 14, general construction of swimming pool at Cortland Normal School, here, from A. E. Stephens Co., 143 State St., Springfield, Mass., $21,750. Panzieri & Hogan, Arkay Bldg., Albany, $23,700; filters, etc., for pool, from Bates Co., West Water St., Syracuse, $7,995.

Steam Ashes—Long Island City, N. Y.—M. E. Connelly, pres. Queens Boro, Queens Subway Bldg., opened bids Feb. 15, furnishing and delivering 13,000 ton steam ashes to Bureau of Highways, from E. B. Simpson, Hempstead Turnpike, Hollis, $11,760; Fred Starr Contg. Co., 220 West 42nd St., New York, $13,520; Tuohey & Upton, 98 Main St., Flushing, $13,900. Noted Feb. 8.

Cable — New York, N. Y. — B. Purch. Municipal Bldg., opened bids Feb. 14, furnishing and delivering weatherproof cable to Dept. Plant & Structures, from Standard Underground Cable Co., 50 Church St., $14,193; U. S. Rubber Co., Bway. and 58th St., $15,640. Noted Feb. 8.

Lumber—New York, N. Y.—Bd. Purch. Municipal Bldg., opened bids Feb. 15, furnishing and delivering lumber and piles to various departments, from A. R. Sax Lumber Co., 143 West 33rd St., $19,430; Robinson Lumber Co., 20 West 34th St., $9,761; G. Elias & Bros., Inc., 22 East 17th St., $34,885; Prever Lumber Co., 250 West 23rd St., $1,267; Leary & Co., Java and Provost Sts., Brooklyn, $10,950; J. S. Hoskins Lumber Co., $9,690; East River Mill & Lumber Co., 92nd St. and East River, $13,292; E. J. Sterner & Co., Inc., 30 Church St., $22,018; J. A. Malone & Co., $22,624; J. H. Burton & Sons Co., 52 Vanderbilt Ave., $10,316; N. E. Pearce, $8,080. Noted Feb. 8.

Mowers, etc.—New York, N. Y.—Bd. Purch., Municipal Bldg., opened bids Feb. 15, furnishing and delivering mowers and tractors, to Dept. Parks-Bronx, from Caldwell Lawn Mower Co., $2,145; Hope Mfg. Co., 442 Bway., $2,560; J. S. Woodhouse Co., 191 Water St., $3,373. Noted Feb. 8.

Manholes, etc. — Baltimore, Md. — Bd. awards, 125,000 lb. manholes, sewer inlet and similar castings, from Greenmount Iron & Mfg. Co., 833 Greenmount Ave., $0.0225 per lb.; Levering Bros., 210 Key Highway, $0.0294; Caroline Fdry. Co., 723 South Caroline St., $0.03. Noted Feb. 8.

Cement—Detroit, Mich.—Dept. Purchases and Supplies, 200,000 bbl. portland cement, from J. Calverts Sons Co., McGraw Bldg., $2.87 per bbl. in cloth sacks, $0.10 rebate for each sack; Aetna Portland Cement Co., 412 Union Trust Bldg., $2.87, $0.10 rebate for sacks; Michigan Portland Cement Co., Chelsea, $2.77, $0.10 rebate for sacks.

Air Lift Equipment—Madison, Wis.—Air lift equipment and pump complete with Booster tank for city water supply, from Indiana Air Pump Co., 812 Indiana-Pythian Bldg., Indianapolis, Ind., $1,592, alternate $1,242; Wisconsin Fdry. Co., 623 East Main St., $2,185 alternate $2,120; Harris Air Pump Co., 431 South Dearborn St., Chicago, $1,816 alternate $1,169. Noted Jan. 25.

CONTRACTS AWARDED

Park—Astoria, N. Y.—Park Bd. at office Dept. Parks, Municipal Bldg., New York, improving Astoria Park, here, to T. Di Roma, 33 Evelyn Pl., New York, $111,903. Noted Feb. 15.

Plumbing and Drainage—Brooklyn, N. Y.—J. E. Douglass, acting supt. School Buildings of Bd. Educ., Flatbush Ave. extension and Concord St., plumbing and drainage work in Thomas Jefferson High School, Dumont Ave., to J. D. Duffy Co., 315 East 23rd St., New York City, $92,764. Noted Feb. 8.

Portland Cement—Jamestown, N. Y.—Bd. Estimate & Review, City Bldg., furnishing portland cement for 1923, to Chautauqua Builders Supply Co., Inc., 132 Blackstone Ave., $2.73 per 100 lb. bag. Noted Jan. 25.

Bulkhead, etc.—Wildwood, N. J.—Bulkhead and sandfill improvements on beach front from Schellenger to Montgomery Aves., concrete and stone, to R. H. Coney, 106 East Garfield St., $41,478.

Bridge Lumber — Minneapolis, Minn. — Hennepin Co., 420 pieces bridge lumber, 3 x 12 ft., total 30,240 ft., to Lyman Lumber Co., Excelsior, $82.50 per m.; rejected bids on 10,000 sq.ft. oak flooring. Noted Feb. 1.

Cement—Minneapolis, Minn.—City, 15,000 bbl. portland cement, to P. G. Speakes Co., 2845 2nd Ave. S.; 45,000 bbl. to Landers-Morrison-Christenson Co., 800 Builders Exch.; 25,000 bbl. to Thompson Yards Inc., 2694 University Ave., St. Paul; 35,000 bbl. to Minneapolis Builders Supply Co., 315 Lumber Exch.; all at $2.52 per bbl. net f.o.b. cars. Noted Feb. 8.

Crushed stone—Dallas, Tex.—For 3,000 ton crushed stone for macadam paving, to Thurber Earthen Products Co., Thurber, $2.40 per ton.

CONSTRUCTION NEWS

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Mar. 5	Bay City, Mich.	Feb. 15
Mar. 5	Slayton, Minn.	Feb. 22
Mar. 5	Greensboro, N. C.	Mar. 1
Mar. 5	Brackenridge, Minn.	Mar. 1
Mar. 6	Toronto, Ont.	Feb. 1
Mar. 7	Rawlins, Wyo.	Feb. 1
Mar. 7	Baltimore, Md.	Feb. 15
Mar. 7	San Francisco, Calif.	Mar. 1
Mar. 7	Casselton, N. D.	Mar. 1
Mar. 8	Ft. Stockton, Tex.	Feb. 22
Mar. 12	Bay City, Mich. Adv. Mar. 1.	Mar. 1
Mar. 12	Buffalo, N. Y.	Mar. 1
Mar. 13	Shamrock, Tex.	Mar. 1
Mar. 13	St. Louis, Mo.	Mar. 1
Mar. 14	Delaware, O.	Mar. 1
Mar. 15	Oxford, Miss. Adv. Feb. 22 and Mar. 1.	Mar. 1
Mar. 16	Cleveland, O.	Mar. 1
Mar. 20	Brooklyn, N. Y. Adv. Feb. 22 and Mar. 1.	Feb. 22
Mar. 20	Brooklyn, N. Y. Adv. Mar. 1.	Mar. 1
Mar. 20	Canandaigua, N. Y. Adv. Mar. 1.	Mar. 1
Mar. 21	Roxboro, N. C. Adv. Mar. 1.	Mar. 1
Mar. 28	Wheeling, W. Va. Adv. Mar. 1.	Mar. 1

SEWERS

Mar. 5	Portland, Ore.	Feb. 22
Mar. 5	Pleasant Ridge, Mich.	Mar. 1
Mar. 7	Casselton, N. D.	Mar. 1
Mar. 7	Maplewood (St. Louis P. O.), Mo.	Mar. 1
Mar. 9	Milwaukee, Wis. Adv. Feb. 22 and Mar. 1.	Mar. 1
Mar. 9	Long Island City, N. Y.	Mar. 1
Mar. 9	New York, N. Y.	Mar. 1
Mar. 12	New Castle, Pa.	Jan. 25
Mar. 13	Matawan, N. J.	Feb. 15
Mar. 19	Pleasant Ridge, Mich. Adv. Mar. 1.	Mar. 1
Mar. 19	Plainfield, N. J. Adv. Mar. 1.	Mar. 1
Mar. 21	Tonawanda, N. Y. Adv. Mar. 1.	Mar. 1
Mar. 26	Glen Rock (Ridgewood P. O.), N. J.	Mar. 1

WASTE DISPOSAL

Mar. 22	Marion, Wis.	Feb. 22

BRIDGES

Mar. 6	Port Elgin, Ont.	Mar. 1
Mar. 7	Marion, Ia.	Mar. 1
Mar. 8	Columbus, Kan.	Feb. 22
Mar. 9	Indianapolis, Ind.	Mar. 1
Mar. 9	Normal, Ill. Adv. Mar. 1.	Mar. 1
Mar. 12	Kansas City, Kan.	Mar. 1
Mar. 12	Akron, O.	Mar. 1
Mar. 13	Media, Pa. Adv. Mar. 1.	Mar. 1
Mar. 14	Washington, Ia.	Mar. 1
Mar. 14	Kentucky	Mar. 1
Mar. 15	Grand Forks, N. D.	Mar. 1
Mar. 15	Oskaloosa, Kan.	Feb. 22
Mar. 20	Manchester, N. H. Adv. Feb. 22 and Mar. 1.	Feb. 22
Mar. 21	Brainerd, Minn.	Feb. 15
Mar. 27	Wilkes-Barre, Pa. Adv. Mar. 1.	Mar. 1
Apr. 1	Wilkes-Barre, Pa.	Dec. 14
Sept. 1	Sydney, New South Wales, Australia	Aug. 3

EXCAVATION, DRAINAGE, IRRIGATION

Mar. 5	Oregon	Feb. 22
Mar. 6	Holly, Colo.	Mar. 1
Mar. 10	Monte Vista, Colo. Adv. Mar. 1.	Mar. 1
Mar. 13	Corcoran, Calif.	Mar. 1
Mar. 19	Selmer, Tenn.	Mar. 1
Mar. 21	Newton, Ia.	Mar. 1

STREETS AND ROADS

Mar. 5	Hillsdale, Mich.	Jan. 25
Mar. 5	Casper, Wyo.	Feb. 15
Mar. 5	Jasper, Ind.	Mar. 1
Mar. 5	Huntingburg, Ind.	Mar. 1
Mar. 5	Evansville, Ind.	Mar. 1
Mar. 5	Warsaw, Ind.	Mar. 1
Mar. 5	Wanakah (Hamburg P. O.), N. Y.	Mar. 1
Mar. 5	Kankakee, Ill.	Mar. 1
Mar. 6	Fond du Lac, Wis.	Mar. 1
Mar. 6	West Virginia	Feb. 15
Mar. 6	Norwalk, Conn.	Feb. 22
Mar. 6	Louisiana	Feb. 22
Mar. 6	Royal Oak, Mich.	Feb. 22
Mar. 6	Michigan	Feb. 22
Mar. 6	Logansport, Ind.	Mar. 1
Mar. 6	Boonville, Ind.	Mar. 1
Mar. 6	Valparaiso, Ind.	Mar. 1
Mar. 6	Maryland Adv. Mar. 1.	Mar. 1
Mar. 6	Hammond, Ind.	Mar. 1
Mar. 6	Ripley, W. Va.	Mar. 1
Mar. 6	Eldorado, Tex.	Mar. 1
Mar. 6	Charlotte, N. C.	Mar. 1
Mar. 7	Quebec	Feb. 22
Mar. 7	Ontario	Feb. 22
Mar. 7	Chester, S. C.	Mar. 1
Mar. 7	Lakefield, Minn.	Mar. 1
Mar. 7	Salina, Kan.	Mar. 1
Mar. 7	Waukesha, Wis.	Mar. 1
Mar. 7	Baltimore, Md.	Mar. 1
Mar. 8	Columbus, Kan.	Feb. 22
Mar. 8	Akron, O.	Mar. 1
Mar. 9	Cincinnati, O.	Mar. 1
Mar. 9	Wayne, W. Va.	Mar. 1
Mar. 12	Evansville, Ind.	Mar. 1
Mar. 12	Bradentown, Fla.	Mar. 1
Mar. 12	Dayton, O.	Mar. 1
Mar. 12	Chicago, Ill.	Mar. 1
Mar. 13	Washington	Mar. 1
Mar. 13	Louisiana	Mar. 1
Mar. 13	Wallingford, Conn. Adv. Mar. 1.	Mar. 1
Mar. 13	Mantorville, Minn.	Mar. 1
Mar. 13	South Bend, Ind. Adv. Mar. 1.	Mar. 1
Mar. 13	Ohio	Mar. 1
Mar. 14	Mayville, Wis.	Feb. 15
Mar. 14	Virginia Adv. Mar. 1.	Mar. 1
Mar. 14	Kentucky	Mar. 1
Mar. 15	New Richmond, Wis.	Mar. 1
Mar. 15	Faribault, Minn.	Mar. 1
Mar. 16	Kenosha, Wis.	Mar. 1
Mar. 16	Ft. Scott, Kan.	Mar. 1
Mar. 16	Independence, Ia.	Mar. 1
Mar. 20	Alabama	Feb. 22
Mar. 21	Madison, Wis.	Feb. 22
Mar. 22	Madison, Wis.	Feb. 22
Mar. 23	Madison, Wis.	Feb. 22
Mar. 23	Commerce, Tex.	Mar. 1
Apr. 1	Huntingdon, Pa.	Feb. 8
Apr. 3	Amsterdam, N. Y.	Feb. 1
Apr. 23	Spokane, Wash.	Feb. 1

INDUSTRIAL WORK

Mar. 6	De Quincy, La.	Feb. 22
Mar. 6	Altoona, Pa.	Mar. 1
Mar. 6	Baltimore, Md.	Mar. 1
Mar. 10	St. Louis, Mo.	Mar. 1
Mar. 14	Garfield, N. J.	Mar. 1
Mar. 27	Oswego, N. Y. Adv. Mar. 1.	Mar. 1

BUILDINGS

Mar. 5	Albany, N. Y.	Feb. 15
Mar. 5	Oakland, Calif.	Feb. 22
Mar. 5	Tuscon, Ariz.	Feb. 22
Mar. 5	Belleville, Ont.	Mar. 1
Mar. 5	Cleveland, O.	Mar. 1
Mar. 6	San Antonio, Tex.	Mar. 1
Mar. 7	Phila., Pa.	Mar. 1
Mar. 7	Crockett, Calif.	Mar. 1
Mar. 8	Phila., Pa.	Mar. 1
Mar. 9	Wapello, Ia.	Feb. 15
Mar. 10	Greenfield, O.	Feb. 15
Mar. 10	Cortland, N. Y.	Feb. 22
Mar. 12	Wichita, Kan.	Feb. 15
Mar. 12	Lorain, O.	Mar. 1
Mar. 12	Mount Blanchard, O.	Mar. 1
Mar. 14	Buffalo, N. Y.	Feb. 22
Mar. 14	Duncannon, Pa.	Feb. 22
Mar. 14	Lancaster, Wis.	Mar. 1
Mar. 15	Duluth, Minn.	Jan. 18
Mar. 15	Trenton, N. J.	Jan. 11
Mar. 15	Austin, Tex.	Mar. 1
Mar. 16	Atlanta, Ga.	Mar. 1
Mar. 16	Minnetonka Beach, Minn.	Mar. 1
Mar. 17	Virginia, Minn.	Mar. 1
Mar. 19	Erie, Pa.	Feb. 15
Mar. 20	Stockton, Calif.	Feb. 22
Mar. 23	Shreveport, La.	Nov. 9
Mar. 26	Cincinnati, O.	Mar. 1
Apr. 1	Oil City, Pa.	Jan. 18
Apr. 2	Syracuse, N. Y.	Mar. 1

FEDERAL GOVERNMENT WORK

Mar. 2	Dredging—New York, N. Y. Adv. Feb. 8 to Mar. 1.	Feb. 8
Mar. 5	Protection, etc. — Boston, Mass.	Feb. 8
Mar. 6	Towboat—Nashville, Tenn. Adv. Feb. 8 to Mar. 1.	Feb. 8
Mar. 7	Dredging — Providence, R. I. Adv. Feb. 8 to Mar. 1.	Feb. 15
Mar. 7	Riprapping — Mare Island, Calif.	Feb. 15
Mar. 7	Alterations, etc.—Brooklyn, N. Y.	Feb. 22
Mar. 10	Wreck Removal — Buffalo, N. Y. Adv. Mar. 1.	Mar. 1
Mar. 12	Barge—Florence, Ala. Adv. Feb. 15 to Mar. 1.	Feb. 15
Mar. 13	Turbine and Generator, etc.—Riverton, Wyo.	Feb. 15
Mar. 14	Storehouse — San Diego, Calif.	Feb. 22
Mar. 14	Cranes — Puget Sound, Wash.	Feb. 22
Mar. 14	Hangars—Quantico, Va.	Mar. 1
Mar. 14	Extension—Keyport, Wash.	Mar. 1
Mar. 15	Dredging—New York, N. Y. Adv. Feb. 15 to Mar. 1.	Feb. 15
Mar. 17	Houses — Huntington, W. Va. Adv. Feb. 15 to Mar. 1.	Feb. 15
Mar. 20	Dredging—Detroit, Mich. Adv. Feb. 22 and Mar. 1.	Feb. 22
Mar. 21	Dredging—Phila., Pa. Adv. Feb. 22 and Mar. 1.	Feb. 22
Mar. 21	Dredging—Detroit, Mich. Adv. Feb. 22 and Mar. 1.	Feb. 22
Mar. 22	Tank and Tower — Memphis, Tenn. Adv. Feb. 22 and Mar. 1.	Mar. 1
Mar. 26	Extension — Kansas City, Mo. Adv. Mar. 1.	Mar. 1
Mar. 29	Dredging — New York, N. Y. Adv. Mar. 1.	Mar. 1
Mar. 29	Hospital — Livermore, Calif. Adv. Mar. 1.	Mar. 1
Apr. 10	Lock—Newburg, Ind. Adv. Mar. 1.	Mar. 1
Apr. 12	Machinery, etc. — Honolulu, H. T. Adv. Mar. 1.	Mar. 1
Apr. 16	Tunnel, etc. — Mitchell, Neb. Adv. Mar. 1.	Mar. 1
May 10	Post Office — Cordova, Alaska	Jan. 25

MISCELLANEOUS

Mar. 5	Portland Cement—Waterloo, Wis.	Feb. 22
Mar. 5	Trailers—San Jose, Calif.	Feb. 22
Mar. 5	Paving Stone, etc. — Buffalo, N. Y.	Mar. 1
Mar. 5	Supplies—Hamilton, Ont. Adv. Feb. 22 and Mar. 1.	Feb. 22
Mar. 5	Paving Materials — St. Paul, Minn.	Mar. 1
Mar. 6	Road Maintenance Machine—Stillwater, Minn.	Feb. 15
Mar. 6	Lumber, etc.—Council Bluffs, Ia.	Feb. 22
Mar. 7	Lumber and Metal—Anamosa, Ia.	Mar. 1
Mar. 7	Lumber, Piling, etc.—Oskaloosa, Ia.	Mar. 1
Mar. 7	Stadium—Baltimore, Md.	Mar. 1
Mar. 8	Road Oil, etc.—Brantford, Ont.	Mar. 1
Mar. 8	Building Materials — New York, N. Y.	Mar. 1
Mar. 9	Steel Pipe, etc.—New York, N. Y.	Mar. 1
Mar. 9	Brick Chimney — Milwaukee, Wis.	Mar. 1
Mar. 9	Lumber, Piling, etc.—Winterset, Ia.	Mar. 1
Mar. 10	Road Grader — Armstrong Mills, O.	Mar. 1
Mar. 13	Levee Work — Clarksdale, Miss.	Mar. 1
Mar. 14	Tank Trailors — Hackensack, N. J. Adv. Mar. 1.	Mar. 1
Mar. 14	Lumber, etc. — Washington, Ia.	Mar. 1
Mar. 15	Graders and Tractors — Crookston, Minn.	Mar. 1
Mar. 15	Dry Dock Machinery—Esquimalt, B. C.	Feb. 22
Mar. 20	Elevating Grader, etc.—St. Cloud, Minn.	Mar. 1

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Conn., Wallingford—Water Dept. takes bids latter part of month new c.i. mains to reservoir, and rein.-con. tunnel through one of hills, etc. $150,000. W. A. Mackenzie, boro. engr. Noted Jan. 4.

N. Y., Ballston Spa.—Bd. Village Trustees and Chamber of Commerce plans new water supply from Crook Brook. $100,000. J. L. Tracy, village pres.

Md., Baltimore—See "Miscellaneous."

N. C., Burlington — See "Streets and Roads."

O., Columbus—See "Streets and Roads."

Wis., Waupun—Making plans 80,000 gal. tank on new steel tower about 74 ft. high, also one 60,000 gal. tank, 20 ft. diameter, 26 ft. high, to be built on present masonry tower. W. G. Kirchoffer, Dean Bldg., Madison, engr.

Ia., Ames—Takes bids early in spring extensions to waterworks. $75,000. P. F. Hopkins, Ames, engr.

Minn., Brainerd—Soon takes bids 200 hp. engine and generator, for waterworks pumping station. E. T. Flewer, clk. L. P. Wolff, 1000 Guardian Life Bldg., St. Paul, engr. Noted May 11.

Tex., Rule—Voted $54,000 bond issue for mains, wells and pumps. Address B. L. Jackson, Rule. Engineer not announced.

Wash., Longview—See "Dams."

Calif., San Bruno—Plans improvements to waterworks system. $50,000. G. A. Kneese, Courthouse, Redwood City, engr.

Ont., Toronto — Having plans prepared 15,500 ft. 36 in. c.i. mains from Front St. to Rathnally Ave. $723,000. R. C. Harris, city engr.

Ont., Toronto—Plans to expend $150,945 for 25,000,000 imp. gal. pump at high level waterworks pumping station. R. C. Harris, city engr.

Ont., Toronto—Plans new pumping station at Riverdale in connection with waterworks program. $200,000. R. C. Harris, city engr.

BIDS DESIRED

N. Y., Brooklyn—March 20, by Bd. Water Supply, Municipal Bldg., New York, constructing Narrows Siphon 2, a portion of Catskill Aqueduct extending across narrows of New York Harbor from 86th St. and Shore Rd., Bay Ridge, here, to Vanderbilt Ave. and Bay St., Clifton, Staten Island. Contr. 198. G. J. Gillespie, pres., adv. this issue.

N. Y., Buffalo — March 12, by A. W. Kreinheder, comr. Pub. Wks., Municipal Bldg., furnishing and delivering pipe castings for Buffalo Filter Plant. G. C. Andrews, Col. Ward Pumping Sta., engr.

N. Y., Canandaigua—March 20, by Bd. Pub. Wks., City Hall, trenching and laying c.i. mains. W. S. Lozier, 321 Cutler Bldg., Rochester, consult engr.; adv. this issue.

W. Va., Wheeling—March 28, 20,000,000 gal. filtration plant, pumping station, steel reservoirs, force mains, distribution system, piping and appurtenances. W. M. Evans, city clk.; adv. this issue.

N. C., Roxboro—March 21, by Mayor and Bd. Comrs., waterworks improvements. Ludlow Engineers, Winston-Salem, engrs.; adv. this issue.

N. C., Greensboro — March 5, by City Council, 7 mi. 6-20 in. c.i. water pipe and 5 mi. 6-12 in. sewer pipe, all complete in place. P. C. Painter, city mgr.

Miss., Oxford—March 15, by R. J. Farley, mayor, and Aldermen, engine, generator and switchboard equipment. T. M. Early, supt. Water and Light Plant; adv. this issue.

O., Cleveland—March 16, 190 x 193 ft. pumping station, 67 ft. high, brick, steel and concrete. $500,000. A. V. Ruggles, City Hall, engr.

O., Delaware—March 14, by W. H. Duffy, pres. Bd. Purch., Oak and 9th Sts., Columbus, one 400 g.p.m. duplex steam pump, and two 500 g.p.m. vertical centrifugal pumps electrically driven, to replace waterworks plant at Girls Industrial Home, Concord, Delaware Co., near here.

Mich., Bay City — March 12, at office W. H. Reid, city mgr., furnishing and installing filter plant equipment, electric lighting and power wiring pumping station and filtration plant, plumbing for pumping station and filtration plant, heating for pumping station and filtration plant, low service pumps, high and low pressure steam and water piping in pumping station. Frazier-Ellms-Sheal Co., B. F. Keith Bldg., Cleveland, O., engrs.; adv. this issue.

Minn., Brackenridge—March 5, by R. R. Waite, city clk., gate valves, hydrants and fittings for Water Dept.

N. D., Casselton—March 7, by C. D. Smith, city aud., waterworks system incl. 1,815 lin.ft. 4 in. 32,140 lin.ft. 6 in. 2,490 lin.ft. 8 in. c.i. pipe, hydrants, etc. $35,000. C. L. Pillsbury Co., 1200 2nd Ave. S., Minneapolis, Minn., engrs.

Mo., St. Louis—March 13, by Bd. Pub. Serv., 208 City Hall, 380 ton Class B 6 in., 50 ton Class C 8 in., 660 ton Class C 12 in. and 110 ton Class C 20 in. Amer. Waterworks Standard coated c.i. pipe.

Tex., Shamrock — March 13, gravity supply pipe line system and storage resevoir, involving 2,600 lin. ft. 4 in. vitr. sewer pipe, 11,500 lin.ft. 4-6 in. c.i. soil pipe, 2,700 lin.ft. 6 in. galvanized iron pipe, 63,500 lin.ft. 6 in. wood or c.i. pipe, 26 air valves, 4 concrete wells, 29,550 lin.ft. 1½-2 in. galvanized iron pipe, one 100,000 gal. concrete storage reservoir. J. D. Trammell, 511 Wright Bldg., Tulsa, Okla., consult. engr.

Calif., San Francisco—March 7, by Bd. Pub. Wks., high pressure fire mains and appurtenances in portions Leavenworth, Beach, Jones and Jefferson Sts. $18,000. City will furnish pipe and fittings not included in estimated cost. M. M. O'Shaughnessy, city engr. Noted Feb. 15.

BIDS RECEIVED

O., Cleveland—Furnishing coal and ash handling equipment for Fairmont Pumping Sta., from Sternes Conveyor Co., East 200th St. and St. Clair Ave., $53,900, Webster Mfg. Co., Swetland Bldg., $55,335, Stevens Adamson Co., Chicago (street address not available) $59,700; 200 ft. chimney, 13 ft. base, from Alphonse Custodias Chimney Constr. Co., Guardian Bldg., $12,430, Hoosier Stack & Constr. Co., 3323 East Washington St., Indianapolis, Ind., $12,786, H. R. Heinicke, Inc., 147 4th Ave., New York City, $13,971; feed water heater, from Fulton Fdry. & Machine Co., East 75th St. and Morgan Ave., $2,233, Swartout Co., 84th St. and Detroit Ave., $2,792; equipment for make up water, from International Filter Co., 333 West 25th St., Chicago, $4,085, Wayne Tank & Pump Co., Ft. Wayne, Ind. (street address not available) $7,950.

O., Wellsville—Dept. Pub. Serv. opened bids Feb. 14, earthen reservoir, from A. W. Hinaman, Canton, Pa., $114,083, Allison Harris Co., West Liverpool, $117,214, Ambursen Constr. Co., Grand Central Terminal, New York City, $141,505; furnishing and laying 300 ft. 30 in., 11,000 ft. 16 in., 52,744 ft. 16 in., and 78 ft. 4 in. c.i. pipe, manholes, covers and relaying brick pavement, etc., from J. A. Grimes, Portsmouth, $110,825; trenching and laying above pipe, manholes, covers, etc., from Allison Harris Co., East Liverpool, $49,588; furnishing above pipe only, from U. S. Cast Iron Pipe & Fdry. Co., 412 Oliver Bldg., Pittsburgh, Pa., $56,029; furnishing 300 ft. 30 in. c.i. pipe and 18 ton special, furnishing and installing 16,274 ft. continuous stave Redwood pipe ranging from 70 to 180 ft. head, also 16,274 ft. 16 in. machine banded redwood pipe, from Pacific Tank & Pipe Co., 2 Rector St., New York City, $46,278. Noted Jan. 25.

CONTRACTS AWARDED

N. Y., Albany—Bd. Contract & Supply, 6 in c.i. pipe, to Warren Fdry. & Machine Co., 11 Bway., New York City, $58 per ton, total $1,160.

N. Y., Buffalo—A. W. Kreinheder, comr. Pub. Wks., Municipal Bldg., furnishing c.i. pipe and specials, to U S. Cast Iron Pipe & Fdry. Co., 957 East Ferry St., $95,148; 341 valves, to Rensselaer Valve Co., Ontario St., Troy, $10,687; 100 hydrants, to Howard Iron Wks., 287 Chicago St., $82.75 each; 100 hydrants, to R. D. Wood & Co., 300 Chestnut St., Phila., $66.30 each. Noted Feb. 1.

O., Bexley (Columbus, P. O.) — See "Streets and Roads."

O., Cleveland—Cuyahoga Co. for 16,160 ft. 6 and 8 in. c.i. mains in impvt. 16 C of Co. Water Dist., to Langahan Constr. Co., Marshall Bldg., $40,197. Noted Feb. 22.

Ill., Marengo—For 6,000 ft. 4 in. and 1,200 ft. 6 in. mains, 4,250 ft. 8 in. and 3,200 ft. 10 in. sewers, to Hamilton Bros., Ann Arbor, Mich., $20,202. Noted Feb. 8.

Wis., Appleton—For 156 ton 12 in., 132 ton 6 in., 6 ton 8 in. and 23 ton 4 in. c.i. water pipe, to Lynchburg Fdry. Co., Peoples Natl. Bank Bldg., Lynchburg, Va., $17,732; 300 sets of brass service material, to Mueller Mfg. Co., 512 West Cerro Gordo St., Decatur Ill., $1,374; 6½ ton pig lead and 11 ton ⅝ in. lead pipe, to Raymond Lead Wks., 725 South Washtenaw Ave., Chicago, $1,105 and $2,090 respectively. Noted Feb. 8.

Wis., Milwaukee — Furnishing 3,000 ton 6-16 in. Class C pipe, to U. S. Cast Iron Pipe & Fdry. Co., 122 South Michigan Ave., Chicago, $159,700; 100 ton special castings, to Amer. Cast Iron Pipe Co., 38 South Dearborn St., Chicago, $9,500. Noted Feb. 1.

Ia., Van Horne—To Des Moines Steel Co., 5th and Tuttle Sts., Des Moines, 5,000 ft. 4 in. Class B c.i. main laid under 5 ft. cover $0.90; 11,000 ft. 6 in. c.i. pipe $1.20; 50,000 gal. steel tank on 100 ft. tower $4,791; concrete for foundations $26 per cu.yd., deep well pumping equipment $2,793; pump house, $835, total $29,200. Noted Nov. 30.

Mo., St. Louis—G. Oetting, supply comr., 200 ton Class C 6 in. c.i. pipe for Water Dept., to Hammond-Byrd Iron Co., Amer. Trust Bldg., Birmingham, Ala., $50.58 per net ton.

Okla., Burbank—Waterworks system, involving 10,171 lin.ft. 4 in. and 3,410 lin.ft. 6 in. Class C c.i. pipe, 4,300 lb. c.i. fittings, 35 hp. engine, pump house, 50,000 gal. tank on 90 ft. tower, open well, 16 ft. diam. 26 ft. deep, etc., to Mackintosh Co., 1st Natl. Bank Bldg., Oklahoma City, $29,949. Noted Jan. 4.

N. M., Artesia—See "Sewers."

Wash., Aberdeen—For 5,000 ft. 16 in. c.i. mains from reservoir to feeders, to Central Fdry. Co., Rialto Bldg., San Francisco, $44,754. Noted Feb. 1.

Sewers

PROPOSED WORK

N. Y., Youngstown—Bd. Village Trustees had plans prepared new sewerage system. $40,000. L. J. Kelly, village pres.

N. J., Hightstown—Plans enlarging sewage plant. $40,000. W. H. Thompson, mayor.

Pa., Lewistown—Having plans prepared and opens bids about May 1, for 6,000 ft. sewers and sewage disposal plant. Banks & Craig, Telegraph Bldg., Harrisburg, engrs.

Md., Baltimore—See "Miscellaneous."

N. C., Burlington — See "Streets and Roads."

Ky., Paducah — City takes bids about March 13, 407 ft. 42 in., 2,817 ft. 36 in., 307 ft. 33 in., 2,286 ft. 21 in., 1,725 ft. 18 in., 2,845 ft. 15 in., 3,506 ft. 12 in. and 940 ft. 10 in. sewers. Alternate bids on concrete segment block, cement, clay, etc. H. A. Pulliam, comr. pub. wks. and ch. engr.

O., Cincinnati—See "Streets and Roads."

O., Columbus—See "Streets and Roads."

O., Warren—Plans storm water sewer in northwest section. $98,000. Engineer not announced.

Ill., Cissna Park—Plans 3,000 ft. sewers. $25,000. C. Blake, Watseka, engr.

Ill., Kankakee—Soldier Creek D.D. plans 8,600 ft. concrete monolithic and segmental block sewers. $350,000. R. Gregg, city engr.

Minn., Lakefield — See "Streets and Roads."

Kan., Independence—Had plans prepared sewage disposal plant, incl. pumping plant, filters and sprinklers. $75,000. H. W. Crawford, Independence, engr.

Mo., Kansas City — Preparing plans 7 mi. of 7 ft. rein.-con. sewers. $2,000,000. P. A. Hartung, City Hall, engr.

Mo., St. Louis—Bd. Pub. Serv., City Hall, received no bids Feb. 13, 1,528 ft. 8-18 in. vitr. sewer in Harlem Creek Sewer Dist. 19; 5,500 ft. 10-24 in. vitr. sewer in Glaise Creek Dist. 20 and 1,065 ft. 8-21 in. vitr. sewer in Glaise Creek Dist. 23. Will readvertise. Noted Feb. 1.

Tex., Nacona—Voted $50,000 bonds for sewerage extensions and improvements. Address Mayor.

Tex., Port Arthur—See "Streets and Roads."

Tex., Rosenberg — Attorney Generals Dept., Austin, approved $50,000 bond issue for sanitary sewer extensions and improvements. E. E. Sands, Mason Bldg., Houston, consult. engr. Noted Dec. 28.

Okla., Hugo—March 7, to vote on $25,000 bonds 15,000 ft. lateral sewers and small incinerator. H. G. Hixon, Hugo, engr.

Ont., Chatham — Having plans prepared sanitary sewers in Park Ave., Pegley and Colborne Sts. $35,000. Prices wanted on materials. C. H. Fuller, city engr.

Ont., Hamilton—Plans to extend storm sewer to James St., 2,000 ft. vitr. pipe. $27,000. E. R. Grap, city engr.

Ont., Toronto—Plans to extend and improve rein.-con. sewage disposal plant in North Toronto Dist. $63,188. R. C. Harris, city engr.

Ont., Toronto—Plans relief sewers in (1) Bloor St. via Charles and Church Sts. Park Rd. and Rosedale Creek, (2) Rosedale Creek and Yonge St. via Rosedale Valley Rd. to Don River, 12,000 ft. long, $208,500. R. C. Harris, city engr.

Sewers (Continued)

BIDS DESIRED

Conn., Wallingford — See "Streets and Roads."

N. Y., Long Island City—March 9, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., storm water sewer in 25th St. from point about 100 ft. northerly from north line of Riker to Ditmars Aves.; combined sewer in 25th St. from Riker to Ditmars Aves.; temporary screen and drop chamber at intersection of 25th St. and Riker Ave.; temporary 30 in. sanitary sewer in 25th St. from Riker Ave. to bulkhead line continuing at an angle of 61 degrees with bulkhead line in northerly direction to point about 1,250 ft. beyond pierhead line, 2nd Ward, Contr. 1.

N. Y., New York—March 9, by J. Miller, pres. Manhattan Boro. Municipal Bldg., furnishing and delivering sewer castings, also 2 superstructures for auto trucks (basin cleaning machine).

N. Y., Tonawanda—March 21, by Town Bd. constructing sewerage system, disposal plant and pumping station. G. C. Diehl, 575 Ellicott Sq., Buffalo, town engr.; adv. this issue.

N. J., Glen Rock (Ridgewood P. O.)—March 26, sewerage system, sewage disposal works and pumping station. $310,000. H. J. Harder, 129 Market St., Paterson, engr.

N. J., Plainfield—March 19, by Common Council, about 1,000 lin.ft. 20 in. sanitary sewer, 8-14 ft. deep. A. W. Vars, city engr.; adv. this issue.

N. C., Greensboro—See "Waterworks."

Mich., Pleasant Ridge—March 5, by C. W. Hubbell, engr., 2348 Penobscot Bldg., Detroit, 21,389 ft. sewers, incl. 5,955 ft. 12 in., 3,130 ft. 18 in., 1,305 ft. 20 in., 1,437 ft. 32 in., 1,954 ft. 24 in., 1,213 ft. 27 in., 3,013 ft. 30 in., 812 ft. 33 in., 295 ft. 36 in., 603 ft. 42 in., 307 ft. 48 in., 584 ft. 60 in. and 971 ft. 66 in. vitr. crock, brick, concrete or rein.-con. pipe, for village.

Mich., Pleasant Ridge—March 19, by O. C. Keil, village clk., 24,428 ft. 12-66 in. sewers. C. W. Hubbell, 2348 Penobscot Bldg., Detroit, consult, engr.; adv. this issue.

Wis., Milwaukee—March 9, by Sewerage Comn. at its offices 508 Market St., extensions to intercepting sewerage system. J. H. Fowles, secy.; adv. this issue.

N. D., Casselton — March 7, by City Auditor, sanitary sewer system, 27,924 lin. ft. 8 in., 1,980 lin.ft. 10 in. and 226 x 526 lin.ft. 12 in. sewer pipe, manholes, and 1 sewage disposal tank, etc. $60,000. C. L. Pillsbury Co., 1200 2nd Ave. S., Minneapolis, engrs. Noted Dec. 1, 1921.

Mo., Maplewood (St. Louis P. O.) — March 7, by J. D. Schuster, mayor, City Hall, sewers in Manchester Dist. 2, 16,594 cu.yd. excav., 14,882 lin.ft. 8-36 in. vitr. clay pipe, 794 ft. 42 in. segment block sewer, 33,500 lb. cast and 4,250 lb. wrought iron, etc.; Laclede Sta. Rd. Sewer Dist. 1, 11,597 cu.yd. excav., 378 cu.yd. tunnel work, 9,062 lin.ft. 8-36 in. vitr. clay pipe, 994 ft. 42 in. segment block sewer, 88,900 lb. cast and 4,400 lb. wrought iron, etc.; Caroline Ave. Sewer Dist., 460 cu.yd. excav., 646 ft. 8-12 in. vitr. pipe, 1,875 lb. cast and 222 lb. wrought iron, etc.; Louise Ave. Sewer Dist., 600 cu.yd. excav., 490 ft. 10-12 in. vitr. pipe, 1,200 lb. cast and 157 lb. wrought iron, etc.; Brent St. Sewer Dist., 736 cu.yd. excav., 829 ft. 10-12 in. vitr. pipe, 47,800 lb. cast and 314 lb. wrought iron, etc.; grading and paving 500 ft. Oxford Ave., 24 ft., 6½ in. concrete and 250 cu.yd. grading. A. H. Beard, 616 Title Guaranty Bldg., St. Louis, engr.

BIDS RECEIVED

O., Akron—W. F. Peters, dir. Pub. Serv., opened bids Feb. 19, (1) 2,150 ft. 12-15 in. vitr. sewer in Garry Ave., engrs. est. $9,528 (2) 3,000 ft. 8-30 in. vitr. clay sewer in Tallmadge Ave. engrs. est. $18,222 (3) 2,745 ft. 30-114 in. brick sewer in Willow Run Trunk Sewer Contr. 3 engrs. est. $229,700 (4) 6,010 ft. 8-27 in. vitr. clay sewer in Case Ave. engrs. est. $24,[illegible]22 (5) Ohio Canal Intercepter Sewer, engrs. est. $62,000, from S. L. Rowland, 769 Bisson Ave., (1) $9,292 (2) $17,749; E. R. Hunt, Akron (street address not available) (1) $10,538 (4) $27,412; F. Mannella, 1811 Foust St., (1) $11,427; Crano & Lombardi, 274 Crosby St., (2) $20,108 (4) $35,104; T. E. McShaffrey Constr. Co., 171 South Forge St., (3) $226,239 (5) brick $82,803; P. W. Graham, 1274 West 108th St., Cleveland (3) $255,607; J. L. Bates, 868 East Buchtel Ave., (4) $26,904; E. and W. McShaffrey Co., 574 Rhodes Ave., (5) segmental block $115,415 (5) brick $130,475. Noted Feb. 15.

Mo., St. Louis—Bd. Pub. Serv., City Hall, opened bids Feb. 13, 5,825 ft. 8-27 in. vitr. sewer in Harlem Sewer Dist. 20 from Frazier-Davis Constr. Co., Arcade Bldg., $26,245; 5,320 ft. 8-30 in. vitr. sewer in Manchester Sewer Dist. 2, from Fruin-Colnon Constr. Co., Merchants-Laclede Bldg., $26,809, Hogan Constr. Co., 2,120 Harris Ave., $28,637. Noted Feb. 1.

Calif., Lodi — Constructing sewage disposal plant, from Davis-Heller-Pearce Co., Delta Bldg., Stockton, $83,169; Gould & Johns' Stockton, (street address not available), $84,516; Youdall & Nysted, Stockton, (street address not available), $84,744. Noted Feb. 1.

Calif., Santa Ana—Joint sewer outfall line into ocean, 1,075 ft. 42 in. segmental block, 325 ft. 42 in. monolithic sewer, laying 800 ft. 42 in. c.i. pipe, etc., from De-Waard & Cobham, Granger Bldg., San Diego, $43,730; P. Barnett, 630 East Washington St., Orange, $59,031.

CONTRACTS AWARDED

Fla., St. Petersburg—Mechanical equipment for sewage screening plant, to Dorr Co., 101 Park Ave., New York City, $6,816. Noted Dec. 28.

O., Bexley (Columbus, P. O.) — See "Streets and Roads."

O., Columbus—W. H. Duffy, dir. Pub. Serv., 1½ mi. 18-48 in. storm and sanitary sewer in Torrence Run, to I. O. Jones, 707 Grove St., $30,164.

O., Dayton—Montgomery Co., 14,770 ft. 8 and 10 in. vitr. sewer in Westwood Sewer Subdistrict B, to Murray & Dill, 18 Cambridge Ave., $29,566. Noted Feb. 15.

Mich., Springwells—B. P. Esper, village clk., 4,720 ft. sewer outlet through Ford property, to R. A. Mercier, 5435 Wesson Ave., Detroit, $219,000. Noted Feb. 8.

Wis., Menasha—Pit and sewage pump house for Shone type of sewage ejector, to A. Nielson & Co., Neenah; ejector, to Yoemans Bros. Co., 209 Grand Ave., Milwaukee, $12,232. Engrs. total est. $25,000.

Wis., Milwaukee—Sewerage Comn., 508 Market St., intercepting sewer in Scott St. from 2nd Ave. to Barclay St., incl. 1,130 lin.ft. 48 in. concrete pipe, 1,550 ft. 48 in. c.i. pipe, to A. H. Prange, 101 Campau Ave., Grand Rapids, Mich., $94,560. Noted Feb. 15.

Ia., Clinton—For sewers in Sewer Dist. 7, between Main and Commercial Sts., to W. B. Carter, United Bank Bldg., Sioux City, 2091 ft. 30 in. vitr. sewer pipe $5.60, 819 ft. 27 in. $4.70, 265 ft. 24 in. $3.26, 872 ft. 18 in. $2.10, 3,156 ft. 15 in. $1.60, 3,258 ft. 12 in. $1.08, 1,718 ft. 10 in. $1, 10,800 ft. 8 in. $0.80, etc., total $49,879. Noted Feb. 15.

Ia., Glidden — For 23,100 lin.ft. 8 in., 4,150 ft. 10 in., 2,410 ft. 12 in. and 420 ft. 15 in. sewers, 75 manholes, etc. to Gjellefald-Chapman Constr. Co., Forest City, $40,744; disposal plant to Sieg Constr. Co., Waterloo, $8,423. Noted July 20.

Mo., St. Louis—Dept. Pub. Serv., City Hall, sewer in Manchester Sewer Dist. 2, 6,000 cu.yd. excav., 2,600 cu.ft. brick masonry, 300 cu.ft. concrete, 300 cu.ft. gravel, 5,320 ft. 8-30 in. vitr. pipe, 11,400 lb. cast and 1,250 lb. wrought iron, etc., to Fruin-Colnon Constr. Co., Merchants-Laclede Bldg., $26,809; Harlem Creek Sewer Dist. 20, 6,225 cu.yd. excav., 300 cu.ft. gravel, 2,800 cu.ft. brick masonry, 5,825 lin.ft. 8-27 in. vitr. pipe, 11,624 lb. cast and 1,105 lb. wrought iron, etc., to Frazier-Davis Constr. Co., Arcade Bldg., $26,245.

Tex., Abilene — For 50,000 ft. 6-8 in. sewer, to Janes Constr. Co., Southwestern Life Bldg., Dallas, $32,500.

N. M., Artesia—To R. M. Irick & Sons, Plainview, Tex., 11,476 lin.ft. 6 in. vitr. pipe $0.26, 21,012 lin.ft. 8 in. $0.42, 2,475 ft. 10 in. $0.58 and 3,656 ft. 12 in. $0.75, 10 flush tanks $90, 99 manholes $92, disposal plant with septic tank, sludge bed, etc., $5,000, total, $34,457, also 1,025 ft. 6 in. c.i. water mains, $1.40 6,970 ft. 4 in. $1.02, etc., total $9,920. Noted Jan. 25.

Calif., Los Angeles — Grading site for outfall sewer treatment plant, involving grading and disposal of 700,000 cu.yd. sand, to J. Balch, 696 12th St., $97,704. Noted Feb. 22.

Waste Disposal

PROPOSED WORK

W. Va., Moundsville—March 8, to vote on $50,000 bonds for incinerator plant and fire department equipment. C. F. Wieneke, mayor.

Okla., Hugo—See "Sewers."

CONTRACTS AWARDED

Pa., Allentown — M. W. Gross, mayor, City Hall, 70 ton per day garbage incinerator, to Roberts Filter Mfg. Co., Darby, $56,200. Noted Feb. 8.

Bridges

PROPOSED WORK

N. Y., Norwich—Plans election to vote on 27,000 bonds steel bridge encased in concrete, across Canasawacta Creek on lower Broad St.

Alabama—See "Streets and Roads."

O., Cincinnati—See "Streets and Roads."

Wis., Appleton — Rejected bids for 2 rein.-con. and steel bridges across Fox River one at Cherry St. other at Lawe St. Will readvertise later. Harrington, Howard & Ash, Orear Leslie Bldg., Kansas City, Mo., engrs. Noted Feb. 22.

Ia., Des Moines — Widening 6th Ave. Bridge over Des Moines River, etc., to Alexander & Higbie, 2733 6th Ave., $27,492. Noted Feb. 15.

Minn., St. Paul—See "Streets and Roads."

Kan., Ft. Scott—Bourbon Co. takes bids about April 1, 2 rein.-con. bridges, through span girder type, over Walnut and Turkey Creeks, on Atlantic-Pacific Highway. B. Boyle, co. engr.

Kan., Independence — See "Streets and Roads."

Kan., Wellington—Sumner Co. had plans prepared, takes bids in March, bridge across Chekaskia River, Federal Aid Project 35, six 50 ft. deck girder spans with alternate bid on three 100 ft. spans. Marsh Eng. Co., 205 Masonic Bldg., Des Moines, Ia., engrs.

N. D., Fargo—Great Northern Ry. Co., 174 East 4th St., St. Paul, Minn., plans timber bridge with two 20 ft. roadways and 2 sidewalks, at 10th St. crossing, here. $110,000. A. H. Hogeland, ch. engr.

Missouri—State Hy. Dept., Jefferson City, five 80 ft. rein.-con. arch span bridge, 20 ft. roadway, also grading 1.278 mi. road near Waynesville, State Project Route 14, Pulaski Co., to Koss Constr. Co., 2818 5th St., Des Moines, Ia., $62,476. Noted Feb. 22.

Wash., Chehalis—Lewis Co. having plans prepared 200 ft. steel bridge over Chehalis River, at Claquato. $26,000. R. Greene, Chehalis, engr.

Oregon—State Hy. Comn., Salem, filed report for Interstate bridge across Columbia River, recommending bascule bridge at Cathlamet Point, near Cathlamet, $2,032,690, or same type near Ranier, $1,639,352. Latter site is recommended most favorable.

Ore., Astoria—State Hy. Comn., Salem, had plans prepared for bascule lift with 100 ft. span, total 600 ft., over Lewis and Clark River, here. $200,000.

Ont., Ft. William — See "Streets and Roads."

Ont., London—See "Streets and Roads."

Ont., Ottawa—See "Streets & Roads."

Ont., Toronto—Plans to expend $44,410 on maintenance of bridges, $46,100 on level crossings. Work includes paving, planking, wood block floors, etc. R. C. Harris, city engr.

BIDS DESIRED

N. Y., Chatham—March 9, by Town Bd. for Kline Kill Bridge on Chatham-Valatie Highway. To exceed $25,000. W. H. Smith, town supt.

Pa., Media—March 13, at office G. T. Wadas, controller Delaware Co., for Plush Mill Bridge 107, 2 span rein.-con.; adv. this issue.

Pa., Wilkes-Barre—March 27, at office F. H. Gates, city clk., South St. Bridge, 1,735 ft. long. J. E. Greiner & Co., Union Arcade Bldg., Pittsburgh, consult. engrs.; adv. this issue. Noted Dec. 14.

Virginia—See "Streets and Roads."

Kentucky—March 14, by State Hy. Comn., Frankfort, constructing bridge over Triplett Creek, Sta. 249 plus 90, on Midland Trail, Morehead to Carter Co. line, Federal Aid Project 67, Rowan Co., one 100 ft. steel pony truss, 20 ft. roadway, superstructure involves 133,800 lb. structural steel, 3,352 lb. c.i., 66 cu.yd. concrete, 7,550 lb. reinforcing, 208 sq.yd. bituminous surfacing, substructure involves 425 cu.yd. cement rubble masonry; bridge over Livingston Creek between Caldwell and Crittenden Co., Sta. 380 plus 18, on Marion-Princeton Rd., State Project 10, Caldwell Co., two 30 ft. concrete spans with concrete abutments and center pier, 259 cu.yd. concrete, 19,724 lb. reinforcing, 190 cu.yd. excav. J. S. Boggs, state highway engr.

Ohio—See "Streets and Roads."

O., Akron—March 12, by W. F. Peters, dir. Pub. Serv., concrete trestle and steel encased concrete bridge, on West Market St., 107,000 lb. structural steel, 76,000 lb. reinforcing, 880 cu.yd. 1:2:4 concrete, 250 cu.yd. earth approach and fill. $35,000. E. A. Kemmler, Delaware Bldg., engr.

Ind., Indianapolis—March 9, by W. J. Hiner, purch. agt., Cleveland, Cincinnati, Chicago & St. Louis R.R., Room 101, 511 West 3rd St., Cincinnati, O., 90 ft. steel superstructure, 200 ft. wide, East St., here. $60,000. J. B. Hunley, ch. engr.

Bridges (Continued)

Ill., Normal — March 9, by Bd. Local Impvts., constructing 3 portland cement reinforced steel concrete bridges. E. A. Tobias, clk.; adv. this issue.

Ia., Marion—March 7, by Auditor Linn Co., 33 box culverts and extensions, 1 slab bridge, etc. R. W. Gearhart, Marion, engr.

Ia., Washington—March 14, by Auditor Washington Co., for Bridge Project 153, incl. 29 culverts and extensions, 14 culverts and 2 deck girder bridges. Exceeds $25,000. W. P. Rawn, Washington, engr.

Kan., Kansas City—March 12, by Clerk Wyandotte Co., reconstructing 12th St. bridge, steel and rein.-con. $385,000. O. K. Williamson, co. engr.

N. D., Grand Forks—March 15, by H. Anderson, aud. Grand Forks Co., wooden, steel and concrete bridges to be built during 1923. J. Ingram, Grand Forks, engr.

Ont., Port Elgin—March 6, by F. W. Elliott, engr., 1 span steel bridge 110 ft. long, 16 ft. roadway, 2 concrete abutments with retaining walls, twin cement rein.-con. arches each 60 ft., $25,000.

BIDS RECEIVED

S. C., Kingstree — See "Streets and Roads."

CONTRACTS AWARDED

North Carolina—See "Streets and Roads."

North Carolina—State Hy. Dept., Raleigh, rein.-con. bridges and culverts on State Project 991, Transylvania Co., to Gibson Constr. Co., Holston Bank Bldg., Knoxville, Tenn., $50,967; on State Project 815, Burke Co., to J. L. Von Glahn, Spartanburg, S. C., $39,457; on State Project 363, Onslow Co., to Pittsburgh-Des Moines Steel Co., Richmond, Va., (street address not available) $89,006; on State Project 671, Rowan Co., State Project 107, Bertie Co. and State Project 147, Bertie and Hertford Co., to Atlantic Bridge Co., Roanoke, Va., $34,706, $50,128 and $37,559 respectively. Noted Feb. 15.

Ky., Pikeville — Pike Co., constructing 300 ft. concrete bridge over Tug Fork of Big Sandy River, to Roehl & Steel, Knoxville, Tenn. (street address not available), $28,700. Noted Jan. 25.

Ohio—See "Streets and Roads."

Ia., Nevada—Story Co., 52 box culverts and extensions 2 I-beams and 1 pair abutments, 1,363.1 cu.yd. rein.-con., 2,672 lin.ft. wood piling, 27,860 lb. steel, to B. J. Cole, Ames, $28,810.

Ia., Rockwell City—Auditor Calhoun Co., to Vinton Eng. and Constr. Co., Vinton, 4 pony trusses and 1 I-beam, $27,196; Powers & Devereaux, Ft. Dodge, 3 I-beams, 1 slab and 1 pair abutments, $17,185; C. A. Schlachter, Manson, 2 box culverts, $1,647. Noted Feb. 8.

Missouri — State Hy. Dept., Jefferson City, one 40 ft. deck girder, one 50 ft. steel truss and one 20 ft. rein.-con. slab spans, 20 ft. roadways, 6 rein.-con. abutments, etc., on State Project Route 14, Sect. 7, Lawrence Co., to Carterville Constr. Co., Carterville, $19,444; one 80 ft. steel truss and four 20 ft. rein.-con. slab spans, 2 rein.-con. piers, 4 rein.-con. bents, over Palmer Creek, State Project Route 10, Sect. 24, Chariton Co., to C. Parker, Keytesville, $15,674; fourteen 25 ft. I-beam, one 120 ft. and two 76 ft. steel truss spans, 14 creosoted wood pile and 1 rein.-con. bents, 2 rein.-con. piers, over Castor River Diversion Channel, State Project Route 51, Sect. 24, Bollinger Co., and one 100 ft. steel truss span, 2 rein.-con. bents, 20 ft. roadway, over Salt Fork, on State Project Route 20, Sect. 22, Saline Co., to Pioneer Constr. Co., 101 New York Life Bldg., Kansas City, $57,268 and $13,906 respectively. Noted Feb. 22.

B. C., Waldo — Provincial Government, Victoria, two timber bridges over Kootenay River, near here, one 385 ft. long with 165 ft. timber Howe truss on concrete abutments and 220 ft. of pile approaches, and other 515 ft. long with 165 ft. Howe truss, two 65 ft. King trusses, 220 ft. of pile approaches, to W. Greenlees, 592 Seymour St., Vancouver, $58,000.

Dams

PROPOSED WORK

Ia., Rochester—See "Industrial Work."

Mo., Hollister—Empire Dist. Electric Co., Forsythe, had preliminary plans prepared 1,500 ft. power dam, 175 ft. high, on White River about 3½ mi. northwest of here, to impound waters of lakes, 500 mi. of shore line. $15,000,000. Owner plans to build large power plant at later date. G. A. Montgomery, mgr. Engineer not announced.

Wash., Longview—W. Vandercook, engr., Longview, preparing plans and takes bids about March 22, 2 rein.-con. dams, one 90 ft. high, 500 ft. long, other 80 ft. high, 400 ft. long, also pipe line to supply water for industrial and domestic purposes, for Long Bell Lumber Co. $400,000-$650,000. Noted Sept. 21 under "Industrial Works," K. 20.

BIDS DESIRED

Wis., Brokaw—L. A. De Guere, engr., Wisconsin Rapids, taking bids and opens same about March 15, 500 ft. rein.-con. dam, 16 ft. high, steel tainter gates, hoist for Wausau Paper Mills Co. $25,000. Noted Jan. 25.

Railways

PROPOSED WORK

North Carolina — Cape Fear Railways, Inc., Fayetteville, plans extending line south 5 mi. from Fayetteville to Hope Mills and west 10 mi. to Manchester. C. F. Harris, genl. mgr.

Kansas—Atchison, Topeka & Santa Fe R.R., Railway Exch., Chicago, soon takes bids 33 mi. new track from Emporia to Plymouth, have now double track but will build addition making 3 tracks. C. W. Felt, ch. engr.

Kansas—Chicago, Rock Island & Pacific Ry., La Salle St., Chicago, had plans prepared and soon lets contract rebuilding road bed and laying 80-85 mi. new steel rails, 150,000 cu.yd. solid rock excav. C. A. Morse, ch. engr.

Montana—Ernster & Barker, Columbus, directing managers of Columbus Copper Range & Southern, take bids this summer, 81 mi. standard gauge electric railroad from Columbus to New World Mining Dist. Engineer not announced.

California—Atchison, Topeka & Santa Fe R.R., 6th and Main Sts., Los Angeles, having plans prepared spur switching track to connect Atchison, Topeka & Santa Fe warehouses with municipal docks, 1st St. from Jackson to Washington Sts., Oakland. $50,000. R. B. Ball, ch. engr.

Excavation, Drainage, Irrigation

PROPOSED WORK

La., New Orleans—Metairie Parks Inc., retained J. F. Coleman, consult. engr., 822 Perdido St., to plan drainage system, lay out roads and plant grounds of new subdivision, incl. 85 acres in West Park.

Calif., Fresno—Stinson Irrigation Dist. plans election March 9, to vote on $360,000 bonds constructing additional canals, wells, reservoirs and installing pumping plants. Quinton, Code & Hill, Hollingsworth Bldg., Los Angeles, engrs.

BIDS DESIRED

Miss., Clarksdale—See "Miscellaneous."

Tenn., Selmer — March 19, by Drainage Comn., McNairy Co., clearing right of way and excavating 7 mi. for Mossy Creek Drainage Canal, D. D. 17, 51,200 cu.yd. earthwork. Abernathy & Abernathy, Selmer, attorneys.

Ia., Newton—March 21 by Auditor Jasper Co., constructing drainage ditch, Impvt. 11, Sect. 1, main ditch, 32,400 lin.ft., 324,340 cu.yd. excav., Sect. 2, main ditch, 16,100 lin.ft., 239,340 cu.yd. excav., Sect. 3, Indian Creek cutoff, 3,258 lin.ft., 25,000 cu.yd. excav. $61,000. J. R. Sterling, 1521 31st St., Des Moines, engr.

Tex., Houston—Anderson Clayton & Co., Mason Bldg., taking bids dredging channel, 600 ft. wharves, concrete warehouses and cotton compress. $1,000,000. W. L. Clayton, mgr.

Colo., Monte Vista—March 10, by Bowen D. D., 18 mi. covered drains. O. A. Cramer, secy.; adv. this issue.

Calif., Corcoran—March 13, by Trustees Corcoran Irrigation Dist., excavating canal 3,850 ft. long, 17,700 cu.yd. excav. D. I. Drown, secy.

Colo., Holly—March 6, by M. H. Geary, secy. Holly D.D. at office of said district, Room 3, McMurtry Land Co. constructing drainage system incl. (a) open drainage canal and Horse Creek syphon, (b) closed tile lines, (c) bridges, flumes and other structures. Welland Eng. Co., 721 Thatcher Bldg., Pueblo, engrs.

BIDS RECEIVED

O., Cleveland — Opened bids Feb. 15, dredging Cuyahoga River, 140,000 cu.yd. excav., from Great Lake Dredge & Dock Co., Wiliamson Bldg., $41,852 and $49,552. Noted Feb. 8.

CONTRACTS AWARDED

Md., Baltimore — Dredging and making fill at McComas St. Bulkhead, 1,300,000 cu.yd., to Sanford & Brooks, Commerce and Water Sts. and Arundel Corp., Fidelity Bldg., $304,000. Noted Feb. 15.

Minn., Mankato—Blue Earth Co. Judicial Ditch 36, 155,930 cu.yd. excav. to Kremer & Hog, 1727 LaSalle Ave., Minneapolis, $41,000, 141,855 lin.ft. 6-34 in. tile to Minnesota Pipe and Tile Co., Mankato, $19,880; Judicial Ditch 40, 31,145 lin.ft. 8-27 in. tile, to A. Sanderson, Blue Earth, $11,300, backfilling, to S. E. S. Huso, Lake Mills, Ia., $8,955; Judicial Ditch 43, 28,950 lin.ft. 8-32 in. tile, to Minnesota Pipe & Tile Co., Mankato, $11,996, labor to D. D. Coleman, Forest City, Ia., $5,400; Judicial Ditch 43, 47,100 lin.ft. 8-32 in. tile, to Minnesota Pipe & Tile Co., Mankato, $13,784, labor to D. D. Coleman, Forest City, Ia., $9,706. Noted Jan. 25.

Calif., Los Angeles—See "Sewers."

Calif., Terra Bella—Terra Bella Irrigation Dist., furnishing well casing, 14 gage, 300 lin.ft. of each of following sizes, 10, 12, 14 and 16 in., to Western Pipe and Steel Co., 444 Market St., San Francisco, $530. Noted Feb. 22.

Streets and Roads

PROPOSED WORK

N. Y., East Aurora—Defeated $30,000 bonds for paving and widening Main St. F. H. Ball, village pres. Noted Feb. 15.

N. Y., Geneva—Plans 18,000 sq.yd. pavement probably brick. To exceed $30,000. H. Seybolt, supt. Pub. Wks. Noted June 15.

N. Y., Rochester—New York State Railways, 267 State St., plans paving between tracks on North Goodman St., asphalt. $29,500.

N. Y., Troy—Plans Paving 2nd St., Troy and 6th Aves. in North Troy. $30,000-$35,000. A. E. Roche, city engr.

N. Y., Troy—Plans paving Eagle St. $12,716, Burdett Ave. $9,566, Massachusetts Ave. $10,665, 13th St. $16,992. A. E. Roche, city engr.

N. Y., Troy—Bd. Pub. Wks., plans paving 7th Ave. $56,359, 6th Ave. $16,725, Jacob St. $3,392. A. E. Roche, city engr.

N. J., Trenton—Plans widening 1 block West State St. from Chancery Lane to Willow St., 41 ft. $50,000. A. Swan, City Hall, engr.

Pa., Warren—Plans to pave West 4th and Lexington Aves., 3 in. paving bricks. $25,000.

Md., Baltimore—City and E. J. Gallagher Realty Co., Munsey Bldg., having plans prepared sheet asphalt paving Quantico St., Santa Fe and Oswego Aves. between Reistertown Rd. and Towsanda Ave. $75,000. R. K. Compton, 214 East Lexington St., chn. Paving Comn.

N. C., Burlington—City plans to pave, curb and gutter various streets and sidewalks, also improve waterworks and sewerage systems. $60,000.

N. C., Kinston—Lenoir Co. plans grading, paving or surfacing various roads. Cost several hundred thousand. E. V. Webb, chn. Co. Highway Comn.

N. C., Washington—Beaufort Co. plans grading and surfacing 5 mi. road out of Washington and 5 mi. road in vicinity of Bath. F. C. Kugler, chn. Co. Highway Comn.

Fla., Apalachicola—Franklin Co. election March 15, to vote on $50,000 bonds constructing road from Blockers Ferry via Lanark, and Carrabelle to East Bay, between Ranges 5 and 6. W. P. Dodd, clk.

Fla., St. Petersburg—City Comn. received no bids Feb. 5, 45,000 sq.yd. concrete sidewalks. Will readvertise after resurvey. E. C. Garvin, dir. pub. wks. Noted Feb. 1.

Alabama—State Hy. Dept., Montgomery, had plans prepared grading and surfacing with sand clay and clay gravel 32.4 mi. Eufaula-Dothan Rd., Houston Co.; grading, surfacing with sand clay and one 80 ft. steel span bridge, on 26.06 mi. Florala-Audalusia Rd., Covington Co. W. S. Keller, state highway engr.

Ky., Henderson — Plans paving various streets, probably asphalt on concrete. $125,000. J. A. Cunningham, comr. pub. wks.

O., Cincinnati—Hamilton Co. plans grading and paving 14,780 ft. Ridge Rd., 16 ft., 76,300 sq.yd. bituminous macadam, $40,388; laying sewers and paving 6,681 ft. Liston Ave., 24 ft., 6,400 lin.ft. granite curb, 33,000 sq.ft. cement sidewalk, 18,180 sq.yd. concrete base, 17,550 sq.yd. bitoslag or bitulithic, 1,250 lin.ft. 30 in. brick and 4,460 lin.ft. vitr. sewer, $181,827. E. A. Gast, Court House, co. surv.

O., Cincinnati—Hamilton Co. plans grading, bridging and paving 8,126 ft. Sharon Ave., 20 ft., 10,200 cu.yd. earth excav., 18,500 sq.yd. concrete, 1,050 cu.yd. 1:2:4 concrete, 30,000 lb. reinforcing, 260 lin.ft. corrugated pipe. $84,414. E. A. Gast, Court House, co. surv.

O., Columbus—Preparing plans grading, curbing, laying necessary water services and sewer connections and paving 577 ft. Barth Alley from alley west of Bruck St.

Streets and Roads (Continued)

to Bruck St., 21 ft., concrete $6,033, brick $8,208, asphalt $7,126; 636 ft. Concord Alley from Mohawk to Yeager Sts., 20 ft., brick $8,049, asphalt $6,974, concrete $5,844; 2,044 ft. 3rd St. from Southwood Ave. to alley north of Innis Ave., 50 ft., brick $28,001, asphalt $23,841; 1,916 ft. Zettler Alley from Rich and Donaldson Sts., 19.5 ft., brick $10,268, concrete $8,171; 360 ft. Rush Alley from Belle to Starling Sts., 18 ft., brick $4,263, concrete $3,053; 515 ft. Stelzer St. from Sycamore to Frankfort Sts., 20 ft., brick $7,728, asphalt $6,764. R. H. Simpson, city engr.

O., Columbus — Franklin Co. making plans grading, bridging and paving 1.46 mi. Borror Rd., Jackson Twp., 18 ft., waterbound macadam, $31,446; 2.96 mi. Hard Rd., Perry and Sharon Twps., 16 ft., waterbound macadam, $61,344. C. C. Lattimer, co. surv.

O., Warren—Planes paving East Summit St. and South Homewood Ave. $25,000. Engineer not announced.

Ind., Angola—Steuben Co. plans grading and graveling 19,780 ft. Osfall Rd., 16 ft. $30,422. F. Hubbell, Angola, engr.

Ind., Austin—Scott Co. plans grading and graveling 16,300 ft. M. L. Kistler Rd., 16 ft. $26,061. A Maggard, Austin, engr.

Ind., Brazil—Clay Co. plans paving 5,118 ft. National Ave. Rd., 18 ft., 10,237 sq.yd. vitr. brick on concrete. $25,726. F. E. James, Brazil, engr.

Ind., Evansville—Vanderburgh Co. plans surfacing 3.8 mi. Mt. Vernon Rd., 16 ft., crushed stone, $39,000; 21,787 ft. Henderson Rd., 20 ft., 48,415 sq.yd. one course 7 in. concrete, with 10 ft. stone on each side, $209,628. R. W. Meissinger, Evansville, engr.

Ind., Hammond—Lake Co. plans grading and graveling 4 mi. Beaubien Rd. and 3 mi. Kaminski Rd., both 16 ft., $32,842 and $26,425 respectively. R. Seely, Hammond, engr.

Ind., Indianapolis—Plans paving 8,500 ft. 29th St. from Capitol Ave. to Riverside Dr., 28,127 sq.yd. asphalt on concrete, $72,000. J. Elliott, Indianapolis, engr.

Ind., Laporte—Laporte Co. plans grading and graveling 17,147 ft. H. F. Carpenter Rd., 17 ft., $26,197, 3 mi. Boehlke Rd., 16 ft., $25,131; 3.1 mi. Kalwitx Rd., 16 ft., $25,743. P. Summy, Laporte, engr.

Ind., Petersburg—Pike Co. plans grading and graveling 11 mi. Petersburg and Jasper Rd., 16 ft. $120,000. R. Morton, Petersburg, engr.

Ind., Princeton—Gibson Co. plans grading and graveling 12,894 ft. Knowles Rd., 20 ft., $25,367, 2.5 mi. Epperson Rd., 16 ft., $25,275; crushed stone surfacing 16,820 ft. E. E. Whiting Rd., 16 ft., $25,350. H. C. Morrison, Princeton, engr.

Ind., Rising Sun—Ohio Co. plans paving 19,040 ft. Hanna Rd., 16 ft., 33,824 sq.yd. waterbound macadam. $31,139. J. E. Wright, Versailles, engr.

Ind., Rockport—Spencer Co. plans grading and graveling 2.9 mi. Smith Rd., 16 ft. $26,455. Z. X. Bennett, Rockport, engr.

Ind., South Bend—St. Joseph's Co. plans grading and graveling 2.9 mi. A. Bentter Rd., 16 ft. $27,309. P. R. Gillin, South Bend, engr.

Ind., Terre Haute—Vigo Co. rescinded contract graveling 17,500 ft. J. A. Crabb Rd., 16 ft., $27,420; paving 11,220 ft. Fromme Rd., 30 ft., 37,400 sq.yd. concrete on concrete, $112,769; graveling and stone surfacing 8.5 mi. John N. White Rd., 30 ft., $110,983. G. R. Grimes, Terre Haute, engr. Will readvertise. Nated Dec. 28.

Ind., Terre Haute—Vigo Co. plans paving 2,740 ft. Donovan Ave. in West Terre Haute, 10,916 sq.yd. concrete on concrete. $25,230. G. Grimes, Terre Haute, engr.

Ind., Vernon—Jennings Co. plans paving 16,100 ft. Haley Rd., 16 ft., $25,242; grading and graveling 14,080 ft. Wilds Rd., 16 ft., $25,787. C. W. Miles, North Vernon, engr.

Ind., Vincennes—Knox Co. plans grading and graveling 4.74 mi. Like Rd., 16 ft., $38,000; paving 1.59 mi. R. M. Glass Rd., 16 ft., 15,243 sq.yd. concrete on concrete, $36,251. G. A. Haskin, Vincennes, engr.

Ind., Washington—Daviess Co. plans paving 16,765 ft. James A. Colbert Rd., 16 ft., 29,804 sq.yd. concrete on concrete, $68,250; 15,525 ft. Lawrence Lee Rd., 16 ft., 27,600 sq.yd. concrete on concrete, $57,960. W. L. McCormick, Washington, engr.

Ill., Atwood—Plans concrete paving 1.5 mi. Main St., 12-60 ft., $90,000. W. J. Day, Bement, engr.

Ill., Champaign—Plans paving and curbing 6 blocks Stoughton St., 7,600 sq.yd. concrete and 4,910 lin.ft. concrete curbing, 4 blocks Healey St., 2,000 sq.yd. concrete. F. C. Lohman, city engr.

Ill., Charleston — Plans grading, paving and curbing, State St., 12,600 sq.yd. vitr. brick 4,600 lin.ft. concrete curbing; Polk St., 2,800 sq.yd. concrete, and 2,100 lin.ft. concrete curbing. D. D. McLain, city engr.

Ill., Cissna Park—Plans grading, paving and curbing 800 ft. Main St., 50 ft., 3,500 sq.yd. concrete. $30,000. C. Blake, Watseka, engr.

Ill., Danville—Plans paving 5 alleys, 5,800 sq.yd. concrete. H. Edwards, city engr.

Ill., Decatur—Macon Co. plans paving 2 or 3 mi. township roads, 20 ft. $100,000. C. Becker, Court House, engr.

Ill., Gilman—Plans paving 2,700 ft. Crescent St. widening Egyptian Trail, 28 ft., 8,000 sq.yd. concrete. C. Blake, Watseka, engr.

Ill., Kankakee—Making plans paving 10 blocks Poplar Ave., 6,000 sq.yd. concrete, South Indiana Ave., 4,000 sq.yd. concrete. R. Gregg, city engr.

Ill., Maroa — Plans widening 4,500 ft. State Rd. additional 14 ft., also improving 800 ft. Main St., 50 ft., both concrete. Holbrook, Warren & Van Praag, Milliken Bank Bldg., Decatur, engrs.

Ill., Mattoon—Plans paving 12 blocks 14th and 15th Sts., vertical fibre brick; 13 blocks Champaign St., 15,050 sq.yd. vertical fibre brick, $62,000, both 30 ft. J. A. Goetz, city engr.

Ill., Monticello—Plans paving 3½ blocks South Market St., 36 ft., (18 ft. state work, 7 ft. street car tracks and 11 ft. city work) 6,000 sq.yd. concrete. W. J. Day, Bement, engr.

Ill., St. Anne—Plans paving 2.5 mi. Chicago and Sheffield Aves., Station, Grant and Beaver Sts. 24-25 ft., 32,250 sq.yd. concrete. $100,000. R. Gregg, Kankakee, engr.

Ill., Urbana—Plans concrete paving 4,000 sq.yd. University Ave. from Cunningham to Race Sts., 24 ft.; 3,200 sq.yd. Hill St. from Lincoln to Wright Sts., 26 ft., 8,000 sq.yd. West Main St. from Central to Lincoln Sts., 32 ft. A. M. Danely, city engr.

Ill., Watseka — Iroquois Co. plans concrete paving about 25 mi. roads, 10 ft. B. Jordan, Watseka, engr.

Wis., Burlington—Plans concrete paving, curbing and guttering Jefferson St., Main St. from Jefferson to State St., State St. from Main to city limits, 25 ft. $25,000. Engineer not selected.

Wis., Milwaukee—Preparing plans paving various streets and alleys, concrete, asphalt and possibly other types. $3,000,000. G. F. Staal, City Hall, engr.

Wis., Oconomowoc—Making plans paving North Main, Hickory and 2nd Sts., 25 ft., 10,000 sq.yd. vitr. brick, asphaltic concrete or 1 course concrete, 8,000 lin.ft. concrete curb, 8,000 lin.ft. concrete gutter. $25,000. J. A. Stemper, City Hall, engr.

Wis., Port Washington — Ozaukee Co. State Road and Bridge Com., concrete surfacing, etc., Cedarburg-Grafton-Saukville Rd., from Schaefer Thompson Constr. Co., Marshfield, $117,455; F. Doherty Co., 753 47th St., Milwaukee, $120,129; Lampert Constr. Co., 11 Algoma St., Oshkosh, $120,148. Noted Feb. 15.

Wis., Sheboygan—Making plans concrete paving, curbing and guttering South 11th St. from Indiana to Union Aves., South 14th St. from Georgia to Union Aves., Prospect St. from 2nd to 3rd Sts., North 3rd St. from Bluff Ave. to Clifton St., Union Ave. from South 9th to Lake Michigan Sts., Virginia Ave. from 8th to North Water St., 25 ft. $25,000. C. N. Boley, City Hall, engr.

Ia., Colfax—Rejected bids 22,447 sq.yd. grading and paving, also 16,898 lin.ft. curbing. New bids about April 1. A. T. Archer & Co., 609 New England Bldg., Kansas City, Mo., engrs. Noted Feb. 15.

Ia., Council Bluffs—A. F. Smith Co., 28 Pearl St., soon receives bids grading new sub-division, 75,000-90,000 cu.yd. Rohrbough Eng. Co., 929 City Natl. Bank Bldg., Omaha, Neb., engrs.

Ia., Lamoni—Making plans 18,000 yd. paving, asphaltic concrete, bitulithic, brick or rein.-con. Shockey Eng. Co., 800 Graphic Arts Bldg., Kansas City, Mo., engrs.

Ia., Marshalltown—Auditor Marshall Co. takes bids this month grading 13 mi. Project 240, Sects. A and B, 175,000 cu.yd. excav. $50,000. D. C. Elder, Marshalltown, engr.

Minn., St. Paul — Ramsey Co. levied $449,250 for road and bridge construction in 1923. $50,000 State aid will be added. P. N. Coates, co. surv.

Kan., Independence—Had plans prepared 8,000 yd. brick pavement on 5 in. concrete, on various streets. H. W. Crawford, Independence, engr.

Kan., Independence — Montgomery Co. making plans paving 10 mi. Federal Aid Project 121, Sects. B and C, bituminous macadam, also one 50 ft. span highway bridge. H. K. Hibbard, co. engr.

S. D., Yankton—Plans paving 11 blocks 13th St. between 3rd Ave. W. and Walts Ave. $38,000. J. W. Summers, city aud.

Wyo., Casper — Plans paving 14th and Willow Sts. $30,000. F. S. Knittle, city engr.

Mont., Butte—Making plans paving Harrison Ave., 47,000 sq.yd. $225,000. J. Wiegenstein, city engr.

Mo., Nevada—Plans election to vote on $100,000 bonds for paving. J. W. Clark, Nevada, engr.

Mo., Princeton—Preparing plans paving streets, concrete. $75,000. Shockley Eng. Co., 800 Graphic Arts Bldg., Kansas City engrs.

Mo., St. Louis — Soon takes bids (a) opening and widening (b) paving, etc., 21,500 ft. Chippewa St. from Grand St. to Kingshighway, 80 ft., (a) $120,000 (b) $279,000; 532 ft. Dodier St. between Spring and Prairie Aves., 36 ft., (a) $12,000 (b) $22,400. W. W. Horner, city engr.

Tex., Dallas—City Comn. takes bids early in March paving 1 mi. Pacific Ave. from Lamar St. to Houston & Texas Central R.R. tracks, 50 ft., 7 in. concrete base with Uvalde rock asphalt bitulithic, brick, wood block, asphaltic concrete or sheet asphalt. $75,000-$100,000. G. D. Fairtrace, city engr.

Tex., Ft. Worth — Tarrant Co. having plans prepared and takes bids in about 30 or 60 days grading, gravel surfacing and concrete structures on 8 mi. Forest Hill and 8 mi. Dido Rds., 14 ft., $65,000 each; gravel surfacing and concrete structures on 8 mi. State Highway 10, 18 ft. $85,000. R. V. Glenn, Ft. Worth, consult. engr.

Tex., Ft. Worth — Tarrant Co. rejected bids paving 3.6 mi. State Highway 40, Keller-Denton Rd., 18 ft., 38,446 sq.yd. concrete. New bids to be called for soon on different type of surfacing. $165,000, incl. 10% for engineering and contingencies. R. V. Glenn, Courthouse, Dallas, engr.

Tex., Nacogdoches—Making plans paving, curbing and guttering main business streets. $500,000. G. L. Forsgard, Nacogdoches, engr.

Tex., Port Arthur—Election about April 1 to vote on $60,000 bond issue paving and storm sewers in Shreveport Ave. Nagle Witt & Rollins, Port Arthur, engrs.

Tex., Richmond—Ft. Bend Co. rejected bids surfacing with bituminous topping 10.4 mi. State Highway 19, 16 ft., 82,708 gal. asphaltic oil, 2,300 cu.yd. trap rock, 1,530 cu.yd. lime stone cover material. $40,000. Will readvertise later. C. H. Kendall, Sugarland, co. engr. Noted Nov. 16.

Okla., Drumright—Plans election to vote on $150,000 bonds grading and paving 30 blocks, 35,000 sq.yd. citr. brick. Peckham & Sutton, 227 West Grand St., Oklahoma City, engrs.

Okla., Durant—Plans concrete paving 30 blocks, Elm, 4th and 7th Sts., 30 ft. $200,000. W. A. Frost, mayor. Engineer not selected.

Wash., Seattle — Bd. Public Wks. approved plans grading north end Beacon Hill, $900,000. Entire north end of hill is to be shaped to prevent land slides. Work will be divided into 4 sections, grading of hill, construction of permanent approaches to viaduct on 12th Ave. S. (to cost $189,000), and sluicing hill dirt to 9th Ave. S., etc. J. D. Blackwell, city engr.

Ore., Portland—Having plans prepared and takes bids about April 15, improving 21 streets (⅓ of entire 1923 improvement program) incl. East 44th, Center, East Washington, East 77th, East Alder, East 63rd, Fenwick, East 11th, 15th, East Clay, East 66th and East 36th Sts., also East 76th from Ash St. easterly, from Alberta St. to Killingsworth Ave., and from Hawthorne Ave. to East Main St., East 70th St. from East Yamhill to East Morrison and from center line Siskiyou St., Fowler Ave., Alley in Block 22, Ladds Addition, and as district improvement, East 17th and East 18th Sts., from Shaver to Skidmore Sts. and Shaver St. from East 15th to East 18th Sts. $250,000. O. Laurgaard, city engr.

Calif., Los Angeles — Los Angeles Co. takes bids about March 15, improving Ocean Ave. between east city limits of Long Beach and Ave. 19, 10,235 cu.yd. excav., 17,953 lin.ft. concrete curb, 27,774 sq.ft. concrete pavement, etc.

Calif., Napa—Had plans prepared improving 3rd St. between Jefferson and School Sts., 1,679 cu.yd. exeav., 76,231 sq.ft. 6 in. concrete pavement, etc. $28,000. H. A. Harrold, city engr.

Calif., Oakland—Had plans prepared improving Plymouth Ave. between 90th Ave. and Jones St., 70,664 sq.ft. grading, 2,267 lin.ft. concrete curb, 4,878 sq.ft. concrete gutter, 33,466 sq.ft. oil macadam pavement, 12,197 sq.ft. cement walks, etc. W. W. Harmon, city engr.

Calif., San Diego—Had plans prepared improving 18th St. between Bway. and Imperial Ave., 169,759 sq.ft. 1½ in. asphaltic concrete on 2½ in. bituminous, etc. F. A. Rhodes, city engr.

Calif., San Francisco — City and San Francisco Co. plans grading and paving Market St. extension between Mono and Ord Sts. $275,000, of which $175,000 is

Streets and Roads (Continued)

for rights of way. M. M. O'Shaughnessy, city engr.

Que., Montreal—Having plans prepared extending and widening Sherbrooke St. from Delormier St. to eastern city limits, 25,500 ft. long, asphalt, 100 ft. wide, but only 20 ft. on each side to be paved, 60 ft. in centre to be used in near future for tramways. $125,000. H. A. Terreault, dir. pub. wks.

Ont., Chatham—Having plans prepared asphalt pavements on Park, Dover and various streets, also resurfacing pavements on several streets. $60,000. C. H. R. Fuller, city engr.

Ont., Ft. William—Northern Development Branch, Parliament Bldgs., Toronto, plans improving 20 mi. International Highway in this vicinity, gravel and macadam, with bridges. $135,000. C. H. Fullerton, ch. engr.

Ont., Kitchener—Having plans prepared asphalt and concrete pavements. $50,000. Prices wanted on materials. A. Shupe, city engr.

Ont., London—Middlesex Co. voted $97,746 for new roads, $143,377 for maintenance and repairs, $22,720 for suburban roads, macadam and gravel. Work also includes several concrete and steel bridges. C. Talbot, County Bldg., engr.

Ont., Ottawa—Carleton Co. plans grading, macadam pavements and concrete bridges. $330,000. C. Macnab, County Bldg., clk.

Ont., Ottawa — Ottawa Suburban Rds. Comn., Thistle Bldg., plans asphalt pavements, road surfacing, grade reductions, etc. $240,000 allotted by city, Carleton Co. and Provincial Government.

Ont., Owen Sound—Suburban Rds. Comn., plans grading, gravel and macadam road construction leading out of city. $150,000. C. H. Thompson, secy.

Ont., Penetanguishene—Plans ½ mi. rein.-con. pavement, 30-45 ft. wide. $30,000. W. H. Hewson, town clk.

Ont., St. Thomas—Elgin Co. plans following expenditures: maintenance of roads $38,000, new machinery $5,000, bridges and culverts $10,000, new road construction, macadam and gravel, $30,000. J. Bell, co. engr.

Ont., Toronto—See "Bridges."

BIDS DESIRED

Conn., Wallingford—March 13, by J. P. Bridgett, warden and Court of Burgesses at office of Borough Clerk, 1,710 sq.yd. concrete paving, 4,040 sq.yd. bituminous macadam paving, etc.; sewers in Simpson and Pomeroy Aves., Ward, Wall and South Orchard Sts.; adv. this issue.

N. Y., Wanakah (Hamburg P. O.)—March 5, by Wanakah Land Corp., 577 Ellicott Sq., Buffalo, removing ½ mi. brick pavement, 16 ft. wide, and building ½ mi. rein.-con. pavement, 18 ft. G. C. Diehl, 577 Ellicott Sq., Buffalo, engr.

Maryland—March 6, by State Roads Comn., 601 Garrett Bldg., furnishing and applying 576,127 gal. oil. J. N. Mackall, chn.; adv. this issue.

Md., Baltimore — March 7, by Paving Comn., for 22,805 cu.yd. sheet asphalt, Contr. 231-OANA. $35,000. R. K. Compton, 214 East Lexington St., chn.

Virginia—March 14, by State Hy. Dept., Richmond, (1) 1.5 mi. road in Fluvanna Co., Project S-166, (2a) 10.4 mi. road in Fluvanna and Goochland Counties, Project S-209, (2b) bridge over Bird Creek, Project S-209, (3a) 9.7 mi. road on Isle of Wight and Nansemond Counties, Project F-160 B and C, (3b) bridge over Kingsale Swamp, (4) 5.5 mi. road in Buchanan Co., Project S-265, (5) 4.8 mi. road Wise Co., Project S-287, (6a) 6.6 mi. road Fluvanna Co., Project S-214, (6b) bridge over Carys Branch Sta., Project S-214, (7) 4.3 mi. road James City Co., Project F-157, (8) 5.08 mi. road Tazewell and Russel Counties, Project F-271, (9) bridge over Grassy Creek, Mecklenburg Co., Project F-178. H. G. Shirley, Richmond, chn. State Highway Comr.; adv. this issue.

W. Va., Ripley—March 6, by Jackson Co., grading 2.25 mi. Ravenswood Rd., Project 3132 B, 18 ft. $45,000. E. Staats, clk.

W Va., Wayne—March 9, by Wayne Co., grading 7 mi. Dunlow-Fleming Rd., Project 3202, 3,000 lin.ft. 18 in. vitr. clay pipe, 162,000 cu.yd. unclassified, 450 cu.yd. wet, 2,400 cu.yd. dry and 1,000 cu.yd. borrow excav., 300 cu.yd. Class A and 1,160 cu.yd. Class B concrete, 32,000 lb. reinforcing, 2,950 sta.yd. overhaul, 33,500 lin.ft. clearing, 360 cu.yd. cement rubble masonry, etc. $135,000. H. J. Spelman, Huntington, engr.

N. C., Charlotte—March 6, by T. Griffith, chn. Mecklenburg Co Comn., improving Conelius River Rd., 45,500 sq.yd. paving, 4,000 cu.yd. grading; County Home Rd., 48,050 sq.yd. paving 4,500 cu.yd. grading; Derita Rd., 4,100 sq.yd. paving, topping only. L. Ross, Charlotte, engr.

S. C., Chester—March 7, by Chester Co. grading and topsoiling 8.6 mi. State Route 9, between survey stations 21-00 and 492-22, 34,664 cu.yd. excav. and 27,137 cu.yd. topsoil. County Bd. Directors, Chester, engrs.

Fla., Bradentown—March 12, by Comrs. Manatee Co., sand clay surfacing 20 mi. Sandy-Edgeville-Duette Rd., $50,000; macadam paving 16 mi. road from Myakka to De Soto Co. line, $100,000. McElroy Eng. Co., Giddens Bldg., Tampa, engrs.

Louisiana—March 13, by State Hy. Comn., Baton, Rouge, constructing 5.49 mi. Federal Aid Project 104, Sect. A., between Colfax and Natchitoches, also furnishing 6,692 cu. yd. washed gravel and 6,698 cu.yd. sand clay. A. Fourmy, state hy. engr.

Kentucky—March 14, by State Hy. Dept., Frankfort, surfacing 3.9 mi. Lawrenceburg-Versailles Rd., State Project 20, Sect. C, Anderson Co., 8,150 ton crushed stone, 2,002 ton screenings, 110 lin.ft. 18 in. and 44 lin. ft. 24 in. corrugated metal pipe, 31 cu.yd. concrete, etc. J. S. Boggs, state highway engr.

Ohio—March 13, by Dept. Highways and Pub. Wks., Columbus, grading and paving roads in following counties:

Fairfield Co., Sect. O-1 Cincinnati-Zanesville Rd., 2.484 mi., brick $118,259; state to furnish brick $90,173; rein.-con. $90,709.

Fairfield Co., Sect. "O-2" Cincinnati-Zanesville Rd., 2.767 mi. brick $128,985; state to furnish brick $104,259; rein.-con. $100,133.

Fairfield Co., Sect. "E-2" Cincinnati-Zanesville Rd., 2.274 mi. brick $85,439; state to furnish brick $66,942; rein.-con., $76,201.

Greene Co., Sect. "J" Columbus-Cincinnati Rd., 2.62 mi., waterbound macadam $54,919.

Huron Co., Sect. "S" Norwalk-Mansfield Rd., 2.504 mi., rein.-con. $69,132.

Mahoning Co., Sect. "A" Salem-Warren Rd., 3.1 mi., bituminous macadam, asphalt or tar $58,823.

Pike Co., Sect. "Piketon" Columbus-Portsmouth Rd., 1.07 mi., brick $47,568.

Richmand Co., Sects. "B-C-D" Mansfield-Norwalk Rd., 8.94 mi., rein.-con. $447,897; bituminous concrete $484,839.

Sandusky Co., Sect. "O-1" Fremont-Castalia Rd., 0.15 mi., waterbound macadam $4,041.

Vinton Co., Sect. "G-3" 0.464 mi., McArthur-Athens Rd., rein.-con., $15,460.

Wood Co., Sect. "B" Perrysburg-Fostoria Rd., 1.549 mi., bituminous macadam, asphalt or tar, $38,781.

Logan Co., Sects. "B and C-2" Bellefontaine-Marysville Rd., 8.832 mi., rein.-con., $271,494.

Mahoning Co., Sect. "Z" Canfield-Poland Rd., 2.531 mi., bituminous macadam, asphalt or tar, $65,927.

Delaware County, Sect. "D" Columbus-Wooster Rd., 1.805 mi., brick, $53,904.

Huron Co., Sects. "K and L" Norwalk-Bellevue Rd., 6.204 mi., concrete curb widening, $76,384.

Huron Co., Sects. "M and N" Norwalk-Bellevue Rd., .476 mi., concrete curb widening, $5,749.

Huron Co., Sect. "P" Norwalk-Oberlin Rd., 4.708 mi., concrete curb widening, $55,994.

Sandusky Co., Sect. "K" Fremont-Perrysburg Rd., two concrete slab top culverts, $3,033. L. C. Herrick, dir. highways.

O., Akron—March 8, by W. F. Peters, dir. Pub. Serv., paving 5th Ave. from Arlington to Elbon Sts., 26 ft., 2,200 lin.ft. stone curb, 5,800 sq.ft. concrete sidewalk, 3,400 cu.yd. earth excav., 3,980 sq.yd. vitr. brick on concrete, 3,790 lin.ft. 6-24 in. sewers, $30,500; Clifton Ave., Lee Dr., Marion Pl. and Bank Alley, 2,650 ft. long, 16 and 26 ft. wide, 7,900 cu.yd. earth excav., 1,400 lin.ft. stone curb, 2,300 lin.ft. brick and concrete gutter, 1,775 sq.yd. vitr. brick, 725 sq.yd. asphalt and 2,500 sq.yd. concrete base, $27,000. E. A. Kemmler, Delaware Bldg., engr. Noted Dec. 7.

O., Cincinnati—March 9, by Hamilton Co., grading and paving 8,980 ft. Van Zandt Rd., 16,000 sq. yd. bituminous macadam, $25,595; 4,230 ft. Oak Rd., 16 ft., 7,525 sq. yd. bituminous macadam, $15,128; 8,530 ft. Baughman Rd., 16 ft., 15,200 sq.yd. bituminous macadam, $23,272; 9,300 ft. Blue Ash Rd., 20 ft., 20,700 sq.yd. bituminous macadam, $30,042. E. A. Gast, Court House, co. surv.

O., Dayton—March 12, by Montgomery Co. paving 1 mi. Brandt St., wood block, brick or Kentucky rock asphalt on concrete. $31,000-$44,000. W. O. Pease, co. surv. Noted Jan. 11.

Ind., Boonville — March 6, by Auditor Warrick Co., grading and graveling 13,000 ft. Susott Rd., 16 ft. $27,500. S. Bohanon, Boonville, engr. Noted Feb. 22.

Ind., Evansville — March 5, by Auditor Vanderburgh Co., rock screening 14,921 ft. Koring Rd., 16 ft., $26,501. R. W. Meissinger, Evansville, engr. Noted Feb. 22.

Ind., Evansville—March 12, by Auditor Vanderburgh Co., grading and graveling 13,685 ft. Covert and Hege Rd., 16 ft. $25,181. R. W. Meissinger, Evansville, engr. Noted Feb. 22.

Ind., Hammond—March 6, by Auditor Lake Co., grading and graveling 8.5 mi. C. O. Holmes Rd., 20 ft. $74,500. R. Seely, Hammond, engr.

Ind., Huntingburg—March 5, by Auditor Dubois Co., crushed stone surfacing 14,360 ft. John Steineker Rd., 16 ft. $25,625. E. Pickardt, Huntingburg, engr. Noted Feb. 22.

Ind., Jasper—March 5, at office F. J. Seng, aud. Dubois Co., improving 13,960 ft. A. H. Manntel et al. Rd. $33,860.

Ind., Logansport—March 6, by Auditor Cass Co., grading and graveling 17,122 ft. Martin Kesling Rd., 16 ft. $27,181. J. Bennett, Logansport, engr. Noted Feb. 22.

Ind., South Bend—March 13, by Dept. Public Wks., paving Harper Court, Leer, Marina, Poland and Carroll Sts., Fassnacht, Golden and Harrison Aves. V. C. Sweeney, clk.; adv. this issue.

Ind., Valparaiso—March 6, by Auditor Porter Co., concrete paving 3.494 mi. Theodore Gloyeske Rd., 16 ft., 32,744 sq. yd. concrete on concrete, $51,591; 2.500 mi. Edward Esserman Rd., 16 ft., $29,244; 1.167 mi. Horace Payne Rd., 18 ft., $32,816; 1.368 mi. Charles O. Carlson Rd., 18 ft. $26,101. F. R McNeice, Valparaiso, engr. Noted Feb. 22.

Ind., Warsaw—March 5, by Auditor Kosciusko Co., grading and graveling 15,460 ft. John W. Mauzy Rd., $26,146; 16,237 ft. Henry Ulmer Rd., $26,684; 14,960 ft. John M. Tuttle Rd., $25,727; 17,132 ft. James H. Stinson Rd., $28,552, all foregoing 16 ft. S. S. Boggs, Warsaw, engr. Noted Feb. 22.

Ill., Chicago—March 12, by Bd. Local Impvts., 207 City Hall, widening Ogden Ave., $800,000, paving Bennett St. from Euclid to Yates Sts., $250,000, various other streets, $1,000,000. C. D. Hill, ch. engr.

Ill., Kankakee—March 5, by Clerk Kankakee Co., concrete paving 5.03 mi. Sect. J. 15-D, State Aid Route 5 and 4.95 mi. Sect. L 15-D, State Aid Route 5, 9 ft. F. M. Enos, co. supt. highways.

Wis., Fond du Lac—March 6, by Fond du Lac Road and Bridge Com., Court House, grading and surfacing 9.89 mi. Eden-Waucousta Rd., Trunk Highway 55, commencing at end of pavement in village of Eden and extending southerly to present pavement 3 mi. south Waucousta, bids will be received in three ways (1) on Sect. A the north end of project comprising 6.76 mi. incl. 24,436 cu.yd. earth excav., 71,400 cu. yd. 18 ft. concrete surfacing, etc., (2) on Sect. B south end of project comprising 3.13 mi., 33,103 sq.yd. 18 concrete surfacing, etc., (3) on Sects. A and B combined. J. S. McCullough, co. highway engr.

Wis., Kenosha—March 16, by R. M. Smith, city engr., paving Pleasant, West, Erie, 3rd, South, Lester, and Bond Sts., Marion, Sellick, Alleman, Tanck, Lyman and Florence Aves., Linderman Court, Pleasant Pl., alternate bids on sheet asphalt, vertical fibre brick, 1 course rein.-con. and asphaltic concrete. $430,000. Noted Feb. 1.

Wis., New Richmond—March 15, by J. E. Hughes, city clk., paving 18,000 sq.yd. various streets, concrete. Former bids rejected. J. W. Shaffer & Co., 716 New York Life Bldg., Minneapolis, Minn., engrs. Noted Feb. 1.

Wis., Waukesha—March 7, by Waukesha Co. State Road and Bridge Com., Court House, surfacing, etc., Merton-North Lake Rd., State Trunk Highway 74, Village of Merton and extending north and west 4.2 mi., incl. 16,397 cu.yd. earth excav., 44,488 sq.yd. 18 ft. concrete surfacing, etc.; Waukesha-Prospect Rd., commencing at College Ave. in this city and extending 3.35 mi. along County Trunk Highway H. 21,296 cu.yd. earth excav., 37,720 sq.yd. 16 ft. concrete surfacing, etc. C. J. Hahn, co. highway comr.

Ia., Independence—March 16, by Auditor Buchanan Co., grading, paving and incidental work on 1.906 mi. primary road in Jesup, 5,644 cu.yd. excav., 5,295 ft. 6 in. and 3,040 ft. 8 in. tile, 20,192 sq.yd. concrete pavement, etc. Iowa Hy Comn., Ames, engrs.

Minn., Faribault—March 15, by F. M. Kaisersatt, aud. Rice Co., Job 2301 State Rd. 3, 42,171 cu.yd. earth excav., 2,200

Streets and Roads (Continued)

cu.yd. loose and 50 cu.yd. solid rock excav., 63,797 cu.yd. overhaul, 964 lin.ft. 12-24 in. corrugated metal culverts, 2 wing-wall culverts, 127 cu.yd. concrete, 8,861 lb. steel, 544 lin.ft. piling; Job 2301 State Rd. 6, 62,791 cu.yd. earth excav., 1,840 cu.yd. loose and 100 cu.yd. solid rock excav., 52,648 cu.yd. overhaul, 1,727 lin.ft. 12-24 in. corrugated metal culverts, 4 wing-wall culverts, 480 cu.yd. concrete, 35,158 lb. steel; Job 2303, State Rd. 27, 56,720 cu.yd. earth excav., 1,712 cu.yd. loose and 100 cu.yd. solid rock excav., 46,648 cu.yd. overhaul, 1,378 lin.ft. 12-24 in. corrugated metal culverts, 1 wing-wall culvert, 86 cu.yd. concrete, 5,112 lb. steel; Job 2304, State Rd. 24, 78,938 cu.yd. earth excav., 1,656 cu.yd. loose and 244 cu.yd. solid rock excav., 65,422 cu.yd. overhaul, 1,438 lin.ft. 12-25 in. corrugated metal culverts, 3 wing-wall culverts, 122 cu.yd. concrete, 7,678 lb. steel, $50,000. J. C. McElherne, Faribault, engr.

Minn., Lakefield—March 7, by city, paving 15,000 sq.yd. various streets, concrete, sheet asphalt, asphaltic concrete, bitulithic or brick, concrete curb and gutter, 1,600 lin. ft. 10-18 in. storm sewer. $70,000. W. E. Buell & Co., 205 Davidson Bldg., Sioux City, Ia., engrs.

Minn., Mantorville—March 13, by G. L. Taylor, aud. Dodge Co., Job 2301, State Rd. 4, 26,992 cu.yd. earth excav., 91 cu.yd. loose rock excav., 153,820 cu.yd. overhaul, 480 lin.ft. sectional concrete or corrugated metal culverts, load and haul 4,207 cu.yd. gravel, 700 cu.yd. ½ to 1 mi., 3,507 cu.yd. over 1 mi., 2,547 cu.yd. miles, 975 cu.yd. stripping, one 30 ft. I-beam concrete span, 3 monolithic culverts, $25,000; Job 2302, State Rd. 7, clear 1,188 trees, grub 1,268 trees, 99,642 cu.yd. earth excav., 444,310 cu.yd. overhaul, 1,610 lin.ft. sectional concrete or corrugated metal culverts, one 18 ft. and one 20 ft. concrete slab bridge, 8 monolithic culverts, $40,000. D. P. Poboisk, Mantorville, engr.

Kan., Ft. Scott—March 16, at office K. Culbertson, clk. Bourbon Co., improving 4 mi. Hornaday Rd., 25,000 gal. bituminous surface treatment, 2¾ mi. Coleman Rd., 15,000 gal. bituminous surface, 3¼ mi. High Drive Rd., 20,000 gal. bituminous surface, 6 mi. Rd. No. 34, Sect. A, 28,000 gal. bituminous surface, 3¼ mi. Rd. No. 33, Sect. A, 15,000 gal. bituminous surface, 12, 14 and 16 ft. wide, one and 2 course bituminous surface treatment, together with necessary patching, etc.

Kan., Salina—March 7 at office of C. E. Banker, city clk., grading and paving certain streets, incl., 24,000 cu.yd. excav., 5,000 lin.ft. curb and gutter, 80,000 sq.yd. paving, alternate bids on 3 in. brick on 5 in. concrete, 2 in. asphaltic concrete on 5 in. concrete and 6 in. rein.con., with cement curb and combined cement curb and gutter.

Mo., Maplewood (St. Louis P. O.)—See Sewers."

Tex., Commerce—March 23, by City Com. paving 30,000 sq.yd. various streets, brick or other high class pavement. $100,000. Burtner & Dockney, Greenville, engrs.

Tex., Eldorado—March 6, by W. F. Ford, judge Schleicher Co., grading, gravel surfacing and bituminous topping 9.86 mi. State Highway 4, 16 ft. $134,000. J. L. Neill, co. engr. Noted Feb. 15.

Washington — March 13, by State Hy. Comn., Olympia, concrete paving 4.4 mi. Pacific Highway from Kalama to Carrols; 6.73 mi. Pacific Highway from Carrols to Kelso. J. Allen, state highway engr.

British Columbia—Minister of Dept. Pub. Wks., Victoria, taking bids and opens same about March 12 paving 7¼ mi. Pacific Highway from Cloverdale to Blaine, Wash., 16 ft. wide, 6 in. concrete, $250,000.

BIDS RECEIVED

N. Y., New York—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., opened bids Feb. 19, curbing, laying sidewalks and crosswalks on (1) Fieldston Rd., grading, setting curb, laying sidewalks, etc. on (2) Bogart Ave. (3) Buhre Ave. (4) Crosby Ave. (5) Gleason Ave. (6) Hobart Ave. (7) Jarvis Ave. (8) Mahan Ave. (9) Gainsborg Rd., from Spedero & Turriamo, 827 East 217th St., (1) $2,838 (3) $12,960 (4) $17,534 (5) $25,248 (6) $7,745 (7) $5,470 (8) $15,641 (9) $31,359; J. V. Timoney Constr. Co., 220 East 201st St., (1) $3,178; Burnside Contg. Co., 270 Burnside Ave., (1) $3,255 (2) $11,396 (3) $15,323 (6) $8,605 (7) $6,020; Gregorio & Gabriele, 1129 8th Ave., (2) $10,647; L. DiMinna, (2) $10,816 (9) $32,732; M. DelBalso, 660 East 221st St., (3) $13,799 (5) $27,266; I. F. Cavaluzzo, 1538 Walton Ave., (3) $13,678 (4) $17,108 (5) $25,065 (7) $6,422 (8) $17,473; P. J. Donovan, 30 Church St., (4) $16,661 (6) $7,520 (8) $16,034 (9) $30,721. Noted Feb. 15.

N. J., Spring Lake—Mayor and Council opened bids Feb. 19, improving East Lake Dr., engrs. est. $107,452, from J. Burke Constr. Co., 309 Park Ave., Plainfield, 97% of engineers estimate; Union Paving Co., 30th and Locust Sts., Phila., 97.3%; E. Riley Mixner Co., Bridgeton, 98.7%. Noted Feb. 8.

S. C., Kingstree—Williamsburg Co., constructing 12.2 mi. Project 177, from L. Cartledge, Pine Apple, Ala., $43,013, W. B. Boyle Co. and Mallard Lumber Co., Sumter, $45,566, W. D. Caughman, Jr., 1207 Maple St., Columbia, $47,620; 2 rein.-con. bridges on above project, from C. E. Story, Augusta, Ga., $10,853, General Road & Drainage Constr. Co., Liberty Bank Bldg., Columbia, $11,767, Lillard Laurens Co., Charleston, $11,769. Noted Feb. 1.

O., Cincinnati — Hamilton Co. grading and paving (1) 9,800 ft. Newtown Rd., 16 ft., 17,500 sq.yd. bituminous macadam, engrs. est. $37,714 (2) 15,840 ft. Hopewell Rd., 16 ft., 28,160 sq.yd. bituminous macadam, engrs. est. $41,612, from A. C. Pickelheimer, 3555 Mooney Ave., (1) $31,223 (2) $32,730; R. E. Cash, 4234 Greenlee Ave., St. Bernard, (1) $33,981; Byrnes & Conway, 894 Greenwood Ave., (1) $34,535; J. S. Radabaugh, Montgomery, (2) $34,635; W. P. Flynn, 1252 Chase Ave., (2) $35,546.

O., Cleveland — Opened bids Feb. 14, grading, curbing and paving (1) East 108th St., (2) Valley Rd. (3) Darley Ave. (4) Spring Rd., 16,090 lin.ft. stone curb and 4 in. tile drain gutter, 12,550 cu.yd. earth excav., 26,311 sq.yd. vitr. brick on concrete, from Enterprise Paving & Constr. Co., 8440 Bway., (1) $22,655; O. G. Leach, Eddy Rd., (1) $18,396 (4) $55,557; Roehl Bros., West 25th St. and Clark Ave., (2) $54,512 (4) $64,173; Baldwin Bros., 4500 Euclid Ave., (2) $61,955; Gould & Maybach, 823 East 150th St., (3) $29,310; H. G. Herring, Pavers Exch., (3) $35,204. Noted Feb. 8.

O., Cleveland—Grading, curbing and paving (1) Hoy Ave. from East 128th to East 131st Sts. (2) West Boulevard from Adelaide to Thrush Aves. (3) East 125th St. from Kinsman to Luke Rds. (4) Unity Ave. from West Boulevard to West 101st St. (5) East 122nd St. from Miles Ave. to point 610 ft. northerly (1 to 5 inclusive) involve 7,400 lin.ft. stone curb and 4 in. tile drain gutter, 11,950 cu.yd. earth excav., (a) 11,045 sq.yd. vitr. brick on concrete, (b) 10,985 sq.yd. asphalt, (c) 4,506 sq.yd. concrete (6) Eaglesmere Ave. from East 133rd to East 140th Sts. (7) West 110th St. from Loretta to Walford Aves. (8) Hlavin Ave. from East 128th to East 131st Sts. (9) Argus Ave. from East 133rd to East 140th Sts. (10) East 110th St. (6 to 10 inclusive) involve 4,920 lin.ft. stone curb and 4 in. drain tile gutter, 7,510 cu.yd. earth excav., (a) 15,700 sq.yd. vitr. brick on concrete (b) 12,150 sq.yd. asphalt, from A. M. Pejsa, Euclid Heights Blvd., (1) $9,609 (3b) $11,774 (8b) $10,050 (10) $10,101; Baldwin Bros., 4500 Euclid Ave., (1) $9,902 (3b) $11,747; O. G. Leach, Eddy Rd., (2c) $58,503; W. McHugh, c/o Pavers Exch., Society for Savings Bldg., (2b) $64,907 (4b) $11,693; Freshwater Constr. Co., Natl. Bldg., (4a) $13,993 (7a) $18,295; Enterprise Paving & Constr. Co., 8444 Bway., (5) $21,187 (10) $9,901; Roehl Bros., West 25th St. and Clark Ave., (5) $21,368 (7a) $17,350 (7b) $17,781 (8a) $12,899; Gould & Maybach, 823 East 150th St., (6a) $28,814 (6b) $23,815 (9a) $28,369 (9b) $23,650; River Constr. Co., 2402 Mapleside Rd., (6a) $29,202 (9a) $28,883. Noted Jan. 11 and 18.

O., Shaker Heights (Cleveland P. O.)—Grading, curbing and paving (1) Helen Ave. (2) North Moreland Blvd. (3) Milverton Rd. (4) East 150th St. (5) Warwick Rd., 15,800 lin.ft. stone curb, 234,200 cu.yd. earth excav., 238,712 ft. 6 in. concrete base, 223,760 sq.ft. vitr. brick and 21,490 sq.yd. asphalt, from Cleveland Trinidad Paving Co., The Arcade, Cleveland, (1) $8,343 (2) $54,822 (3) $43,209 (4) $23,868 (5) $17,976; Rieley Bros., The Arcade, Cleveland, (1) $8,431 (2) $55,893; Baldwin Bros. 4500 Euclid Ave., Cleveland, (3) $43,967 (4) $24,079 (5) $18,427.

Ind., Indianapolis — Marion Co. opened bids Feb. 15, paving 2.8 mi. English Ave. Rd., 20 ft., 26,895 sq.yd. asphalt on concrete, 10,200 cu.yd. earth excav., from Marion County Constr. Co., 1600 South West St., $73,400. Engrs. est. $83,638. Noted Oct. 19.

Tex., Corsicana—Navarro Co. surfacing with crushed rock 7.71 mi. State Highway 31, 12 ft., incl. 18,054 cu.yd., from Scarborough & Davis, Gaston Bldg., Dallas, $88,366; F. P. McElwrath, Corsicana, $90,340. Engrs. est. $90,870. Noted Dec. 21.

Calif., Inglewood—Grading and paving portion Manor Dr., 4,265 lin.ft. grading, 93,149 sq.ft. willite paving, etc., from Bryant, Braun & Austin, 1680 4th St., Santa Monica, $28,046; C. R. Curtis, 2440 East 26th St., Los Angeles, $29,651.

Calif., Los Angeles — Improving Larchmont Ave. between Melrose and Beverly Sts., 646,811 sq.ft. grading, 646,811 sq.ft. concrete pavement, etc., from Tryon & Brain, Tajo Bldg., $175,696; G. H. Oswald, 366 East 58th St., $176,428; W. Liddington, 420 East 60th St., $178,524.

Calif., Los Angeles—Supervs. Los Angeles Co. improving Anaheim-Telegraph Rd., from G. H. Oswald, 366 East 58th St., $74,898; Griffith Co., Los Angeles Ry. Bldg., $76,768; G. R. Curtis, 2440 East 26th St., $80,011. Noted Feb. 1.

Calif., San Francisco — City and San Francisco Co., improving (1) boulevard connecting Lincoln Park with Sutro Heights (2) Vicente St. between Forestside and 19th Aves., from J. McElroy, 180 Jessie St., (1) $56,615; J. M. Smith, 407 11th St., (1) $56,838 (2) $63,984; L. J. Cohn, 110 Sutter St., (1) $57,645; Fay Impvt. Co., Phelan Bldg., (2) $63,174. Noted Feb. 8.

Calif., Yreka — Siskiyou Co. improving Salmon River Rd. Butler Sect., from Warren Constr. Co., Bacon Bldg., Oakland, $89,660; W. B. Arndt, Crescent City, $92,806; C. H. Warren, 463 35th St., Oakland, $93,132.

CONTRACTS AWARDED

New York—F. S. Greene, comr. highways, Albany, improving 1.33 mi. Highway 1544, Dutchess Co., to H. G. Strong, 151 East 38th St., New York City, $48,268; 6.61 mi. Highway 8150, Erie Co. and 4.84 mi. Highway 8151, Erie Co., to Cold Spring Constr. Co., Ellicott Sq. Bldg., Buffalo, $247,280 and $201,706 respectively; 10.07 mi. Highway 8152, Hamilton Co., to Bricon Constr. Co., Inc., 73 West Eagle St., Buffalo, $405,345; 0.08 mi. Highway 1117-A Saratoga Co., to J. McLane, Rexford, $3,784; 0.11 mi. Highway 1662, Saratoga Co., to J. W. Flynn, 141 Broad St., Waterford, $7,900; 3.47 mi. Highway 1665, Schuyler Co., to W. Curtis & Co., Geneva (street address not available), $125,042; reconstructing 4 mi. Repair Contrs. 3036 and 3037, Montgomery Co., to L. D. Sullivan Co., Inc., White Bldg., Utica, $147,617; 4.24 mi. Repair Contr. 3049, Saratoga Co., to R. Hopkins Co., Albany (street address not available), $83,333. Noted Feb. 15.

N. J., Salem—Salem Co. paving 33,35[illegible] sq.yd. Pennsville-Salem Rd., bituminous macadam, to Weldon Contg. Co., Broad St., Westfield, $90,348. Noted Jan. 25.

Md., Baltimore—Repairing streets, sheet asphalt, to Amer. Paving Co., Montebello, P. Flanigan & Sons, Hartford Rd. and B. & O. R.R., and Baltimore Asphalt Block & Tile Co, 1320 North Monroe St. Engrs. est. $100,000.

North Carolina—State Hy. Dept., Raleigh, grading, asphaltic paving and rein.-con. bridges and culverts on 1 mi. State Project 391A, Robeson Co., to R. G. Lassiter & Co., Citizens Bank Bldg., Raleigh, $39,393; clearing, grading and topsoiling 11.63 mi. State Project 815, Burke Co., to Geer & Wilson, Rutherfordton, $89,446, 20.55 mi. State Project 555, Randolph and Montgomery Counties, to Mayfield Contg. Co., Lakeview, $83,176, 17.4 mi. State Project 147, Bertie and Hertford Counties, to N. L. Teer, Durham, $73,573, 15.22 mi. State Project 363, Onslow Co., to Newell Contg. Co., 3828 Ave. A, Birmingham, Ala., $109,826, 9.04 mi. State Project 486, Wake Co., to O. A. Mann & Co., La Grange, Ga., $37,332; clearing, grading, topsoiling and rein.-con. bridges and culverts on 7.01 mi. State Project 403, Chatham Co., to H. G. Kershaw Contg. Co., Woodward Bldg., Birmingham, Ala., $60,737, 9.67 mi. State Project 752, Stokes Co., to W. E. Graham, Mt. Ulla, $113,728, 11.67 mi. State Project 512, Caswell Co., to J. T. Plott, Greensboro, $49,772; clearing and grading 7.31 mi. State Project 991, Transylvania Co., to Gibson Constr. Co., Holston Bank Bldg., Knoxville, Tenn., $91,445; grading and asphaltic concrete paving 11.35 mi. State Project 743, Forsyth Co., to Atlantic Bitulithic Co., Wash., D. C. (street address not available), $376,981, 7.34 mi. State Project 671, Rowan Co., to Thompson-Caldwell Constr. Co., Mooresville, $247,761; grading and plain concrete paving 19.62 mi. State Project 155 B, Martin and Pitt Counties, to W. F. Hadlow, Baldwin Bldg., Jacksonville, Fla., $501,641, 14.96 mi. State Project 163, Nash Co., to Pub. Serv. Production Co., Terminal Bldg., Newark, N. J., $407,718; clearing, grading, plain concrete paving and rein.-con. bridges and culverts on 6.94 mi. State Project 429, Granville Co., to A. B. Sandidge & Co., Georgetown, Del., $237,634, 2.44 mi. State Project 273, Sampson Co., to Eagle Eng. Co., New Bern, $88,106. Noted Feb. 15.

North Carolina — State Hy. Dept., Raleigh, clearing and grading 19.43 mi. State Project 107, Bertie Co., to N. L. Teer, Durham, $67,505. Noted Feb. 15.

Fla., Orlando — Orange Co., to Lasley Bros. and Howey, Chattanooga, Tenn. (street address not available), paving 4 mi. road from Bithlo north to Seminole

Streets and Roads (Continued)

Co. line, Project 10, 41,400 lin.ft. concrete curb at $0.25, 35,500 sq.yd. vitr. brick, sand filled nat. base, $2.20; to Southern Paving Constr. Co., Vol Life Bldg., Chattanooga, Tenn., 26.7 mi. road from Orlando to St. Johns River, Project 1, 282,000 lin.ft. concrete curb $0.27, 240,000 sq.yd. 5 in. Florida rock base $1.05, 240,000 sq.yd. 2 in. sheet asphalt, without binder, $1.01, 4.3 mi. road from Orlando to Winter Park, Project 7, 5 acres clearing $85, 20,000 cu.yd. excav. $0.33, 46,000 lin.ft. concrete curb $0.25, 39,000 sq.yd. 5 in. Florida lime rock base $0.75, 39,000 sq.yd. 2 in. sheet asphalt, without binder $1.01, 82 cu.yd. Class A concrete $27, 135 cu.yd. Class B concrete $24, 13,000 lb. reinforcing $0.08, etc., 3.8 mi. between Winter Park and Golden Rod, Project 6, 5 acres clearing $60, 20,000 cu.yd. excav. $0.33, 40,000 lin.ft. concrete curb $0.25, 35,000 sq.yd. 5 in. Florida rock base $0.75, 35,000 sq.yd. 2 in. sheet asphalt, without binder $1.01, 65 cu.yd. Class A concrete $27, 54 cu.yd. Class B concrete $24, 4,000 lb. reinforcing $0.08, etc., 2 mi. road from Tildenville south, 4 acres clearing $60, 10,000 cu.yd. excav. $0.33, 21,500 lin. ft. concrete curb $0.25, 18,000 sq.yd. 2 in. sheet asphalt, without binder, $1.01, 20 cu. yd. Class A concrete $27, 20 cu.yd. Class B concrete $24, etc., 2 mi. road from Winter Garden south, 4 acres clearing $60, 10,000 cu.yd. excav. $0.33, 21,500 lin.ft. concrete curb $0.25, 18,000 sq.yd. 2 in. sheet asphalt, without binder $1.01, 45 cu.yd. Class A concrete $27, 40 cu.yd. Class B concrete $24, 2,100 lb. reinforcing $0.08, etc. Contracts awarded latter part of January.

Ohio—Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving roads in following counties:

Crawford Co., Sect. "C" Bucyrus-Crestline Rd., 1.69 mi., asphalt macadam, oil, to Losey Road Constr. Co., Kenton, $46,580.

Cuyahoga Co., Sect. "A" Solon-Willoughby Rd., and Sect. "B-1" Chagrin Falls-Cuyahoga Falls Rd., 2.52 mi., warrenite bitulithic and brick, to Ohio Contg. Co., Elyria, (street address not available), $144,847.

Geauga Co., Sect. "J" Chagrin Falls-Greenville Rd., 2.182 mi., brick, to J. A. Westrick, Napoleon, $41,437.

Meigs Co., Sect. "M" Pomeroy-Athens Rd., 4.009 mi., rein.-con., to S. A. Palmer, Marietta, $122,647.

Mercer Co., Sect. "H-2" Celina-Greenville Rd., 4.28 mi., rein.-con., to R. Doaust, Defiance, $113,295.

Sandusky Co., Sect. "S-2" Lima-Sandusky Rd., 2.349 mi., sheet asphalt on a concrete, to Modern Constr. Co., Fremont, $94,-620.

Huron Co., Sec. "K" and "J-1" Bellevue-Norwalk Rd., rein.-con. bridge, to W. A. Yeagle, Clyde, $15,646.

Lorain Co., Sects. "D" and "E" Cleveland-Elyria Rd., constructing culvert, to Elyria Constr. Co., 220 Elyria Blk., Elyria, $973.50. Noted Feb. 22.

O., Bexley (Columbus P. O.) — S. W. Roderick, village clk., to Grant-Boulton Co., Central Natl. Bank Bldg., Columbus, grading, curbing, laying 8 in. water main, making necessary sewer connections and paving with asphalt, 2,200 ft. Ardmore Rd., 24 ft., $44,366, 550 ft. Seneca Pl., 24 ft., 24 ft., $39,836, 350 ft. Seneca Pl., 24 ft., $8,432, 2,000 ft. Fair Ave. 36 ft. roadway with 18 ft. parkway in center, $49,443. Noted Feb. 23.

O., Cleveland — Commissioner Purchases & Supplies, 219 City Hall, grading, curbing and paving Gruss Ave., East 117th and East 127th Sts., 6,500 lin.ft. stone curb and 4 in. tile drain gutter, 2,160 cu.yd. earth excav., 5,530 sq.yd. vitr. brick, 5,570 sq.yd. concrete base, to River Constr. Co., 2402 Mapleside Rd., $35,270; East 124th St., Ada and Arbor Aves., 2,690 lin.ft. stone curb and 4 in. tile drain gutter, 3,350 cu.yd. earth excav., 8,230 sq.yd. vitr. brick on concrete, to O. G. Leach, Eddy Rd., $34,699; Iroquois Ave. and East 130th St., 2,050 lin.ft. stone curb and 4 in. tile drain gutter, 4,460 sq.yd. vitr. brick on concrete, 3,500 cu.yd. earth excav., to Gould & Maybach, 823 East 150th St., $15,525. Noted Feb. 15.

Ind., Ft. Wayne—Paving 5 mi. sidewalk, 5 ft. concrete, to C. Coil, 2525 Florida St., $1.04 per lin.ft. Engrs est. $30,000.

Ind., Monticello—Paving 10,495 ft. East Bway., 30 ft., 34,983 sq.yd. concrete on concrete, to W. J. Nees & Co., Frankfort, $76,963. Engrs. est. $81,200.

Ind., Versailles — Ripley Co., macadam surfacing 9.061 ft. John Bland Rd., 16 ft., to H. Dobson, Osgood, $31,135. Engrs. est. $37,000. Noted Feb. 22.

Wis., Fond du Lac—Fond du Lac Co. State Road and Bridge Com., concrete surfacing, etc., Fond du Lac-Ripon-Green Lake Rd., to Cherney Constr. Co., Francis Creek, $141,058; Ripon-Oshkosh Rd. and Waupon-Brandon Rd., to A. J. Kramp, Berlin, $105,-872 and $70,869 respectively.

Wis., Fond du Lac—Concrete surfacing, etc., Ladoga-Brandon-Ripon Rd., to Kroening Constr. Co., 39th Ave. and Mitchell St., Milwaukee, $134,108. Noted Feb. 15.

Wis., Milwaukee — Milwaukee Co., concrete surfacing, etc., Brown Deer-Manomonee Fallas Rd., to J. Bluhm & Sons, 1298 Achilles Pl., $68,500. Noted Feb. 8.

Ia., Dubuque — To Even-Ulrick-Staner Co., Dubuque, 59,000 sq.yd. vibrolithic concrete paving $2.33 to $2.47 per sq.yd., to J. Rasmussen & Sons, Mankato, Minn., 100,000 sq.yd. sheet asphalt paving $1.42.

Ia., Sioux City—Auditor Woodbury Co., grading and concrete paving 5.02 mi. Correctionville-Cushing Rd., 12.19 mi. Sioux City-Smithland Rd. and 8 mi. Salix Rd. southeast, all 18 ft., 272,449 sq.yd. concrete pavement, 138,772 cu.yd. excav., to C. F. Lytle Constr. Co., 504 Nebraska St., paving $2.26 per sq.yd., excav. $0.63 per cu.yd., total $703,161. Noted Feb. 1.

Kan., Atwood — Rawlins Co., grading Kansas City-Denver Air Line Rd., incl. 90,000 cu.yd. earth excav., to A. L. Cook, Ottawa, $26,049; culverts and bridges, incl. 772 cu.yd. concrete, to Wallace Bros., Atwood, $10,189 and $10,493 respectively. Engrs. est. $61,000. Noted Jan. 18.

S. D., Platt—Paving Main St. between 1st and 7th Sts., 18,873 sq.yd. concrete, 4,095 lin.ft. curb, also between 7th St. W. and 11th St., 7,197 sq.yd. concrete, 5,375 lin.ft. curb, to Larson Constr. Co., Albert Lea, Minn., $86,885. Noted Jan. 18.

Missouri — State Hy. Dept., Jefferson City, to Reynolds, Bloker & Crews, Caruthersville, 3.563 mi. State Project Route 9, Sect. 147, Pemiscot Co., $14,493, 3.383 mi. State Project Route 9, Sect. 146, Pemiscot Co., $13,932, 0.665 mi. State Project Route 9, Sect. 149, Pemiscot Co., $2,302, 3.631 mi. State Project Route 9, Sect. 151, Pemiscot Co., $39,646; to Illinois Steel Bridge Co., Jacksonville, Ill., 1.837 mi. State Project Route 4, Sect. 18, Gentry Co., $120,628. Noted Feb. 15 and 20.

Missouri—State Hy. Dept., at div. office Harrisonville, 4.11 mi. State Aid Project 20,174, 24 ft., Cass Co. to Graham & Dillion, Pleasant Hill, $21,433. Noted Jan. 25.

Missouri—State Hy. Dept., Jefferson City, 3.087 mi. State Project Route 3, Sect. 112, Taney Co., to E. A. Luck, Black Rock, Ark., $19,043; 3.03 mi. State Project Route 14, Sect. 39, Pulaski Co., and 2.879 mi. State Project Route 14, Sect. 40, Pulaski Co., to S. T. Rollins, Waynesville, $9,367 and $10,343 respectively; 3.707 mi. State Project Route 7, Sect. 65, Phelps Co., to M. E. Gillioz, Monett, $24,883; 0.568 mi. State Project Route 10, Sect. 37, Randolph Co., to Lynch-McDonald Constr. Co., Moberly, $35,294; 2.952 mi. State Project Route 15, Sect. 63, Camden Co. and 3 mi. State Project Route 51, Sect. 24, Bollinger Co., to Pioneer Constr. Co., 101 New York Life Bldg., Kansas City, $73,280 and $68,-784 respectively; 3.833 mi. State Project Route 78, Sect. 3, Taney Co., to J. E. Hartley, Mt. Vernon, $16,750; 1.082 mi. State Project Route 9, Sect. 26, Marion Co., to H. C. Harbicht, Hannibal, $40,689; 0.928 mi. State Project 55, Sect. 6, Scott Co., to G. E. Stoner, Charleston, $45,788; 0.568 mi. State Project Route 14, Sect. 36, Laclede Co., to General Constr. Co., Syndicate Trust Bldg., St. Louis, $21,326; 0.25 mi. State Project Route 40, Sect. 20, Douglas Co., to Allhands & Davis, 705-6 Frisco Bldg., Joplin, $19,877; 5 mi. State Project Route 19, Sect. 4, Crawford Co., to Powell & Gaven Co., Collinsville, Ill., $37,381; 4.962 mi. State Project Route 14, Sect. 5, Lawrence Co., 4.986 mi. State Project Route 14, Sect. 6, Lawrence Co., 4.794 mi. State Project Route 14, Sect. 3, Jasper Co., 4.938 mi. State Project Route 14, Sect. 7, Lawrence Co., and 2.897 mi. State Project Route 14, Sect. 8, Lawrence Co., to Carterville Constr. Co., Carterville, $19,630, $33,-927, $26,856, $49,561 and $23,256 respectively; 2.548 mi. State Project Route 1, Sect. 14, Holt Co., to Pittsburgh-Des Moines Steel Co., Tuttle and S. W. 10th Sts., Des Moines, Ia., $26,656; 4.702 mi. State Project Route 34, Sect. 13, Wayne Co., to Muskogee Constr. Co., 223 Cole Bldg., Tulsa, Okla., $46,406; 3.411 mi. State Project Route 15, Sect. 11, Knox Co., to W. H. and G. H. Turner, Memphis, $50,055; 3.238 mi. State Project Route 3, Sect. 113, Taney Co., to Cox & Chaney, Branson, $19,686; 0.786 mi. State Project Route 16, Sect. 41, Adair Co., to Harrison Constr. Co., 413 Kraft Blk., Des Moines, Ia., $44,475; 1.161 mi. State Project Route 10, Sect. 25, Chariton Co. and 4.318 mi. State Project Route 10, Sect. 24, Chariton Co., to C. Parker, Keytesville, $5,734 and $32,818 respectively; 4.452 mi. State Project Route 1, Sect. 13, Holt Co., to Roberts & Reynolds Constr. Co., Sabetha, Kan., $37,082; 4.942 mi. State Project Route 2, Sect. 5, Jackson Co., 4.974 mi. State Project Route 2, Sect. 6, Jackson Co., 4.345 mi. State Project Route 2, Sect. 4, Jackson Co. and 4.109 mi. State Project Route 2, Sect. 3, Jackson Co., to W. A. Ross, Kansas City, (street address not available) $171,204, $235,311, $251,267 and $152,783 respectively; 4.946 mi. State Project Route 8, Sect. 13, and 4.964 mi. State Project Route 8, Sect. 12, both Caldwell Co., to Highway Constr. Co., Tulsa, Okla., (street address not available) $231,762 and $224,482 respectively; 3.379 mi. State Project Route 2, Sect. 8, Lafayette Co., to Tibbets Constr. Co., Independence, $36,038; 0.274 mi. State Project Route 9, Sect. 52, Lincoln Co., to J. P. Sparks, Kirkwood, $22,899; 4.943 mi. State Project Route 14, Sect. 77, and 2.244 mi. State Project Route 14, Sect. 76, both St. Louis Co., to E. Berns Co., Indianapolis, Ind. (street address not available) $316,-623. Noted Feb. 15 and 22.

Missouri—See "Bridges."

Mo., St. Louis—Bd. Pub. Serv., 208 City Hall, repaving 6,400 ft. Chouteau Ave. from Bway. to Jefferson Ave., 50 ft., 15,-900 sq.yd. recut granite block, 15,900 sq. yd. asphalt filler, 4,240 sq.yd. concrete, 3,600 cu.yd. earth excav. and 13,400 lin.ft. granite curb, to Independent Quarry & Contg. Co., Title Guaranty Bldg., $197,917. Noted Jan. 11.

Mo., St. Louis—Bd. Pub. Serv., 208 City Hall, improving 5,600 ft. Arsenal St., 36 ft., 7 in. concrete, granite curb, to Skrainka Constr. Co., Security Bldg., $86,638; 2,250 ft. Taylor Ave., 36 ft., warrenite bitulithic with Class A granite curb, to Granite Bituminous Paving Co., Ry. Exch. Bldg., $54,842; 5,140 ft. West Florissant Ave., 50 ft., Trinidad asphalt on concrete, to Trinidad Asphalt Mfg. Co., Title Guaranty Bldg., $139,084; reconstructing 3,100 ft. 7th St., 36 ft., recut granite with granite curb and 5,202 ft. Clayton Ave., 36 ft., Trinidad asphalt, to Independent Quarry & Constr. Co., 4875 Ashland Ave., $86,656 and $53,-015 respectively; 1,900 ft. Chouteau Ave., 30 ft., Trinidad asphalt, to O. S. Grighton, 4115 McRee Ave., $18,264. Noted Feb. 15.

Tex., Clarksville—Red River Co. grading, gravel surfacing, etc., 5.74 mi. State Highway 5, Federal Aid Project 315, 12 ft., to Womack Constr. Co., Sherman, $29,245; gravel surfacing to be furnished by county, $20,000. Engrs. est. $54,150. Noted Feb. 22.

Tex., Denton—Paving 1 mi. West Oak St. from Public Sq. to city limits, 30 ft., 10,610 lin.ft. curb and gutter, 7,000 cu.yd. crushed stone, 1,500 cu.yd. chats, 8,000 gal. bitumen, 26,934 sq.yd. 2 in. rock asphalt paving, to W. M. Jagoe Co., Denton, $55,740. Engrs. est. $55,000.

Tex., Jefferson—Marion Co. grading, gravel surfacing and bridging 14.42 mi State Highway 35, Avinger Rd., 16 ft., concrete, $150,676; grading and gravel surfacing 21.75 mi. State Highway 35-B, Frees City Rd., from here to the Louisiana State line, 16 ft., $239,162. T. B. Warden, co. engr.

Tex., Laredo—Grading, preparing roadbed and paving various streets, 120,062 sq. yd. bitulithic, 62,000 lin.ft. curbing, 7,083 sq.yd. vitr. brick or concrete guttering, to Southwest Bitulithic Co., Gunter Bldg., San Antonio, $387,167. Noted Jan. 4.

Oklahoma—State Hy. Dept., Oklahoma City, paving with concrete 6 mi. road between Ponca City and Newkirk, 18 ft. Kay Co., to M. A. Swatek & Co., Security Bldg., Oklahoma City, $196,114; gravel surfacing 7 mi. road between Poteau and Wister, 18 ft., Le Flore Co., to T. C. Ottinger, Main St., Hinton, $83,842. Noted Feb. 1.

Okla., Oklahoma City—City paving Central Ave. from Santa Fe to east line of Ave. C, 10,400 sq.yd. asphalt, to Western Paving Co., Tradesmans Natl. Bank Bldg., $53,926; Central Ave. from Ash to Ave. A, 15,000 sq.yd. concrete, to M. A. Swatek & Co., Security Bldg., $54,401.

N. M., Artesia—For 13,742 sq.yd. 6 in. plain concrete paving, 2,290 cu.yd. excav., 13,742 sq.yd. finishing and rolling, 3,135 ft. 6 in. concrete curb, etc., to Fredell Concrete Constr. Co., Douglas, Wyo., $2.25 for paving, $0.60 for excav., $0.04 for finishing, $0.60 for curb, total $34,377. Noted Jan. 25.

Wash., Colfax—Whitman Co., constructing 7.5 mi. Coulee-Hite Rd., 16 ft., 8 in. macadam, to Campbell & Burr, Colfax, $73,977.

Wash., Pasco — Franklin Co., surfacing 10 mi. Pasco-Kahlotus Rd., to G. I. Stickler, Lewiston, Idaho, $26,346. Engrs. est. $27,000.

Calif., Fresno—Improving Belmont Ave. between Fresno Ave. and North 1st St., and Floradora St. between Lucerne Lane and Van Ness Ave., to California Road & Street Impvt. Co., Bank of Italy Bldg., $38,832 and $35,606 respectively. Noted Feb. 22.

Streets and Roads (Continued)

Calif., Fresno—Supervs. Fresno Co. paving highway near Reedley, 531,900 sq.ft. 5 in. asphaltic concrete, to T. A. Hanrahan, 1361 P St., $109,958; highway in vicinity of Clovis, 280,300 ft. 5 in. asphaltic concrete, to Clark & Henery Constr. Co., 38 South Sutter St., Stockton, $72,534. Noted Feb. 22.

Calif., Los Angeles—Improving 1st St. between Rampard Blvd. and Vermont St., to Warren Constr. Co., 5444 Hollywood Blvd., $138,134. Noted Feb. 15.

Calif., Oroville—Supervs. Butte Co., improving Oroville-Chico Rd., and Biavo-Nelson Rd., to T. H. and M. C. Polk, Chico, $63,288 and $53,799, respectively. Noted Feb. 22.

Calif., Stockton—San Joaquin Co., improving French Camp Rd. and Lane Rd., to C. Moreing, Commercial Savings Bank Bldg., $57,347 and $14,320, respectively; Bixler Rd., to Guy Bros., Stockton, $3,724. Noted Feb. 22.

Industrial Works

PROPOSED WORK

Vt., Barre—A. B. Carter plans 1 story, 75 x 195 ft. garage, brick and steel. $50,000. Engineer or architect not selected.

Mass., Boston—Boston Wharf Co., 259 Summer St., 5 story, 50 x 155 ft. warehouse, brick, concrete and steel, Summer St. $400,000. Engineer or architect not announced.

Mass., Boston—E. V. Earle & Sons, Inc., 200 Devonshire St., having plans prepared by G. N. Meserve, archt., 200 Devonshire St., 6 story, 100 x 150 ft. stores, building and warehouse, brick and limestone, Columbia Ave. and Clarendon St. $750,000.

Mass., Boston—Edison Electric Illuminating Co., 70 State St., having preliminary plans prepared by Stone & Webster, Inc., archts. and engrs., 147 Milk St., power distributing station, Warrenton and Carver Sts.

Mass., Springfield—Dairymens Co-operative Assn., c/o W. A. Robinson, Hardwick, plans milk exchange, here. $80,000-$100,000.

R. I., Bristol—Jenks & Ballou, archts. and engrs., 10 Weybosset St., Providence, soon take bids 5 story, 64 x 122 ft. mill addition, brick and timber, plain foundation, for Cranston Worsted Co. $100,000. Noted Feb. 1.

Conn., Meriden—Connecticut Telephone and Electric Co., 70 Britannia St., plans 1 story addition to plant, brick, steel and concrete. Engineer or architect not announced.

Conn., Newington — Acme Mchy. and Equipment Co. plans 1 story, 100 x 225 ft. factory, brick and steel. $80,000. Engineer or architect not announced.

Conn., Putnam—Hammond, Knowlton & Co. plan large 1 story weave shop, brick, concrete and steel, at plant. Engineer or architect not selected.

N. Y., Buffalo—Root Tire Truck Service, 62 Genesee St., plans 1 story, 30 x 100 ft., service and repair station, brick, steel and concrete, Ellicott Sq. To exceed $40,000. Engineer and architect not announced.

N. Y., Clarence — Buffalo Tractor Co. purchased site and plans factory addition. $50,000. Engineer and architect not selected.

N. Y., Endicott—See "Miscellaneous."

N. Y., Massena—Beakes Dairy Co. plans rebuilding milk handling and storage plant recently destroyed by fire. $150,000-$160,000. C. H. C. Beakes, mgr.

N. Y., Medina—Knowlesville Canning Co., Knowlesville, plans brick plant, Hill St., here. $75,000. Engineer and architect not announced.

W. Va., Huntington — Motor Sales Co., 1611 6th Ave., having revised plans prepared by Meanor & Handloser, archts., Robson-Prichard Bldg., 6 story, 90 x 100 ft. garage, brick, steel, tile and terra cotta, 6th Ave. $200,000. Noted Nov. 16.

W. Va., Weston — Lewis County Cut Glass Co. plans glass factory. To exceed $50,000. Engineer or architect not announced.

N. C., Hickory—Hickory Chair Mfg. Co., soon takes bids 1 story, 70 x 260 ft., chair factory. $50,000. Q. E. Herman, Hickory, archt.

S. C., Clinton—Lydia Mills having plans prepared by Lockwood, Greene & Co., engrs., Piedmont Bldg., Charlotte, N. C., addition to sheeting mill. $100,000.

Fla., Tampa—A. B. Hale, (owner and engr.) 2906 Nebraska Ave., preparing plans 35 ton ice and cold storage plant, North Rome and Fuller Sts. $50,000.

Ky., Livingston—Ohio—Kentucky Fluo-Spar Co., plans large fluo-spar plant, on 100 acre site. $100,000. Engineer or architect not announced.

O., Cleveland—See "Buildings."

O., Cleveland—Gerson-Stewart Co., 1276 West 3rd St., had plans prepared by W. J. Wefel, archt., 1836 Euclid Ave., 1 story, 80 x 100 ft., brick, steel and concrete factory, East 74th St., along tracks of Western & Lake Erie R.R. $50,000.

O., Cleveland—H. J. Hunger Brass Co., 928 Champlain Ave., having plans prepared by Withington-Roberts-Wright Co., archts., Swetland Bldg., 1 story, 89 x 139 ft., brick and steel foundry. $60,000.

O., Gambier—See "Buildings."

O., Mansfield—Barnes Mfg. Co., had plans prepared by G. S. Rider & Co., archts., Century Bldg., Cleveland, 1 story, 73 x 261 ft., brick, steel and concrete foundry and factory addition. $75,000.

Ind., New Albany—Natl. Hame & Chain Co. plans factory to replace one destroyed by fire. $100,000. Engineer or architect not announced.

Mich., Holland — Federal Stamping Co. had plans prepared and takes bids in March, 1 story, 100 x 260 ft. concrete and brick factory, plain foundation, River St. $100,000.

Mich., Pontiac—Fisher Body Corp., General Motors Bldg., Detroit, having preliminary plans prepared by A. Kahn, archt., 1000 Marquette Bldg., Detroit, two 1 story units and one 2 story unit, 150 x 500 ft., rein.-con., brick and steel, plain foundation, Baldwin Ave. $2,000,000.

Ill., Chicago — R. Gregori, archt., 155 North Clark St., preparing plans 1 story, 100 x 125 ft. garage, rein.-con., brick and steel, Cottage Grove Ave. near 94th St. $50,000. Owner's name withheld.

Ill., Chicago—Ford Motor Co., Woodward Ave., Highland Park (Detroit P. O.), Mich., takes bids about March 10, for 94 x 100 ft. power house, rein.-con., brick and steel, with 165 ft. stack, for auto factory on Calumet River, here. A. Kahn, 1000 Marquette Bldg., Detroit, Mich., engr. Noted Dec. 7.

Ill., Chicago—Melba Mfg. Co., 4237 Indiana Ave., plans 160 x 186 ft., rein.-con., brick and steel plant, Michigan Ave. and 43rd St. $300,000. Engineer and architect not selected.

Wis., Madison—S. Sinaiko, 1968 Railroad St., plans to rebuild 2 story and basement mill, brick and rein.-con., plain foundation, Railroad St. $40,000. Engineer and architect not selected.

Wis., Madison—J. E. Teckemeyer, 807 University Ave., having plans prepared by E. Tough, archt., Conklin Bldg., 1 or 3 story, 36 x 70 ft., service station, brick, rein.-con. and stone, plain foundation, University Ave. $40,000.

Wis., Manitowoc—Globe Steam Laundry, c/o E. Hemple, mgr., 14th St. and Washington Ave., having plans prepared 2 story, 46 x 120 ft., brick, rein.-con. and steel laundry, plain foundation, Washington Ave. $50,000. Private plans.

Wis., Manitowoc — J. C. Larimer, 944 South Quincy St., Green Bay, plans 2 story, 60 x 150 ft. cement plant, brick, rein.-con. and steel, plain foundation, here. Engineer and architect not selected.

Wis., Markesan — River View Canning Co., c/o W. A. Miller, pres., Farmers State Bank, having plans prepared 3 story, 50 x 80 ft., canning factory and power house, brick, rein.-con. and steel. $50,000. Private plans.

Wis., Milwaukee — M. Carpenter Baking Co., 102 7th St., having plans prepared by C. Barkhausen, archt., 79 Wisconsin St., 2 story and basement, 42 x 100 ft. addition to bakery, brick and concrete, plain foundation, 7th St. $50,000.

Wis., Milwaukee—Oneida Impvt. Co., 214 Biddle St., plans 5 story and basement, 150 x 175 ft., brick and concrete garage, plain foundation, Front St. $300,000. Engineer and architect not selected.

Wis., Milwaukee—M. R. Hayes, 97 Wisconsin St., had plans prepared by V. Esser, archt., 82 Wisconsin St., 1 story and basement, 80 x 150 ft., brick and concrete garage, plain foundation, Cambridge Ave. $45,000.

Wis., Neenah — Valley Paper Mills, 145 Wisconsin Ave., having preliminary plans prepared by Cahill & Douglas, engrs., 217 West Water St., Milwaukee, 60 x 160 ft. power house.

Wis., Port Washington—Gilson Mfg. Co. plans to rebuild 4 story, brick, rein.-con. and steel factory, plain foundation, recently destroyed by fire. $100,000. H. W. Bolens, pres. Engineer and architect not selected.

Wis., Sturgeon Bay—Fruit & Dairy Box Co. plans 2 story unit to box factory, brick and rein.-con., plain foundation. $40,000. J. G. Martin, pres. Engineer and architect not selected.

Wis., Wittenberg—Holman Mfg. Co., 1910 North 13th St., Sheboygan, plans 2 story and basement, brick, rein.-con. and steel factory, Main St., here. $65,000. H. Holman, pres. Engineer and architect not selected.

Ia., Rochester—Iowa Ry. & Light Co., 201 2nd Ave., Cedar Rapids, had plans prepared by Fargo Eng. Co., 236 West Main St., Jackson, Mich., rein.-con. hydro-electric plant and dam in Cedar River, here. Three plans under consideration (1) 5 unit, 22 ft. head, 27,000,000 K.W.H., $1,317,000 (2) 8 unit, 22 ft. head, $1,551,000 (3) 8 unit, 27 ft. head, 33,800,000 K.W.H., $1,963,000.

Ia., Sioux City—Sioux City Gas & Electric Co., 509 Pierce St., plans power plant. $2,000,000. O. W. Harrod, engr.

Minn., Minneapolis—Bd. Educ. plans 2 story and basement storehouse and shop, rein.-con., brick and tile, 3rd St. N. and 9th Ave. $150,000. Bureau of Buildings, Div. Design and Inspection, 305 City Hall, archts.

Kan., Mildred—Great Western Portland Cement Co. having plans prepared 70 x 115 ft. warehouse, 100 ft. high, 200,000 bbl. capacity, steel and rein.-con. Private plans.

Neb., Omaha—Armour & Co., Union Stock Yards, Chicago, plans 9 story packing plant, rein.-con., brick and steel, here. $2,000,000. Private plans.

Mo., Kansas City—See "Buildings."

Mo., Kansas City—Ralston Purina Co., 8th and Gratiot Sts., St. Louis, takes bids within 6 to 8 weeks, 3 and 6 story, 110 x 640 ft., rein.-con. plant, Rochester and Park Aves., here. $250,000. Private plans.

Mo., St. Louis—Cascade Wet Wash Co., 2311 Texas Ave., having plans prepared by L. Haeger, archt., 3844 Utah Pl., 3 story, rein.-con. and brick laundry, plain foundation, Ohio Ave. $200,000.

Mo., St. Louis—Fidelity Transfer Co., 734 South 7th St., plans 6 story, rein.-con. and brick warehouse, plain foundation, Bway. $200,000.

Mont., Billings — J. Gerson, Billings, plans 2 story and basement, 135 x 200 ft., rein.-con. and brick garage, North 27th St. and Minnesota Ave. $60,000. Engineer and architect not announced.

Tex., Corpus Christi—March 15 to vote on $350,000 bond issue for gas plant, gas mains and conduits. Address P. G. Lovenskiold, mayor.

Tex., Hemphill — Temple Lumber Co. plans to rebuild mill, machine shops and power house recently destroyed by fire. $500,000. Private plans.

Okla., Tonkawa—Comar Oil Co. plans 7 unit refinery. $150,000. Engineer or architect not announced.

Colo., Ashcraft (Aspen P. O.)—Belle Marie Mining & Milling Co., Aspen, having plans prepared by A. J. Petelinz, archt. and engr., 428 Grand Ave., Milwaukee, Wis., mill building, power house, shop, tourists hotel, pavilion, etc., brick and steel, plain foundations. $500,000.

Calif., Los Angeles—P. B. Fletcher, et. al., c/o Walker & Eisen, archts., Pacific Finance Bldg., having plans prepared 9 story, rein.-con. garage, 6th and Kenmore Sts.

Calif., San Francisco — Pacific Gas & Electric Co., 445 Sutter St., plans 5 electrical substations. $1,000,000. W. E. Creed, pres. Private plans.

Calif., Los Angeles—Los Angeles Transfer Co., c/o J. M. Cooper, archt., Marsh Strong Bldg., having plans prepared 2 story, 115 x 325 ft., rein.-con. warehouse and loft, Crocker St. To exceed $150,000.

Calif., San Francisco—Rickey & Schimferman (City Rough Dry Laundry Co.), 1672 15th St., had plans prepared by Meyer & Johnson, archts., 742 Market St., 1 story and mezzanine, 115 x 150 ft., rein.-con. laundry, 14th St. between Mission and Howard Sts. $50,000.

Calif., San Pedro—Pan-American Petroleum Co., Security Bldg., Los Angeles, plans first unit of plant, 30,000 bbl. capacity, here. Total cost between $5,000,000 and $8,500,000.

Calif., Stockton—Fisher Bros., 141 West Channel St., plans 100 x 150 ft. planing mill, also office building, storage sheds, etc., wood, corrugated iron and stucco, East St. and Weber Ave. $100,000. Private plans.

Calif., Taft—Central California Ice Co., P and Mono Sts., Fresno, plans brick plant, 6th St., here. $50,000. Engineer or architect not announced.

Ont., Dresden—C. Morrison having plans prepared for flour mill, 200 bbl. per day capacity. $60,000. Private plans.

Industrial Works (Continued)

Ont., London—H. J. Jones & Sons, Dundas St. E., plans to rebuild plant recently destroyed by fire. $60,000.

B. C., Anyox—Granby Consolidated Mining & Smelting Co. having plans prepared for ore mill and concentrator, fireproof construction. $500,000. Private plans.

BIDS DESIRED

N. Y., Elmira Heights (Elmira, P. O.)—Amer. Bridge Co., taking bids rebuilding template shop recently destroyed by fire. $100,000-$125,000. R. T. Lewis, mgr.

N. Y., Oswego—March 27, by E. S. Walsh, supt. Pub. Wks., Albany, terminal freighthouse, here. Contr. 237; adv. this issue.

N. J., Garfield—March 14, by Lockwood-Green & Co., archts. and engrs., 101 Park Ave., New York City, 4 story, 88 x 315 ft., rein.-con. and steel factory, plain foundation, here, for Samuel Hird & Sons, Inc., Passaic.

Pa., Altoona—March 6, by Pennsylvania R.R., Broad St. Sta., Phila., 3 story, 60 x 400 ft. store house, brick, steel and stone, plain foundation. $100,000. W. H. Cooksman, Broad St. Sta., Phila., archt.

Md., Baltimore—March 6, by Canton Co., Commerce and Water Sts., 2 story, 100 x 500 ft. warehouse, rein.-con. and brick. $150,000. Private plans.

Tenn., Memphis — McCormick Co., Inc., archts., 41 Park Row, New York City, taking bids 2 story, 101 x 107 ft., brick, steel and concrete bakery, for Winkelman Baking Co., 93 North Main St., here. $150,000. Noted Feb. 22.

O., Cleveland—See "Buildings."

O., Cleveland—G. S. Rider & Co., archts. and engrs., Century Bldg., taking bids 6 story and basement, 119 x 221 ft., brick and rein.-con. factory, 3803 Superior Ave., for W. S. Tyler Co., 3615 Superior Ave. $500,000. Noted Feb. 1.

Mich., Marshall—A. B. Chanel, archt., Post Bldg., Battle Creek, taking bids rebuilding 1 story, 130 x 250 ft. brick and steel factory, plain foundation, recently destroyed by fire, for Marshall Furnace Co., here. $40,000.

Wis., Milwaukee—E. A. Swendson, 714 National Ave. taking bids and opens same about March 6, 1 story and part basement, 150 x 200 ft., brick and concrete garage, plain foundation, National Ave. $75,000. W. J. Kozick, 664 26th St., archt. Noted Feb. 8.

Mo., St. Louis—Laclede Gas Light Co., 11th and Olive Sts., taking bids and opens same about March 10, 1 and 2 story, 100 x 175 ft. brick, steel and concrete garage, and workshop, plain foundation, Forest Park Blvd. $50,000. A. Von Moore, c/o owner, engr.

Mo., St. Louis—March 10, by United Bakeries Corp., Grand Blvd. and Natural Bridge Rd., 1 and 2 story, 75 x 130 ft., rein.-con. and brick plant, plain foundation, Benton St. $100,000. A. J. Tuchschmidt, Rialto Theatre Bldg., archt. Noted Feb. 15.

Tex., Houston—See "Excavation, Drainage, Irrigation."

BIDS RECEIVED

Minn., Minneapolis — Murphy Transfer Co., 309 3rd Ave. N., opened bids Feb. 20, 4 story and basement, 114 x 119 ft. warehouse, and 2 story and basement, 68 x 149 ft. garage, rein.-con., brick and tile, 4th St. and 9th Ave. N., general contract from W. M. Murphy & Son, 616 Endicott Bldg., St. Paul, $155,000; J. Peterson, 3152 10th Ave. S., $161,933; Victorson Constr. Co., 126 South 9th St., $166,709. Noted Feb. 15.

Calif., Oakland—State Dept. Pub. Wks., Sacramento, power house, recreation building employees' cottage and women's shop building, at Industrial Home for Adult Blind, here, from F. W. Maurice, 1362 East 22nd St., $45,760; A. H. Vogt, 185 Stevenson St., San Francisco, $46,113; E. T. Leiter & Sons, 3601 West St., Piedmont, $47,867. Noted Feb. 1.

CONTRACTS AWARDED

Mass., Chicopee—Moore Drop Forge Co., 38 Walter St., Springfield, 1 story, 76 x 103 ft. addition to factory, brick and steel, plain foundation, to Adams & Ruxton, 387 Main St., Springfield. Archts. est. $60,000.

Mass., Springfield — Standard Electric Time Co., 89 Logan St., 3 story, 50 x 90 ft. factory addition, Logan St., to W. W. Davis, Bellevue Ave. Archts. est. $60,000. Noted Jan. 18.

R. I., Providence—Goldberger & Steiner, Olneyville Sq., 1 story, garage and service station, concrete and steel, plain foundation, Library Court, to Puro Constr. Co., Providence (street address not available). Archts. est. $40,000. Noted Jan. 11.

R. I., Providence—Providence Wholesale Drug Co., Chestnut St., 2 story, 70 x 140 ft. factory, brick and timber, plain foundation, Chestnut St., to Industrial Constr. Co., 334 Westminster St. Archts. est. $55,000.

Conn., New Haven—Larkin-Carey Co., 166 Brewery St., will build 1 story, 65 x 216 ft. garage and service station, brick, steel and concrete, plain foundation, Whalley Ave., by day labor. $50,000. H. Castor, St. Girard Bldg., Phila., archt.

Conn., Thompsonville—Bigelow-Hartford Carpet Co., 4 story, 135 x 470 ft. factory, brick and timber, plain foundation, to L. E. Locke & Sons Co., South Union St., Lawrence. Archts. est. $550,000.

Conn., Waterbury — Waterbury Farrel Fdry. and Machine Co., Bank St., 2 story, 55 x 120 ft. factory addition, brick and steel, plain foundation, to Immick Co., State St. Extension, Meriden. Archts. est. $75,000.

N. Y., Albany — Van Slyke & Horton, Brick, steel and concrete factory, Clinton Ave., to W. G. Sheehan Constr. Co., 28-30 De Witt St., $150,000.

N. J., Trenton—New Jersey Twin Hoist Co., 201 Calhoun St., manufacturing plant, to W. R. Thropp Sons Co., 968 East State St., $100,000.

O., Cincinnati—Williamson Heater Co., 335 West 5th St., 1 story, 100 x 400 ft., brick, steel and concrete factory, to H. K. Ferguson Co., 6523 Euclid Ave., Cleveland. Archts. est. $150,000.

O., Cleveland—Atlas Fdry. Co., Shaw Ave. along tracks of Cleveland, Cincinnati, Chicago & St. Louis R.R., 1 story, 100 x 140 ft., brick and steel foundry, West 69th St. along tracks of Wheeling & Lake Erie R.R., to Uhl-Jaster Co., 1900 Euclid Ave. Archts. est. $50,000. Noted Jan. 14.

O., Cleveland—Commercial Bookbinding Co., 2231 West 110th St., 2 story and basement, 100 x 156 ft., brick and steel factory, to Dolinsky Bros., 2214 East 83rd St. Archts. est. $50,000. Noted Feb. 15.

O., Cleveland—Clover Meadow Creamery Co., 1823 East 55th St., 1 story, 80 x 92 ft., brick and steel garage, East 57th St. and Belvidere Ave., to Super-Built Constr. Co., Union Bldg. Archts. est. $40,000. Noted Jan. 25.

O., Cleveland—Perfection Trailer & Mfg. Co., 1453 West 110th St., 2 story, 100 x 200 ft., brick and steel factory, West 100th St., to H. Noderer, 3913 Cecelia Ave. Archts. est. $60,000. Noted Feb. 8.

O., Cleveland— Lincoln Fireproof Storage Co., 5660 Euclid Ave., 7 story, brick and concrete storage warehouse, Cedar Rd. and East Boulevard, to G. A. Rutherford Co., 2725 Prospect Ave. Archts. est. $225,000. Noted Jan. 18.

O., Cleveland—J. W. Wilson, Fidelity Mortgage Bldg., 2 story, 45 x 100 ft., brick and steel workshop, 5205 Euclid Ave., to Hearthstone Building Co., 8514 Carnegie Ave. Archts. est. $40,000.

O., Cleveland — Sterling Mfg. Co., 2845 Prospect Ave., 2 story, 67 x 100 ft., brick and rein.-con. factory addition, to S. W. Emerson Co., 1836 Union Bldg. Archts. est. $75,000.

Ind., Shelbyville — Kennedy Car Liner Mfg. Co., 1 story, 250 x 400 ft., brick, steel and concrete factory, to H. K. Ferguson Co., 6523 Euclid Ave., Cleveland, O. Archts. est. $250,000.

Ill., Chicago—A. B. Hayward Co., 849 West Ohio St., 1 story, 253 x 256 ft. factory, rein.-con., brick and steel, Sheffield and Marcy Sts., to F. H. Stowell Co., 28 North Clinton St. Archts. est. $50,000.

Wis., Biron (Wisconsin Rapids P. O.)—Consolidated Water Power & Paper Co., Wisconsin Rapids, will build 1 story and basement, 58 x 300 ft. and 64 x 72 ft. addition to paper mill here, brick and concrete, plain foundation, by day labor. $50,000. L. A. De Guere, Wisconsin Rapids, engr.

Wis., Kenosha—A. Allen Co., 1000 Prairie Ave., 5 story and basement, 90 x 150 ft., manufacturing plant, brick and concrete, plain foundation, Prairie Ave., to W. W. Oeflein, 86 Michigan St., Milwaukee. Engrs. and archts. est. $280,000.

Wis., Rhinelander — Rhinelander Paper Co. will remodel 1 story, 70 x 220 ft., machine shop, brick and steel, by day labor. $40,000. L. A. De Guere, Wisconsin Rapids, engr.

Wis., Sheboygan — Northern Furniture Co., South Water St. and New Jersey Ave., 1 story, 185 x 200 ft., brick and rein.-con. factory, plain foundation, to F. Geib & Co., Sheboygan (street address not available). Archts. est. $50,000.

Ia., Clarinda—Swift & Co., c/o H. Gilmore, mgr., 76 West Monroe St., Chicago, general contract 4 story, 76 x 154 ft. cold storage plant, brick and concrete, here, to Collins Bros., 1600 Grand Ave., Kansas City, Mo. Archts. est. $135,000. Noted Jan. 4.

Minn., Minneapolis—State Bd. Control, Capitol, St. Paul, 3 story and basement, rein.-con., brick and tile storehouse and shops, State "U," general contract to Madsen Constr. Co., 848 Builders Exchange, $119,000. Noted Feb. 8.

Minn., St. Paul—Twin City Motor Car Co., 1428 Harmon Pl., Minneapolis, 2 story and basement, 60 x 138 ft. garage and sales building, rein.-con., brick and stone, 5th and Exchange Sts., here, general contract to H. C. Struchen, 405 Dakota Bldg., $56,341. Noted Feb. 1.

Mo., Kansas City—W. Jewell, Jr., Rialto Bldg., 2 story and basement, 93 x 132 ft., rein.-con., brick and steel garage, 9th and Oak Sts., by day labor. $65,000. Wilkinson & Crans, 608 Interstate Bldg., archts.

Mo., St. Louis—Missouri Pacific Ry., Railway Exch. Bldg., 1 and 2 story, 147 x 202 ft., brick, steel and concrete machine shop, plain foundation, 3033 Chouteau Ave., to J. J. Woellner & Son, East St. Louis, Ill. (street address not available). $96,000.

Mo., St. Louis—Terminal R.R. Assn., 1800 Market St., 1 story, 43 x 520 ft., rein.-con. and brick warehouse-shop addition, 500 South 12th St., to Doerman Constr. Co., 1441 Syndicate Trust Bldg., $50,850.

Calif., Fresno—Herminghaus Estate, 1 story, 125 x 150 ft., garage, L St., between Tuolumne and Merced Sts., to Davis-Heller-Pearce Co., Weber and California Sts., Stockton, $40,000. Waterman Bros., Tulare and L Sts., lessee. Noted Dec. 21.

Calif., Los Angeles—Union Pacific R.R., 610 South Main St., constructing power house, garage, car repair and blacksmith shop, boiler shops, traveling cranes and round house, brick, frame and corrugated iron, in vicinity of Belvedere Gardens, to Lynch & Gannon Eng. Co., Chapman Bldg., $500,000.

Calif., Orland—Ford Garage Agency, 1 story, 80 x 100 ft., rein.-con. garage, 5th and Swift Sts., to H. C. Hauck, Orland.

Calif., San Francisco—Real Estate Development Co., Hearst Bldg., two 1 story, rein.-con. warehouses, 17th and Kansas Sts. and 1 story rein.-con. warehouse, 17th and Arkansas Sts., to G. Wagner, 251 Kearny St., $60,000 each.

Buildings

PROPOSED WORK

Me., Auburn—High School—School Dept. plans 3 story, brick and steel. $400,000. Engineer or architect not announced.

Mass., Amherst—Library—Jones Memorial Library plans to construct library. $500,000. G. Cutler and J. H. Tyler, Amherst, trustees. Engineer or architect not selected.

Mass., Boston—Club—Dartmouth College Alumni Assn., c/o J. R. Chandler, chn., 120 Water St., having preliminary plans prepared, club, Trinity Pl. and Stuart St. Engineer or architect not selected.

Mass., Boston—Hospital—Massachusetts General Hospital, Fruit St., plans 10 story, rein.-con. and brick, Fruit St. $300,000. Engineer or architect not selected.

Mass., Brighton (Boston P. O.)—Apartment—Brighton, Carlin & Cherney, Warren St., plan three 6 story, each 75 x 90 ft., rein.-con., brick and stone, wood pile foundation, Warren St. $300,000. Engineer or architect not announced.

Mass., Brighton (Boston P. O.)—Apartments—Meltzer & Snider, Brookline, had preliminary plans prepared one 5 story and three 4 story, rein.-con. and brick wood pile foundation, Strathmore and Orkney Rds. $280,000. Engineer or architect not announced.

Mass., Brighton (Boston P. O.)—Hospital, etc.,—Florence Crittendon League, 505 Tremont Temple, Boston, having plans prepared by H. F. Kellogg, archt., 110 Summer St., Boston, 4 story, hospital and nurses home, stone, Oak Sq., here. $250,000.

Mass., Cambridge (Boston P. O.)—Gymnasium—Massachusetts Institute of Technology, 491 Boylston St., Boston, having preliminary plans prepared 2 story, 100 x 150 ft., brick and concrete, here. $1,000,000. Probably private plans.

Mass., Forest Hills (Boston P. O.)—Apartment—Boston Dwelling House Co., c/o

Buildings (Continued)

W. B. Bushway, mgr., Jamaica Plain (Boston P. O.), having plans prepared by Mulhall & Holmes, archts., 248 Boylston St., Boston, 3 story, 100 x 300 ft., 6 courts, brick and limestone, wood pile foundation, West Bourne Rd. $200,000.

Mass., Pittsfield—Hospital—St. Luke and St. Boylans Hospital plans 3 story, East St. $150,000.

Mass., Springfield — Apartment—Lincoln Realty Trust, 387 Main St., having plans prepared by H. C. Hearne, archt., 387 Main St., 4 story, 90 x 300 ft., brick, plain foundation, Lincoln St. $450,000.

Mass., Springfield—Y. M. C. A. plans 8 story, brick and concrete, at rear of present building $150,000. B. H. Hoover, secy. Engineer or architect not announced.

R. I., Pawtucket—Church, etc.—St. Jean de Baptiste Church, c/o A. Graton, pastor, Harrison St., soon takes bids 1 story and tower, 80 x 172 ft., brick and stone church and 2 story, 26 x 30 ft. rectory, Slater St. $350,000. Private plans. Noted Feb. 1.

R. I., Woonsocket—Church—Universalist Church Parish, c/o G. Henshaw, archt., 87 Weybosset St., Providence, having plans prepared 1 story and basement, stone. $150,000.

R. I., Woonsocket—Home and Club—Woonsocket Lodge 850, B. P. O. E., having plans prepared by W. F. Fontaine, archt., Federal Bldg., 4 story, brick, Federal St. $150,000.

Conn., Greenwich—High School Building Comn., having plans prepared by Guilbert & Betelle, archts. and engrs., 546 Broad St., Newark, N. J., 3 story and basement, brick, concrete and steel, plain foundation, West Elm St. $800,000.

Conn., New Haven—Office—Security Insurance Co., 115 Elm St., plans office, Whitney Ave. $300,000. Engineer or architect not selected.

N. Y., Akron—High School—Bd. Educ. plans high school. $285,000. Engineer and architect not selected.

N. Y., Batavia — Theater and Office —Syndicate of theater owners plan modern fireproof, Jackson St. $175,000-$200,000. W. Krieger, chn. of com.

N. Y., Brooklyn—School—Bd. Educ., 500 Park Ave., New York, plans P. S. 206, brick, steel and stone, plain foundation, Elmore Pl. $1,000,000. W. H. Gompert, Flatbush Ave. extension and Concord St., archt. and engr.

N. Y., Buffalo—Hotel—Hotel Touraine, 274 Delaware Ave., plans improving and building 2 and 4 story rein.-con., brick and steel addition. $250,000. J. Howie, pres.

N. Y., Carthage — School — Bd. Educ. Wilna School Dist. 1, having plans prepared by S. S. Kieff, archt., Flower Bldg., brick and concrete school addition. $200,000. E. Villars, 821 State St., pres.

N. Y., Eggertsville—School—Voted $18,000 bonds for site and $182,000 for school, Eggertsville Rd. Bids to be called for in March. Bley & Layman, 250 Delaware Ave., Buffalo, archts. Noted Feb. 8.

N. Y., Mt. Vernon—Bank and Office—Eastchester Savings Bank having plans prepared by Holmes & Winslow, archts. and engrs., 134 East 44th St., New York City, 6 story, brick, steel and stone, plain foundation. $500,000.

N. Y., New York—Loft—Maxal Realty Co., c/o Schwartz & Gross, archts. and engrs., 347 5th Ave., having plans prepared 20 story, 75 x 100 ft., brick, steel and stone, plain foundation, 330 7th Ave. $1,500,000.

N. Y., New York—Theatre—B. F. Keith, 1564 Bway., plans brick, steel and stone, plain foundation, Bway. $1,000,000. Private plans.

N. Y., Perry—Hotel—Chamber of Commerce plans new hotel. $150,000. R. Smith, pres.

N. Y., Portchester—Bank and Office—First Natl. Bank having plans prepared by Holmes & Winslow, archts. and engrs., 134 East 44th St., New York City, 3 story, brick, steel and stone, plain foundation. $300,000.

N. Y., Schenectady—Hospital and Sanitarium—Schenectady Co. plans new hospital and sanitarium. $500,000. I. P. Estcourt, 25 Front St., clk. Engineer and architect not selected.

N. J., Annandale—Hospital—Amer. Legion, c/o J. D. Sears, post commander, 203 East State St., Trenton, plans tuberculosis hospital here. $250,000. Engineer and architect not selected.

Number of Contracts Let in January and February, 1923

	New England	Middle Atlantic	Southern	Middle West	West of Mississippi	Western	Total
Water-works	----	8	4	14	26	3	55
Sewers	----	8	5	12	16	6	47
Bridges	5	1	11	5	30	3	55
Excav. and dredging	----	2	----	1	3	6	12
Streets and roads	2	18	35	27	105	27	214
Industrial works	24	50	9	71	22	17	193
Buildings	20	110	24	73	38	40	305
Federal Government work	----	18	11	4	1	12	46
Miscellaneous	4	23	5	11	16	9	68
	55	238	104	218	257	123	995

N. J., Trenton—Show Room and Apartment—E. D. Cook, Jr., 413 Bellevue St., having plans prepared by W. A. Klemann, archt., 1st Natl. Bank Bldg., 6 story, brick and steel, Prospect St. $200,000.

Pa., Jersey Shore—School—Bd. Educ. having plans prepared by F. A. Rianhard, archt., Masonic Temple, Williamsport, 3 story and basement, 80 x 110 ft. rein.-con. and brick, Broad St.

Md., Baltimore—Hospital—Hebrew Hospital plans 7 story, brick and steel, Monument St. between Bway. and Wolfe St. $800,000. L. C. Coblentz, pres. J. E. Sperry, Calvert Bldg., archt.

D. C., Wash.—Office, etc.—C. L. Payne, Munsey Bldg., having plans prepared by P. M. Julian, archt., Commercial Natl. Bank Bldg., office and newspaper building, 1321 H St., N. W., $200,000. G. M. McCabe, 96 5th Ave., New York City, associated archt.

D. C., Wash.—School—St. Paul Parochial School, 15th St. and New Hampshire Ave., had plans prepared by Milburn-Heister Co., archts., 710 14th St., for school. $150,000.

Va., White Sulphur Springs—Hotel—White Sulphur Springs Co. having plans prepared by Elzner & Anderson, archts., Citizens Natl. Bank Bldg., Cincinnati, O., 7 story, 180 x 380 ft., steel and brick, plain foundation. $700,000.

W. Va., Huntington—Exchange and Office—Coal Exch. Bldg. Co., c/o A. Solof, 1107 4th Ave., having plans prepared by Meanor & Handloser, archts., Robson-Prichard Bldg., 14 story and basement, 60 x 114 x 170 ft., rein.-con., steel and stone and brick, 4th Ave. and 11th St. $750,000.

W. Va., Huntington — Hospital — State Bd. Control, Charleston, having plans prepared by R. M. Bates, Jr., archt., Cammack Watts Bldg., 3 story and basement, 70 x 240 ft., brick, tile, stone and steel, Spring Hill, here. $150,000.

W. Va., Huntington—Schools—Bd. Educ. having plans prepared by Meanor & Handloser, archts., Robson-Prichard Bldg., 3 story and basement, grade school, Monroe Ave., $150,000; by R. M. Bates, archt., Cammock Watts Bldg., 3 story and basement, high school, 25th St., $150,000.

N. C., Charlotte—Office—J. M. Scott, 18 South College St., having plans prepared by C. C. Hook, archt., Trust Bldg., 4 story, 30x 200 ft., stone and steel. $150,000.

N. C., Charlotte—Theatre—J. H. Cutter, Commercial Bank Bldg., plans theatre, West Trade St. $200,000. Engineer or architect not announced.

N. C., Hendersonville—High School—City plans large fireproof high school. $300,000. Engineer or architect not selected.

Miss., Brookhaven—High School—Bd. Educ. having plans prepared by E. J. Hull, archt., Daniel Bldg., Jackson, for high school. $150,000.

Tenn., Chattanooga—Lodge—Knights of Pythias having plans prepared by R. H. Hunt, archt., James Bldg., 8 story, 79 x 100 ft., brick, plain foundation, 7th and Pine Sts. $150,000.

O., Arcanum—High and Grade School—Bd. Educ. having plans prepared by Hall & Lethly, archts., 806 Fairbanks St., Springfield, 2 story and basement, brick and concrete. $150,000.

O., Avondale (Cincinnati P. O.)—Hotel Apartment—C. C. and E. A. Weber (owners and archts.) Ingalls Bldg., Cincinnati, preparing plans 80 x 112 ft. brick, plain foundation, Reading Rd. and Gholson Ave., here. $700,000.

O., Canton—Hospital—Stark Co. plans tuberculosis hospital, on farm south of city. $162,000. Thayer & Johnston, 5716 Euclid Ave., Cleveland, archts.

O., Canton—Theatre—A. H. Abrams having plans prepared by Carmichael & Millspaugh, archts., 67 East Long St., Columbus, 3 story and basement, 95 x 110 ft. rein.-con. and brick. $200,000.

O., Cincinnati—Apartment—Fourth and Bway. Apartment Co., 4th and Main Sts., having plans prepared by H. Hake, archt., Telephone Bldg., 10 story, 4th and Bway.

O., Cincinnati—School—St. Augustin Congregation, Bank St. near Freeman St., having plans prepared by Kunz & Beck, archts., Carew Bldg., 3 story and basement, 48 x 116 ft., brick plain foundation, Bank St. between Freeman and Boymillen Sts. $150,000.

O., Cleveland—Apartment—H. Abrams, 204 Ulmer Bldg., having plans prepared by M. Weis, archt., 617 Union Bldg., 4 story, 37 x 120 ft., brick and steel, 1826 East 82nd St. $150,000.

O., Cleveland—Apartment—W. P. Crady, 3148 East Overbrook Rd., having plans prepared by R. H. Hinsdale, archt., Bangor Bldg., 4 story, 48 x 128 ft., brick and timber, East 132nd St. $150,000.

O., Cleveland—Apartment—W. Vretman, 3328 Euclid Ave., had plans prepared by Walker & Weeks, archts., 1900 Euclid Ave., 4 story, 50 x 100 ft., brick, steel and concrete, 3328 Euclid Ave. $150,000.

O., Cleveland—Display, etc.—L. L. Carlozzi Co., 1258 East 105th St., having plans prepared by W. S. Ferguson Co., archts., 1900 Euclid Ave., 2 story, 101 x 120 ft., brick, steel and concrete automobile display and garage, Ansel Rd. and Superior Ave. $150,000.

O., Cleveland—Hospital and Asylum—Italian Home Building Co., c/o P. Garbo, 13815 Drexmore Rd., having plans prepared by C. R. Greco, archt., Guardian Bldg., 4 story, brick and steel. $500,000.

O., Columbus — Apartment — Barnhart-Seiller Co., 36 West Gay St., plans 3 story and basement, 162½ x 243 ft., brick, concrete and stucco, 2nd Ave. and High St., by day labor. $600,000. Architect not selected.

O., Dayton — High School — St. Marys Church plans 3 story and basement, rein.-con., brick and stone. $175,000. H. W. Germann, Schwind Bldg., archt.

O., East Cleveland (Cleveland, P. O.)—Apartment—Estates and Investment Co., c/o F. L. Tenbusch, treas., 5809 Euclid Ave., Cleveland, having plans prepared by M. Weis, archt., 617 Union Bldg., Cleveland, 4 story, 69 x 149 ft., brick and timber, Euclid Ave. and Weymore Rd., here. $200,000.

O., Gambier—Dining Hall, etc.—Kenyon College plans dining hall $200,000, science hall $150,000, central heating plant $75,000, renovating Ascension Hall $50,000, Kenyon Inn $50,000. A. Garfield, Natl. City Bldg., Cleveland, archt.

O., Hartwell—School—Bd. Educ., having plans prepared by Garber & Woodward, archts. and engrs., 2803 Union Central Bldg.,

Buildings (Continued)

Cincinnati, 2 story, 136 x 336 ft., brick and rein.-con. slab, Sheffield Ave. $350,000.

O., Lakewood (Cleveland P. O.)—Apartment—Loveto Development Co., co A. W. Kautz, 1283 Westlake Ave., Cleveland, having plans prepared by P. E. Robinson, archt., Hippodrome Bldg., Cleveland, 4 story and basement, brick and steel, Detroit and Grace Aves., here. $300,000.

O., Norwood (Cincinnati P. O.)—Exchange—Cincinnati Suburban Bell Telephone Co., Telephone Bldg., Cincinnati, plans exchange, here. $200,000. H. Hake, Telephone Bldg., Cincinnati, archt.

O., Piqua—High Schools—Bd. Educ. rejected bids opened Feb. 20, Wilder High School, 2 story, 76 x 234 ft. with 20 x 64 ft. wings and Bennett High School, 2 story and basement, both brick and concrete. Will readvertise. Schenck & Williams, 908 Mutual Home Bldg., Dayton, archts.

O., Westwood (Cincinnati P. O.)—Exchange—Cincinnati Suburban Bell Telephone Co., Telephone Bldg., Cincinnati, plans exchange, here. $200,000. H. Hake, Telephone Bldg., Cincinnati, archt.

Mich., Benton Harbor — Clubhouse — Michigan Club, Otis Bldg., Chicago, having plans prepared by H. P. Sturgis, archt., 79 West Monroe St., Chicago, and takes bids in early spring, 3 story and basement, rein.-con. and brick hotel, plain foundation, also two 18 hole golf courses, in Forest Park. $250,000. Noted Nov. 2.

Ill., Chicago—Apartment—A. L. Himelblau, archt., 179 West Washington St., preparing plans 3 story and basement, 124 x 200 ft., rein.-con., brick and steel, Jackson St. and Central Ave. $300,000. Owner's name withheld.

Ill., Chicago—Apartment—A. L. Himelblau, archt., 179 West Washington St., preparing plans three 3 story, 180 x 358 ft., rein.-con., brick and steel, Washington St. near Le Claire St. $800,000. Owner's name withheld.

Ill., Chicago — Apartment-Hotel — Graemère Hotel Bldg. Corp., c/o W. W. Ahlschlager, archt., 65 East Huron St., plans 8 story, rein.-con., brick and steel, Washington and Homan Sts. $2,000,000.

Ill., Chicago—Church—B'nai Bezelel Congregation, c/o D. S. Klafter, archt., 64 West Randolph St., plans rein.-con., brick and steel, 6028 Champlain Ave. $250,000.

Ill., Chicago — Temple — Temple Mizpah Congregation, c/o M. Spitzer, archt., 115 South Dearborn St., plans 1 story, 106 x 165 ft., rein.-con., brick and steel, Ashland Ave. and Morse St. $500,000.

Ill., Chicago—University—DePaul University, 1010 Webster Ave., soon receives bids 4 story, rein.-con., brick and steel, liberal arts building, Osgood St. near Belden St. $250,000. Foster, Elbert & Sandel, 56 East Randolph Sts., archts.

Ill., West Pullman—School—Assumption Catholic Congregation c/o T. Langfort, 544 West 123rd St., having plans prepared by E. Brielmaier & Sons Co., Inc., archts., 432 Bway., Milwaukee, Wis., 2 story and basement, 70 x 115 ft., brick and tile, 123rd and Parnell Sts. $150,000.

Wis., La Crosse—Bank—Natl. Bank of La Crosse, 1428 Main St., having plans prepared by Cady & Crosby, archts., 179 West Washington St., Chicago, 2 story and basement, 50 x 50 ft. addition, brick, concrete and stone, plain foundation, Main St. $150,000.

Wis., La Crosse—Schools—School Bd. had plans prepared by O. A. Merman, archt., 210 Linker Bldg., and soon takes bids 3 story, part basement, 114 x 159 ft., grade school, brick, tile and concrete, plain foundation, 8th and Division Sts., $225,000; 2 and 1 story and basement vocational school, brick, tile and concrete, plain foundation, $150,000. Noted Feb. 8.

Wis., Milwaukee — Apartment-Hotel — R. Razall, archt., 114 Grand Ave., preparing plans 3 story and basement, 102 x 118 ft. and 50 x 116 ft., brick, tile and concrete, plain foundation, East Side. $200,000. Owner's name withheld.

Wis., Milwaukee—Hospital, etc.—Misericordia Hospital, 2224 Chestnut St., having plans prepared by Backes & Pfaller, archts., 216 West Water St., 5 story and basement, 45 x 122 ft. hospital, 1 story, 50 x 100 ft. power house and laundry building, 1 story 40 x 40 ft. kitchen, brick, tile and concrete, plain foundation, Chestnut St. $175,000.

Wis., Milwaukee—Hotel—O. Brachman, 425 East Water St., having preliminary plans prepared by M. Tullgren & Sons Co., archts. and engrs., 425 East Water St., 9 story and basement, 100 x 150 ft., brick and concrete, plain foundation, Wells St. $900,000.

Wis., Milwaukee—Hotel—Hotel Medford, 3rd and Sycamore Sts., having plans prepared by C. Barkhousen, archt., 79 Wisconsin St., 4 story, 75 x 120 ft. addition, brick, concrete and steel, 3rd St. $450,000.

Wis., Milwaukee—Office—Realty Impvt. Co., c/o O. Brachman, 425 East Water St., having preliminary plans prepared by M. Tullgren & Sons Co., archts., 425 East Water St., 7 story and basement, 50 x 150 ft., brick and concrete, plain foundation, Wells St. $500,000.

Wis., Wauwatosa—Seminary—Wisconsin Evangelical Lutheran Synod, c/o J. Brenner, pastor, 814 Vliet St., Milwaukee, having preliminary plans prepared by Clas, Shepherd & Clas, archts., 445 Milwaukee St., Milwaukee, 2 and 3 story, school, also dormitory and administration building, brick, stone and concrete, plain foundations, Spring and 12th Aves. $300,000.

Ia., Ames—High School—Voted $200,000 bonds for high school. Noted Feb. 1.

Ia., Boone—March 12 to vote on $225,000 bonds for school. Architect not selected.

Ia., Cedar Rapids—School—Sacred Heart Academy having plans prepared by C. B. Zaleski, archt., 615 Amer. Trust Bldg., stone and rein.-con. addition. $200,000.

Ia., Davenport—School—March 12, to vote on $150,000 bonds for school additions. Engineer and architect not selected.

Ia., Le Mars—High School—March 12 to vote on $150,000 bonds for high school addition. R. J. Koehler, secy. School Bd. Engineer and architect not selected.

Minn., St. Paul—Gymnasium, etc.—Macalester College, Grand and Snelling Aves., having general campus plans prepared by W. M. Ingeman, 637 Endicott Bldg., St. Paul, and E. D. Litchfield & Rogers, 477 5th Ave., New York City, archts., for group of buildings, incl. 3 story, rein.-con., brick and tile gymnasium, $150,000, and chapel, to be built first; dormitory and library later.

Kan., Ft. Scott—Church—First Presbyterian Church, 3rd and Crawford Sts., plans 2 story and basement, brick, stone and rein.-con. $100,000. Engineer and architect not selected.

Kan., Junction City—High School—Bd. Educ. plans high school. $250,000. H. E. Chandler, clk. Engineer and architect not selected.

Kan., Lawrence—Auditorium—State appropriated $300,000 to construct auditorium for University of Kansas, here. R. L. Gamble, Topeka, state archt.

Kan., Parsons—High School—Bd. Educ. plans rein.-con., stone and brick, 28th and Main Sts. $400,000. H. Hughes, secy. Engineer and architect not selected.

S. D., Capa—Sanitarium—Capa Hydro Sanitarium having plans prepared by J. C. Ewing, archt., Rapid City, three 2 story and basement, 120 x 124 ft. rein.-con., brick, steel and stone buildings. $250,000.

Wyo., Casper — Church — Presbyterian Church Assn., plans brick or stone, 8th and Wolcott Sts. $150,000. Architect not announced.

Mo., Cape Girardeau—Hotel—L. L. Van Dervoort, Vandervoort Hotel, Paragould, Ark., interested in syndicate which plans 6 to 8 story, rein.-con. and brick, plain foundation, Bway., here. $300,000. Engineer and architect not selected.

Mo., Kansas City—Business—F. E. McIlvain, archt., Orear-Leslie Bldg., preparing plans 5 story and basement, rein.-con. and brick, 1009 Main St. To exceed $150,000. Owner's name withheld.

Mo., Kansas City—Hotel—Gate City Lodge, F. & A. M., 522, having plans prepared by Lodge & Gornall, archts., 1505 Commerce Bldg., 7 story and basement, rein.-con. and brick, 31st and Troost Aves. $275,000. J. A. Kellan, 507 Mutual Bldg., secy. building com. Noted Dec. 15, 1921.

Mo., Kansas City—Office—H. H. Hill, archt., 2920 Wabash St., preparing plans 30 story and basement, 200 x 200 ft., rein.-con. brick and steel office building and garage. Owner's name withheld.

Mo., Kansas City—Theater—Amusement Holding Corp., 4203 Holmes St., having plans prepared by C. Boller & Bro., archts., 508 Ridge Arcade, 1 story, basement and balcony, 66 x 150 ft., rein.-con., brick and steel, 2,000 seating capacity, Archibald St. and Bway. $150,000.

Mo., Liberty—High School—Voted additional $100,000 bonds and takes bids within 20 days, for 3 story and part basement. Total cost $225,000. C. A. Smith, Finance Bldg., Kansas City, archt. Noted Jan. 4.

Mo., St. Louis — Apartment — Fairmont Hotel Co., Chemical Bldg., had plans prepared by N. Howard, archt., Arcade Bldg., 10 story, 147 x 216 ft., rein.-con. and brick, concrete pile foundation, Euclid St. $500,000.

Mo., St. Louis—Apartment—S. Kopiar, 5759 Waterman Ave., plans 150 x 254 ft., probably 10 story, rein.-con. and brick, concrete pile foundation, Union St. $600,000.

Mo., Springfield—Church—First Presbyterian Church having plans prepared by H. H. Hunt Co., archts., Southwestern Life Bldg., Dallas, Tex., 2 story, brick and stone, South Jefferson St. $175,000. J. T. Bacon, Olive and Jefferson Sts., pastor.

Tex., Houston—Schools—April 9, to vote on $3,000,000 bond issue for general school improvements. W. A. Dowdy, city archt.

Tex., Tyler—High School—March 15, to vote on $250,000 bond issue for junior high school. H. J. Graeser, city mgr.

Okla., Oklahoma City — Hospital — Baptist Church, 1201 North Robinson St., had plans prepared by R. F. Herbert, 305½ North Robinson St., and C. W. Welborn, 100 West Choctaw St., archts., 5 story and basement, 140 x 168 ft., brick, 511 West 12th St. $350,000.

Okla., Tulsa—Church—First Presbyterian Church, 7th and Boston Sts., plans 2 story and basement, rein.-con. and brick, 7th and Boston Sts. $300,000. Engineer and architect not selected.

Colo., Denver—Store—May Co., 16th and Champa Sts., plans 7 story, 79 ft. front, on Champa Sts. between 16th and 17th Sts. $500,000. Engineer or architect not selected.

Nev., Reno—Hotel—C. S. Knight, pres. Chamber of Commerce, is head of company which plans hotel, 3 or more stories, fireproof. $250,000 or more. Engineer and architect not selected.

Ariz., Tucson—Library—University of Arizona having plans prepared by Lyman & Place, archts., 79 North Stone Ave., for library. $175,000.

Wash., Seattle—Office and Store—Lawton & Moldenhour, archts., Alaska Bldg., opens bids about March 30, 7 story, steel and concrete, 4th and Pike Sts., for Bigelow Bldg. Co.

Ore., Portland—Office—Medical Building Assn. Com.; takes bids about April 15, 12 story, probably rein.-con., Taylor, 10th and 11th Sts. $1,000,000. W. Bruce, Henry Bldg., archt.

Calif., Alhambra—Hotel and Store—F. I. Lamb, 126 South Cordova St., having plans prepared by Scott & Quinton, archts., San Gabriel, 4 story, 145 x 175 ft., brick, Main St. $250,000.

Calif., Huntington Park—Schools—Huntington Park Union High School Dist. will vote on $500,000 bonds and Huntington Park City School Dist. will vote on $90,000 bonds for school improvements.

Calif., Los Angeles—Apartment—L. Cross, c/o Walker & Eisen, archts., Pacific Finance Bldg., 4 story and basement, brick, Hollywood Blvd., to Lange & Bergstrom, Washington Bldg., $260,000.

Calif., Los Angeles—Clubhouse—Southern California Country & Athletic Club, c/o Engineering Service Co., archts., Washington Bldg., had plans prepared 3 story, rein.-con. To exceed $200,000.

Calif., Los Angeles—Hospital—St. Vincents Hospital Assn., 1151 Sunset Blvd., having plans prepared by J. C. Austin, archt., Baker-Detwiler Bldg., group of fireproof buildings. To exceed $1,000,000.

Calif., Los Angeles—Hotel—M. Dozier, c/o Eldredge & Jewell, archts., Pacific Finance Bldg., had plans prepared 4 story and basement, rein.-con. and brick, West 11th St. $150,000.

Calif., Los Angeles—Hotel—E. H. Janfen, et al., c/o H. Cross, archt., Merchants' Natl. Bank Bldg., having plans prepared 6 story, brick, Francisco St. $150,000.

Calif., Los Angeles — Office — Southern Counties Gas Co., Montebello St., having plans prepared by Walker & Eisen, archts., Pacific Finance Bldg., 2 and 3 story, rein.-con., Atlantic St. To exceed $150,000.

Calif., Merced—Office, Store, etc.—Kahl & Healy, are at head of building association being formed and having sketches prepared by N. R. Coulter, archt., 46 Kearny St., San Francisco, 5 story and basement, fireproof, L and 19th Sts. $300,000.

Calif., Oakland—Lodge, Store and Office—Elks Hall Assn., c/o W. Knowles, archt., Bacon Bldg., Oakland, and Hearst Bldg., San Francisco, having plans prepared 8 or 9 story, fireproof, 14th St. near Franklin St. $750,000.

Calif., Pleasanton—School—Amador Valley Union High School Dist., had plans prepared by H. C. Smith, archt., Humboldt Bank Bldg., San Francisco, 1 and 2 story, rein.-con. with 2 wings. $150,000.

Buildings (Continued)

Calif., Riverside—College—Riverside High School Dist., having plans prepared by G. S. Wilson, archt., 646 West 9th St., 2 story, concrete. $150,000.

Calif., Riverside—High School—Riverside High School Dist., having plans prepared by G. S. Wilson, archt., 646 West 9th St., 2 story, brick, also additional rooms to Palm School. To exceed $150,000.

Calif., San Francisco—Apartment—Huntington Apartments, had plans prepared by Weeks & Day, archts., California Insurance Bldg., 12 story, steel, California and Taylor Sts. $1,500,000. E. B. De Golla, 114 Sansome St., pres.

Calif., San Francisco—Hospital—Mount Moriah Hospital Assn., c/o C. Werner, archt., Santa Fe Bldg., having plans prepared 6 story, first unit. $225,000. Total cost $1,000,000.

Calif., San Francisco—Market Terminal—Pope & Talbot, 3rd and Berry Sts., had plans prepared by C. A. Meussdorffer, archt., Humboldt Bank Bldg., for first unit, 2 story rein.-con., 1,700 ft. frontage, 3rd, 2nd, King and Berry Sts., $500,000. Ultimate cost $2,000,000.

Calif., Santa Monica—Apartment—Rapp & Harrison, c/o A. B. Rosenthal, archt., Orpheum Theatre Bldg., Los Angeles, had plans prepared 8 story, rein.-con., Ocean Ave and Montana St. To exceed $300,000.

Calif., Stockton—Office—See "Industrial Works."

Que., Montreal — Schools — Protestant School Comrs., University St., plans 3 story, 27 room brick, on Cote St. Paul, Ville Emard, $250,000, J. S. Archibald, 314 Dorchester St. W., archt.; also plan 15 room addition to Rosemount School, $150,000. D. R. Brown, 285 Beaver Hall Hill, archt.

Ont., Hamilton — Church — Westminster Presbyterian Church plans 1 story, brick and stone, King St. and Melrose Ave. $150,000. W. L. Williams, pastor.

B. C., Point Grey—Library—University of British Columbia, 10th and Willow Sts., Vancouver, having plans prepared by Sharp & Thompson, archts., London Bldg., Vancouver, 3 story and basement, rein.-con., granite, brick and tile. $200,000 for 1st unit.

BIDS DESIRED

N. Y., Brooklyn—Market—H. E. Witteman, 188 Montague St., 28 x 170 ft., brick and steel, plain foundation, Flatbush Ave. $250,000. Work will be done by separate contracts.

N. Y., Syracuse—High School—April 2, by Bd. Educ., 17th Ward Junior High School, 2 story and basement, 200 x 300 ft., brick, steel and stone. $450,000. A. L. Brockway, Syracuse Savings Bank Bldg., archt. Noted Feb. 1.

Pa., Phila. — Clubhouse — March 7, by B.P.O.E., Juniper and Race Sts., 15 story and basement, 163 x 197 ft. rein.-con., brick and steel, caisson foundation, Broad and Wood Sts. $2,000,000. A. J. Sauer & Co., Denckla Bldg., archts.

Pa., Phila.—Schools—March 8, by Bd. Educ., 3 story and basement, 148 x 171 ft. rein.-con., brick and steel, 54th and Berks Sts., $450,000, also 3 story and basement, 148 x 171 ft. brick and steel, 17th and Lindley Aves., $450,000, both plain foundations. Private plans. Noted Jan. 11.

N. C., Raleigh—Office—G. L. Preacher & Co., archts., Commercial Bank Bldg., receiving bids 10 story and basement, rein.-con., brick and stone, Hargette St., for Odd Fellows Lodge, Home Bldg. $400,000. Noted Aug. 3.

Ga., Atlanta—Schools—March 16, by Bd. Educ., c/o J. N. Landers, city purch. agt., City Hall, 3 story and basement, 77 x 276 ft., concrete and stone 8th and 10th Sts. Robert & Co., Tuft Bldg., engrs. Hentz, Reid & Adler, 92½ North Forsyth St., archts.

O., Cincinnati — School — March 26, by Clerk Bd. Educ., Hartwell School, 2 story, 136 x 336 ft., brick, plain foundation, Springfield Pike. $350,000. Garber & Woodward, Union Central Bldg., archts. and engrs.

O., Cleveland — Apartment — M. Teplitz, 10003 Columbia Ave., taking bids 4 story, 37 x 124 ft., brick and timber, 1864 East 82nd St. $150,000. M. Weis, 617 Union Bldg., archt.

O., Cleveland—Sales, etc—W. S. Ferguson Co., archts., 1900 Euclid Ave., taking bids and opens same about March 6, 3 story and basement, 54 x 190 ft., brick and rein.-con. salesroom and garage, 2000 Euclid Ave., for Studebaker Corp. of America, 2020 Euclid Ave. $300,000. Noted Dec. 14.

SEWER—MICHIGAN CITY, IND.

Following are lowest and highest bids opened Dec. 18, by city, for constructing South Side District Sewer. Byrne Bros. Constr. Co., 258 East 115th St., Chicago, Ill., were awarded the contract using reinforced-concrete pipe.

	Monolithic Concrete		Reinforced Concrete		Brick		Segment Block	
3,840 lin.ft. 72 in. (6 ft.)	$41.80	$54.61	$40.30	$59.00	$42.30	$56.10	$45.00	$47.50
940 lin.ft. 66 in. (5½ ft.)	29.35	41.20	27.85	50.00	29.85	47.00	39.00	42.00
1,560 lin.ft. 48 in. (4 ft.)	22.02	24.68	20.52	39.85	22.52	52.00	30.50	33.00
9,360 lin.ft. 42 in. (3½ ft.)	22.15	20.90	20.65	31.00	22.65	27.25	24.25	29.00
2,380 lin.ft. 36 in. (3 ft.)	15.90	15.61	14.40	24.00	16.40	21.00	22.15	24.75
2,100 lin.ft. 30 in. (2½ ft.)	11.60	12.58	10.10	19.00	12.10	16.00	16.50	20.25
2,990 lin.ft. 24 in. (2 ft.)	9.63	11.46	8.13	7.65	10.13	8.70	7.00	8.05
2,378 lin.ft. 12 in. (1 ft.)	2.27	5.50	2.27	2.25	2.27	2.25	2.00	2.40
77 manholes	100.00	130.00	100.00	105.00	100.00	105.00	100.00	125.00
67 catch basins and connections	110.00	85.00	110.00	100.00	110.00	105.00	100.00	125.00
1 bulkhead	1,000.00	1,900.00	1,000.00	1,100.00	1,000.00	1,100.00	1,000.00	950.00
100 cu.yd. rock excavation	2.50	5.00	2.50	10.00	2.50	10.00	5.00	6.25
Extended totals	$542,490	$611,574	$507,735	$768,015	$554,075	$702,988	$612,973	$826,354

ROAD WORK—OREGON

Following are lowest three bids opened Feb. 6, by State Highway Comn., Portland, for constructing 6 mi. of The Dalles-California Highway, High Grade section, Wasco Co., (A) Elliott, Scoggins & Pacquet, McKay Bldg., (awarded contract using corrugated iron pipe); (B) Montague O'Reilly, Blake-McFall Bldg.; (C) E. A. Webster. The unit bids were as follows:

	A	B	C
Clearing and grubbing (lump sum)	$250.00	$250.00	$1,000.00
30,000 cu.yd. common excavation	.40	.42	.40
160,000 cu.yd. solid rock excavation	.95	.97	.95
76,000 sta. yd. overhaul	.04	.04	.05
2300 lin.ft. 12-in. plain concrete pipe	2.50	1.90	2.00
650 lin.ft. 18-in. reinforced concrete pipe	3.00	3.50	3.50
330 lin.ft. 24-in. reinforced concrete pipe	4.50	4.70	5.00
80 lin.ft. 36-in. reinforced concrete pipe	7.50	8.35	12.00
2300 lin.ft. 12-in. corrugated galvanized iron pipe	1.50	1.49	1.50
650 lin.ft. 18-in. corrugated galvanized iron pipe	2.75	2.43	3.00
330 lin.ft. 24-in. corrugated galvanized iron pipe	3.30	3.10	4.00
80 lin.ft. 36-in. corrugated galvanized iron pipe	5.75	5.80	6.00
490 cu.yd. class A concrete	45.00	31.50	33.00
71 cu.yd. class C concrete	45.00	25.00	33.00
47,000 lb. metal reinforcement	.12	.07	.10
100 cu.yd. riprap	100.00	75.00	100.00
4M ft. b.m. lumber and timber	2.00	3.00	5.00
Extended totals using concrete pipe	$197,125	$201,054	$202,398
Extended totals using corrugated galvanized iron pipe	$194,050	$200,273	$200,273

O., Cleveland — Store — March 5, by Bedell Cloak & Suit Co., 19 West 34th St., New York City, 6 story and basement, 75 x 132 ft., brick, steel and concrete, 746 Euclid Ave., here. $250,000. G. H. Schonewald, Grand Central Terminal, New York City, archt. Noted Jan. 18.

O., Lorain—Schools—March 12, by Bd. Educ., 2 story, 12 room addition, Oakdale and East 20th Sts., $150,000 and 2 story, 12 room high school addition, 31st and Seneca Sts., $150,000, both brick, steel and concrete. F. C. Warner, Hippodrome Annex Bldg., Cleveland, archt.

O., Mount Blanchard—School—March 12, by Bd. Educ., 2 story, 91 x 136 ft. brick, steel and concrete. $150,000. R. M. Hulsken, 216 West Market St., Lima, archt.

Mich., Detroit—Clubhouse—Stratton & Snyder, archts., 1103 Union Trust Bldg., taking bids 8 story and basement, 90 x 120 ft., rein.-con., brick, steel and stone, plain foundation, Elizabeth St. and Park Blvd., for Women's City Club, 141 Bagley Ave. $500,000. Noted Jan. 18.

Ill., Chicago—Apartment—C. A. Ackley, 1447 East 63rd St., receiving bids 3 story, 62 x 160 ft., rein.-con., brick and steel, 64th and Blackstone Sts. $175,000. T. R. Bishop, 35 South Dearborn St., archt.

Ill., Chicago—Dormitory—Northern Baptist Theological Seminary c/o S. M. Seator, archt., 19 South La Salle St., receiving bids 3 story, 40 x 175 ft., rein.-con., brick and steel dormitory and school. Washington and Albany Sts., $150,000. Noted Jan. 4.

Ill., Chicago — Office — Owner, c/o A. J. Browne, Tower Bldg., receiving bids 4 story, 86 x 163 ft., rein.-con., brick and steel addition, Madison St. and Michigan Ave. $400,000. Holabird & Roche, 104 South Michigan Ave., archts.

Ill., Chicago—Store and Office—D. S. Klafter, archt., 64 West Randolph St., receiving bids 2 story, 250x255 ft., rein.-con., brick and steel, Milwaukee and Crawford Aves., for I. M. Mills c/o architect. Noted Jan. 25.

Ill., Winnetka—School—Perkins, Fellows & Hamilton, archts., 814 Tower Court, Chicago, receiving bids 2 story, 50x63 ft., rein.-con., brick and steel, Woodlawn and Sunset Aves., here, for New Trier High School Twp. Bd. c/o architects. $165,000.

Wis., Green Bay—Hotel—M. Tullgren & Sons, archts., 425 East Water St., Milwaukee, taking bids on superstructure for 8 story, 130 x 160 ft., brick and concrete, plain foundation, Pine St., for Hotel Wisconsin Realty Co., 86 Michigan St., Milwaukee. Total $850,000. Noted Dec. 7. See item under "Miscellaneous."

Wis., Lancaster—High School—March 14, by School Bd., 2 story and basement, 100 x 200 ft., brick, tile and concrete, plain foundation. $175,000. E. J. Morse, pres. Parkinson & Dockendorff, Linker Bldg., La Crosse, archts.

Wis., Madison — School and Church — F. L. Kronenberg, archt., Carroll Bldg., taking bids 2 story and basement, 150 x 200 ft., brick, rein.-con. and steel, plain foundation, Hollister St., for Blessed Sacrament Church. $150,000.

Ia., De Witt—School—March 10, by Bd. Educ., 2 story and basement, 138 x 138 ft., rein.-con., brick, tile and stone. $150,000. H. Seifert, secy. J. C. Wood & Co., Clinton, archts. Noted Nov. 23.

Minn., Minnetonka Beach—Club House—March 16, by Lafayette Club, c/o C. M. Harrington, pres., 713 Chamber of Commerce, Minneapolis, 1, 2 and 3 story and basement, rein.-con., brick and tile. $275,000. Hewitt & Brown, 1200 2nd Ave. S., Minneapolis, archts.

Minn., Virginia—City Hall, etc.—March 17, by H. C. Bickford, city clk., 3 story, 112 x 137 ft. City Hall, and 2 story, 112 x 250 ft. recreational unit, rein.-con., brick and stone. $400,000. German & Jenssen, Exch. Bldg., Duluth, archts. and engrs. Noted May 11.

Tex., Austin—Hotel—March 15, by Baker Hotel Co., San Antonio, and Sanguinet, Staats & Gottlieb, archts. and engrs., 1st Natl. Bank Bldg., Ft. Worth, 16 story, 90 x 110 ft., rein.-con. and brick. $500,000.

Tex., Beaumont — High School — City Comn. taking bids 2 story and basement, rein.-con. and brick, plain foundation. $165,000. A. Babin, 15 Blanchett Bldg., Beaumont, engr. C. H. Page & Bros., Austin Natl. Bank Bldg., Austin, archts. Noted Nov. 30.

Tex., San Antonio—Schools—March 6, by School Bd., three one story and two 2 story, rein.-con., brick and stone schools, (1) at San Pedro and Mulberry Sts. (2) Josephine St. (3) Berkshire and Yorkshire Sts. (4) Morales and Zarzamora Sts. (5) Darragh site. Five separate jobs each to be figured separately. $800,000. W. E. Simpson & Co, Natl. Bank of Commerce Bldg., engrs. Phelps & Dewees, Gunter Bldg., archts. Noted Feb. 22.

Colo., Denver—Church—Montjoy & Frewen, archts., Chamber of Commerce Bldg., taking bids and opens same about March 15, 75 x 150 ft., brick and rein.-con., (1st unit), for Sacred Heart Parish, 23rd and York Sts. $200,000.

Calif., Crockett—School—March 7, by Trustees Carquinez School Dist., 2 story, brick and concrete. $235,000. A. A. Brown,

Buildings (Continued)

c/o Matson Navigation Co., 120 Market St., San Francisco; archt. Noted Oct. 19.

Calif., Los Angeles—Home—California Lutheran Hospital Assn., 1414 South Hope St., receiving bids 4 story and basement, brick and concrete, 15th St. To exceed $150,000. J. J. Frauendfelder, Story Bldg., archt.

Calif., San Francisco—Office—A. Boyd Estate, c/o S. L. Hyman, archt., Foxcroft Bldg., receiving bids 10 story, fireproof, Taylor and O'Farrell Sts. $300,000.

Ont., Belleville—College—March 5, by H. W. Ackerman, secy. Bldg. Com. Bd. Educ., 3 story and basement, 30 room, concrete, brick and steel. $250,000. Chapman & Oxley, Harbor Bldg., Toronto, archts. Noted Feb. 8.

BIDS RECEIVED

N. Y., New York — Schools — W. H. Gompert, archt. Bd. Educ., Flatbush Ave. extension and Concord St., Brooklyn, opened bids Feb. 23, (1) addition to P. S. 12, Frisby Ave. and Overing St., (2) addition to P. S. 33, Jerome and Walton Aves. between East 184th St. and Fordam Rd., Bronx Boro, from G. E. Dekempe, New York Ave., Union Hill, N. J., (1) $239,000 (2) $82,000; Concord Constr. Co., 139 Baxter St., (1) $255,555; T. J. Waters Co., 271 West 125th St., (1) $264,800 (2) $97,780; M. F. Kelly Co., Inc., (2) $94,945. Noted Feb. 15.

O., Cleveland Heights (Warrensville, P. O.)—City Hall, Police and Fire Station—For 2 story, brick, steel and concrete, 2953 Mayfield Rd., from C. A. Carson Co., 7016 Euclid Ave., Cleveland, $181,900; C. Peterson Co., 4500 Euclid Ave., Cleveland, $184,250.

O., Columbus—Administration, etc.—C. E. Steele, secy. Bd. Trustees Ohio State University, opened bids Feb. 20, (1) 3 story and basement, 100 x 180 ft. administration building (2) 4 story and basement, 75 x 145 ft. medical science building, both brick, stone and concrete on campus, (a) general contract (b) plumbing (c) heating and plumbing, from D. W. McGrath & Sons, 255 East Broad St., (1a) $304,700 (2a) $238,847; E. Elford, 307 East Gay St., (1a) $313,000 (2a) $225,000; E. H. Latham, 60 East Broad St., (1a) $319,000; Huffman & Wolfe, 669 North High St., (1b) $29,183 (2c) $38,399; Fitzpatrick & Hoepfner, 63 East Gay St., (1b) $32,300 (2c) $38,140; Boyajohn & Baer, 8 East Broad St., (2a) $238,000. Noted Feb. 8.

Wis., Kenosha—Grade Schools—School Bd. opened bids Feb. 20, two 2 story and basement, brick, tile and concrete, plain foundations, on Fairfield Ave. and Bronson St., general contract, from M. Madsen, Builders Exch., Minneapolis, Minn., $117,500 each; J. Stocker, 101 North Brocket St., $120,000 each; Bondgard & Christensen, Mound Ave. and Mead St., Racine, $144,360 each. Noted Feb. 8.

Minn., Minneapolis—High School—Bd. Educ. opened bids Feb. 23. 3 story and unfinished basement, 45 x 250 x 300 ft., with 1 story, 60 x 80 ft. wing, rein.-con., brick and tile, 26th St. and Emerson Ave. S., general contract from Madsen Constr. Co., 848 Builders Exch., $345,000; Kvitrud & Madsen, 754 Builders Exch., $354,850; Standard Constr. Co., 1101 Plymouth Bldg., $355,325. Noted Feb. 15.

Calif., Oakland—Store and Office—Ambassador Realty Co., 7 story, rein.-con., 17th St. and Bway., from Dinwiddie Constr. Co., Crocker Bldg., San Francisco, $149,200; Macdonald & Kahn, 130 Montgomery St., San Francisco, $155,167; Walters & Grove, Monadnock Bldg., San Francisco, $155,183. Noted Feb. 8.

Calif., Taft—High School—Taft Union High School Dist., group rein.-con. buildings, general contract from W. J. Ochs, Coalinga, $185,800; Olchester, Patten & Kerr, Selma, $189,000; Campbell Constr. Co., Nicolaus Bldg., Sacramento, $333,636; Cobby & Owsley, 74 New Montgomery St., San Francisco, (combination bid $223,900). Noted Jan. 25.

CONTRACTS AWARDED

Mass., Boston—Health—City (George Robert White Fund), 3 story, 75 x 100 ft., rein.-con. and brick, wood pile foundation, Battery and Commercial Sts., general contract to J. Slotnick Co., 448 Bway., Chelsea, (Boston P. O.), $146,837. Noted Jan. 18.

Mass., Dorchester (Boston P. O.)—High School—City of Boston, high school, rein.-con. and brick, wood pile foundation, Dunbar Ave., here, to J. Slotnick Co., 448 Bway., Chelsea (Boston P. O.), $871,911. Archts. est. $1,000,000. Noted Jan. 18.

Mass., Boston—Office—Washington-Essex Real Estate Trust, 59 Temple Pl., 8 story, brick, stone, concrete and steel, Washington, Essex and Harrison Sts., to G. B. H. Macomber Co., 44 Bromfield St. Archts. est. $750,000.

Mass., Springfield — Hotel — Hampden Hotel Co., 140 Chestnut St., 10 story, 45 x 60 ft., addition, Hillman St., to E. J. Pinney, 374 Main St., $148,000. Archts. est. $150,000.

Conn., New Haven—Church—St. Boniface Roman Catholic Church, 229 George St., 1 story and tower, 55 x 120 ft., stone and brick, plain foundation, State St., to M. J. Gibbud Co., 100 Water St. Archts. est. $150,000. Noted Dec. 14.

N. Y., Albany—School—Bd. Contract & Supply, general contract P. S. 4, 2 story and basement, 68 x 198 ft. with 45 x 59 ft. wing, Madison Ave. and Ontario St., to J. Dyer, Jr., 17 Steuben St., $386,980; heating and ventilating work, to W. B. Armstrong Co., 3 Fulton St., $34,888. Noted Jan. 25.

N. Y., Brooklyn — Apartments — Trieb Building Corp., c/o M. A. Cantor, archt. and engr., 373 Fulton St., two brick, steel and stone, plain foundations, 18th Ave. and 48th St., by day labor. $150,000 each.

N. Y., Endicott—School—Bd. Educ. Union Free School Dist. 1, new school, West Endicott, to Endicott-Johnson Corp., 108 East Main St., $235,000.

N. Y., Lockport—Theatre and Office—Lock City Theatres, Inc., brick, steel and concrete, Elm St. and East Ave., to J. Moon, 21 Main St. Archts. est. $150,000.

N. Y., New York—Apartments—Burnside Development Corp., c/o G. G. Miller, archt. and engr., 1482 Bway., two 5 story, brick, steel and stone, plain foundations, Burnside Ave., by day labor. $150,000 each.

N. Y., New York—Apartment—C. Glaser, c/o W. Hohauser, archt. and engr., 116 West 39th St., 5 story, brick, steel and stone, plain foundation, East 175th St., by day labor. $160,000.

N. Y., New York—Apartment—Glick-Rose Holding Co., c/o D. S. Lang, archt. and engr., 110 West 34th St., 6 story, 54 x 100 ft., brick, steel and stone, plain foundation, Bway. and 175th St., by day labor. 350,000.

N. Y., New York—Apartment—J. E. Mautuer, c/o S. Cohen, archt. and engr., 45 West 57th St., 5 story, 90 x100 ft., brick, steel and stone, plain foundation, Cauldwell Ave. near 165th St., by day labor. $400,000.

N. Y., New York—Apartment—J. D. Pederson, c/o G. G. Miller, archt. and engr., 1482 Bway., 5 story, 125 x 175 ft., brick, steel and stone, plain foundation, Waldo Ave. near 238th St., by day labor. $250,000.

Md., Baltimore—School—Bd. Awards, 4 story, 87 x 237 ft., rein.-con. and brick, 36th St. west of Falls Rd., to C. L. Stockhausen Co., Gay and Water Sts., $534,937. Noted Feb. 22.

N. C., Raleigh—Theatre and Office—Raleigh Theatre Co., 8 story and basement, rein.-con., brick, tile and marble, Salisbury St., to J. E. Beaman, Commercial Bank Bldg., $264,750.

Ga., Atlanta—Schools—For 3 story and basement, rein.-con., on Houston St. near Randolph St., to Service Co., 180 Auburn Ave., $211,725; 3 story and basement, rein.-con., Beecher St., to McDevitt Fleming Co., 702 Forsyth Bldg., $220,168.

O., Cincinnati — Apartment — Vernon Manor Co., 16 East 17th St., 7 story and basement, 90 ft. high, 140 x 208 ft., rein.-con. and brick, plain foundation, Burnett and Oak Aves., to Ferro Concrete Constr. Co., 3rd and Elm Sts., $1,250,000. Noted Sept. 28.

O., Cleveland—Office and Commissary—Clark Restaurant Co., 1954 East 6th St., 2 story and basement, 112 x 120 ft., brick, steel and concrete, East 23rd St. south of Payne Ave., to W. Dunbar Co., 8201 Cedar Ave. Archts. est. $150,000. Noted Feb. 1.

O., Columbus—Lodge—United Commercial Travelers of America, Russell and Park Sts., general contract, 2 story and basement, 75 x 153 ft., brick and stone, North Park St., to Willing Bros., Bellevue, $157,786. Noted Feb. 8.

O., Columbus—School—Bd. Educ., Madison Twp., 2 story, 50 x 56 x 70 x 199 ft., brick, steel and concrete, to C. Schneider & Son, Pennsylvania R.R. south of Fair Grounds, $145,800.

O., Dayton—Office, etc.—Standard Register Co., Albany St., general contract 2 story and basement, brick and rein.-con. office building and shop, Albany St., to Danis-Hunt Constr. Co., 907 Schwind Bldg., $100,000.

O., Greenville—High School—Bd. Educ., general contract 2 story, brick, steel and concrete, to Yager & Sons, Danville, Ill., $265,999; heating and ventilating work, to Wethers & Son, New Castle, Pa., $63,221. Noted Feb. 1.

O., Massillon—School—Bd. Educ., general contract, Lorin Andrews School, 2 story and basement, 101 x 225 ft., brick, steel and concrete, to James Meinhardt Contg. Co., Massillon, $199,890.

O., Vanlue—School—Bd. Ed[illegible] 2 story, 98 x 138 ft., brick, steel and co[illegible]ete, to W. Smart, Fremont. Archts. est. $[illegible]

Ind., South Bend—Store—Rob[illegible]son Bros., 8 story and basement, 100 x 1[illegible] ft., rein.-con. and brick, South Michi[illegible] St., to H. G. Christman Constr. Co., [illegible]oom 202, Union Trust Bldg. Archts. est. $[illegible],000.

Mich., Benton Harbor—Hot[illegible] W. Bastor, 7 story and basement, 1[illegible] x 160 ft. rein.-con. and brick, West Mai[illegible] St., to W. L. Reisinger Co., 464 Oakland [illegible]ve., Milwaukee, Wis., $340,000. Noted [illegible] 2.

Ill., Chicago—Apartment—A. [illegible]ry, 4759 North Western Ave., 3 story, 9[illegible] x 120 ft., rein.-con., brick and steel, 22[illegible]09 Eastwood St., to J. S. Erickson, 14[illegible] Elsdale Ave. Archts. est. $150,000.

Ill., Chicago — Apartment — Plotke & Grosby, 2532 North Clark St., 100 x 100 ft., Kenmore and Winona Sts., 100 x 150 ft., Winthrop St. near Bryn Mawr St., 100 x 175 ft., Arlington Pl. near Clark St., and 100 x 190 ft., Wrightwood Ave. near Clark St., all 3 story and basement, rein.-con. brick and steel, to Barrett Constr. Co., 153 North Clark St. Archts. est. $400,000 $400,000, $450,000 and $450,000 respectively.

Ill., Chicago—Clinic—F. O. De Money, archt., 5 North La Salle St., 2 story and basement, 80 x 161 ft., rein.-con., brick and steel, Monroe and Loomis Sts., to B. J. Regnell Co., 19 South La Salle St. Archts. est. $200,000. Owners name withheld.

Ill., Chicago — Office — Foreman Bros. Banking Co., 30 North La Salle St., remodeling Stock Exch. Bldg., to G. A. Fuller Co., 140 South Dearborn St. Archts. est. $200,000.

Wis., Milwaukee—Theatre and Office—Grand & Sixth Bldg., Inc., 425 East Water St., 8 story and basement, 150 x 205 ft. brick, concrete and steel, plain foundation, superstructure to Collins Bros., 1600 Grand Ave., Kansas City, Mo.; steel, to Worden-Allen Co., Port Washington Rd. Archts. est. $1,500,000. Noted Jan. 18.

Minn., Minneapolis—Office—Northwestern Natl. Life Insurance Co., 3 story and basement, 58 x 113 x 118 x 137 x 175 ft. rein.-con., brick and tile, Indiana limestone front, 15th and Oak Grove Sts., general contract to J. L. Robinson Co., 511 South 7th St. Building complete $400,000. Noted Feb. 15.

Minn., Minneapolis — Office — Yeates & Son, 520 1st Natl. Soo Line Bldg., 6 story and basement, 80 x 105 ft., rein.-con., brick and tile, Nicollet Ave. and 9th St., general contract to J. Leck Co., 316 South 7th St., cost plus percentage basis. Total cost $350,000. Noted Jan. 25.

Minn., St. Charles—High School—Bd. Educ., 2 story and basement, 140 x 150 ft., rein.-con., brick and tile, general contract to P. Kramer, St. Charles, $117,920.

Kan., Kansas City—High School—Bd. Educ. general contract 3 story and basement, rein.-con., steel and brick, 18th and Haskell Sts., to Baer Eng. & Constr. Co., Leavenworth, $204,168; heating and ventilating, to Justus, Schenck & Co., Kansas City, Mo., (street address not available). $30,760.

Neb., Omaha—Apartment—Meyer Realty Co., c/o C. B. Kraus Co., 616 Keeline Bldg., 8 story and basement, fireproof, 38th St. between Dewey Ave. and Harney St., to Fleisher Constr. Co., 606 Builders' Exch., Minneapolis, Minn.

Mo., St. Louis—Church—Wedemeyer & Nelson, archts., Wainwright Bldg., 2 story, 105 x 127 ft., brick, tile and terra cotta, plain foundation, 3732 Natural Bridge Ave., to Dickie Constr. Co., Syndicate Trust Bldg., for Sixth Church Christ Scientist, 3730 Natural Bridge Ave. Archts. est. $200,000. Noted March 9.

Nev., Reno—Junior High School—Junior High School Dist. Bd., 2 story, brick, to J. C. Dillard, Reno, $139,140. Contract for gymnasium will be awarded later. Total estimate $200,000. Noted March 16.

Wash., Seattle—Office—Pacific Warehouse Co., Maritime Bldg., 11 story, 90 x 111 ft., concrete and steel, 1st and Virginia Sts., to be known as Terminal Sales Bldg., general contract to H. Pederson, Alaska Bldg. Archts. est. $500,000.

Calif., Fresno — Store and Office — K. Emerzian, c/o E. Mathewson, archt., Gory Bldg., will build 3 story and basement, 100 x 150 ft., rein.-con., Inyo and Van Ness Sts., by day labor. $300,000.

Calif., Los Angeles — Apartment — Wilshire—Carondelet Holding Co., c/o Russell & Alpaugh, archts., Story Bldg., 8 story, rein.-con., Wilshire Blvd., to Richardson Building Co., Story Bldg., $700,000.

B. C., Point Grey—Science—University of British Columpia, 10th and Willow Sts., Vancouver, completing 3 story, 45 ft. high, with 12 ft. basement, 60 x 250 ft. with 60 x 60 ft. wing, granite, brick and tile, (frame erected), to E. J. Ryan Contg. Co. Ltd., 445 Granville St., Vancouver. Archts. est. $650,000. Noted Nov. 30.

Federal Government Work

PROPOSED WORK

Pa., Phila.—Coal—U. S. Engineer, 815 Witherspoon Bldg., plans to purchase semi-bituminous coal for floating plant.

Pa., Phila.—Fuel Oil—U. S. Engineer, 815 Witherspoon Bldg., plans to purchase 40,000 bbl. fuel oil.

Md., Claibourne—Dredging U. S. Engineer plans dredging in Harbor, here.

D. C., Wash.—Hospital—U. S. Veterans Bureau, Arlington Bldg., plans U. S. Veterans Hospital, Mt. Alto, Wisconsin Ave., N. W.

W. Va., Huntington — See "Contracts Awarded."

Ala., Florence—Boilers—U. S. Engineer plans purchasing and installing 4 steam boilers.

Miss., Vicksburg—Metal, etc.—U. S. Engineer plans to purchase metal, etc., for Locks and Dams 5 and 8 Onachita River.

Tenn., Chattanooga—Lock Gates—U. S. Engineer will purchase Lock gates for Widows Bar Lock and Dam.

Ky., Louisville—Cement—U. S. Engineer plans to purchase portland cement for Dams 44 and 45 Ohio River.

Ky., Louisville—Piling—U. S. Engineer plans to purchase steel sheet piling for Dam 44, Ohio River.

Minn., St. Cloud—Hospital—U. S. Veterans Bureau, Arlington Bldg., Wash., D. C., having plans prepared by A. H. Stem, archt., 601 Endicott Bldg., St. Paul, group 2 and 3 story, rein.-con., brick, tile and stone hospital buildings, here. Noted Sept. 21.

Mo., Excelsior Springs—Hospital—Bureau Yards & Docks, Navy Dept., Wash., D. C., having plans prepared 3 additional buildings to U. S. Veterans Hospital, here.

Calif., San Diego—Water-Softening Plant—Spec. 4768—Bureau Yards & Docks, Navy Dept., Wash., D. C., rejected bids for water-softening plant at Naval Base, here. Noted Feb. 15.

BIDS DESIRED

N. Y., Buffalo—Wreck Removal—March 10, at office U. S. Engineer, Buffalo, removing wreck of steamer Arizona from St. Lawrence River at Cape Vincent; adv. this issue.

N. Y., New York—Dredging, etc.—March 20, at office U. S. Engineer, Army Bldg., 39 Whitehall St., dredging and rock removal in East River, here; adv. this issue.

Va., Quantico — Hangers — Spec. 4693——March 14, by Bureau Yards & Docks, Dept., Wash., D. C., marine flying field hangars, here.

Tenn., Memphis—Tank and Tower—March 22, at office, District Engineer, Mississippi River Dredging Dist., P. O. Box 1017, water tank and tower at U. S. Dredge Depot, here; adv. this issue. Noted Feb. 1.

Ind., Newburg—Lock—April 10 at office U. S. Engineer, P. O. Box 72, Louisville, Ky., constructing Lock 47, Ohio River, here; adv. this issue.

Neb., Mitchell—Tunnel, etc.—April 16, at office U. S. Recl. Service, Mitchell, constructing Tunnel 3 and concrete lining canal approaches to same on Ft. Laramie Canal, North Platte Project, Nebraska-Wyoming, near Haig. A. P. Davis, dir.; adv. this issue.

Mo., Kansas City—Extension—March 26, by Treas. Dept., Wash., D. C., Extension 3, incl. mechanical equipment, for U. S. Post Office and Court House, here. J. A. Wetmore, acting superv. archt.; adv. this issue.

Wash., Keyport—Extension—Spec. 4744—March 14, by Bureau Yards & Docks, Navy Dept., Wash., D. C., extension to torpedo storehouse, here. Noted Oct. 12.

Calif., Livermore—Hospital—March 29, by Director U. S. Veterans Bureau, Arlington Bldg., Wash., D. C., Tuberculosis Hospital, here; adv. this issue. Noted Jan. 4.

H. T., Honolulu—Machinery, etc.—April 12 at office Constructing Quartermaster, Honolulu, machinery and equipment for refrigerating plant to be erected at Schofield Barracks, Oahu; adv. this issue.

BIDS RECEIVED

Pa., Phila.—Barge—U. S. Engineer, 815 Witherspoon Bldg., 1321 Walnut St., one 87 ft. steel oil barge, at Ft. Mifflin, here, from Noank Shipyard, Inc., Noank, Conn., $21,-900; Charleston Dry Dock and Machine Co., 106 Concord St., Charleston, S. C., $27,811; W. Cramp & Sons Ship & Engine Building Co., Richmond and Norris Sts., $29,000. Noted Feb. 8.

Pa., Phila.—Dredging, etc.—Spec. 4738—Bureau Yards & Docks, Navy Dept., Wash., D. C., dredging, filling, wood bulkhead and concrete drain at Navy Yard, here, (1) work complete, from E. Fay & Sons, 2 South Mole St., (4a) $22,772 (90 days), (5a) $67,715 (150 days), (5c) $66,975 (150 days); McLean Contg. Co., Fidelity Bldg., Baltimore, Md., (4a) $14,954 (90 days), (5a) $72,965 (150 days); Amer. Dredging Co., Mariner and Merchant Bldg., (1) $0.33 (2d) $0.18 (2e) $0.18 (2f) $0.18 (3) $0.32; Delaware Dredging Co., 139 South 3rd St., (1) $0.378 (2a) $0.16 (2b) $0.158 (2c) $0.156 (2d) $0.147 (2e) $0.149 (2f) $0.158 (4b) $16,800 (5b) $72,150. Noted Jan. 25.

Pa., Pittsburgh—Houses—U. S. Engineer, two 2 story lockkeepers' houses at Lock 6, Monongahela River, (1) solid brick (2) hollow tile, brick veneer, from Charleroi Lumber Co., Charleroi (1) $18,376 (2) $18,130, W. L. Craft, South Brownsville, (1) $19,-333 (2) $18,793; North Side Constr. Co., 6939 Hamilton Ave., (1) $22,104 (2) $21,-804. Noted Jan. 4.

Miss., Gulfport—Refrigerating Equipment—Spec. 4780—Bureau Yards & Docks, Navy Dept., Wash., D. C., refrigerating equipment at U. S. Veterans Hospital, here, (1) work complete, from Clothel Refrigerator Co., 61 Bway., New York, (1) $19,480 (120 days), (2) $19,240; Brunswick-Kroeschell Co., 460 West Erie St., Chicago, (1) $24,-516 (214 days); Wittenmeier Mchy. Co., 850 North Spaulding Ave., Chicago, $24,930 (200 days). Noted Feb. 1.

Miss., Gulfport—Stack—Spec. 4781—Bureau Yards & Docks, Navy Dept., Wash., D. C., radial brick stack at U. S. Veterans Hospital, here, from Webber Chimney Co., 332 South Michigan Ave., Chicago, $5,450 (200 days); H. R. Heinicke, Inc., 221 South New Jersey St., Indianapolis, Ind., $5,700; A. Custodis, 95 Nassau St., New York City, $6,035 (red) $6,235 (buff). Noted Feb. 15.

Calif., Crescent City—Stone, etc.—U. S. Engineer, 401 Custom House, San Francisco, furnishing 80,000 ton stone for repairing and extending present breakwater approximately 400 to 600 lin.ft., from A. D. Kern, Lumber Exch. Bldg., Portland, Ore., $1.97 per ton; W. B. Arndt, Crescent City, $6 with alternate bid $2.45 per ton. Noted Dec. 28.

CONTRACTS AWARDED

N. Y., Ft. Tilden—Plotting-Room, etc.—U. S. Engineer, 608 Army Bldg., 39 Whitehall St., New York, concrete plotting-room and switchboard room, here, to Pearce Co., Inc., 220 West 42nd St., New York, $29,457. Noted Jan. 18.

W. Va., Huntington—Lock Operating Machinery, etc.—U. S. Engineer, lock operating machinery for Dam 30, Ohio River, to H. P. Gazzam Machine Co., 3200 Penn Ave., Pittsburgh, Pa., Lot A, $7,995; to J. and J. B. Milholland Co., 714 5th Ave., Pittsburgh, Pa., Lot C, $6,739. Lots B and D rejected. Noted Dec. 28.

Fla., Jacksonville—Boat—U. S. Engineer, Jacksonville, 1 motor survey boat, to Burger Boat Co., Manitowoc, Wis., $4,925.

Ala., Florence — Steel Centering — U. S. Engineer, steel centering for arches of bridge over dam, here, to The Blaw-Knox Co., Freeport Rd., Pittsburgh, Pa., $22,050.

Tenn., Nashville—Barges—U. S. Engineer, 14 steel barges, to Penn Bridge Co., Beaver Falls, Pa., $156,535. Noted Jan. 4.

O., Cincinnati—Dredging Ladder—U. S. Engineer, Custom House, dredging ladder for 24 in. pipe line dredge, to J. and J. B. Milholland Co., 714 5th Ave., Pittsburgh, Pa., $35,497. Noted Jan. 4.

Mich., Battle Creek—Hospital—Director, U. S. Veterans Bureau, at office Quartermaster-General, 2306 Munitions Bldg., Wash., D. C., for Neuro-Psychiatric Hospital at Camp Custer, here, to A. Bentley & Sons, 201 Belmont Ave., Toledo, O., $2,-174,680. Noted Feb. 22.

Tex., Galveston—Dredging—U. S. Engineer, dredging 30 ft. project in Houston Ship Channel, to United Dredging Co., 233 Bway., New York-City, $350,000. Noted Jan. 4.

Ore., Astoria—Dredging—Spec. 4615—Bureau Yards & Docks, Navy Dept., Wash., D. C., additional contract for 400,000 cu.yd. dredging at Naval Submarine and Destroyer Base, here, to Gilpin Constr. Co., foot of 14th St., $0.15 per cu.yd. Noted Feb. 8.

H. T., Honolulu—Dredging—U. S. Engineer, dredging in harbor, here, 1,250,000 cu.yd. excav., to Hawaiian Dredging Co., 854 Kuhuhuana St., $949,540. Noted Nov. 2.

Miscellaneous

PROPOSED WORK

Light and Power Lines—New York—Depew & Lancaster Light, Power & Conduit Co., 173 Central Ave., Lancaster, plans extending its light and power lines to towns of Cowlesville, Bennington, Strykersville, Java, Curriers, etc. $25,000. This corrects report in Feb. 1 issue.

Tract Development—Endicott, N. Y.—E. B. Jenny, 32 Vermont Ave., plans development of "Jenny Tract" incl. business buildings and shops. $2,000,000.

Power Development—Watertown, N. Y.—Voted $415,000 bonds to develop water power at Delano Island. P. B. Sutton, city engr.

Tunnel System Extension — Baltimore, Md.—Johns Hopkins University, Homewood, having plans prepared extension to tunnel system, incl. tunnel sewers, water and gas mains, electric feeders, high and low pressure steam and general distribution. C. L. Reeder, 916 North Charles St., engr.

Fire Department Equipment—Moundsville, W. Va.—See "Waste Disposal."

Dragline — Racine, Wis. — Racine Co. Drainage Comn., c/o L. J. Quinn, Badger Bldg., having specifications prepared for dragline for cleaning out open ditches. Private plans.

Steam or Gasoline Shovel—Sheboygan, Wis.—Having specifications prepared for steam or gasoline shovel for city use. C. N. Boley, City Hall, engr.

Tractor, etc.—Waukesha, Wis.—Waukesha Co. c/o C. J. Hahn, engr., Court House, plans to purchase tractor, steam or gas shovel and graders.

Steel Tanks—Salt Creek, Wyo.—Mid West Refining Co., Salt Creek, plans to purchase 500 steel Columbian tanks, 500 bbl. each. $250,000.

Road Oil—St. Louis, Mo.—G. Oetling, supply comr., soon takes bids about 800,-000 gal. road oil of not less than 9.2 gravity at 60 deg. Fah. and of 2.0 to 2.7 viscosity (Engler) at 212 Deg. Fah.

Gas Mains—Corpus Christi, Tex. — See "Industrial Works."

Transmission Line—Washington—Washington Water Power Co., 825 Trent St., Spokane, plan 18 mi. power transmission line between Ephrata and Quincy. Will be used for irrigation purposes.

Terminal — Los Angeles, Calif. — Outer Harbor, Dock and Wharf Co., of which the Union Oil Co., Union Oil Bldg., has controlling interest, plans terminal, wharves, docks, etc., on harbor front. Cost several million dollars.

Storage Sheds — Stockton, Calif. — See "Industrial Works."

Curbstone—Montreal, Que.—Soon takes bids 5,000 ft. circular and 4,500 ft. straight curbstone, granite. L. O. Pion, purch. agt.

Road Equipment—Ottawa, Ont.—Plans to purchase asphalt equipment for laying asphalt pavements. A. F. Macallum, city engr.

BIDS DESIRED

Street Cleaning Machines—Albany, N. Y.—Bd. Pub. Wks., taking bids 3 automatic street cleaning machines. $7,000 each. F. A. Raven, comr.

Paving Stone, etc.—Buffalo, N. Y.—March 5, by Commissioner Pub. Wks., Municipal Bldg., purchasing paving stone, curbing, sand, gravel and crushed stone for street repairs for year ending Dec. 31, 1923. G. H. Norton, Municipal Bldg., engr.

Road Scrapers, etc.—Hoosick Falls, N. Y.—Town Bd. taking bids 2 road scrapers, dump wagons, road building and repairing tools. $1,000. F. H. White, village pres.

Building Materials—New York, N. Y.—March 8, by Bd. Purch., Municipal Bldg., furnishing and delivering building materials to Depts. Correction, Health, Parks-Manhattan, Parks-Brooklyn, Parks-Bronx, Parks-Queens, Police Dept. and Depts. Pub. Welfare and Water Supply, Gas & Electricity. G. A. Whalen, chn.

Steel Pipe, etc.—New York, N. Y.—March 9, by Bd. Purch., Municipal Bldg., furnishing and delivering steel pipe, pipe fittings, valves and expansion joints to Dept. Plant & Structures; c.i. pipe to Dept. Water Supply, Gas & Electricity. G. A. Whalen, chn.

Trucks—New York, N. Y.—See "Sewers."

Tank Trailors—Hackensack, N. J.—March 14, by Road Com. of Bd. Freeholders Bergen Co., at office of Clerk, Court House, two 1,000 gal. capacity tank trailors for transporting asphaltum. J. A. W. Donaldson, chn.; adv. this issue.

Stadium—Baltimore, Md.—March 7, by Bd. Awards, 1 story, 42 x 230 ft. stadium, 33rd St. $150,000. J. Pennington, 330 North Charles St., engr.

Miscellaneous (Continued)

Locomotive Crane, etc.—Richmond, Va.—J. G. Skelton, 1102 Virginia R & P Bldg., taking bids one 5 ton and one 10 ton locomotive crane with clam shell bucket, two 20 ton standard gauge double drum locomotive cranes, five 11 x 16 in. cylinder 36 in. gauge saddle tank locomotive.

Levee Work—Clarksdale, Miss.—March 13, by Bd. Levee Comrs. for Yazoo-Mississippi Delta, at its office, Clarksdale, enlargement of Trotters Emergency Loop, Sects. 53 and 54, involving 250,000 cu.yd. Work is straddle enlargement with land side borrow. W. L. Head, ch. engr.

Road Grader — Armstrong Mills, O. — March 10, at office T. J. Weekley, clk. Washington Twp., road grader to do heavy grading with a 16-32 tractor.

Road Machinery—Black River Falls, Wis.—O. Overlien, highway comr. Jackson Co., taking bids on road machinery incl. 12 ft. grader, 2 patrol graders and one tractor. W. Tibbits, comr. Noted Dec. 14.

Brick Chimney—Milwaukee, Wis.—March 9, by Sewerage Comn., 508 Market St., brick chimney, 175 ft. high, 12 ft. internal diameter, in connection with power house on Jones Island. J. H. Fowles, secy.

Lumber and Metal — Anamosa, Ia. — March 7 by Auditor Jones Co., furnishing 4 cars lumber and 3,000 ft. corrugated culvert metal. F. S. Yetter, Anamosa, engr.

Lumber, Piling, etc.—Oskaloosa, Ia. — March 7, by Auditor Mahaska Co., furnishing 78,685 ft fir lumber, 3,690 ft. red cedar piling and 6,100 ft. corrugated culvert metal. R. H. Tumy, Oskaloosa, engr.

Lumber, etc.—Washington, Ia.—March 14, by Auditor Washington Co., furnishing 331,000 ft. No. 1 common fir full sawed, and 3,000 ft. corrugated culvert metal. W. P. Rawn, Washington, engr.

Lumber, Piling, etc.—Winterset, Ia.—March 9, by Auditor Madison Co., furnishing 157,453 ft. standard sawed fir, 2,660 ft. red cedar piling, 4,500 ft. corrugated culvert metal and 5,000 lb. reinforcing. E. B. Hiatt, Winterset, engr.

Graders and Tractors, etc.—Crookston, Minn. — March 15, by H. J. Welte, aud. Polk Co., one 12 ft. blade grader, 2 standard 8 ft. graders with 10 ft. blades, and standard 4-horse graders equipped with 8 ft. blades, for maintenance work; also sectional concrete and metal culvert material; 1 heavy wheel tractor or one 10 ton caterpillar tractor.

Elevating Grader and Dump Wagons—St. Cloud, Minn.—March 20, by N. Thomey, aud. Stearns Co., 1 elevating grader, large size, and six ½ yd. dump wagons. M. J. Cleveland, St. Cloud, engr.

Paving Materials — St. Paul, Minn. — March 5, by H. W. Austin, city purch. agt., paving materials for street repairs, incl. 600 ton limestone dust, 500 sq.yd. 3½ in. creosoted wood block, 2,400 sq.yd. sandstone blocks, 3,000 cu.yd. fine asphalt sand, 800 cu.yd. asphaltic sand, 600 ton asphalt, 3,275 cu.yd. crushed rock, 1,800 cu.yd. pea rock, for Bd. Pub. Wks., 1,700 bbl. portland cement, all sewer brick and pipe for 1923 season, all manhole frames and covers for 1923, for Bureau of Parks, 1,182 pieces oak and clear fir lumber. G. M. Shepard, city engr.

Wharves, etc.—Houston, Tex.—See "Excavation, Drainage Irrigation."

Excavator — Montreal, Que. — Chairman Executive Comn., City Hall, taking bids one trench excavator.

Road Oil, etc.—Brantford, Ont.—March 8, by C. S. Mayer, chn. Bd. Wks., furnishing road oil, asphalt cement, castings, cement and sewer pipe. $100,000. F. P. Adams, city engr.

BIDS RECEIVED

Road Oil—Urbana, Ill.—Furnishing 435,775 gal. road oil, from Indian Refining Co., Lawrenceville; Amer. Mexican Refining Co., 11 South La Salle St., Chicago; Azee & Hayes, Urbana; W. H. Cocking, Jacksonville; Roxana Refining Co., Wood River; all bid $0.0587. Noted Feb. 1.

Electrolier System—Berkeley, Calif.—Installing 151 electroliers in portions of University Ave., etc., from F. E. Newberry Electric Co., 417 Webster St., Oakland, $37,518; Osborn Electric Co., Turlock, $39,353; H. C. Reid Co., 115 Mission St., San Francisco $42,475. Noted Jan. 25.

Dump Bodies—San Jose, Calif.—Santa Clara Co. furnishing and delivering one or more Heil Hydro dump bodies, from Artana-Goeffrey, Santa Clara and River Sts., $877 each. Noted Feb. 1.

CONTRACTS AWARDED

Cable—New York, N. Y.—Bd. Purch., Municipal Bldg., weatherproof cable for Dept. Plant & Structures, to Standard Underground Cable Co., 50 Church St., $14,193. Noted Feb. 22.

Manholes, etc.—Baltimore, Md.—Mayor and City Council, 125,000 lb. manholes, sewer inlets and similar castings, to Greenmount Iron Wks., 883 Greenmount Ave., $0.0225 per lb. Noted Feb. 22.

Piles and Substructure—Cleveland, O.—Cleveland Electric Illuminating Co., Illuminating Bldg., concrete piles and substructure for 1 story electric service building, brick, steel and concrete, foot of East 70th St., to Great Lakes Dredge & Dock Co., Williamson Bldg., Total cost $300,000. Noted Oct. 5 under "Industrial Works."

Foundation — Green Bay, Wis. — Hotel Wisconsin Realty Co., 86 Michigan St., Milwaukee, plain foundation for 8 story, 130 x 160 ft., brick and concrete hotel, Pine St., to L. M. Hansen Co., East Walnut St. Total cost $850,000. See item under "Buildings."

Elevators—Duluth, Minn.—Russell-Miller Milling Co., 25th Ave. S.E. and Marshall St., Minneapolis, 6 story, 275 x 400 ft., rein.-con. and tile, Rieis Point, here, to Barnett & Record Co., 418 Lyceum Bldg., $975,000.

Truck Tractors — Minneapolis, Minn. — City, two 5 ton capacity, and two 3½ ton capacity truck tractors, (Stoughton Truck Co. make), for Garbage Dept., to Congress Garage Co., 315 South 8th St., $10,600. Noted Feb. 1.

Street Signs—St. Paul, Minn.—City, 485 street signs on posts, 67 special signs for Summit Ave. and 58 box signs for Lexington Ave., to Western Display Co., 301 Chestnut St., $5,564.

White Way—Dallas, Tex.—White way on Pacific Ave. from Lamar St. to Houston & Texas Central R.R. tracks to E. Ash Electric Co. & Western Electric Co., Scollard Bldg., joint contract $30,000. Engrs. est. $25,000. Noted Jan. 25.

Crushed Stone—Houston, Tex.—Harris Co., 10,000 cu.yd. crushed stone, to Vandaveer, Brown & Story, 2202 Polk Ave., Houston, $2.60 and $2.90 per cu.yd.

Steel Pipe—Portland, Ore.—Port of Portland Comrs., 916 Spalding Bldg., to Coast Culvert Co., Columbia Blvd. and Denver Ave., 2,000 ft. 30 in. electric butt weld steel pipe for dredges $6,800, with privilege of purchasing 2,000 ft. or more at $3.20 per ft.

Traveling Cranes—Los Angeles, Calif.—See "Industrial Works."

OFFICIAL PROPOSALS

Bids: Mar. 20.

Laying Cast Iron Pipe

Canandaigua, N. Y.

Sealed proposals will be received by the Board of Public Works at its office in the City Hall, Canandaigua, N. Y., until 7:30 o'clock p.m., March 20th, 1923, for the trenching and laying of Twelve Thousand Twenty-six (12,026) lineal feet of sixteen (16) inch Cast Iron Water Pipe and Eight Hundred (800) feet of twelve (12) inch Cast Iron Water Pipe and their various appurtenances.

Proposals must be enclosed in plain sealed envelopes and marked "Proposal for Trenching and Laying Cast Iron Water Pipe."

Plans may be seen and the specifications may be obtained at the office of the City Clerk, City Hall, Canandaigua, N. Y., or at the office of W. S. Lozier, Consulting Engineer, 321 Cutler Bldg., Rochester, N. Y.

Bids must be accompanied by a certified check for Two Thousand ($2,000.00) Dollars, payable to the Treasurer of the City of Canandaigua. In case of failure or neglect to enter into contract or furnish the necessary bond within the time specified, the certified check will be forfeited to the City of Canandaigua.

A performance bond to the sum of fifty (50%) per cent of the contract will be required.

The Board reserves the right to reject any and all bids or to accept any bid which it deems most favorable to the City.

BOARD OF PUBLIC WORKS.
HENRY A. BEEMAN.
WILLIAM GARRATT.
ROY E. POOL.

Bids: Mar. 12.

Furnishing and Installing Filter Plant Equipment

Bay City, Mich.

Sealed proposals for the furnishing and installing Filter Plant equipment will be received at the office of the City Manager, City Hall, Bay City, Michigan, until ten o'clock A.M., Eastern Standard Time, on March 12, 1923.

The contract will include filter piping and valves, wash water tanks, operating tables, strainer systems, chemical feed devices, rate controllers, Venturi meters and miscellaneous equipment for a water filtration plant for the City of Bay City, Michigan.

All bids must be made upon blank proposal forms furnished by the City and each bid must be accompanied by a proposal bond or certified check for $5,000. Bids will be compared on the basis of the engineer's estimate of quantities.

Surety bonds in the sum of 50% of the contract will be required of the successful bidder.

Plans, proposal forms, contract and specifications may be obtained at the office of the City Manager, City Hall, Bay City, Michigan, and also from The Frazier-Ellms-Sheal Company, Engineers, B. F. Keith Building, Cleveland, Ohio, upon deposit of fifty dollars, which deposit will be refunded upon return of plans and specifications in good condition.

The City reserves the right to accept any bid or to reject any and all bids.

WM. H. REID,
City Manager.

Bids: March 19.

Sewers

Pleasant Ridge, Mich.

Sealed bids will be received up to 8 p.m., March 19, 1923, by the Village Clerk at the Village Hall, Woodward Ave. and the Ten Mile Road, Pleasant Ridge, Michigan, for the construction of approximately 24,428 feet of 12" to 66" sewer. Sewers over 24" diameter may be built of brick, concrete, reinforced concrete pipe, or segment block. Sewers 24" in diameter and under shall be built of double strength vitrified pipe.

Plans and specifications are on file at the office of the Village Clerk and copies may be secured from the office of Clarence W. Hubbell, Consulting Engineer, 2348 Penobscot Bldg., Detroit. A deposit of $10.00 will be required for the plans and specifications which will be refunded upon their return in good order on or before March 26, 1923.

A certified check made payable to the Village of Pleasant Ridge for the sum of $7,000.00 must accompany each bid. In case of failure or neglect to enter into contract and furnish the required bonds within the time specified the check shall be forfeited to the Village as liquidated damages.

No proposals will be received unless made on the blanks furnished and delivered to the Village Clerk on or before 8 p.m., March 19, 1923.

The Village reserves the right to reject any or all bids.

By order of the Village Commission.
G. W. WESSINGER,
Village Manager.
O. C. KELL,
Village Clerk.

CONSTRUCTION NEWS

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Mar. 12	Bay City, Mich.	Mar. 1
Mar. 12	Buffalo, N. Y.	Mar. 1
Mar. 12	St. Petersburg, Fla.	Mar. 8
Mar. 12	Muskegon, Mich.	Mar. 8
Mar. 13	New York, N. Y.	Mar. 8
Mar. 13	Shamrock, Tex.	Mar. 1
Mar. 13	St. Louis, Mo.	Mar. 1
Mar. 14	Baltimore, Md.	Mar. 8
Mar. 14	New York, N. Y.	Mar. 8
Mar. 14	Elton, La.	Mar. 8
Mar. 14	Delaware, O.	Mar. 1
Mar. 14	Clawson, Mich.	Mar. 8
Mar. 15	Waupun, Wis.	Mar. 8
Mar. 15	Oxford, Miss.	Mar 1
Mar. 16	St. George, N. Y.	Mar. 8
Mar. 16	New York, N. Y.	Mar. 8
Mar. 16	Wauwatosa, Wis.	Mar. 8
Mar. 16	Cleveland, O.	Mar. 1
Mar. 19	Lake City, Minn.	Mar. 8
Mar. 20	Brooklyn, N. Y.	Feb. 22
	Adv. Feb. 22 to Mar. 8.	
Mar. 20	Davenport, Neb.	Mar. 8
Mar. 20	Mount Greenwood, Ill.	Mar. 8
	Adv. Mar. 8.	
Mar. 20	Milwaukee, Wis.	Mar. 8
Mar. 20	Brooklyn, N. Y.	Mar. 1
	Adv. Mar. 1 and 8.	
Mar. 20	Canandaigua, N. Y.	Mar. 1
Mar. 21	Roxboro, N. C.	Mar. 1
	Adv. Mar. 1 and 8.	
Mar. 23	Wallingford, Conn.	Mar. 8
	Adv. Mar. 8.	
Mar. 27	Weatherford, Okla.	Mar. 8
Apr. 1	Cresson, Pa.	Mar. 8
Apr. 4	Wheeling, W. Va.	Mar. 8
	Adv. Mar. 8.	
Apr. 26	New Orleans, La.	Mar. 8
	Adv. Mar. 8.	

SEWERS

Mar. 12	New Castle, Pa.	Jan. 25
Mar. 12	St. Petersburg, Fla.	Mar. 8
Mar. 13	Matawan, N. J.	Feb. 15
Mar. 13	Perrysburg, O.	Mar. 8
Mar. 15	New York, N. Y.	Mar. 8
Mar. 15	Riverside, Ont.	Mar. 8
Mar. 15	Cresson, Pa.	Mar. 8
Mar. 19	Lake City, Minn.	Mar. 8
Mar. 19	Pleasant Ridge, Mich.	Mar. 1
Mar. 19	Plainfield, N. J.	Mar. 1
Mar. 19	Newark, N. J.	Mar. 8
Mar. 20	South Bend, Ind.	Mar. 8
	Adv. Mar. 8.	
Mar. 20	Paducah, Ky.	Mar. 8
	Adv. Mar. 8.	
Mar. 21	Tonawanda, N. Y.	Mar. 1
Mar. 21	Kenmore, N. Y.	Mar. 8
Mar. 22	Mamaroneck, N. Y.	Mar. 8
	Adv. Mar. 8.	
Mar. 26	Glen Rock (Ridgewood P. O.), N. J.	Mar. 1
Apr. 10	Toronto, Ont.	Mar. 8

WASTE DISPOSAL

Mar. 12	St. Petersburg, Fla.	Mar. 8
Mar. 22	Marion, Wis.	Feb. 22
Mar. 27	Tampa, Fla.	Mar. 8

BRIDGES

Mar. 12	Kansas City, Kan.	Mar. 1
Mar. 12	Akron, O.	Mar. 1
Mar. 12	St. Petersburg, Fla.	Mar. 8
Mar. 12	Utah	Mar. 8
Mar. 13	Media, Pa.	Mar. 1
	Adv. Mar. 1 and 8.	
Mar. 14	Alvinston, Ont.	Mar. 8
Mar. 14	Washington, Ia.	Mar. 1
Mar. 14	Kentucky	Mar. 1
Mar. 14	Brigden, Ont.	Mar. 8
Mar. 15	Franconia, N. H.	Mar. 8
Mar. 15	Grand Forks, N. D.	Mar. 1
Mar. 15	Oskaloosa, Kan.	Feb. 22
Mar. 20	Manchester, N. H.	Feb. 22
Mar. 21	Brainerd, Minn.	Feb. 15
Mar. 22	Eau Claire, Wis.	Mar. 8
	Adv. Mar. 8.	
Mar. 23	Leamersville, Pa.	Mar. 8
Mar. 24	Brantford, Ont.	Mar. 8
Mar. 26	Bowling Green, O.	Mar. 8
	Adv. Mar. 8.	
Mar. 27	Wilkes-Barre, Pa.	Mar. 1
	Adv. Mar. 1 and 8.	
Apr. 1	Wilkes-Barre, Pa.	Dec. 14
Sept. 1	Sydney, New South Wales, Australia	Aug. 3

Bids Close		See Eng. News-Record

EXCAVATION, DRAINAGE, IRRIGATION

Mar. 13	Corcoran, Calif.	Mar. 1
Mar. 19	Selmer, Tenn.	Mar. 1
Mar. 21	Newton, Ia.	Mar. 1
Mar. 27	Lamar, Colo.	Mar. 8
	Adv. Mar. 8.	
Mar. 29	Beardstown, Ill.	Mar. 8
	Adv. Mar. 8.	

STREETS AND ROADS

Mar. 10	Laporte, Ind.	Mar. 8
Mar. 10	Princeton, Ind.	Mar. 8
Mar. 10	Rockport, Ind.	Mar. 8
Mar. 10	Vernon, Ind.	Mar. 8
Mar. 10	Versailles, Ind.	Mar. 8
Mar. 10	Angola, Ind.	Mar. 8
Mar. 10	Terre Haute, Ind.	Mar. 8
Mar. 12	Evansville, Ind.	Mar. 1
Mar. 12	Gowrie, Ia.	Mar. 8
Mar. 12	Burlington, N. C.	Mar. 8
Mar. 12	Bradentown, Fla.	Mar. 1
Mar. 12	Dayton, O.	Mar. 1
Mar. 12	Chicago, Ill.	Mar. 1
Mar. 12	Pennington, N. J.	Mar. 8
Mar. 12	South Bend, Ind.	Mar. 8
Mar. 12	Port Washington, Wis.	Mar. 8
Mar. 12	Arkansas	Mar. 8
Mar. 13	Washington	Mar. 1
Mar. 13	Louisiana	Mar. 1
Mar. 13	Wallingford, Conn.	Mar. 1
Mar. 13	Elkhorn, Wis	Mar. 8
Mar. 13	Corpus Christ., Tex.	Mar. 8
Mar. 13	Phila., Pa.	Mar. 8
Mar. 13	Omaha, Neb.	Mar. 8
Mar. 13	Mantorville, Minn.	Mar. 1
Mar. 13	South Bend, Ind.	Mar. 1
	Adv. Mar. 1 and 8.	
Mar. 13	Ohio	Mar. 1
Mar. 13	Ohio	Mar. 8
Mar. 13	Columbus, O.	Mar. 8
Mar. 14	Fairmont, Minn.	Mar. 8
Mar. 14	St. James, Minn.	Mar. 8
Mar. 14	Kentucky	Mar. 8
Mar. 14	Aiken, S. C.	Mar. 8
Mar. 14	Oklahoma	Mar. 8
Mar. 14	Waukesha, Wis.	Mar. 8
Mar. 14	Brooklyn, N. Y.	Mar. 8
Mar. 14	Mayville, Wis.	Feb. 15
Mar. 14	Virginia	Mar. 1
Mar. 14	Kentucky	Mar. 1
Mar. 14	Cleveland, O.	Mar. 8
Mar. 15	New York, N. Y.	Mar. 8
Mar. 15	Kitchner, Ont.	Mar. 8
Mar. 15	Staunton, Va.	Mar. 8
Mar. 15	Juneau, Wis.	Mar. 8
Mar. 15	Bishopville, S. C.	Mar. 8
Mar. 15	New Richmond, Wis.	Mar. 1
Mar. 15	Faribault, Minn.	Mar. 1
Mar. 15	Pittsburg, Kan.	Mar. 8
Mar. 16	Gaffney, S. C.	Mar. 8
Mar. 16	Clarksville, Tex.	Mar. 8
Mar. 16	Kenosha, Wis.	Mar. 1
Mar. 16	Ft. Scott, Kan.	Mar. 1
Mar. 16	Independence, Ia.	Mar. 1
Mar. 16	Cincinnati, O.	Mar. 8
Mar. 17	Duluth, Minn.	Mar. 8
Mar. 17	Brazil, Ind.	Mar. 8
Mar. 19	Hammond, Ind.	Mar. 8
Mar. 19	Spokane, Wash.	Mar. 8
Mar. 19	San Diego, Calif.	Mar. 8
Mar. 19	Mineola, N. Y.	Mar. 8
	Adv. Mar. 8.	
Mar. 20	Granite Falls, Minn.	Mar. 8
Mar. 20	Tampa, Fla.	Mar. 8
Mar. 20	Alabama	Feb. 22
Mar. 20	Sioux Falls, S. D.	Mar. 8
Mar. 21	Washington, Pa.	Mar. 8
Mar. 21	Madison, Wis.	Feb. 22
Mar. 21	Ontario	Mar. 8
Mar. 21	Independence, Kan.	Mar. 8
Mar. 21	Preston, Minn.	Mar. 8
Mar. 22	East Providence (Providence P. O.), R. I.	Mar. 8
Mar. 22	Worthington, Minn.	Mar. 8
Mar. 22	Madison, Wis.	Feb. 22
Mar. 23	Madison, Wis.	Feb. 22
Mar. 24	Charlottesville, Va.	Mar. 8
	Adv. Mar. 8.	
Mar. 27	St. Louis, Mo.	Mar. 8
Apr. 1	Huntingdon, Pa.	Feb. 8
Apr. 3	Amsterdam, N. Y.	Feb. 1
Apr. 4	Holton, Kan.	Mar. 8
Apr. 5	Topeka, Kan.	Mar. 8
Apr. 23	Spokane, Wash.	Feb. 1

INDUSTRIAL WORK

Mar. 14	Garfield, N. J.	Mar. 1
Mar. 20	New Haven, Conn.	Mar. 8
Mar. 27	Oswego, N. Y.	Mar. 1
	Adv. Mar. 1 and 8.	
Mar. 9	Juniata, Pa.	Mar. 8
Mar. 15	Hamilton, Ont.	Mar. 8

Bids Close		See Eng. News-Record

BUILDINGS

Mar. 10	Cleveland, O.	Mar. 8
Mar. 12	Milwaukee, Wis.	Mar. 8
Mar. 12	Wichita, Kan.	Feb. 15
Mar. 12	Lorain, O.	Mar. 1
Mar. 12	Mount Blanchard, O.	Mar. 1
Mar. 13	Allentown, Pa.	Mar. 8
Mar. 14	Buffalo, N. Y.	Feb. 22
Mar. 14	Duncannon, Pa.	Feb. 22
Mar. 14	Lancaster, Wis.	Mar. 1
Mar. 14	Newark, N. J.	Mar. 8
Mar. 15	Midland, Ont.	Mar. 8
Mar. 15	Milwaukee, Wis.	Mar. 8
Mar. 15	Wash., D. C.	Mar. 8
	Adv. Mar. 8.	
Mar. 15	Springfield, Mass.	Mar. 8
Mar. 15	Duluth, Minn.	Jan. 18
Mar. 15	Trenton, N. J.	Jan. 11
Mar. 15	Austin, Tex.	Mar. 1
Mar. 15	Roanoke, Va.	Mar. 8
Mar. 16	Atlanta, Ga.	Mar. 1
Mar. 16	Minnetonka Beach, Minn.	Mar. 1
Mar. 17	Mt. Union, Pa.	Mar. 8
Mar. 17	Virginia, Minn.	Mar. 1
Mar. 19	Erie, Pa.	Feb. 15
Mar. 19	Milwaukee, Wis.	Mar. 8
Mar. 19	Westfield, Mass.	Mar. 8
Mar. 20	Stockton, Calif.	Feb. 22
Mar. 21	Sykesville, Md.	Mar. 8
Mar. 21	New York, N. Y.	Mar. 8
Mar. 21	Memphis, Tenn.	Mar. 8
Mar. 21	Brooklyn, N. Y.	Mar. 8
Mar. 22	Oil City, Pa.	Mar. 8
Mar. 23	Shreveport, La.	Nov. 9
Mar. 26	Cincinnati, O.	Mar. 1
Mar. 27	West Bend, Wis.	Mar. 8
Mar. 30	Clearfield, Pa.	Mar. 8
	Adv. Mar. 8.	
Mar. 30	Sioux Falls, S. D.	Mar. 8
Apr. 1	Freeport, Pa.	Mar. 8
Apr. 2	Syracuse, N. Y.	Mar. 1
Apr. 31	Capa, S. D.	Mar. 8

FEDERAL GOVERNMENT WORK

Mar. 10	Wreck Removal — Buffalo, N. Y.	Mar. 1
	Adv. Mar. 1 and 8.	
Mar. 12	Barge—Florence, Ala.	Feb. 15
	Adv. Feb. 15 to Mar. 8.	
Mar. 13	Turbine and Generator, etc.—Riverton, Wyo.	Feb. 15
Mar. 14	Rock Protection—New Orleans, La.	Mar. 8
	Adv. Mar. 8.	
Mar. 14	Distilling Apparatus, etc. — Guantanamo, Cuba	Mar. 8
Mar. 14	Storehouse — San Diego, Calif.	Feb. 22
Mar. 14	Cranes — Puget Sound, Wash.	Feb. 22
Mar. 14	Hangars—Quantico, Va.	Mar. 1
Mar. 14	Extension—Keyport, Wash.	Mar. 1
Mar. 15	Dredging—New York, N. Y.	Feb. 15
	Adv. Feb. 15 to Mar. 8.	
Mar. 17	Dredging—Detroit, Mich.	Mar. 8
	Adv. Mar. 8.	
Mar. 17	Houses — Huntington, W. Va.	Feb. 15
	Adv. Feb. 15 to Mar. 8.	
Mar. 20	Dredging—Detroit, Mich.	Feb. 22
	Adv. Feb. 22 to Mar. 8.	
Mar. 21	Dredging—Phila., Pa.	Feb. 22
	Adv. Feb. 22 to Mar. 8.	
Mar. 21	Dredging—Detroit, Mich.	Feb. 22
	Adv. Feb. 22 to Mar. 8.	
Mar. 22	Tank and Tower — Memphis, Tenn.	Mar. 1
	Adv. Feb. 22 to Mar. 8.	
Mar. 26	Machine Shop—Staten Island, N. Y.	Mar. 8
Mar. 26	Extension — Kansas City, Mo.	Mar. 1
Mar. 29	Dredging — New York, N. Y.	Mar. 1
	Adv. Mar. 1 and 8.	
Mar. 29	Hospital — Livermore, Calif.	Mar. 1
	Adv. Mar. 1 and 8.	
Mar. 31	Water Softening Plant—San Diego, Calif.	Mar. 8
Apr. 2	Head-Gate Track, etc. — Florence, Ala.	Mar. 8
	Adv. Mar. 8.	
Apr. 3	Dredging, etc. — Jacksonville, Fla.	Mar. 8
	Adv. Mar. 8.	
Apr. 5	Piling—Louisville, Ky.	Mar. 8
	Adv. Mar. 8.	
Apr. 10	Lock—Newburg, Ind.	Mar. 1
	Adv. Mar. 1 and 8.	
Apr. 12	Machinery, etc. — Honolulu, H. T.	Mar. 1
	Adv. Mar. 1 and 8.	
Apr. 16	Tunnel, etc. — Mitchell, Neb.	Mar. 1
May 10	Post Office — Cordova, Alaska	Jan. 25

MISCELLANEOUS

Mar. 12 Bulkhead and Filling—Mineola, N. Y. .....Mar. 8
Adv. Mar. 8.
Mar. 12 Gas Mains—St. Petersburg, Fla. .....Mar. 8
Mar. 12 Cement, Gravel, etc. — Phila., Pa. .....Mar. 8
Mar. 12 Materials—Clinton, Ia.....Mar. 8
Mar. 13 Centrifugal Pump — Peru, Ind. .....Mar. 8
Mar. 13 Paving Blocks — New York, N. Y. .....Mar. 8
Mar. 13 Levee Work — Clarksdale, Miss. .....Mar. 1
Mar. 14 Tank Trailors — Hackensack, N. J. .....Mar. 1
Adv. Mar. 1 and 8.
Mar. 14 Cable, etc.—Niagara Falls, N. Y. .....Mar. 8
Mar. 14 Lumber, etc. — Washington, Ia. .....Mar. 1
Mar. 15 Graders and Tractors — Crookston, Minn. .....Mar. 1
Mar. 15 Dry Dock Machinery—Esquimalt, B. C. .....Feb. 22
Mar. 15 Asphaltic Cement, etc. — St. George, N. Y. .....Mar. 8
Mar. 16 Sand, Stone, Gravel, etc. — Erie, Pa. .....Mar. 8
Mar. 16 Special Work — New York, York, N. Y. .....Mar. 8
Mar. 19 Power Plant Machinery — Jacksonville, Fla. .....Mar. 8
Adv. Mar. 8.
Mar. 20 Elevating Grader, etc.—St. Cloud, Minn. .....Mar. 1
Mar. 21 Road Tractor — Granite Falls, Minn. .....Mar. 8
Mar. 22 Steel Frame—New Orleans, La. .....Mar. 8
Adv. Mar. 8.

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

Pa., Johnsonburg—New York—Pennsylvania Paper Co. plans developing new water area in Silver Creek Valley by drilling at least 100 wells, wit 10 in. air compressor from wells to plant and also 36 in. line. $200,000. Engineer not announced.

La., Baton Rouge—Comn. Council having plans prepared for complete new waterworks and sewerage systems, light and power system, grading and paving present streets, etc., $1,000,000 or more. J. W. Billingsley, Interstate Bank Bldg., New Orleans, consult. engr. P. Converse, Interstate Bank Bldg., New Orleans, associate engr.

Tenn., Morristown — Plans reservoir, 1,000,000 gal. capacity, for municipal water plant. J. F. Mathes, supt.

O., Warren — Plans purchasing 50 ton more or less c.i. pipe. G. T. Hecklinger, city clk.

Ind., South Bend—Election soon to vote on bonds for waterworks station and improvements. $400,000. Burns & McDonnell, 402 Interstate Bldg., Kansas City, Mo., engrs. Noted Feb. 8.

Minn., Lamberton—Plans water main extensions, 18,500 lin.ft. c.i. pipe, 22 hydrants, etc. $27,000. F. A. Beiersdorf, city clk.

Minn., Willmar—Plans to rebuild water plant. $30,000. H. Gunderson, city clk.

Mo., St. Louis—Bd. Pub. Serv., 208 City Hall, soon takes bids river intake tower, brick, concrete and steel, at new Missouri River waterworks at Howards Bend, 13 mi. west of St. Louis, $335,000; 21 dikes and dredge work, $400,000; road from intersection of Olive St. and Craig Rd. along water main right-of-way to water works, $60,000; engine pits to take care of 7 large pumps, etc., $165,000.

Ark., Booneville—Having revised plans prepared for new water distribution system in Waterworks Dist. 1 and new sanitary sewerage system in Sewer Dist. 1. $90,000. W. L. Winters, 312 Merchants' Natl. Bank Bldg., Ft. Smith, engr.

Ark., Ft. Smith—Having plans prepared for extensions to mains and laterals, 3,000,000 gal. high service reservoir and miscellaneous equipment. Kiersted & Stringfellow, 611 Interstate Bldg., Kansas City, Mo., engrs.

Tex., Wichita Falls—City Council soon takes bids for additional pumping unit, direct connected motor and pump, 10,000,000 gal. capacity. $5,000. F. M. Rugeley, city engr.

Okla., Ardmore—City takes bids early in April, waterworks improvements, involving 21,000 ft. c.i. pipe and fittings. A. B. Payne, Ardmore, engr.

Okla., Sayre—March 13, to vote on $35,000 bonds enlarging reservoir, new pipe lines and extensions to distribution system, 6,000 ft. 10 in. c.i. pipe. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Wash., Camas—Plans to purchase existing waterworks $60,000 and expend $100,000 on extension, or building new waterworks, probably gravity system, $160,000. Address City Engineer.

Wash., Port Angeles—North Pacific Public Service Co. plans enlarging distribution system, installing settling basin, new standpipe, 50,000 gal. capacity. $70,000.

Calif., Cutler—Cutler Public Utility Dist. plans to vote on $27,000 bonds for waterworks system.

Calif., Venice—Defeated $350,000 bonds for water system. Noted Feb. 8.

Ont., Bridgeburg—Plans water filtration plant. $30,000. H. G. Patriarche, town clk.

Ont., Capreol—Plans waterworks system and fire protection service, incl. pumps, c.i. pipe, hydrants, valves, pumphouse and reservoir. $50,000. Engineer not selected.

Ont., Hamilton—Plans chlorination plant in connection with waterworks system. E. R. Gray, city engr.

Ont., Oshawa—Plans installing additional filtering units, incl. Ransome drifting sand filters. W. C. Smith, Town Hall, engr.

Ont., Toronto—Plans new water mains, $355,330, extension to existing mains, $24,611, mostly 6 and 8 in. pipe; 80,000,000 imp. gal. pump at waterworks station, $113,122. R. C. Harris, city engr.

Ont., Toronto — Plans extending high pressure fire system in Bathurst Dist. south of Queen St. between John and Bathurst Sts., incl. 20,000 ft. c.i. pipe 20 in. up. $418,791. R. C. Harris, city engr.

BIDS DESIRED

Conn., Wallingford—March 23, by Bd. Comrs., pipe laying and excavation of ditches. W. A. MacKenzie, engr. and mgr.; adv. this issue. Noted March 1.

N. Y., Elmira—Elmira Water Bd. receiving bids 6 and 8 in. Class B, c. i. pipe (carload lots), A.W.W.A. specifications or equivalent.

N. Y., New York—March 13, by Water Supply, Gas & Electricity, Municipal Bldg., mains in Bway., Amsterdam, 10th and 11th Aves., West 51st, 54th, 57th and Clarkson Sts., Manhattan Boro.

N. Y., New York — March 14, by Bd. Purch., Municipal Bldg., furnishing, delivering, unloading, stacking and storing c.i. pipe, special and valve box castings, valves, and double nozzle fire hydrants, to Water Supply Gas & Electricity.

N. Y., New York—March 16, by N. J. Hayes, comn. Water Supply, Gas & Electricity, Municipal Bldg., hauling and setting valves and making connections to existing trunk mains in various streets, Manhattan Boro.

N. Y., St. George—March 16, by N. J. Hayes, comn. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Tompkins Circle, Alberta, Atlantic, Barnes, Burton, Carlton, Cedar, Central, Curtis, Delafield, Demorest, Dixon, Elm, Florida, Forest, Isabella, Hett, Lake, Liberty, Livermore, Madsen, Oak, Palmer, Pendleton, Pennsylvania, Perry, Pleasant Plains, Post, Quincy, Terrace, Ward and Woodland Aves., Catherine, Depuy, Murray, Pine, 3rd, 4th, 5th, 10th, 11th, 13th and 14th Sts., Delafield Ford, Laforge and Whittaker Places, Eltingeville Blvd., Wakefield, Willowbrook and Woods of Arden Rds., here.

Pa., Cresson—April 1, by Boro. Council, first unit of filtration plant to contain 2 sedimental tanks, one digestion chamber and sledge bed, $12,000, also 1,600 ft. 18 in. vitr. sewers in Main and 2nd Sts. D. W. Dillman, 80-81 Altoona Trust Bldg., Altoona, engr.

Md., Baltimore—March 14, by Mayor and City Council, furnishing and delivering curb stop and roadway valve boxes. W. A. McGraw, engr. Water Dept.

W. Va., Wheeling—April 4 (change of date), 20,000,000 gal. filtration plant, pumping station, steel reservoirs, force mains, distribution system, piping and appurtenances. C. H. Dowler, city mgr.; adv. this issue. Noted March 1.

Fla., St. Petersburg—March 12, by City Comrs., extending waterworks system. $160,000. R. E. Ludwig, dir. pub. wks. Noted Nov. 23.

La., Elkton—March 14, reservoir, tank and tower, mains, well, an ice making plant, incl. 5,200 ft. 4 and 6 in. and 10,000 ft. 2 in. c.i. pipe. $35,000. H. A. Mentz, Magnolia, Miss., engr.

La., New Orleans—April 26, by Sewerage & Water Bd., furnishing 1500-1800 hp. water tube boilers. A. G. Moffat, secy.; adv. this issue.

O., Columbus—See "Streets and Roads."

Ill., Mount Greenwood—March [illegible], by Bd. Local Impvts., Village Hall, c.i. mains in various streets. M. L. Cusack, [illegible]; adv. this issue.

Mich., Clawson — March 14, by A. D. Hodges, village clk., laying 9,000 ft. 6 and 8 in. c.i. mains. $20,000. Ruhling, Holdsworth & Hudson, 16549 Woodward Ave., Detroit, engrs. Noted Oct. 12.

Mich., Muskegon—March 12, by E. D. Prescott, city clk., furnishing and laying c.i. mains with valves and hydrants, 3,600 ft. Class B 8 in. bell an spigot pipe, 3,200 ft. 6 in. pipe, 11 four in. fire hydrants, three 8 in., five 6 in. and four 4 in. gate valves, also 70,000 gal. steel tank on 4 post steel tower, 100 ft. high, concrete foundation, one 350 gal. and one 500 gal. centrifugal pumping units, pumping station building, receiving well and infiltration gallery on south shore of Bear Lake. Hoad, Decker, Shoecraft & Drury, Ann Arbor, engrs.

Wis., Milwaukee — March 20, at office Central Bd. Purchases, Item 1, three 54 in. flanged gate valves with bevel gears. Item 2, (a) three 42 in. flanged gate valves with by-pass, hand operated with bevel gears, (b) two 42 in. gate valves with hub ends and by-pass, hand operated with bevel gears, (c) six 4 in. flanged gate valves. Item 3 three 54 in. flanged horizontal check valves with by-pass, all built for 150 lb. working pressure. G. Stall, city engr.

Wis., Wauwatosa—March 16, by A. V. Bingham, secy. Bd. Pub. Wks., furnishing and erecting one 1,000 gal. per minute centrifugal pump or turbine connected to 220 volt, 3 phase, 60 cycle electric motor.

Wis., Waupun—March 15, by F. M. Bennett, secy. Water and Light Comn., furnishing and erecting 80,000 gal. steel tank on 77 ft. steel tower and 60,000 gal. steel tank on existing stone tower. W. G. Kirchoffer, Dean Bldg., Madison, engr. Noted March 1.

Minn., Lake City—March 19, by H. V. Flick, city clk., water main extensions, 33,870 lin.ft 6 in. and 768 lin.ft. 4 in. main, sixty-four 4 in. and one 5 in. hydrants, forty-seven 6 in. valves and boxes, 18,000 lb. specials, 29 connections to present mains. $57,000. L. P. Wolff, 1000 Guardian Life Bldg., St. Paul, engr. Noted June 22.

Okla., Weatherford—March 27, by R. Dickerson, city clk., 2 centrifugal pumps, 500 hp. oil engine power plant, 20 ton distilled water ice plant, buildings and appurtances. $100,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs. Noted Feb. 15.

Neb., Davenport—March 20, by Village Clerk, steel tank on steel tower, 4 and 6 in. pipe, valves, fittings, hydrants, 8 in. well, pump and pump house. $25,000. Prince-Nixon Eng. Co., 501 Peters Trust Bldg., Omaha, engrs. Noted Feb. 8.

BIDS RECEIVED

Conn., Easton—Bridgeport Hydraulic Co., Main and Gilbert Sts., Lake Easton reservoir, 6,000,000,000 gal. capacity, concrete dam, 1,000 ft. long, 125 ft. high, 95 ft. wide at base, on Mill River, in towns of Easton and Trumbull, involving 400,000 bags cement, sand, gravel, crushed stone, steel bars, etc., 7 mi. 30 in. c.i. pipe line from lake to Bridgeport. $1,500,000. Work will be done by day labor. Private plans.

Md., Baltimore—Mayor and City Council, pig lead for Water Dept., from J. Robertson Lead Co., 827 South Howard St., $8.85 per 100 lb.

Md., Baltimore—Mayor and City Council, pipe, couplings and iron fittings, from Crane Co., 624 West Pratt St., $9,752; Wallace Stebbins & Sons, Charles and Lombard Sts., $9,899; Southern Supply Co., Calvert and Saratoga Sts., $10,095.

O., Cleveland—Cuyahoga Co. 8,398 ft. 6 and 8 in. c.i. mains for Improvement 23 of Co. Water Dist., from Hadded & Karial, Schofield Bldg., $37,342; Joseph Co., 877 Orange Ave., $46,574.

Minn., St. Paul—H. W. Austin opened bids March 19, rein.-con. reservoir, 18,000,000 gal. capacity, from W. J. Hoy Co., Metropolitan Life Bldg., Minneapolis, $250,017; Swenson, Hankinson Co., 202 Bremer Arcade, $271,421; Grant-Smith Co., 905 Exchange Bank Bldg., $279,929. Noted Feb. 8.

CONTRACTS AWARDED

Mass., Holyoke—Bd. Water Comrs., 500 ft. 4 in., 2,000 ft. 6 in., 2,000 ft. 8 in. 1,000 ft. 12 in. and 7,400 ft. 24 in. pipe, to Donaldson Iron Co., Emaus, $57.50 per ton, $64,000. Noted Feb. 8.

Mass., Warren—Complete installation of water pipe system line throughout town, incl. piping work, reservoir, pumping plant and wells, to Hanscom Constr. Co., 141 Milk St., Boston. Engrs. est. $200,000. Noted Nov. 16.

N. J., Gloucester—City Council, City Hall, 3,000,000 gal. raid sand filtration plant, etc., to Good Roads Co., Phila. (street addre not available), $39,403. Noted Feb. 1.

Waterworks (Continued)

Ill., Carlyle—To Illinois Constr. Co., Springfield, (street address not available) filtration plant, here, Item 1 $1,232, Item 2 $6,632, Item 3 $1,268, Item 4 $2,063, Item 5 $365, Item 6 $1,659, Item 7 $3,081, Item 8 $180, Item 9 $651, Item 10 $128, Item 11 $273, Item 12 $1,210, Item 13 $462, Item 14 $19,305. Noted Feb. 1.

Pa., Zelienople—Boro. Council, 1 story, 21 x 36 ft. filter plant, two 300,000 gal. per day mechanical filter units and auxiliaries, one 350 gal. per minute centrifugal low lift pumps, to W. J. Maglaughlin, Park Bldg., Pittsburgh. Engrs. est. $25,000. Noted Jan. 25.

N. C., Charlotte—For 47,000 ft. c.i. pipe and fittings for extension to city water lines, to Lynchburg Fdry. Co., Lynchburg, Va. $43,605.

O., Columbus—See "Streets and Roads."

Mich., Detroit—Furnishing 500 ton 6, 8, 10 and 12 in. c.i. pipe to Lynchburg Fdry. Co., Lynchburg, Va., $50.70 per net ton; 12,300 ft. Universal c.i. pipe to Central Fdry. Co., 41 East 42nd St., New York City, $3.55 per ft.; 7,900 ft. 24 in. lock bar steel pipe to East Jersey Pipe Co., 7 Dey St., New York City, $5.99 per ft.

Mich., Ferndale—Laying 7,720 ft. 10 and 12 in. c.i. mains, together with backfilling, to L. Kovorkian, Pontiac, $15,000. Noted Feb. 8.

Wis., Milwaukee—Furnishing and installing three 42 in. Venturi tube meters for Riverside Pumping Station, to Simplex Valve & Meter Co., 5722 Race St., Phila., $7,050. Noted Jan. 25.

Wis., Milwaukee—Will lay 16,370 lin. ft. 6-8 in. mains in State Rd., Mason, Melvin, Pine, Harriman, Sumner, Lemiwah, Douglas, Fairview, Appleton, Morrison, Candee and Harris Sts., by day labor. $25,000. G. Staal, city engr.

Minn., Minneapolis—For 40,000 ft. 6 in., 16,000 ft. 8 in. and 10,000 ft. 12 in. bell and spigot c.i. pipe, to Amer. Cast Iron Pipe Co., Acipco St., Birmingham, Ala., $60,000; 110 ton special water castings, to Amer. Brake Shoe Fdry. Co., 37th Ave. N.E. and University Ave., $8,000; 400 ton special sewer castings, to Crown Iron Wks. Co., Tyler St., $25,000. Noted Feb. 8.

Minn., St. Paul—City, 30 in. and 42 in. c.i. pipe, to United States Cast Iron Pipe and Fdry. Co., Amer. Trust Bldg., Birmingham, Ala., $189,000. Noted Jan. 4.

Minn., St. Paul—For two hundred and fifty 6 in., thirty-five 8 in., sixteen 16 in., five 20 in. and one 24 in. hub end, nut operated, non-rising steam valves, etc., for Water Dept., to South Park Fdry. & Mchy. Co., 23 East 6th St., $5,415, and Iowa Valve Co., 727 Pillsbury Ave., St. Paul, $5,235.

Minn., St. Paul—Water Dept., disc type water meters, etc., as follows: one thousand ¾ in. with couplings, two thousand ⅝ in. type with spuds, couplings, and connections, fifteen 1 in. type, fifty 1½ in., fifty 1 in. type with couplings, fifty 2 in. type with couplings, to Gamon Meter Co., 282 South St., Newark, N. J., $26,675; five 42 in., two 36 in., fourteen 30 in. and one 24 in. hand operated gate valves, to Kennedy Valve Mfg. Co., East Water St., Elmira, N. Y., $6,892; 100 ton special castings to St. Paul Fdry. Co., Como Ave. and Mackubin St., at about $150 per ton; one 12,000 gal. steel gasoline tank with pump, etc., to E. R. Tarnoski, 328 Metropolitan Bank Bldg., $750. Noted Jan. 25.

Kan., Republic—Installing waterworks, to E. K. Ladd & Co., 3229 Harrison St., Kansas City, $18,258; 50,000 gal. tank on 60 ft. tower, to Chicago Bridge & Iron Co., 608 South Dearborn St., Chicago, $4,500; pumping equipment to Terry, Cowan & Smith, Davidson Bldg., Kansas City, Mo., $1,725.

Tex., Corsicana—For 12,000 residence water meters, to Badger Mfg. Co., 156 Clinton St., Milwaukee, Wis., $8.79 each; 12,000 water box tops, iron to Washington Iron Wks., Sherman, $1.65 each.

Okla., Wynnewood—For 150,000 gal. elevated tank, 2 mi. pipe line, 2 wells, 350 hp. power plant, electric distribution system and transmission line, etc., to Sherman Machine Co., 18 East Main St., Oklahoma City, $61,263. Noted Feb. 22.

B. C., Vancouver—Furnishing 3,100 ft. 18 in. diam. $\frac{5}{16}$ in. thick riveted steel pipe, to Vancouver Eng. Wks., 519 6th Ave., $3.12 per ft. Pipe will be laid by day labor. Noted Feb. 8.

Sewers

PROPOSED WORK

Pa., Oil City—Plans sanitary sewer for Oil Creek. $75,000. J. Webber, city engr.

N. C., Salisbury—See "Industrial Works."

La., Baton Rouge—See "Waterworks."

Ark., Booneville—See "Waterworks."

Colo., Greeley—April 3, to vote on $200,000 bonds for storm and sanitary sewers. Burns & McDonnell Eng. Co., 402 Interstate Bldg., Kansas City, Mo., engrs.

Calif., Long Beach — See "Streets and Roads."

Calif., Venice—Defeated $300,000 bonds for sewerage system. Noted Feb. 8.

Ont., Leamington—Plans sewerage disposal plant. A. Smith, chn. com.

Ont., Niagara Falls — Stamford Twp. plans vitr. tile sanitary sewers in Stanley, 7th Ash, Culp and Victoria Sts., 8 in. up. $200,000. M. Kerr, Twp. Hall, engr.

Ont., Toronto — Plans 15,000 ft. relief sewers in Macdonnell, Cowan, Starr and Spencer Aves., Queen St. W., King St. W. and Dominion St. $373,000. R. C. Harris, city engr.

B. C., Nelson — Having plans prepared and takes bids in about 2 months sewers in Fairview Dist. $56,000.

BIDS DESIRED

N. Y., Kenmore—March 21, new sewerage system. W. Ducker, 160 Tremaine Ave., pres.

N. Y., Mamaroneck—March 22, by E. L. Howe, village clk., completing sewage disposal works. Fuller & McClintock, 170 Bway., New York City, engrs. J. M. Duffy, village engr.; adv. this issue.

N. Y., New York—March 15, by W. J. Flynn, pres. Bronx Boro, 3rd and Tremont Aves., sewers in Strang Ave. between Grace Ave. and East 233rd St., East 233rd St. between existing drain at Edenwald and Barnes Aves., Laconia Ave. between East 233rd and East 232nd Sts., East 232nd St. between Laconia Ave. and existing sewer west of Bronxwood Ave., Edenwald Ave. between Grace and Edson Aves., Bussing Ave. between Edson and Digney Aves., Baychester Ave. between Strang Ave. and East 232nd St., Edson Ave. between Strang and Bussing Aves., Bruner Ave. between Edenwald and Bussing Aves., Gunther Ave. between East 233rd St. and Bussing Ave., Boyd Ave. between Edenwald and Bussing Aves., Bronxwood Ave. between East 233rd and East 232nd Sts., Digney Ave. between Bussing and Barnes Aves., Mayflower Ave. between Wilkinson Ave. and Pelham Parkway S., East 195th St. between Mayflower and Hobart Aves., East 197th and East 196th Sts. between Mayflower and Continental Aves., Pilgrim Ave. between Morris Park and Wilkinson Aves., Mayflower and Pilgrim Aves. between Morris Park and Buhre Aves., Theriot Ave. between Wood Ave. and Summit north of Archer St., Cruger Ave. between Burke and Adee Aves., Taylor Ave. between Seward and Sound View Aves. and across Sound View Ave. at Taylor Ave., west side of Sound View Ave. between change of grade just north of Taylor and Randall Aves., east side of Sound View Ave. between Taylor and Randall Aves., Roebling Ave. between Appleton and Mayflower Aves., Roebling Ave between Mayflower and Edison Aves., Orloff Ave. between Van Cortlandt Ave. and Cannon Pl., Cannon Pl. between Orloff Ave. and Summit westerly therefrom. Burnet Pl. between Garrison Ave. and Barry St., Mace Ave. between Barker Ave. and Bronx Park East; temporary connections in Laconia Ave., East 232nd St., Edison Ave. at Bussing Ave., and Digney Ave. at Pitman Ave.

N. J., Newark—March 20, by Passaic Valley Sewerage Comrs., 128 Market St., constructing Union Outlet Sewer Connection, on westerly side of Riverside Ave. at Newark-Belleville City Line, here. J. R. Van Duyne, ch. engr.

Pa., Cresson—March 15, for 720 lin.ft. 18 in., 1,150 lin.ft. 20 in. and 1,200 lin.ft. 6 in. vitr. clay lateral sewers. D. W. Dillman, 80-81 Altoona Trust Bldg., Altoona, engrs.

Pa., Cresson—See "Waterworks."

Fla., St. Petersburg—March 12, by City Comrs. constructing storm and sanitary sewers. $463,000. E. C. Garvin, St. Petersburg, engr. Noted Nov. 23.

Ky., Paducah—March 20, at office H. A. Pulliam, comr. Pub. Wks., 14,833 ft. 10-42 in. sewers; adv. this issue. Noted March 1.

O., Perrysburg — March 13, by J. W. Lyons, village clk., main outlet sewer in Elm St. Dist. 1, 1,585 lin.ft. 60 in., 665 lin.ft. 54 in., 640 lin.ft. 48 in., 650 lin.ft. 42 in., 710 lin.ft. 36 in. and 1,530 lin.ft. 30 in. sewers, 773 lin.ft. 12-27 in. pipe sewer, 12 standard and 3 drop manholes, etc. G. Champe, 610 Nasby Bldg., Toledo, engr.

Ind., South Bend — March 20, by Dept. Pub. Wks., sewers in William, Brookfield, Calverts, Kinyon, Keller, Medora, Victoria, Clyde, Lafayette and Marietta Sts., Indiana and Fairview Aves., Oak Park Court, and Parkovash. V. C. Sweeney, clk.; adv. this issue.

Minn., Lake City—March 19, by H. V. Flick, city clk., sanitary sewerage system, 59,303 lin.ft. 8-18 in. sewer pipe, manholes, flush tanks, etc., 6,600 lin.ft. 8-33 in. storm sewer, 11 manholes, 75 storm water inlets, 266 lin.ft. 8 in. and 2,108 lin.ft. 10 in. inlet connections. $100,000. L. P. Wolff, 1000 Guardian Life Bldg., St. Paul, engr. Noted Dec. 1.

Mo., Sugar Creek—March 12, by C. E. Deland, city clk., constructing 11,042 lin.ft. 10-15 in. vitr., 96 lin.ft. 10-14 in. c.i. and 280 lin.ft. 12-16 in. wrought steel sewers, 1,560 lin.ft. 0-6 ft., 2,080 lin.ft. 6-8 ft., 4,382 lin.ft. 8-10 ft., 2,010 lin.ft. 10-12 ft., 830 lin.ft. 12-14 ft., 85 lin.ft. 14-16 ft., 110 lin.ft. 16-18 ft., 361 lin.ft. 18-20 ft. trenching, 23 cu.yd. concrete in piers, 500 cu.yd. rock in trench, etc. Black & Veatch, Mutual Bldg., Kansas City, engrs.

Ont., Riverside—March 15, by R. W. Code, engr., McGregor Bldg., Windsor, sewers and sewage disposal plant. $200,000.

Ont., Toronto—April 10, by C. A. Maguire, mayor, 3,000,000 imp. gal. centrifugal sewage sludge pump and motor. R. C. Harris, city engr.

BIDS RECEIVED

Pa., Phila.—Opened bids Feb. 21, sewers in (1) Ashdale St. (2) Charles St. (3) Pratt St. (4) Grays Ave., from Lombardi & Co., Lincoln Bldg., (1) $19,430 (2) $52,675; A. Pascuzzi, Lincoln Bldg., (1) $14,564; A. DeVito, 1721 Hicks St., (2) $49,572 (3) $5,452 (4) $5,698; O'Neill Co., 127 East Mermaid Lane, (2) $39,985 (3) $6,787; Higgins & Reilly, Real Estate Trust Bldg., (3) $9,265 (4) $7,852; W. H. Garson, 5033 Brown St., (4) $6,375. Noted Feb. 15.

Neb., Omaha — Constructing sanitary sewers in Dist. 785, between 14th and 20th Sts., H St. to J St., 5,573 lin.ft. 8-27 in. concrete or clay pipe, 10,695 lb. c.i., from J. P. Connolly, 430 World Herald Bldg., $14,477; Dist. 786, 37th St. from Ames Ave. to Paxton Blvd., 1,470 lin.ft. 8-18 in. clay or concrete pipe, 2,325 lb. c.i., etc., and Dist. 788, J St. from 15th to 16th Sts., 260 lin.ft. 8 in. clay or concrete pipe, from J. S. Harrington, 3001 Mason St., $2,060 and $238 respectively; Dist. 787, W St., 385 lin.ft. 8 in. pipe, etc., from J. Jensen, 2625 Wirt St., $458.

Calif., Stockton—See "Buildings."

CONTRACTS AWARDED

N. Y., St. George — J. A. Lynch, pres. Richmond Boro, Boro Hall, temporary sanitary sewer in Sand Lane, etc., to J. W. Murphy, 8866 26th Ave., Brooklyn, $59,645. Noted Feb. 22.

Miss., Canton—See "Streets and Roads."

O., Akron—W. F. Peters, dir. Pub. Serv., 2,680 ft. 114 in. brick sewer in Willow Run Trunk Sewer Contr. 3, to T. E. McShaffrey Constr. Co., 171 South Forge St., $226,238, engrs. est. $234,000; 6,010 ft. 8-27 in. vitr. sewer in Case Ave., to J. T. Bates, 868 East Buchtel Ave., $26,904, engrs. est. $26,000. Noted March 1.

O., Columbus—See "Streets and Roads."

Mich., Detroit—Whitney & Hollinger Co., 408 Detroit Savings Bank Bldg., 11,000 ft. 6, 8 and 10 in. vitr. crock sewers in Morningside subdivision, to O. Schultz, c/o owner, $25,000.

Ill., Arthur — Sewer improvements, to James & Shinn, Mattoon, $24,846.

Wis., Milwaukee—Sewerage Comn., 4,200 ft. 42 in. rein.-con. intercepting sewer in various streets, to G. E. Zimmerman, 3402 Grand Ave., $134,179. Noted Feb. 22.

Minn., Minneapolis—Vitr. clay sewer pipe, various sizes, to Red Wing Sewer Pipe Co., Red Wing, about $38,000. Noted Feb. 8.

Kan., Ft. Scott—To Ammerman & Snyder, Ft. Scott, sanitary sewer in Dist. 8, incl. 15 yd. plain concrete $25 per yd., 6,446 yd. earth excav. $1.20, 430 yd. shale $3.60, 3,665 yd. rock $6, 38 standard manholes $78 each, 10 flush tanks $100 each, 1,134 ft. 12 in., 1,340 ft. 10 in. and 11,891 ft. 8 in. D. S. pipe, $0.90, $0.65 and $0.50 per ft., etc., total $44,326; sanitary sewer in East Side Dist. 2, 8.3 cu.yd. plain concrete $25, 9,850 cu.yd. earth excav. $1.20, 3,120 cu.yd. rock excav. $6, 600 cu.yd. shale $3.60, 50 manholes standard size $75 each, 17 flush tanks $120 each, 4,739 lin.ft. 12 in. D. S. V. C. pipe incl. Y's $1, 16,778 ft. 8 in. standard VC pipe incl. Y's $0.50, etc., total $54,041.

Neb., Lincoln — Constructing sewers, to A. Phelps & Sons Knoxville, Ia. Engrs. est. $175,000.

Calif., Lodi—Constructing sewage disposal plant, to Davis-Heller-Pearce Co., Delta Bldg., Stockton, $83,169. Noted March 1.

Waste Disposal

PROPOSED WORK

O., Youngstown—Plans election to vote on $125,000 bonds for garbage incinerator plant.

Ont., Coburg—Plans garbage incinerator. B. Ewing, town clk.

BIDS DESIRED

Fla., Tampa—March 27, by A. Brown, mayor, constructing incinerator plant, 50 ton daily capacity.

Fla., St. Petersburg—March 12, by City Comrs., constructing new incinerator and repairing old one. $125,000. E. C. Garvin, St. Petersburg, engr.

BIDS RECEIVED

Pa., Phila.—Opened bids Feb. 24, foundation for Harrowgate incinerator, 36,000 cu.yd. excav., 1750 cu.yd. mass concrete and 56,000 lb. reinforcing, from G. F. Dobbins, 4615 Springfield Ave., $91,638; Brown-King Constr. Co., Commercial Trust Bldg., $96,321; Lombardi & Co., Lincoln Bldg., $105,653.

N. D., Fargo—A. R. Watkins, city and opened bids Jan. 24, for 35 ton garbage incinerator plant, from Superior Garbage Incinerator Co., Dallas, Tex., 35 ton, $25,895, 60 ton $44,865; Jones Odorless Garbage Crematory Co., Syndicate, Trust Bldg., St. Louis Mo., $26,870; T. Ostbye & Son, (address not available) $27,000; Nve Odorless Crematory Co., Georgia Life Bldg., Macon, Ga., $30,000; H. Dollar Hide Co., (address not available) $35,000; Decarie Incinerator Co., McKnight Bldg., Minneapolis, Minn., $47,100. Noted Dec. 7.

CONTRACTS AWARDED

Calif., San Francisco—See "Buildings."

Bridges

PROPOSED WORK

N. Y., Niagara Falls—Niagara Falls Power Co., plans replacing present iron bridge, 30 ft. wide, with new and modern concrete structure, 60 ft. wide, across Niagara River, on Buffalo Ave. To exceed $50,000. F. L. Lovelace, secy. Engineer not announced.

Pa., Leamersville—Comrs. Blair Co., Altoona, plan concrete and steel bridge over Juniata River, here. $25,000.

Pa., Tipton—Comrs. Blair Co., Altoona, plan rein.-con. bridge over Juniata River, here, to replace one which recently collapsed. Cost to exceed $30,000. Engineer not announced.

North Carolina—State Hy. Dept., Raleigh, having plans prepared and soon takes bids constructing rein.-con. bridges and culverts on State Project 293, Wilson Co., $33,600; State Project 392, Robeson Co., $35,000; State Project 971, Madison Co., $61,600; State Project 437, Harnett Co., $36,000; State Project 213, Craven Co., $50,400. C. M. Upham, state highway engr.

South Carolina—See "Streets and Roads."

Kan., Kansas City—Having plans prepared 100 ft. steel and rein.-con. bridge over Turkey Creek on Kansas Ave., 40 ft. roadway, two 10 ft. sidewalks. $25,000. R. L. McAlpine, City Hall, engr.

Missouri—State Hy. Dept., Jefferson City, plans two 20 ft. rein.con. slab, one 25 ft. rein.-con. girder, three 30 ft. and three 40 ft. rein.-con. deck girder, and one 60 ft. steel truss spans, 20 ft. roadways, 16 rein.-con. abutments, 2 rein.-con. piers, on road from St. Louis to Festus, State Project Route 9, Jefferson Co.; six 25 ft. and one 40 ft. I beam, one 80 ft. steel truss and twenty 10 ft. rein.-con. slab spans, 20 rein.-con. piers, creosoted wood pile bents, 4 rein.-con. abutments, 4 rein.-con. bents, on road from Fisk to Dexter, State Project Route 16, Stoddard Co.; one 25 ft. and one 35 ft. rein.-con. deck girder, one 20 ft. rein.-con. slab and one 80 ft. steel truss spans, 20 ft. roadways, 8 rein.-con. abutments, on road from De Soto to Potosi, State Project Route 21, Sect. 4, Washington Co.; one 60 ft. steel truss span, 2 rein.-con. abutments, 20 ft. roadway, on road from St. Louis to Springfield, State Project Route 14, Phelps Co.; five 120 ft. truss spans, 4 rein.-con. piers, 2 rein.-con. bents, over Little Piney River, on road from St. Louis to Springfield, State Project Route 14, Phelps Co.; one 20 ft. rein.-con. slab, one 35 ft., one 30 ft. and two 25 ft. rein.-con. deck girder spans, 20 ft. roadways, 8 rein.-con. abutments, 1 rein.-con. bent, on road from Appleton City to Henry Co. line, State Project Route 24, St. Clair Co.; one 100 ft. steel truss span, 20 ft. roadway, 2 rein.-con. abutments, over Johnson Creek, on road from Phelps to Halltown, State Project Route 14, Sect. 9, Lawrence Co.; three 60 ft. steel truss and one 30 ft. rein.-con. deck girder spans, 2 rein.-con. piers, 2 rein.-con. bents, 2 rein.-con. abutments, 20 ft. roadway, on road from Oregon to Savannah, State Project Route 1, Andrew Co.; fifteen 20 ft. rein.-con. slab spans, 20 ft. roadway, etc., over Bowdry Lake, on road from Waverly to Carrollton, State Project Route 3, Carroll Co.; one 35 ft. rein.-con. deck girder span, 2 rein.-con. abutments, 20 ft. roadway, over Hooker Branch, on road from Waynesville to Arlington, State Project Route 14, Pulaski Co.; one 80 ft. steel truss span, 2 rein.-con. abutments, 20 ft. roadway, over Drainage Ditch, on road from North Kansas City to Liberty, State Project Route 1, Clay Co.; one 30 ft. I beam, one 80 ft. and one 70 ft. steel truss spans, 6 rein.-con. bents, 20 ft. roadway, on road from Portageville to Arkansas State line, State Project Route 9, Sect. 142, Pemiscot Co.; three 70 ft. steel truss spans, 2 rein.-con. piers, 2 rein.-con. bents, 20 ft. roadway, over Turnback Creek, on road from Phelps to Halltown, State Project Route 4, Sect. 9, Lawrence Co.; one 60 ft. steel truss span, 2 rein.-con. abutments, 20 ft. roadway, over Billies Creek, on road from Phelps to Halltown, State Project Route 14, Sect. 10, Lawrence Co.; three 100 ft. steel truss spans, 2 rein.-con. piers, 2 rein.-con. bents, 20 ft. roadway, over Nodaway River, on road from Oregon to Savannah, State Project Route 1, Holt Co.; one 20 ft. rein.-con. slab and one 25 ft. rein.-con. deck girder spans, 4 rein.-con. abutments, 20 ft. roadways, on road from Neosho to Anderson, State Project Route 1, Sect. 108, McDonald Co.; two 70 ft. steel truss spans, 20 ft. roadways, 4 rein.-con. abutments, one over Cypress Creek and other over Logan Creek, on road from Doniphan to Poplar Bluff, State Project Route 42, Sect. 12, Ripley Co., one 40 ft. rein.-con. deck girder span, 2 rein.-con. abutments, 20 ft. roadway, over Dicks Creek, on road from Golden City to Lamar, State Project Route 36, Sect. 6, Barton Co.; four 80 ft. steel truss spans, 3 rein.-con. piers, 2 rein.-con. bents, over Salt River, on road from Shelbyville to Shelbina, State Project Route 15, Sect. 23, Shelby Co.; one 35 ft. and three 40 ft. rein.-con. deck girder spans, 2 rein.-con. piers, 2 rein.-con. bents, 2 rein.-con. abutments, 20 ft. roadways, on road from Fredericktown to Jackson, State Project Route 9, Sect. 101, Bollinger Co.; one 120 ft. and two 80 ft. steel truss spans, 2 rein.-con. piers, 2 rein.-con. bents, 20 ft. roadway, over Cedar Creek on road from Jefferson City to Columbia, State Project Route 7, Callaway Co.; one 100 ft. steel truss span, 2 rein.-con. bents, 20 ft. roadway, over Turkey Creek, on road from Jefferson City to Columbia, State Project Route 7, Callaway Co.; one 25 ft. rein.-con. deck girder span, 2 rein.-con. abutments, 20 ft. roadway, on road from Neosho to Goodman, State Project Route 1, Sect. 107, Newton Co.; one 40 ft. rein.-con. deck girder span, 2 rein.-con. abutments, 20 ft. roadway, over branch of Fabines River, on road from Lancaster to Kirkville, State Project Route 7, Schuyler Co.; one 40 ft. rein.-con. deck girder span, 2 rein.-con. abutments, 20 ft. roadway, over Salt River, on road from Greentop to Queen City, State Project Route 7, Schuyler Co. B. H. Piepmeier, state highway engr.

Tex., Ft. Davis—See "Streets and Roads."

Ontario—See "Streets & Roads."

Ont., Galt—Plans new bridge over Speed River, probably steel. $50,000. D. T. Black, city engr.

BIDS DESIRED

N. H., Franconia—March 15, by F. E. Everett, comr. State Hy. Dept., Concord, one 90 ft. steel truss bridge over South Branch River, here. $25,000. State Hy. Dept., Concord engrs.

Pa., Leamersville—March 23, by Comrs. Blair Co., (Hollidaysburg) 90 ft. concrete arch bridge here. D. A. McCloskey, Hollidaysburg, engr.

Fla., St. Petersburg—March 12, by City Comrs., constructing several concrete arch bridges across Bookers Creek. $79,000. E. C. Garvin, St. Petersburg, engr. Noted Nov. 23.

Ohio—See "Streets and Roads."

O., Bowling Green—March 26, Comrs. Wood Co., for Oregon Rd. Bridge. E. E. Coriell, aud.; adv. this issue.

O., Cincinnati—See "Streets and Roads."

Wis., Eau Claire—March 22, by State Hy. Comn., at office of Div. Engineer, 213 South Barstow St., constructing Madison Street Bridge over Chippewa River, on State Trunk Highway 12. W. C. Buetow, bridge engr.; adv. this issue.

Kan., Holton—See "Streets & Roads."

Utah—March 12, by State Rd. Comn., Salt Lake City, 75 bridge, with abutments, approaches and 1,000 ft. pavement, incl. furnishing and fabricating steel, over Coal Creek near Cedar City, Iron Co., $39,000. H. C. Means, state road engr.

Ontario—See "Streets and Roads."

Ont., Alvinston—March 14, by J. McCallum, road supt., 150 ft. concrete and steel bridge, 18 ft. roadway. $40,000.

Ont., Brantford—March 24, by C. S. Moyer, chn. Pub. Wks., c/o City Clerk, 3 span rein.-con. arch bridge, 300 ft. long, 64 ft. wide, over Grand River. $335,000. F. P. Adams, city engr. Noted Jan. 11.

Ont., Brigden—March 14, by J. McCallum, road supt. Lambton Co., Alvinston, or J. A. Huey, co. clk., Sarnia, 150 ft. steel highway bridge on concrete abutments 18 ft. roadway, over Bear Creek, Moore Twp. $40,000. G. A. McCubbin, Chatham, co. engr.

BIDS RECEIVED

Virginia—See "Streets and Roads."

La., New Orleans—Dept. Pub. Finances, Purch. Div., Room 24, City Hall, opened bids Feb. 14, furnishing and erecting Scherzer rolling lift bridge over Navigation Canal at intersection of Broad St., from Pensacola Shipbuilding Co., Little Bayou, Pensacola, Fla., $53,000, Doullut & Williams Co. Inc., 816 Howard Ave., $58,900. Noted Jan. 18.

Tex., Liberty—Liberty Co. concrete bridges, concrete culverts and pile trestles, 7,380.16 cu.yd. concrete, 687,769 lb. reinforcing, etc., from Tibbetts Constr. Co., 209½ 8th St., Ft. Worth, $217,995; Smith Bros., 311 Central State Bank Bldg., Dallas, $222,194; Brown-Abbott Co., Laraine, $226,496.

Calif., Santa Ana—Orange Co., constructing bridge in 2nd Rd. Dist. on Coast Highway, eleven 30 ft. spans on concrete piles, 55 ft. steel girder, from W. Ledbetter Co., Pacific Electric Bldg., Los Angeles, $62,500; Wheeler Co., Los Angeles Ry. Bldg., Los Angeles, $66,000; Mercereau Bridge Co., 313 North Ave. 22, Los Angeles, $73,000.

CONTRACTS AWARDED

N. Y., Massena—F. A. Hough, town clk., substructure for bridge over Grasse River, to P. C. Rock Co., Antwerp, $38,251; superstructure, to Phoenix Bridge Co., Phoenixville, $167,500. Noted Feb. 8.

Pa., Pittsburgh—Allegheny Co., Court House, substructure piers and abutments for bridge, (2,744 ft. long, 15 spans), over Allegheny River on 40th and Foster Sts., to H. C. Converse & Co., Devonshire St., Boston, Mass., $854,692. Noted Dec. 7.

S. C., Kingstree—See "Streets and Roads."

Alabama—See "Streets and Roads."

Wis., Merrill—Rein.-con. bridge, three 70 ft. spans, to Wausau Iron Wks., 738 South 10th St., Wausau, $32,940. Noted Feb. 15.

Minnesota—State Hy Dept., St. Paul, Bridge 3753 on State Project 1-35, 580 ft. steel girder, in Northfield, Rice Co., and Bridge 3886, State Project 3-37, Federal Aid Project 239, 162 ft. steel girder, in Kelloff, Wabasha Co., to Illinois Steel Bridge Co., 552 Gilfillan Blk., St. Paul, $40,480 and $25,970 respectively; Bridge 3940, State Project 1-39, 230 ft. rein.-con. and steel, over Chicago, Rock Island & Pacific R.R. tracks, in Owatonna, Steele Co., to L. E. Baum, 2305 Ogden Ave., Superior, Wis., $17,435. Noted Jan. 25.

Minn., Crookston—Polk Co., Bridge 3880, steel truss, two 170 ft. spans and one 150 ft. span, to Minneapolis Bridge Co., 924 Metropolitan Life Bldg., Minneapolis, $47,000. Noted Sept. 21.

Kan., Leavenworth—Concrete slab on 4½ mi. Federal Aid Project 13 Sects. D and F, 18 ft., to J. Stanton, 6th and Kiowa Sts., $2.645 per sq.yd., total $150,812. Noted Feb. 15.

Missouri—State Hy. Dept., Jefferson City, one 35 ft. reinforced deck girder and one 80 ft. steel truss spans, 2 rein.-con. bents, 2 rein.-con. abutments, on State Project Route 8, Sect. 12, Caldwell Co., to Highway Constr. Co., Tulsa, Okla. (street address not available), $25,861. Noted Feb. 22.

Missouri—State Hy Dept., Jefferson City, to J. P. Wolfenbarger, Neosho, one 25 ft. concrete deck girder span, 2 rein.-con. abutments, 20 ft. roadway, over Meeks Branch, State Project Route 1, Sect. 106, Newton Co., $6,283; to W. A. Ross, Kansas City (street address not available) one 25 ft. rein.-con. deck girder and three 50 ft. steel truss spans, 20 ft. roadways, 2 rein.-con. piers, 2 rein.-con. bents on State Project Route 2, Sect. 6, Jackson Co., $23,103, one 100 ft. high truss steel span and one 50 ft. low truss steel approach span, 2 rein.-con. piers, 2 rein.-con. bents, over Little Blue River, State Project Route 2, Sect. 4, Jackson Co., $26,009, one 60 ft. low steel truss span and one 20 ft. rein.-con. slab approach span each end, 20 ft. roadway, 2 rein.-con. piers, 2 rein.-con. bents, over east fork of Little Blue River, on State

Bridges (Continued)

Project Route 2, Sect. 4, Jackson Co., $13,448; to Illinois Steel Bridge Co., Jacksonville, Ill., five 40 ft. I-beam and one 20 ft. rein.-con. slab spans, 20 ft. roadway, 6 creosoted wood pile bents skewed, 2 rein.-con. abutments, State Project Route 4, Sect. 18, Gentry Co., $19,876, one 140 ft. steel truss and twelve 20 ft. I-beam spans, 2 rein.-con. piers, 12 creosoted wood pile bents, etc., over west fork of Grand River, State Project Route 4, Sect. 18, Gentry Co., $30,439, one 100 ft. and two 50 ft. steel truss spans, 20 ft. roadway, 2 rein.-con. piers, 2 rein.-con. bents, over middle fork of Grand River, State Project Route 4, Sect. 18, Gentry Co., $25,882; to Muskogee Constr. Co., Tulsa, Okla. (street address not available) one 60 ft. steel and one 20 ft. rein.-con. slab spans, 20 ft. roadway, 4 rein.-con. abutments, on State Project Route 34, Sect. 13, Wayne Co., $11,412; to C. Parker, Keytesville, one 80 ft. steel truss and four 20 ft. concrete slab spans, 2 concrete piers, 4 rein.-con. bents, over Palmer Creek, State Project Route 10, Sect. 24, Chariton Co., $15,674; to Pioneer Constr. Co., 101 New York Life Bldg., Kansas City, one 120 ft. and two 76 ft. steel truss spans, 20 ft. roadway, 14 creosoted wood pile and 1 rein.-con. bents, 2 rein.-con piers, over Castor River Diversion Channel, State Project Route 51, Sect. 24, Bollinger Co., $57,268, one 60 ft., one 160 ft. and one 80 ft. steel truss spans, 2 concrete piers, 2 rein.-con. bents, 20 ft. roadway, over Grande Glaize River, State Project Route 15, Sect. 63, Camden Co., $43,860; to Pittsburg-Des Moines Steel Co., Tuttle and Southwest 10th Sts., Des Moines, Ia., five 30 ft. I-beam spans, 20 ft. roadway, 6 creosoted wood pile bents, over Squaw Creek D.D., State Project Route 1, Sect. 14, Holt Co., $8,843; to General Constr. Co., Syndicate Trust Bldg., St. Louis, one 30 ft. rein.-con. deck girder and one 80 ft. steel truss spans, 20 ft. roadways, 4 rein.-con. abutments, State Project Route 14, Sect. 36, Laclede Co., $14,605; to W. H. and G. H. Turner, Memphis, one 140 ft. steel truss span, 2 rein.-con. abutments, over north fork of South Fabins River, State Project Route 15, Sect. 11, Knox Co., $19,437; to Carterville Constr. Co., Carterville, one 50 ft. steel truss, one 40 ft. rein.-con. deck girder and one 20 ft. rein.-con. slab spans, 20 ft. roadway, 6 rein.-con. abutments, on State Project Route 14, Sect. 7, Lawrence Co., $19,598; to Koss Constr. Co., 2818 5th Ave., Des Moines, Ia., five 80 ft. rein.-con. spandrel filled arch spans, 2 rein.-con. abutments, 4 concrete piers, on State Project Route 14, Sect. 42, Pulaski Co., $44,035; to Allhands & Davis, 705-6 Frisco Bldg., Joplin, four 30 ft. rein.-con. deck girder spans, 2 rein.-con. piers, 20 ft. roadway, over Cowskin Creek, State Project Route 40, Sect. 20, Douglas Co., $13,513; to G. E. Stoner, Charleston, one 100 ft. steel truss span, 20 ft. roadway, 2 reien.-con. abutments, over North Cut D.D., State Project Route 55, Sect. 6, Scott Co., $17,884; to Reynolds, Bloker & Crews, Caruthersville, one 70 ft. steel truss, three 30 ft. and four 20 ft. I-beam spans, 20 ft. roadway, 2 rein.-con. piers, 8 rein.-con. bents, over Drainage Ditch, State Project Route 9, Sect. 51, Pemiscot Co., $22,834; to Powell, Gouen Co., Collinsville, Ill., one 40 ft. rein.-con. deck girder span, 20 ft. roadway, 2 rein.-con. piers, over Butte Creek, State Project Route 19, Sect. 4, Crawford Co., $5,057; to J. P. Sparks, Kirkwood, one 60 ft. steel truss span, 2 rein.-con. abutments, 20 ft. roadway, over Crooked Creek, State Project Route 9, Sect. 52, Lincoln Co., $13,269. Noted Dec. 28 and Feb. 22.

Dams

PROPOSED WORK

Mo., Annapolis—C. T. Dana et al., International Life Bldg., St. Louis, having preliminary plans prepared 800 ft. rein.-con. and steel power dam, 100 ft. high, 2,000 to 5,000 hp., to furnish power for Annapolis Lead Co. mines, etc., near here. $1,000,000. W. A. Fuller, 1917 Ry. Exch. Bldg., St. Louis, engr.

BIDS DESIRED

Ill., Beardstown—See "Excavation, Drainage, Irrigation."

BIDS RECEIVED

Illinois—G. R. Miller, dir. Dept. Pub. Wks. and Buildings, Div. Waterways, Springfield, opened bids Feb. 28, Starved Rock Lock and Dam, Illinois Waterway Contr. 2, La Salle Co., (a) to complete work in 2 years, (b) to complete work in 3 years from Byrne Bros. Constr. Co., 358 East 115th St., Chicago, (a) $1,309,442, (b) $1,135,693; C. E. Carson Co., 601 St. Clair St., Chicago, (a) $1,717,880, (b) $1,668,800; Green & Sons Co., 705 Tower Bldg., Chicago, (a) $1,919,795, (b) $1,889,795. Noted Feb. 1.

CONTRACTS AWARDED

Conn., Easton—See "Waterworks."

Railways

PROPOSED WORK

North Carolina—State Legislature authorized $10,000,000 bonds to aid in construction of 5 lines of railway, about 125 mi., in northwestern mountain counties. $50,000 appropriated for surveys. State to own 49% of stock. M. Squires, Lenoir, state senator, is one of comrs. for State's interest. Engineer not selected.

CONTRACTS AWARDED

Alabama—Alabama Great Southern R.R., Cincinnati, O., grading roadbed and placing culverts on 20 mi. railroad from Centerville to Woodstock, to Goodrich Constr. Co., Anniston, $183,709.

Excavation, Drainage, Irrigation

PROPOSED WORK

N. C., Dunn—H. L. Godwin plans to organize drainage district and vote on bonds to drain 200,000 acres in Great and Little Coharie, and Seven Mile Swamps, in Sampson Co., near here. F. A. Bartel, U. S. Drainage Engr. of Drainage Dept., Wash., D. C., advising engr.

N. D., Grand Forks—Grand Forks Co., takes bids in spring for drainage ditch 9 mi. long, 260,000 cu.yd. dry earth excav. $33,000. J. Ingram, Grand Forks, engr.

N. D., Grand Forks—Grand Forks Co. plans 3 drainage ditches, one 4½ mi. long, one 5 mi. long and other 2½ mi. long, incl. 140,000 cu.yd. excav. $25,000. J. Ingram, Grand Forks, engr.

Mo., St. Louis—See "Waterworks."

BIDS DESIRED

Ill., Beardstown—March 29, by Comrs. South Beardstown Drainage & Levee Dist., 1st State Bank Bldg., enlarging old sand and dirt levees, also building 5 dams. L. B. Kinsey, Pekin, engr. Former bids rejected, adv. this issue. Noted Feb. 15.

Colo., Lamar — March 27, at office of Granada D.D., Markham Bldg., constructing drainage system. E. H. Gerecke, secy.; adv. this issue.

CONTRACTS AWARDED

Minn., Olivia—Renville Co., Co. Ditch 85A, 7 mi. open ditch, 267,861 cu.yd. excav., to Mulgrew & Sons, Dubuque, Ia. (street address not available, $0.11 per cu.yd., $29,465; 228,200 lin.ft. 5-24 in. tile, 5 concrete bridges, 3 wood pile bridges, to Kircher Bros., Olivia, $77,491. Noted Jan. 11.

Calif., Paradise — Paradise Irrigation Dist., lining 13,100 lin.ft. canals, involving 117,000 sq.ft. 1½ in. rein.-con., to W. Brown, Paradise. Noted Feb. 1.

Streets and Roads

PROPOSED WORK

N. Y., Jamestown—Plans widening 4th St. from 40 ft. to 54 ft., asphalt. $25,000. L. O. Bergman, City Hall, engr.

N. Y., New York — H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., withdrew bids grading, setting curb and laying sidewalks, etc., on Yates Ave., $45,000. Will readvertise. Noted March 1.

Pa., Johnstown—City Comrs. opens bids about April 15, paving 9,000 ft. Wonder St. from Franklin St. to city line and Fairfield Ave. from Hayes St. to city line, brick on concrete. $80,000. H. L. Wilson, city engr.

Pa., Nanty-Glo—Comrs. Cambria Co. open bids about April 11, paving 2nd St. from Cardiff St. to Twin Rocks Co. improved road, 2,000 ft., 26 ft. wide, and 2,700 ft. 18 ft. $60,000. D. E. Bradley, Ebensburg, engr.

Pa., Scranton—Plans to pave Woodlawn St., sheet asphalt and stone blocks on concrete. $48,717. W. LaFontaine, dir. pub. wks.

Pa., Scranton—Plans paving Pettebone St. $36,440, South Garfield Ave. $10,614, South Lincoln Ave. $14,914, all sheet asphalt and stone blocks on concrete. W. Lafontaine, dir. pub. wks.

Pa., Warren—Plans 1 mi. brick pavement. $25,000.

Maryland—State Rds. Com., Baltimore, plans to expend $3,500,000 for road construction and $1,600,000 for maintenance during 1923. J. N. Mackall, chn.

Md., Baltimore—Plans paving with sheet asphalt, 39th St. from St. Paul to Charles Sts., Charles and St. Paul Sts., and streets north and south of 39th St. $90,000.

Va., Norfolk — W. E. Rew, city engr., takes bids about March 15, widening and repaving 2,907 yd. Gates Ave. and 1,432 yd. Brandon Ave. from Armsteads Bridge Rd. to Clarmont, 1,125 yd. North Brandon Ave. from Armsteads Bridge Rd. to Gates Ave., 1,382 yd. Spottswood Ave. from Claremont to Armstead Bridge Rd., 1,590 yd. Granby St. from La Vallett St. to Tanners Creek, all foregoing with asphalt, 1,400 yd. Brooke Ave., Durex.

West Virginia—State Rd. Com., Charleston, appropriated $15,000,000 for road work during 1923 and 24. Of this amount, about $6,000,000 will be let to contract during this year. J. K. Monroe, project engr.

North Carolina—State Hy. Dept., Raleigh, plans grading and waterbound macadam paving 6.74 mi. road from Hot Springs to Tennessee line, State Project 971, Madison Co., $139,100, 3.54 mi. Lenoir-Blowing Rock Rd., State Project 723, Caldwell Co., $114,950, 5.67 mi. road from end of Project 801 to road 69, near Cranberry, State Project 802, Avery Co., $119,600, 2.92 mi. on part of Project 930, State Project 930 A, Graham Co., $33,850; grading and topsoiling 8.6 mi. road from Mecklenburg Co. line to Stanley Co. line, State Project 616, Cabarrus Co., $47,400, 10.74 mi. from Lillington to Duke, State Project 437, Harnett Co., $41,900, 1.15 mi. approaches to bridge through swamp, State Project 392, Robeson Co., $31,660; grading and concrete or asphaltic paving 11.66 mi. from Waynesville to Canton, State Project 944, Haywood Co., $375,000, 6.84 mi. from Buncombe Co. line to Rutherford Co. line, State Project 835, Henderson Co., $282,500, 3.53 mi. from Jefferson east, State Project 713 A, Ashe Co., $108,800, 7.51 mi. from Asheboro to Deep River, State Project 578, Randolph Co., $255,700, 12.89 mi. from Delco to Bolton, State Project 329, Columbus Co., $383,900, 9 mi. from Wilson to Greene Co. line, State Project 293, Wilson Co., $265,400, 10.43 mi. from Fort Barnwell to Jasper, State Project 213, Craven Co., $350,300; clearing and grading 7.81 mi. State Project 485 A, Wake Co., $38,200, 7.45 mi. from Durham Co. line to Hillsboro, State Project 457 A, Orange Co., $56,300; grading, topsoiling and constructing small rein.-con. structures, 6.42 mi. from Northampton Co. line to Aulander, State Project 146, Hertford and Bertie Counties, $38,500, 22.52 mi. from Montgomery Co. line to Aberdeen, State Project 570, Moore Co., $85,400; grading, concrete or asphaltic paving and constructing small rein.-con. structures on 8.57 mi. from Statesville to Rowan Co. line, State Project 643, Iredell Co., $286,800, 11.83 mi. from Edenton to Hertford, State Project 115, Chowan Co., $223,400; paving with 10 ft. sand asphalt 4.39 mi. State Project 151 B, Hyde Co., $72,500. C. M. Upham, state highway engr.

N. C., Rowland—Plans improving various streets, 5,383 sq.yd. paving, 1,515 lin.ft. curbing, 9,339 sq.yd. sidewalk, etc. Ryan Eng. Co., Arcade Bldg., Columbia, S. C., engrs.

South Carolina — State Hy. Dept., Columbia, plans to expend $2,000,000 for road and bridge work. C. H. Moorefield, state highway engr.

Florida—State Rd. Dept., Tallahassee, plans to expend $3,000,000 during 1923; $500,000 will be allowed for maintenance and balance for new construction. W. F. Cocke, state highway engr.

Fla., Bradentown—Plan election to vote on $76,000 bonds paving various streets. L. L. Hine, city clk.

Mississippi—State Hy. Dept., Jackson, plans to let contracts during year for 50 mi. hard surfaced roads, cost $1,750,000, and 300 mi. graded and gravel surfaced roads, $4,250,000. H. C. Dietzer, highway engr.

La., Baton Rouge—See "Waterworks."

Kentucky—Dept. State Roads & Highways, Frankfort, appropriated $7,701,157 for construction and maintenance of state roads during year (it is probable that additional appropriations in amount of $2,500,000 will be made during year). J. S. Boggs, state highway, engr.

O., Akron—W. F. Peters, dir. Pub. Serv., takes bids in April, grading, laying sidewalks and paving 1,400 ft. South St., 28 ft., 2,670 lin.ft. stone curb, 14,600 sq.ft. sidewalk, 2,400 cu.yd. earth excav., 4,650 sq.yd. vitr. brick or asphalt on concrete, $40,000; 1,780 ft. Crozier St., 28 ft. 3,070 lin.ft. stone curb, 18,900 lin.ft. sidewalk, 3,800 cu.yd. earth excav., 4,910 sq.yd. vitr. brick or asphalt on concrete, $40,500; 1,900 ft. Bellows St., 26 ft., 2,825 lin.ft. stone curb, 17,500 sq.ft. sidewalk, 4,100 cu.yd. earth excav., 4,200 sq.yd. vitr. brick or asphalt on concrete, $39,300; 700 ft. Washington St., 24 ft., 1,280 lin.ft. stone curb, 6,600 lin.ft. concrete sidewalk, 1,000 cu.yd. earth excav., 1,740 sq.yd. vitr. brick or asphalt on concrete, $15,200; 1,700 ft. West North St., 30 ft., 3,730 lin.ft. stone

Streets and Roads (Continued)

curb, 25,750 sq.ft. concrete sidewalk, 5,300 cu.yd. earth excav., 7,910 sq.yd. vitr. brick or asphalt on concrete, $52,000; 3,000 ft. Springdale, Annadale, Hite and Rothrock Sts., 24 ft., 1,270 lin.ft. stone curb, 1,140 lin.ft. concrete gutter, 28,000 sq.ft. concrete sidewalk, 8,700 cu.yd. earth excav., 2,400 sq.yd. vitr. brick or asphalt on concrete, $34,000. E. A. Kemmler, Delaware Bldg., engr.

O., Canton—Stark Co. plans grading and paving Sect. B Pigeon Run Rd., brick, asphalt or macadam. $46,000. G. Sickafoose, co. surv.

O., Canton—Stark Co. plans grading and paving 2.71 mi. Sect. A Whipple Rd., 16 ft., $108,000; 2.13 mi. Sect. A Reduban-McDonaldsville Rd., 16 ft., $85,000, both brick, asphalt or macadam. G. Sickafoose, Court House, engr.

O., Columbus — Making plans grading, laying necessary water systems and sewer connections and paving Woodland Ave. from alley west of same from Richmond Ave. to Granville St., 390 ft. long, 20 ft. wide, brick $2,356, concrete $1,886; alley north of Richmond Ave. from Parkwood Ave. to alley west of Woodland Ave., 367 ft. long, 15 ft. wide, brick $2,349, concrete $1,879; alley west of Champion Ave. from Sycamore to Kossuth Sts., 1,087 ft. long, 20 ft. wide, brick $10,743, concrete $9,123; Capitol St. from Belvidere to Whitethorne Aves., 394 ft. long, 20 ft. wide, brick $2,919, concrete $2,282; alley west of Cypress Ave. from Town to Rich Sts., 392 ft. long, 16 ft. wide, brick $2,729, concrete $2,218; alley west of Chicago Ave. from alley north of Broad St. to Cable Ave., 591 ft. long, 15 ft. wide, brick $3,552, concrete $2,779; Brehl Ave. from Town St. to Sullivant Ave., 1,346.5 ft. long, 50 ft. wide, brick $20,886, asphalt $17,723; alley north of 8th Ave. from alley west of Neil to Michigan Aves., 386 ft. long, 18 ft. wide, brick $2,865, concrete $2,290; alley north of 7th Ave. from Michigan Ave. to Perry St., 590 ft. long, 16 ft. wide, brick $3,630, concrete $2,850; Sydney St. from 5th to Leona Aves., 1,186 ft. long, 50 ft. wide, brick $24,438, asphalt $22,611; Williams St. from Northwood to Maynard Aves., 1,010 ft. long, 20 ft. wide, brick $14,154, asphalt $12,752; Torrence Rd. from High St. to Breevoort Rd., 1,318 ft. long, 60 ft. wide, brick $20,871, asphalt $18,021; Piedmont Rd. from Torrence Rd. to Indianola Ave., 1,706 ft. long, 60 ft. wide, brick $70,454, asphalt $62,279; Brevoort Rd. from High St. to Torrence Rd., 1,400 ft. long, 60 ft. wide, brick $23,686, asphalt $20,713; Dunedin Rd. from High St. to Northmoor Pl., 1,992 ft. long, 50 ft. wide, asphalt $35,587; Weston Pl. from Northmoor Pl. to Winthrop Rd., 931 ft. long, 50 ft. wide, asphalt $16,115; Medbrook Way from Torrence to Winthrop Rds. 958 ft. long, 50 ft. wide, asphalt $13,232; Irving Way from Weston Pl. to Winthrop Rd., 1,030 ft. long, 50 ft. wide, asphalt $16,967; sanitary sewer in the alley north of Hosack St. from 6th to 4th Sts., 3rd St. from alley north of Hosack St. to 3rd alley north of Hosack St. and alley north of Hinkle Ave. from 7th St. to alley west of 5th St., 1,425 ft. 8 in. vitr. pipe, 8 manholes, seventy-six 6-in. "Y" branches, $2,333. R. H. Simpson, city engr.

Ill., Urabana—Champaign Co. voted $2,500,000 bonds constructing 173 mi. hard roads.

Mich., Detroit—Plans to widen Abbott St., 6 ft., Brush St. 6 ft., Clifford St., 6 ft., Antoinette St. from Woodward to Cass Sts., 6 ft. and from 2nd to 3rd Sts., 6 ft., Canfield St., 8 ft., Baltimore St. from Woodward to Brush Sts., 8 ft., and from Woodward to Lincoln Sts., 8 ft., Brush St. from Canfield to Ferry Sts., 8 ft. and from Subway to Grand Blvd., 8 ft., Brainard St., 3 ft., Brush St., 4 ft., Gratiot St. from Mt. Elliott to Rohns Sts., 4 ft., and from Rohns St. to point 300 ft. east of Harper Ave., 4 ft., Elizabeth St., 5 ft., Elmwood Ave., 7 ft., Brush St., 10 ft., Canfield St., 10 ft., Chene St., 10 ft., Forest St. from Brush Farm Line to Woodward Ave., 12 ft. and from 12th to 14th Sts., 12 ft., Forest St., 14 ft., 14th St., 14 ft., Cass St. from Warren to Colburn Sts., 15 ft. and from Selden to Warren Sts., 15 ft., and from Temple to Stimson Sts., 15 ft., Forest St., 16 ft., all foregoing work to be done with 3½ in. sheet asphalt on 8 in. concrete; resurfacing with 3½ in. sheet asphalt, Abbott, Alexanderine, Amsterdam, Atwater, Beaubien, Bellevue, Brush, Chene, Custer, Delaware, Fairview, Farmer, Ferry, 4th and Gladstone Sts., Fort St. from 5th to Trumbull Sts., 5th to 8th Sts., 17th to Clark Sts., Artillery to Green Sts. and Green to Wilkie Sts., 14th St. from Temple to Buchanan Sts. and from Warren to Kirby Sts., Grand River Ave. from Woodward to Cass St. and from Cass to Trumbull Sts., Congress St. from Randolph to Brush Sts., and from Hastings to Mt. Elliott Sts. J. W. Reid, city engr.

Mich., Royal Oak—Having plans prepared paving Lincoln Ave. from Woodward Ave. to Knowles St., Center St. from 1st to Hudson Sts., Catalpa Dr. from Woodward Ave. to Main St., Washington Ave. from 1st St. to Catalpa Dr., and University Ave. from Main St. to Virginia Ave., 1 course concrete or asphalt on concrete. P. H. Beauvais, city engr.

Ia., Centerville—Soon takes bids 1.75 mi. road, 18 ft., 80,000 yd. brick or concrete. F. J. Stewart, Centerville, engr.

Neb., Omaha—Douglas Co. soon takes bids paving Q St. Rd. to Millard, 5 mi. Bennington Rd. No. 9 and 10 mi. Military Rd. from point 1½ mi. south of Bennington to Elkhorn River, vitr. brick, asphalt or concrete. $1,000,000. L. E. Adams, Court House, engr.

Kan., Girard—Comrs. Crawford Co. soon takes bids constructing 11.8 mi. Jefferson Highway, 18 ft., chat. $50,000. C. M. Cooper, co. engr.

Kan., Kansas City—Wyandotte Co. takes bids in about 4 weeks grading, paving etc. 3¾ mi. Wolcott Rd., 16 ft., alternate bids on concrete and bituminous macadam. O. K. Williamson, co. engr.

Kan., St. Francis—Comrs. Cheyenne Co. soon take bids grading and bridging 14 mi. Federal Aid Project 145, 28 ft. $70,000. Kansas Eng. Co., Topeka (street address not available), engrs.

South Dakota—State Hy. Dept., Pierre, plans grading and gravel surfacing 12.25 mi. Federal Aid Project 39, between Mitchell and Ethan, Davison Co., incl. 75,000 cu.yd. excav., 22,050 cu.yd. gravel, 36,000 lb. reinforcing steel, one 40 ft. steel truss, etc.; 12.3 mi. Federal Aid Project 138, Lawrence and Meade Counties, incl. 37,800 cu.yd. common and rock excav., 22,140 cu.yd. gravel or limestone surface, 115 cu.yd. concrete, $83,834; 8.5 mi. Federal Aid Project 102, Lincoln Co., 72,000 cu.yd. excav., 250 cu.yd. concrete, 25,000 lb. reinforcing steel, one 45 ft. concrete viaduct, $34,067. F. D. Hudgins, state engr.

Status of state road programs for 1923 is outlined for several states, on p. 471 of the Business Side of Construction. Last week this information was given for ten other states.

S. D., Aberdeen—Brown Co. having plans prepared constructing 24 mi. road, some gravel surfacing. $40,000. L. C. Kranhold, aud.

S. D., Yankton—Yankton Co. plans to gravel surface 100 mi. of road. $300,000.

Mo., Joplin—Making plans 19,000 yd. 1 course 5 in. concrete pavement. $26,000. S. P. Ashcroft, City Hall engr.

Mo., New Franklin — Preparing plans Telford or asphalt paving and granite or concrete curbing about 1 mi. Broadway and Missouri Aves., 24 to 90 ft. wide. $70,000. C. E. Smith, Ry. Exch. Bldg., St. Louis, engr.

Mo., St. Louis—Plans improving 1,439 ft. Delor St. from Gravois to Ray Aves., 36 ft., 2,750 lin.ft. granite curb, 9,000 cu.yd. earth excav., 5,600 sq.yd. warrenite bitulithic, $32,650; opening and widening 24,000 ft. Hampton Ave. from Oakland to Gravois Aves., 80 ft., $83,000; will pave same with warrenite bitulithic or refined asphalt on concrete at later date, cost $1,100,000. W. W. Horner, 300 City Hall, engr.

Mo., St. Louis—See "Waterworks."

Tex., Abilene — City Comn. soon takes bids paving Oak St. from 2nd to 4th Sts., Pine St. from 3rd to 5th Sts., Hickory St. from 1st to 2nd Sts., 30 ft., brick, bitulithic or concrete. $25,000. H. H. Batjer, Abilene, engr.

Tex., Beaumont—City Comn. opens bids about March 12, paving Pine, Mariposa, Panin and Railroad Sts., bituminous and other types. $125,000. R. M. Fulweiler, city engr. Noted Feb. 22.

Tex., Cameron — Comrs. Milam Co. plan to improve highways in Rd. Dist. 30. $32,000 bond issue available. A. F. Mitchell, co. engr.

Tex., Cleburne — Johnson Co., making plans and soon takes bids clearing, gravel surfacing, etc. 10.86 mi. State Highway 2-E, 18 ft., 250 cu.yd. concrete, 55,300 cu. yd. roadway, 50,700 cu.yd. borrow and 2,000 cu.yd. rock excav., 21,000 lb. reinforcing, 24,050 cu.yd. gravel surfacing. $115,000. G. W. Courter, co. engr.

Tex., Ft. Davis—Jeff Davis Co. making plans grading, surfacing with waterbound macadam and bridging 19.5 mi. State Highway 12, 16 ft. $200,000. H. Schroeter, co. engr.

Tex., Houston—City Comn. soon takes bids paving with high class bituminous pavement Lovett Blvd. from Montrose to Graustark Sts., 50 ft. $25,000. J. C. McVea, city engr.

Tex., La Grange — Attorney Generals Dept., Austin, approved $50,000 bond issue for highway improvements in Rd. Dist. 3. A. Schlafli, co. engr.

Tex., Marlin—Lott Dist., Rd. Dist. 4 of Falls Co. voted $60,000 bond issue for highway improvements. G. W. Courter, co. engr.

Tex., Marlin—Rosebud Rd. Dist. No. 3 voted $100,000 bonds for highway improvements in Falls Co. G. W. Courter, co. engr.

Tex., Rocksprings—Edwards Co. (Rocksprings) and Kerr Co. (Kerrville) take bids within 60 days grading, levelling and macadam topping 18 mi. waterbound macadam highway from here and extending toward Kerrville, 18 ft. $168,000. W. E. Simpson, Natl. Bank Commerce Bldg., San Antonio, engrs.

Okla., Ardmore—Carter Co. having plans prepared 7 mi. concrete and 4 mi. gravel roads, Federal Aid Projects 89, 89A and 69. W. W. Trotter, Ardmore, engr.

Okla., Oilton—Tiger Twp. election March 8, to vote on $300,000 bonds for hard surfacing 20 mi. Albert Pike Highway. R. O. Clark, Oilton, trustee.

Colo., Pueblo—Plans paving with concrete 47,400 sq.yd. in Fountain Ave. Paving Dist. $205,200, 29,600 sq.yd. College Hill Paving Dist. $116,660; warrenite paving 29,000 sq.yd. Bruner Park Paving Dist. $114,300, 12,100 sq.yd. Northern Ave. Paving Dist., $43,900, 15,250 sq.yd. Orman Ave. Paving Dist. $61,250. D. P. Gaymon, Pueblo, engr.

Washington — Legislature appropriated $1,670,000 paving 39 mi. Pacific Highway between Centralia and Vancouver. J. Allen, state highway engr.

Wash., Anacortes—Takes bids in about 30 days paving 3rd and 9th Sts., F, X, M and N Aves. $115,000. Address City Clerk.

Wash., Seattle—Plans paving 2 mi. Fauntleroy Ave. and Avalon Way. $250,000. J. D. Blackwell, city engr.

Calif., Davis — Plans paving various streets. To exceed $25,000.

Calif., Fairfield—Plans paving portions Texas St. and Union Ave. To exceed $25,000. E. N. Eager, city engr.

Calif., Kingsburg—Plans paving portions of 19th and 20th Aves. and Riverside St. To exceed $25,000. J. S. Bates, Rowell Bldg., Fresno, engr.

Calif., Long Beach—Soon takes bids improving Belmont Shore Project, 870,746 sq. ft. 5 in. concrete pavement, 33,610 lin.ft. cement curb, 168,573 sq.ft. cement walks, 10,923 lin.ft. 6-42 in. rein.-con. storm drain, 54,326 lin.ft. 8-24 in. concrete sanitary sewers, 1,377 lin.ft. 12 in. c.i. pipe.

Calif., San Diego—Had plans prepared improving Eagle St., 83,544 sq.ft. 1½ in. asphaltic concrete on 2½ in. bituminous, 10[illegible] sq.ft. cement concrete sidewalk, etc.; Goldsmith and Evergreen Sts., 101,779 sq.ft. 1½ in. asphaltic concrete on 2½ in. bituminous. F. A. Rhodes, city engr.

Calif., San Rafael — Takes bids about April 1, 44,000 sq.yd. asphaltic concrete surfacing. $50,000. H. J. Brainerd, city engr.

Calif., Visalia — Tulare Co. plans constructing 2 mi. highway between Dinuba and county line. $25,000. L. A. Moye, co. surv.

Ontario—Dept. Pub. Highways, University Ave. and Dundas St., Toronto, has taken over 35 mi. road from Beaverton through Fenelon Falls to Bobcageon, and will convert into provincial highway, gravel construction, concrete culverts and bridges, etc. $700,000. G. Hogarth, ch. engr.

Ont., Barrie—Simcoe Co. plans to grade and build macadam and gravel roads. $175,000. R. J. Fletcher, clk.

Ont., Elora—Plans 8,000 sq.yd. concrete pavements. $25,000. H. Clark, town clk.

Ont., Essex—Plans 6 mi. concrete pavements from here to Maidstone. C. M. Fox, Kingsville, chn. com.

Ont., Kingston—Frontenac Co. plans to spend $34,500 for new road construction, mostly macadam, and $60,700 for repairs and maintenance. R. H. Fair, County Bldgs., engr.

Ont., Kingsville—Plans concrete sidewalks and 14,000 sq.yd. asphalt pavements. $60,000. Code & Code, Bank of Hamilton Bldg., Windsor, engrs.

Ont., Pembroke—Soon takes bids paving 5,600 ft. McKay St., asphaltic concrete, con-

Streets and Roads (Continued)

crete curbs and gutters, $92,000; Isabella St., asphaltic concrete with concrete curbs and gutters, $34,000. J. P. Howe, city engr.

Ont., St. Thomas—Plans new asphalt and concrete pavements. $60,000. Prices wanted on all materials. A. Miller, city engr.

Ont., Toronto—Plans grading approaches to Weston Rd. overhead bridge and paving with brick, $21,880, rounding street corners on various streets $57,015, will probably be done by day labor. R. C. Harris, city engr.

Ont., Toronto—Plans paving Parliament St. from Queen to Wellesley Sts., 20,000 sq. yd. asphalt, brick block gutter, concrete curb, $153,143. R. C. Harris, city engr.

BIDS DESIRED

R. I., East Providence (Providence P. O.)—March 22, by W. E. Smith, clk., paving 5,200 yd. Warren Ave., sheet asphalt; 2,400 yd. Waterman Ave., granite block; 8,000 yd. Roger Williams Ave., 3,000 yd. Summitt St., and 6,900 yd. Grove Ave., all bituminous macadam; also paving portion Cobb and Orchard Sts. $75,000. F. E. Waterman Co., 86 Weybosset St., Providence, engrs.

N. Y., Brooklyn—March 14, by E. Riegelmann, boro pres., Boro Hall, curbing and asphalt paving Delamere Pl., Glenwood Rd., Foster and 17th Aves., East 9th, West 25th, West 32nd, 66th and 82nd Sts.

N. Y., Mineola — March 19, by Bd. Supervs. Nassau Co., Court House, improving Park St. W. F. Starks, co. engr.; adv. this issue.

N. Y., New York—March 15, by W. J. Flynn, pres. Bronx Boro, 3rd and Tremont Aves., grading, curbing laying sidewalks, etc. in Yates Ave. from northerly line of Becker property about 235 ft. north of Rhinelander Ave. to Pelham Parkway S. Yates Ave. from Sacket Ave. to northerly line of Becker property about 235 ft. north of Rhinelander Ave., Pierce Ave. from Williamsbridge Rd. to Sacket Ave.

N. J., Pennington—March 12, by Hopewell Twp. Com. at Harts Hall, near here, surfacing road from Harbourton to Rear Tavern, Hopewell Twp., cinders, 3 and 6 in. thick, 8,400 sq.yd. D. M. Voorhees, Pennington, clk.

Pa., Phila.—March 13, by Dept. Pub. Wks., asphalt paving on Clearfield St. from 2nd to Hancock Sts., Ella St. from Indiana to Clearfield Sts., Livingston St. from Ontario to Tioga Sts., Duzerne St. from point 500 ft. east of 2nd St. to Oxford Branch of Penn. R.R., Madison St. from Marston to Etting Sts., Oxford St. from 59th to 60th Sts., Tioga St. from Aramingo to Gaul Sts., Wakeling St. from Hawthorne to Cottage Sts., 16th St. from 67th to 68th Aves., Schedule "A"; granite block repaving on Chestnut St. from 23rd St. to west pier of Schuykill River Bridge, Schedule "B"; redressed granite block repaving on 13th St. from Spring Garden to Girard St., Schedule "C"; curbing and footway work, Schedule "D"; removal of buildings on line of Spring Garden St., Schedule "E"; concrete flue for garage reduction plant, Schedule "F"; furnishing and delivering crushed stone, Schedule "G". F. H. Caven, dir.

Pa., Washington—March 21, by Comrs. Washington Co., Court House, paving 4,200 ft. Langioth Rd., 5 and 6 in. concrete, $40,000, 6,500 ft. Country Home Rd., 5 and 8 in. concrete, $50,000, 2,000 ft. Midway-Steubenville Pike, 5 and 8 in. concrete, $30,000, 3,400 ft. 8 in. concrete crown, 5 in. sides, $40,000, 7.7 mi. Monongahela Pike, 8 in. concrete crown, 5 in. sides, $306,000. Chaney Eng. Co., Washington, engrs.

Va., Charlottesville—March 24, by B. A. Bennett, city mgr., grading, curbing, paving and resurfacing various streets; adv. this issue.

Va., Staunton—March 15, by Bd. Supervs. Augusta Co., paving 2 mi. Spottswood-Newport Rd., 12 ft., crushed rock macadam; 4 mi. road Waynesboro to Lyndhurst, 10 ft., waterbound macadam; 2 mi. road in Pastuero Dist. from end of present macadam road west, 12 ft., compacted gravel. G. Shirley, Richmond, state highway comr.

N. C., Burlington—March 12, by E. B. Horner, mayor, 17,500 sq.yd. pavement, 11,000 ft. combined concrete curb and gutter, storm drains and accesesories. Ludlow Engineers, Winston-Salem, engrs. Noted March 1.

S. C., Aiken—March 14, by Aiken Co., constructing 6.23 mi. State Route 39, 33,505 cu.yd. excav., 15,345 cu.yd. sand clay surfacing, 722 lin.ft. rein.-con. pipe, 139 cu. yd. plain and rein.-con., 6,306 lb. reinforcing. Bd. Co. Comrs., Aiken, engrs.

S. C., Bishopville—March 15, by Lee Co., constructing 4.2 mi. State Route 34, 16,000 cu.yd. excav., 10,468 cu.yd. sand clay surfacing, etc. Bd. Co. Comrs., Bishopville, engrs.

S. C., Gaffney—March 16, by Cherokee Co., constructing 1.7 mi. State Route 8, 35,340 cu.yd. excav., 18,820 sq.yd. plain concrete, sheet asphalt or asphaltic concrete. Cherokee Co. Highway Comn., Gaffney, engrs.

Fla., Tampa—March 20, by A. Brown, mayor, paving 13th St., 17,000 yd. asphalt blocks, 6,000 lin.ft. granite curb, 3,000 cu. yd. excav., 5,000 lin.ft. sub drain. $35,000.

Kentucky—March 14, by State Hy. Comn., Frankfort, improving 6,333 mi. Louisville-Bardstown Rd. from High Grove, Sta. 1128 plus 00 to Cox Creek Post Office, Sta. 1462 plus 39, State Project 3, Sect. B, Federal Aid Project 86, Nelson Co., 38,733 cu.yd. earth 3,669 cu.yd. solid rock and 945 cu.yd. borrow excav., 387 cu.yd. excav. structures, 75,371 lb. reinforcing, 66,105 sta.yd. overhaul, alternate types of surfacing as follows, 66,878 sq.yd. rein.-con., or 63,162 sq.yd. rock asphalt or bituminous concrete with 66,878 sq.yd. concrete base, or 66,878 sq.yd. rock asphalt or bituminous concrete, 21,945 ton crushed limestone, 11,146 cu.yd. napped limestone base, 3,343 ton bonding stone, or 66,878 sq.yd. rock asphalt or bituminous concrete, 15,048 ton crushed limestone, 66,878 sq.yd. modified telford base, 4,180 ton bonding stone, or 150,476 gal. bituminous material for bituminous material for bituminous macadam, 2,508 ton stone chips, 20,900 ton crushed limestone, alternate bases for bituminous surfacing, 13,004 cu.yd. napped limestone base, 3,901 ton bonding stone, or 66,878 sq.yd. modified telford base, 3,901 ton bonding stone; 8.501 mi. Louisville-Bardstown Rd. from Jefferson Co. line, Sta. 675 plus 60 to High Grove, Sta. 1128 plus 00, State Project 3, Sect. A, Federal Aid Project 86, Bullitt, Spencer and Nelson Counties, 59,709 cu.yd. earth, 30,780 cu.yd. solid rock and 42,393 cu.yd. borrow excav., 308,470 sta.yd. overhaul, 97,469 lb. reinforcing, 604 cu.yd. concrete, alternate types of surfacing as follows, 89,767 sq.yd. rein.-con., or 84,780 sq.yd. rock asphalt or bituminous concrete with 89,767 sq.yd. concrete base, or 89,767 sq.yd. rock asphalt or bituminous concrete, 20,197 ton crushed limestone, 89,767 sq.yd. modified telford base, 5,611 ton bonding stone, or 89,767 sq.yd. rock asphalt or bituminous concrete, 29,454 ton crushed limestone, 14,961 cu.yd. napped limestone base, 4,488 ton bonding stone, or 201,976 gal. bituminous material for bituminous macadam, 28,051 ton crushed limestone, 3,366 ton stone chips or pea gravel, alternate bases for bituminous macadam 89,767 sq.yd. modified telford base, 5,236 ton bonding stone or 17,454 cu.yd. napped limestone base, 5,236 ton bonding stone; 19.618 mi. Louisa-Paintsville Rd. from Powhatan St. in Louisa, Sta. minus 23 plus 57.8 to Johnson Co. line at Lowmansville, Sta. 969 plus 28, State Project 6, Sect. B, Federal Aid Project 78, Lawrence Co., 20 acre clearing, 197,082 cu.yd. earth, 15,229 cu.yd. loose rock, 81,665 cu.yd. solid rock and 64,714 cu. yd. borrow excav., 134,750 sta. yd. overhaul, 2,998 cu.yd. cement rubble masonry, 1,295 cu.yd. concrete, 214,731 lb. reinforcing, 4,742 lin.ft. 18 in. and 2,282 lin.ft. 24 in. standard vitr. pipe, 680 cu.yd. 1:3:6 encasing concrete or 4,742 lin.ft. 18 in. and 2,282 lin.ft. 24 in. rein.-con. pipe, etc.; 11.297 mi. Paintsville-Louisa Rd., from paved street in Paintsville, Sta. 0 plus 00 to Lawrence Co. line, Sta. 599 plus 54, State Project 6, Sect. A, Federal Aid Project 77, Johnson Co., 9 acres clearing, 115,742 cu.yd. earth, 2,674 cu.yd. loose rock, 52,993 cu.yd. solid rock and 18,108 cu.yd. borrow excav., 96,801 sta. yd. overhaul, 1,183 cu.yd. cement rubble masonry, 1,243 cu.yd. concrete, 149,480 lb. reinforcing, 1,888 lin.ft. 18 in. and 832 lin.ft. 24 in. standard vitr. pipe, 262 cu.yd. 1:3:6 encasing concrete or 1,888 lin.ft. 18 in. and 832 lin.ft. 24 in. rein.-con. pipe, etc.; 8.301 mi. Lexington-Covington Rd., from 1 mi. north of Crittenden, Sta. 0 plus 00 (Kenton Co. line), to south corporate limits, Dry Ridge, Sta. 446 plus 34, State Project 5, Sect. C, Federal Aid Project 90, Grant Co., 69,694 cu.yd. earth and 3,777 cu.yd. borrow excav., 31,638 sta.yd. overhaul, 214 cu.yd. concrete, 82,795 sq.yd. rock asphalt, bituminous concrete or rein.-con. surfacing, 87,665 sq.yd. concrete base, etc.; 9.416 mi. Whitley City-Tennessee State Line Rd. from Whitley City, Sta. 0 plus 00 to Tennessee State line, Sta. 408 plus 80, not including town of Stearns, State Project 22, Sects. B and C, McCreary Co., 27 acres clearing, 67,034 cu.yd. earth, 208 cu. yd. loose rock, 25,082 cu.yd. solid rock and 2,106 cu.yd. borrow excav., 56,277 sta. yd. overhaul, 261 cu.yd. concrete, 2,038 lin.ft. 18 in. and 564 lin.ft. 24 in. standard vitr. pipe, 250 cu.yd. 1:3:6 encasing concrete or 2,038 lin.ft. 18 in. and 564 lin.ft. 24 in. rein.-con. pipe, surfacing with bituminous macadam or waterbound macadam or waterbound macadam surface treated on slag or limestone base. J. S. Boggs, state highway engr.

Ohio—March 13, by Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving 4.011 mi. Sect. "A" Pomeroy-Marietta Rd., Athens Co., brick $210,681, rein.-con. $184,797. L. C. Herrick, dir. highways.

O., Cincinnati—March 16, by Hamilton Co., grading, bridging and paving with 1 course 10 in. concrete, 8,126 ft. Sharon Ave., 20 ft., $84,414. E. A. Gast, Court House, co. surv. Noted March 1.

O., Cincinnati—March 16, by Hamilton Co. grading and bituminous macadam paving 26,300 sq.yd. Ridge Rd., $40,388. E. A. Gast, Court House, engr. Noted March 1.

O., Cleveland—March 14, paving Beyerle Pl. S. E. from Beyerle Rd. S. E. to Independence Rd. S. E., Central Ave. S. E. from East 14th to East 55th Sts., Carnegie Ave. S. E. from East 100th St. to Fairchild Ave. S. E., Corlett Ave. S. E. from East 116th to East 131st Sts., Henritze Ave. S. W. from West 45th to West 47th Sts., Lamontier Ave. S. E. from Woodhill Rd. S. E. to East Blvd. S. E., Maryland Ave. S. E. from Warner Rd. S. E. to East 85th St., Schade Ave. N. E. from East 61st St. to Norwood Rd. N. E., Stardale Court S. W. from West 44th Pl. to West 42nd St., Tyler Court S. W. and West 39th Pl. from West 35th St. to Daisy Ave. S. W., West 47th and West 48th Sts. from Memphis Ave. S. W. to Ardmore Ave. S. W., Curtiss Ave. N. E. from East 55th to East 59th Sts., Lamont Ave. S. E. from East 93rd St. to point 180 ft. easterly. R. Hoffman, city hall, engr. Noted Jan. 11.

O., Columbus—March 13, by W. H. Duffy, dir. Pub. Serv., grading, curbing, extending water service pipe and sewer connections and repaving 5,944 ft. 4th St. from State St. to Livingston Ave., 52½ ft., asphalt $102,581, brick $100,306, Durax block $120,381. R. H. Simpson, city engr.

Ind., Angola — March 10, by Auditor Steuben Co., grading and graveling 19,780 ft. Osfall Rd., 16 ft. $30,422. F. Hubbell, Angola, engr. Noted March 1.

Ind., Brazil—March 17, by Auditor Clay Co., paving 5,118 ft. National Avenue Rd., 18 ft., 10,237 sq.yd. vitr. brick on concrete, $25,726. F. E. James, Brazil, engr. Noted March 1.

Ind., Hammond—March 19, by Auditor Lake Co., grading and graveling 4 mi. Beaubien Rd., 16 ft., $32,842, and 3 mi. Kaminski Rd., 16 ft., $26,425. R. Seely, Hammond, engr. Noted March 1.

Ind., Laporte — March 10, by Auditor Laporte Co., grading and graveling 17,147 ft. H. F. Carpenter Rd., 16 ft., $26,197, 3 mi. Boehlke Rd., 16 ft., $25,131; 3.1 mi. Kalwitx Rd., 16 ft., $25,743. P. Summy, Laporte, engr. Noted March 1.

Ind., Princeton—March 10, by Auditor Gibson Co., grading and graveling 12,894 ft. Knowles Rd., 20 ft., $25,367; 2.5 mi. Epperson Rd., 16 ft., $25,275; crushed stone surfacing 16,820 ft. E. E. Whiting Rd., 16 ft., $25,350. H. C. Morrison, Princeton, engr. Noted March 1.

Ind., Rockport—March 10, by Auditor Spencer Co., graveling 2.9 mi. Smith Rd., 16 ft. $26,455. Z. X. Bennett, Rockport, engr. Noted March 1.

Ind., South Bend—March 12, by Auditor St. Joseph Co., grading and graveling 2.9 mi. A. Bentter Rd., 16 ft. $27,309. P. R. Gillin, South Bend, engr. Noted March 1.

Ind., Terre Haute—March 10, by Auditor Vigo Co., paving 2,740 ft. Donavon Ave., 36 ft., in West Terre Haute, 10,916 sq.yd. concrete on concrete. $25,230. G. R. Grimes, Terre Haute, engr. Noted March 1.

Ind., Vernon — March 10, by Auditor Jennings Co., crushed stone surfacing 16,100 ft. Haley Rd., 16 ft., $25,242; grading and graveling 14,080 ft. Wilds Rd., 16 ft., $25,789. C. W. Miles, North Vernon, engr. Noted March 1.

Ind., Versailles—March 10, by Auditor Ohio Co., surfacing 19,040 ft. Hanna Rd., 16 ft., 33,824 sq.yd. waterbound macadam. $31,139. J. E. Wright, Versailles, engr.

Wis., Elkhorn—March 13, Walworth Co., Court House, grading and surfacing Lake Geneva-Genoa Junction Rd., commencing at Main St., Lake Geneva and extending 9 mi. southeasterly on State Trunk Highway 12, to present concrete at Genoa Junction, 62,624 cu.yd. unclassified excav., 86,380 sq. yd. 18 ft. concrete surfacing, 14,364 sq.yd. full width concrete surfacing, etc. H. J. Peters, co. highway comr.

Wis., Juneau—March 15, by Dodge Co. Road and Bridge Com., grading, draining and surfacing 5.74 mi. Theresa-Huilsburg Rd. beginning at Huilsburg and extending northerly, 28,700 cu.yd. earth excav., 9,191

Streets and Roads (Continued)

cu.yd. gravel surfacing, etc.; 3.15 mi. Fox Lake-Markesan Rd., 11,816 cu.yd. earth excav., 5,512 cu.yd. gravel surfacing, etc.; 5.4 mi. Reeseville-Hubbleton Rd., 18,043 cu. yd. earth excav., 8,554 cu.yd. gravel surfacing, etc.; 4 mi. Leroy-Oakfield Rd. beginning at southeast corner, thence northerly 3 mi., and easterly 1 mi., 9,953 cu.yd. earth excav., 6,387 cu.yd. gravel surfacing, etc.; 10.29 mi. Washington Co. line Hustisford Rd., State Trunk Highway 29, beginning at Washington Co. line and extending westerly to end of 1922 concrete, west of Hustisford, Sect. A, 27,347 cu.yd. earth, 1,132 cu.yd. loose rock, 707 cu.yd. borrow excav., 2,000 cu.yd. channel change, 55,238 sq.yd. 18 ft. concrete pavement, etc. Sect. B, 1.5 acres clearing, 29,741 cu.yd. earth, 6,314 cu.yd. borrow, 635 cu.yd. loose and 200 cu.yd. solid rock excav., 53,474 sq.yd. concrete pavement, etc.; 14.7 mi. Waupun-Fox Lake Randolph Rd., State Trunk Highway 33, beginning at Waupun and extending westerly to Columbia Co. line, Sect. A Sta. 0-Sta. 400, 16,326 cu.yd. earth, 700 cu.yd. loose and 1,450 cu.yd. solid rock excav., 6,387 cu.yd. borrow, etc. Sect. B, Sta. 400-Sta. 782 plus 53, 19,484 cu.yd. earth excav., 12,374 cu.yd. borrow, 75,767 sq.yd. 18 ft. concrete surfacing, etc.; Horicon-Juneau Water Town Rd., State Trunk Highway 26, Sect. A beginning at concrete pavement of State Trunk Highway 118 north of Juneau and extending southerly through Juneau toward Oak Grove to Sta. 261 plus 00, also beginning at junction of State Trunk Highways 118 and 26 in this city and extending easterly on State Trunk Highway 118, to 1922 concrete pavement, 34,316 cu.yd. earth excav., 1,530 cu.yd. borrow, 86,206 sq.yd. concrete pavement, etc. Sect. B, 4.92 mi. beginning at Sta. 261 plus 00 about ½ mi. east of Oak Grove and extending southerly to intersection with State Trunk Highway 29 near northwest corner of Sect. 28 in town of Clyman, 18,221 cu.yd. earth excav., 52,452 sq.yd. 18 ft. concrete pavement, etc.; 4.15 mi. Juneau-Watertown Rd., State Trunk Highway 26, beginning at north city limits of Watertown and extending northerly to end of present concrete, 19,923 cu.yd. earth excav., 629 cu.yd. borrow, etc.; 3.85 mi. Watertown-Lebanon Rd., beginning in city of Watertown and extending northeasterly, this job rough graded with exception of 0.35 mi. in city limits of Watertown, 1,200 cu.yd. fine grading, 1,500 cu.yd. earth excav., etc.; 1.41 mi. Columbus-Beaver Dam Rd., State Trunk Highway 31, beginning at railroad tracks extending northeasterly into city of Beaver Dam, 3,356 cu. yd. earth excav., 14,965 sq.yd. 18 ft. concrete, etc. Cement to be furnished by contractor.

Wis., Port Washington — March 12, by Ozaukee Co. Road and Bridge Com., Court House, grading and surfacing Port Washington-Cedar Grove Rd., commencing at Belguin-Lake Church Rd. and extending 3 mi. south, 11,790 cu.yd. earth excav., 31,300 sq.yd. 18 ft. concrete surfacing, etc. W. C. Bartelt, co. engr.

Wis., Waukesha — March 14, by Waukesha Co. Road and Bridge Com., Court House, grading and surfacing Oconomowoc-Monterey Co. Line Rd., commencing at Dodge Co. line on State Trunk Highway 67 and extending 5.65 mi. in southerly direction to Oconomowoc, 24,000 cu.yd. earth excav., 57,100 sq.yd. 18 ft. concrete surfacing, 4,513 sq.yd. full width concrete surfacing. C. J. Hahn, co. highway comr.

Ia., Gowrie—March 12 (change of date) by T. E. Johnson, clk., 20,500 yd. gravel, 8,000 lin.ft. curb and gutter. $30,000. Bruce & Grupe, 408 Finance Bldg., Omaha, Neb., engrs. Noted Feb. 15.

Minn., Duluth — March 17, by J. A. Phillips, city comr., paving 3,725 ft. Gladstone Ave. from 40th Ave. E. to Superior St., 20 ft., 8,230 sq.yd. concrete, 7,000 cu. yd. earth and 10 cu.yd. rock excav. $46,099. E. K. Coe, city engr.

Minn., Fairmont—March 14, by W. M. Canfield, aud. Martin Co., 6.5 mi. Job 2302, State Rd. 8, 63,000 cu.yd. excav., 80 cu.yd. rein.-con. culverts; Job 2304, State Rd. 6, 43,000 cu.yd. excav., 36 cu.yd. rein.-con. culverts. $25,000. C. N. Krosch, Fairmount, engr.

Minn., Granite Falls—March 20, by G. H. Wilson, aud. Yellow Medicine Co., Job 2301, State Rd. 9, 97,000 cu.yd. earth and 3,000 cu.yd. loose rock excav., 160,000 cu. yd. overhaul; Job 2302, State Rd. 9, 15,000 cu.yd. earth excav., 24,000 cu.yd. overhaul. $25,000. F. Van Krevelen, Granite Falls, engr.

Minn., Preston—March 21, by F. J. Ibach, aud. Fillmore Co., 8 mi. Job 2301, State Rd. 9, 97,000 cu.yd. earth, 17,000 loose rock and 4,000 cu.yd. solid rock excav., 160,000 cu.yd. overhaul, 400 cu.yd. rein.-con. culverts and abutments, portable culverts; 3 mi. Job 2302, State Rd. 5, 25,000 cu.yd. earth excav., 380 cu.yd. loose and 380 cu.yd. solid rock excav., 12,000 cu.yd. overhaul, 150 cu.yd. rein.-con. culverts, portable culverts; 1.5 mi. Job 2303, State Rd. 10, 17,000 cu.yd. earth and 2,000 cu.yd. loose rock excav., 30,000 cu.yd. overhaul, portable culverts; 2 mi. Job 2304, State Rd. 11, 24,000 cu.yd. earth excav., 5,000 cu.yd. loose and 1,600 cu.yd. solid rock excav., 28,000 cu.yd. overhaul, 90 cu.yd. rein.-con. culverts, portable culverts. $62,000. W. Dunbar, Preston, engr.

Minn., St. James—March 14, by A. G. Countryman, aud. Watonwan Co., Job 2301, State Rd. 12, 67,488 cu.yd. excav., haul and place 914 lin.ft. 12-36 in. corrugated metal culverts, etc., Job 2303, State Rd. 4, 29,536 cu.yd. excav., 50,818 cu.yd. overhaul, 52 lin.ft. 12 in. corrugated metal culverts, etc. $25,000. T. J. Buhl, St. James, engr.

Minn., Worthington—March 22, by C. J. Kall, aud. Nobles Co., 4 mi. Job 2304, State Rd. 11, 22,411 cu.yd. excav., 20 cu.yd. loose rock excav., 17,190 sta.yd. overhaul, corrugated metal and sectional concrete culverts; 7.5 mi. Job 2305, State Rd. 4, 48,505 cu.yd. earth and 50 cu.yd. loose rock excav., 58,390 sta. yd. overhaul, corrugated metal, sectional concrete and monolithic culverts; 6.5 mi. Job 2306, State Rd. 3, 43,218 cu.yd. earth and 100 cu.yd. loose rock excav., 49,642 sta.yd. overhaul, corrugated metal, sectional concrete and monolithic culverts; 6.5 mi. Job 2307, State Rd. 8, 34,520 cu.yd. earth and 249 cu.yd. loose rock excav., 26,480 sta.yd. overhaul, corrugated metal and sectional concrete culverts; 6 mi. Job 2310, State Rd. 9, 35,866 cu.yd. earth and 150 cu.yd. loose rock excav., 44,620 sta. yd. overhaul, corrugated metal, sectional and monolithic culverts. $40,000. N. S. Thayer, Worthington, engr.

Kan., Holton—April 4, by Comrs. Jackson Co., earth road and bridges on 8.797 mi. Holton to Mayette Rd., Federal Aid Project 149, A. B. 29½ ft., 38,400 cu.yd. earth excav., $50,000. P. Wright, co. engr. Noted Feb. 15.

Kan., Independence—March 21, by Comrs. Montgomery Co., paving 5.4 mi. Federal Aid Project 121, Sect. B, 18 ft., 57,244 sq. yd. bituminous, 24,000 cu.yd. earth and 1,000 cu.yd. rock excav. $115,000. H. K. Hibbard, co. engr.

Kan., Pittsburgh—March 15, by L. D. Cornelius, engr., Pittsburgh, paving 11 blocks with brick on 5 in. concrete. Noted Feb. 8.

Kan., Topeka — April 5, by Comrs. Shawnee Co. 6.465 mi. Dover Rd., Federal Aid Project 141, Sects. A and B, 18 ft., 15,450 lin.ft. concrete curb and gutter, 35,708 cu.yd. earth excav., 68,923 sq.yd. concrete. $270,000. R. H. Pennartz, co. engr.

Neb., Omaha—March 13, by City Clerk, paving and curbing Dist. 1381, Dupont St. from 29th to 30th Sts., Dist. 2060, Camden Ave. from 27th to 30th Sts., Dist. 2149, 23rd St. from O to Q Sts., Dist. 2164, Valley St. from 24th to 25th Sts., Dist. 2187, 12th St. from Abor to Frederick Sts., Dist. 2210, 31st Ave. from Belvedere Blvd. to Ida St., Dist. 2229, Miami St. from alley west of 49th to 50th Sts., Dist. 2253, Mayberry St. from 55th to 57th Sts., Dist. 2307, Yale Place Dist. portions of Patrick and 33rd Aves., Burdette, Grant, 34th and Erskine Sts., Dist. 2316, McKinley St. from 30th St. west to city limits, Dist. 2317, Dodge St. from Saddle Creek Rd. to 46th St., Dist. 2318, 52nd St. from Nicholas St. to Military Ave.; paving Dist. 2078, Miami St. from 56th to 60th Sts.; surfacing Dist. 2279, 27th St. from N to L Sts., Dist. 2280, 33rd St. from Martha to Center Sts., Dist. 2281, 34th St. from Martha to Center Sts., Dist. 2282, Castelar St. from 13th to 15th Sts., Dist. 2284, Frances St. from 32nd Ave. to 34th St., Dist. 2289, M St. from 27th St. west to Union Pacific R.R. right of way, Dist. 2290, Park Ave. from Farnam St. to Dewey Ave., Dist. 2306, Vinton St. from 20th to 24th Sts.; repaving Dist. 2301, 20th St. from Douglas to Howard Sts., Dist. 2319, 24th St. from Lake to Spaulding Sts. Bids on vitr. brick, granite block, wood block, asphalt and concrete. H. Beal, city engr.

S. D., Sioux Falls—March 20, for 39,000 sq.yd. portland cement concrete, rein.-con., bituminous concrete or sheet asphalt. S. B. Howe, city engr.

Mo., St. Louis—March 27, by Bd. Pub. Serv., City Hall, concrete curbing and guttering and paving 962 ft. Washington Blvd. from Laurel to DeGiverville Aves., 21 ft., 2,295 sq.yd. warrenite bitulithic or refined asphalt, $6,440; 1,768 ft. Westminster Pl. from DeBaliviere to Hamilton Sts., 22 ft., 4,677 sq.yd. warrenite bitulithic or refined asphalt, $13,500; 1,170 ft. McPherson Ave. from DeBaliviere to Laurel Sts., 25 ft., 3,275 sq.yd. warrenite bitulithic or refined asphalt, $9,100; 1,484 ft. Shaw Ave. from Grand Blvd. to 39th St., 42 ft., 6,820 sq.yd. warrenite bitulithic or refined asphalt on concrete over Telford, $28,400; 1,851 ft. Leonard Ave. from Morgan to Easton Sts., 36 ft., 7,975 sq.yd. warrenite bitulithic or refined asphalt, $19,400; 266 ft. Brannon Ave. from Sutherland to Bancroft Sts., 36 ft., 945 sq.yd. warrenite bitulithic, $4,600; 524.54 ft. Neosho St. from Kingshighway westwardly, 26 ft., 1,620 sq.yd. warrenite bitulithic, 385 cu.yd. grading, $7,500; 1,100 ft. Kingsbury Pl. from point 30 ft. east of Laurel St. eastwardly 30 ft., 2,640 sq.yd. warrenite bitulithic, $6,050; 2,751 ft. Page Blvd. from Kingshighway to Union St., 60 ft., 13,585 sq.yd. warrenite bitulithic, $30,800; 1,249 ft. Wilmington Ave. from Colorado St. to Grand-Kingshighway, 26 ft., 1,600 cu.yd. grading, 3,860 sq.yd. vitr. brick on 6 in. concrete, etc., $21,350; 749 ft. Glasgow Ave. from intersection of Kossuth and 25th Sts. to its intersection with Penrose and 22nd Sts., 15 ft., 1,275 sq.yd. vitr. brick on 5 in. concrete, 765 cu.yd. grading, $8,000; 536 ft. Blase Ave. from Bway. easterly to western line Henry W. Kuhs subdivision, 26 ft., 1,585 sq.yd. 8 in. rein.-con., 1,035 cu.yd. grading, $6,900. W. W. Horner, 300 City Hall, engr. Noted Oct. 26 and Jan. 11.

Arkansas—March 12, by Comrs. Little Rock-Hot Springs Hy. Dist. at office of Arkansas State Hy. Comn., Little Rock, paving 42 mi. Little Rock-Hot Springs Highway from city limits of Hot Springs to Saline-Pulaski Co. line, 14 and 18 ft., concrete or asphalt. Will be let in 7 contracts approximately 6 mi. in each. A. M. Lund, 527 Southern Trust Bldg., Little Rock, engr.

Tex., Clarksville—March 16, by G. Morrison, judge Red River Co., grading and gravel surfacing 7.5 mi. State Highway 5 in Detroit Rd. Dist., 12 ft., 812 cu.yd. concrete, 43,126 cu.yd. roadway excav., 45,449 cu.yd. borrow, 1,948 sq. yd. concrete pavement, 85,253 lb. reinforcing. $103,047. J. B. Reiman, co. engr.

Tex., Corpus Christi—March 13, by H. R. Sutherland, judge Nueces Co., surfacing road already graded with 1 in. cold natural rock asphalt topping 10.97 mi. Corpus Christi-Robstown Highway, Federal Aid Project 341, 18 ft., 115,808 sq.yd. bituminous macadam, 20,016 cu.yd. gravel, 16,086 cu.yd. shell, $180,797; 11.71 mi. State Highway 12, from Robstown to Bishop, Federal Aid Project 342, 18 ft., 165.9 cu.yd. concrete, 123,617 sq.yd. bituminous macadam, 21,367 cu.yd. gravel, 17,170 cu.yd. shell, 9,846 lb. reinforcing, $213,800. C. E. Cocke, co. engr.

Oklahoma—March 14, by F. G. Simmons, state highway engr., Oklahoma City, gravel surfacing 14.869 mi. road from Ravia to county line, Federal Aid Project 68, Johnson Co., 54,351 lb. reinforcing, 12,943 cu.yd. borrow, 78,482 cu.yd. earth and 1,700 cu. yd. rock excav., 139,666 sq.yd. gravel surfacing, 80,435 yd. overhaul, 2,510 yd. solid rock excav., 908 cu.yd. concrete; 4.052 mi. road between Tishomingo and Ravia, Federal Aid Project 67, Johnson Co., 35,963 cu.yd. earth excav., 8,906 cu.yd. borrow, 26,101 yd. overhaul, 1,485 cu.yd. concrete, 94,000 lb. reinforcing.

Wash., Spokane—March 19, by Comrs. Spokane Co., improving 11 mi. Elk Rd. between Pend Oreille Highway and Elk, 24,500 cu.yd. waterbound macadam, 75,000 cu.yd. earth excav., (gravel), 3,300 cu.yd. loose and 5,300 cu.yd. solid rock excav.; 4.8 mi. Valley Chapel-Mt. Hope Rd., 9,300 cu.yd. crushed rock, 42,000 cu.yd. earth and 1,300 cu.yd. loose rock excav. $60,000. H. J. Doolittle, Courthouse, Spokane, engr.

Calif., San Diego—March 19, by A. H. Wright, city clk., improving A and C Sts., 145,883 sq.ft. 1½ in. asphaltic concrete on 2½ in. bituminous base, etc.; 2nd and A Sts., 119,764 sq.ft. 2 in. asphalt, 1 in. binder, on 4 in. portland cement concrete, etc. F. A. Rhodes, city engr. Noted Jan. 25 and Feb. 8.

Ontario—March 21, by W. A. McLean, deputy minister of highways, Toronto, concrete pavement as follows: 2.75 mi. in Crumlin easterly, Contr. 894, 4 mi. from Essex to Madistone, Contr. 895, 2.4 mi. from Preston to Freeport, Contr. 896, 2 mi. in St. Thomas easterly, Contr. 938, mostly 20 ft. wide, $400,000; 4 mi. asphaltic concrete pavement from Hamilton southerly, Contr. 898, 30 ft. wide, $200,000; 3.1 mi. macadam road from Odessa easterly, Contr. 899, $60,000; macadam base course as follows: 3.9 mi. from west limits of Yonge Twp. easterly, Contr. 900, 2.3 mi. from Becketts Bridge to Chambers Corners, Contr. 901, 5.1 mi. from Ashton to Carleton Pl., Contr. 904, 3.8 mi. from point 3 mi. west of Cornwall westerly, Contr. 920, $150,000; grading as follows: 1.8 mi. in Hawkesbury, Contr. 902, 4.1 mi. from Richardson Side Rd. to Townline, Contr. 903, 4 mi. from point 3.3 mi. south of Elgin southerly, Contr. 905, 4 mi. in Kenilworth.

Streets and Roads (Continued)

Contr. 906, 4 mi. Cedar Springs, Contr. 907, 4 mi. from point 3 mi. north of St. Johns northerly, Contr. 909, 4.8 mi. from Arkona south to Sarnia Gravel Road, Contr. 910, 4 mi. from Clinton to Seaforth, Contr. 911, 2.5 mi. from point 2 mi. west of Clifford westerly, Contr. 912, 4.9 mi. from Tillsonburg easterly, Contr. 913, Tooleys Hill, Contr. 879, 2 mi. from Stittsville to Stanleys Corners, Contr. 943, 4 mi. from Elgin Sta. northerly, Contr. 944, 7 mi. from Durham southerly, Contr. 945, 4 mi. in Orford, Contr. 946, 5 mi. in Ekfrid, Contr. 947, 1.4 mi. from point 3 mi. west of Parkhill, Contr. 949, 3.2 mi. from Clinton westerly, Contr. 950, 3 mi. from west limits of Welland Co. easterly on Forks Rd., Contr. 952, 1.8 mi. Proof Line 9th to 11th Con., Contr. 953, 4 mi. Sarnia Gravel Rd. from Akrona Side Rd. westerly, Contr. 844, $400,000; concrete bridge abutments as follows: extension to 2 steel bridges on Stratford-Goderich Rd., Contr. 954, two Walkerton bridges and Mildmay Bridge, Contr. 955, McKenzie Creek on Caledonia Rd., Contr. 957, Boston Creek on Caledonia Rd., Contr. 958, Bloomfield Bridge, Contr. 959, Elginfield Bridge, Contr. 962, $180,000; concrete culverts in King and Whitchurch Twps., Contr. 937, $10,000. Total est. $1,500,000. G. Hogarth, ch. engr.

Ont., Kitchener—March 15, by S. Cassel, clk. Waterloo Co., Court House, 24,373 sq. yd. 7 and 8 in. concrete pavements on Provincial Co. Rd. 109, also 14 ft. rein.-con. slab span near German Mills, on Co. Rd. 12. L. S. Lichty, Wellesley, road supt.

BIDS RECEIVED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, opened bids Feb. 28, granite paving (1) Dumont Ave., asphalt paving (2) Tapscott Pl., grading, curbing and flagging (3) New Utrecht Ave. (4) Parrott Pl., curbing and flagging (5) 66th St., from E. J. Galway, 676 9th Ave., New York City, (1) $1,616; J. D. Norton, 20 Sterling Pl., (1) $1,690; J. Meehan & Son, 74 Cortlandt St., New York, (1) $1,809; Uvalde Asphalt Paving Co., 1 Bway., New York, (2) $19,545; Sicilian Asphalt Paving Co., 41 Park Row, New York, (2) $20,190; Borough Asphalt Co., 1301 Metropolitan Ave., (2) $20,322; Castle Bros., Inc., Johnson Pl., (3) $9,523; F. Persicano, 350 Fulton St., (3) $9,798 (4) $4,852 (5) $1,679; G. M. Mandatto, 129 29th St., (3) $10,393; L. Mangeri, 190 31st St., (4) $3,707 (5) $1,815. Noted Feb. 22.

Pa., Phila.—F. H. Caven, dir. pub. wks., opened bids Feb. 20, paving (1) Robinson and Broad Sts. (2) Almond St. (3) Barbara, Bermuda, Howard, Marvine and Oxford Sts. (4) Sansom St. (5) 15th St. (6) various streets in Dist. 1 (7) streets in Dist. 3 (8) streets in Dists. 5, 6 and 7, from Barber Asphalt Paving Co., Land Title Bldg., (1) $25,687 (2) $5,654 (3) $26,569; Eastern Paving Co., Colonial Trust Bldg., (1) $27,532 (2) $5,950 (3) $27,875; Mack Paving Co., Nicetown Lane and Chelten Ave., (2) $5,080; Acchione & Canuso, 804 South 12th St., (4) $2,533; Centrola & Mezzola, Lincoln Blvd., (4) $2,857; J. Mehan & Sons, 914 Dauphin St., (5) $32,493; Fish-Rutherford Co., Real Estate Trust Bldg., (5) $35,977; United Paving Co., Colonial Trust Bldg., (5) $37,563 (6) $22,164 (7) $13,200 (8) $26,813; J. J. McHugh, South Penn Sq., (6) $25,175; Ryan Constr. Co., Real Estate Trust Bldg., (6) $25,398 (7) $11,512 (8) $28,152; F. Borrelli, 6413 Callowhill St., (7) $14,670 (8) $27,176.

Pa., Phila.—Opened bids Feb. 24, paving (1) 56th St. from Summer to Vodges Sts. and Price St. from Chew to MacMahon Sts., incl. 898 sq.yd. vitr. brick, 6,366 sq.yd. asphalt, 1,087 cu.yd. concrete base, (2) Callowhill St. from 15th St. to Parkway, incl. 1,030 sq.yd. vitr. brick, 544 sq.yd. granite block, 8,830 sq.yd. asphalt, 1,842 cu.yd. concrete base, (3) repaving with granite block 16th St. from Locust to Arch Sts., (4) 13th St. from South to Walnut Sts., 12,352 sq. yd. granite block, 2,065 cu.yd. concrete base, (5) pavements on several streets incl. 952 sq.yd. vitr. brick, 7,200 sq.yd. asphalt, 1,175 cu.yd. concrete base, from Barber Asphalt Paving Co., Land Title Bldg., (1) $25,109 (2) $39,223 (5) $28,454; Eastern Paving Co., Colonial Trust Bldg., (1) $25,877 (2) $40,174 (5) $28,788; Union Paving Co., 37th and Spruce Sts., (2) $29,548; Acchione & Canuso, 804 South 12th St., (3) $20,279; Laughlin & Flood, Real Estate Trust Bldg., (3) $21,224; Lombardi & Co., Lincoln Bldg., (3) $25,623; Centroni & Mezzola, Lincoln Bldg., (4) $42,610; J. Mehan & Sons, 914 West Dauphin St., (4) $43,367; Fish-Rutherford Co., Inc., Real Estate Trust Bldg., (4) $45,788.

Pa., Phila.—Opened bids Feb. 27, repaving (1) 15th St. from South to Spruce Sts., incl. 7,600 sq.yd. granite block, 1,700 cu.yd. concrete base, (2) 48th St. from Walnut to Larchwood Sts., 678 sq.yd. vitr. brick, 8,167 sq.yd. asphalt, 1,474 cu.yd. concrete base, (3) Schiller St., from Thompson to Salmon Sts., 179 sq.yd. vitr. brick, 1,099 sq.yd. asphalt, 208 cu.yd. concrete base, from J. Mehan & Sons, 715 West Dauphin St., (1) $37,043; Acchione & Canuso, 815 South 12th St., (1) $42,094; Fish-Rutherford Co., Real Estate Trust Bldg., (1) $43,075; Union Paving Co., 37th and Spruce Sts., (2) $26,442 (3) $4,236; Eastern Paving Co., Colonial Trust Bldg., (2) $27,578 (3) $4,476; Mack Paving Co., Nicetown Lane, (3) $4,321.

Pa., Wilkes-Barre—F. H. Gates, city clk., resurfacing streets during 1923, from C. F. Goeringer Constr. Co., 51 South Washington St., $2.80 per sq.yd. for asphalt, $18 per ton asphalt binder, $2 per sq.yd. for 6 in. concrete base; Neumeyer Bros., Bethlehem, $3 per sq.yd. for asphalt, $17 per cu.yd. for concrete binder, $2 per sq. yd. for concrete base.

D. C., Wash.—Dist. Comrs., 509 Dist. Bldg., opened bids March 1, grading, improving and paving streets, roads and avenues, (1) 33,000 cu.yd. grading for street paving (not incl. stone salvaged and paid for as such) (2) separating and salvaging 11,000 cu.yd. macadam stone (3) constructing 70,000 lin.ft. 8 in. cement curb (4) constructing 51,400 sq.yd. 6 in. cement roadway (5) 88,700 cu.yd. 7 in. cement roadway (6) constructing additional 80,700 cu.yd. concrete, from Cranford Co., 2426 E St., N. W., (1) $0.95 per cu.yd. (2) $1.20 (3) $0.69 (4) $1.81 (5) $2.02 (6) $8.90, total $371,514; W. F. Brenizer Co., 101 New York Ave., N. E., (1) $0.75 (2) $1.25 (3) $0.75 (4) $1.99 (5) $2.39 (6) $9, $411,542; McGuire & Rolfe, Virginia Ry. and Power Bldg., Richmond, Va., (1) $0.75 (2) $0.75 (3) $0.55 (4) $2.27 (5) $2.56 (6) $12, $424,934. Noted Feb. 15.

Md., Baltimore—Paving Comn 214 East Lexington St., opened bids grading, curbing and paving with sheet asphalt, 22,365 sq.yd. various streets, Contr. 230 OANA, from Amer. Paving Co., Montebello St., $78,559; Baltimore Asphalt Block and Tile Co., 1320 North Monroe St., $87,350; P. Flanigan & Son, Harford Rd. and Baltimore & Ohio R.R., $87,777.

Virginia—State Hy. Dept., Richmond, opened bids Feb. 14, soil road on (1) 1 mi. road from Barboursville to Green Co. line, Project F 135 C, Orange Co. (2) 2.7 mi. road from Pearsburg to Ripplemead, Project F 107, (3) 7.5 mi. road from Brookneal to Volens, Project F 141 B; bituminous macadam on (4) 2 mi. road, Project F 136 A, Green Co. (5) 11.07 mi. road, Project F 192 C; concrete on (6) 6.13 mi. road from Clarksville to North Carolina line, Project F 178; (7) 5 mi. road from Big Island to Snowden, Project F 48 C, Bedford Co., (8) various roads in Clarksville, Project S 158, Mecklinburg Co.; (9) 3 concrete bridges over Hunting, Battery and Peters Creeks, Bedford Co., (10) 143 ft. iron bridge over Sandy River, Project F 186 B, Pittsylvania Co., (11) 77 ft. bridge over Spottsylvania Power Company's Canal at Falmouth, from L. R. Colbert, Fredericksburg, (1) $10,646 (4) $60,519; H. B. Baker, Columbus, (1) $11,266, (4) $65,700; C. S. Luck, Ashland, (1) $11,434, (4) $66,826; Warden Constr. Co., Pulaski, (2) $60,953; J. R. Vaughan, Roanoke, (2) $61,401; W. R. Midkeff, Ivanhoe, (2) $62,043; Battershill & Goode, Virgilina, (3) $49,502; Davis & Carson, Cumberland, (3) $50,175, (7) $192,341; Clark & Atkinson, Charlottsville, (3) $50,294; H. A. McDonald, Lexington, (5) $223,901; Ellis & Brook, Staunton, (5) $238,778; Pace Constr. Co., Roanoke, (5) $266,585, (7) $196,125, (9) $13,498; Southern Constr. Corp., Petersburg, (6) $214,016; Allport Constr. Co., Mutual Bldg., Richmond, (6) $219,329, (8) $51,369, (10) $10,335; Overstreet & Nance, Bedford, (6) $221,604, (8) $52,890, (9) $14,835; W. T. Jones, (7) $196,865; Tinsley Constr. Co., Roanoke, (8) $49,937; Ballard & Herring, Bedford, (9) $14,715; Roanoke Iron Wks., Roanoke, (10) $8,569; Major Constr. Co., (11) $20,413. Noted Jan. 25.

Louisiana — State Hy. Comn., Reymond Bldg., Baton Rouge, opened bids Feb. 13, grading and shell surfacing 6½ mi. Federal Aid Project 106 on New Orleans-Mississippi Highway, from Slidell to West Rigolets, from Hampton-Reynolds, Maison Blanche Bldg., New Orleans, $121,299; L. A. Loustalot, Franklin, $154,182. Noted Jan. 25.

Louisiana — State Hy. Dept., Reymond Bldg., Baton Rouge, opened bids Feb. 16, constructing 7.75 mi. Benton-Ferry Rd., from Moore Paving Co., Amite, $53,325, Barta & Multersbough, Lake Charles, $63,100, Burke & Jones, New Orleans, (street address not available) $65,137; 6.36 mi. Minden-Arcadia Highway, from Spencer Bros., Minden, $65,913, Lawrence, Nixon & Philips, Jackson, Miss., $66,913, J. C. Reeves, Pearson, $77,414.

Wis., West Bend—Washington Co. concrete surfacing, etc., 3.4 mi. Milwaukee-Germantown Rd., from Monad Constr. Co., 122 West Main St., Wauwatosa, $73,279; F. Doherty Co., 4419 North Ave., Milwaukee, $75,618. Noted Feb. 22.

Wis., Wisconsin Rapids—Paving various streets, 22,400 sq.yd. (a) plain concrete, (b) rein.-con., from F. Bossert, Wisconsin Rapids, (a) $2.27, (b) $2.41; Rood Constr. Co., Wisconsin Rapids, (a) $2.40, (b) $2.60; 13,880 lin.ft. combined concrete curb and gutter, from J. Peterson, Wisconsin Rapids. Noted Feb. 15.

Tex., Del Rio—Val Verde Co., grading, gravel surfacing, etc., 11.82 mi. State Highway 12, Del Rio-Comstock Rd., 16 ft., 956.2 cu.yd. concrete, 10,463 cu.yd. roadway, 52,288 cu.yd. borrow, 955 cu.yd. loose and 5,028 cu.yd. solid rock excav., 42,109 lb. reinforcing, 24,180 cu.yd. gravel, from Rice & Bates, Austin (street address not available), $54,803; McCall-Moore Eng. Co., Amicable Bldg., Waco, $57,022; C. M. Kelly & Co., 503 Barrett Pl., San Antonio, $62,003. Engrs. est. $78,950.

Tex., Henderson—Rusk Co. gravel and clay surfacing 14.93 mi. State Highway 26; 12 ft., from Standifer & Wood, Royse City, $32,472; D. L. Thornton, Nacogdoches, $33,312; C. Arnold and T. J. Walt, Henderson, $33,733; 9,516 cu.yd. clay and 26,261 cu.yd. gravel to be furnished by county. Engrs. est. $49,035. Noted Jan. 25.

Tex., Houston—Paving with Uvalde rock asphalt Pecore St. from North Main St. to Houston Heights, from S. Shamabugh, Larendon Bldg., $59,724; Uvalde Rock Asphalt Co., Houston, (street address not available), $59,725. Engrs. est. $60,000.

Tex., Liberty—Liberty Co. grading, etc., 34.54 mi. State Highway 3, Federal Aid Project 352, 18-30 ft., from Howard Kenyon Dredging Co., 3603 McKinney Ave., Houston, $196,500; Smith Bros., 311 Central State Bank Bldg., Dallas, $200,232; J. F. Hamer, Stop Interurban 6, Ft. Worth, $218,590. Noted Feb. 8.

Calif., Los Angeles—Improving Compton Ave. between Vernon Ave. and south city limits, from G. H. Oswald, 366 East 58th St., $80,175; Railroad Ave. between Anaheim St. and city limits, from W. E. Hall, 500 Market St., Riverside, $96,130. Noted Feb. 22.

Calif., San Diego — Common Council opened bids Feb. 26, improving (1) Maple, Nutmeg and Olive Sts., (a) 178,918 sq.ft. 1½ in. asphaltic concrete on 2½ in. bituminous, (b) 389 lin.ft. cement concrete curb, (c) 1,033 sq.ft. cement concrete sidewalk, (d) 1,128 sq.ft. gutter, (2) Laurel, Curlew, Brant, Union, Kalmia and 3rd Sts., (e) 281,189 sq.ft. 1½ in. asphaltic concrete on 4 in. Cement concrete, (f) 285 lin.ft. cement concrete curb, (g) 2,189 sq.ft. gutter surfacing with 1½ in. asphaltic concrete, from California Constr. Co., 528 Granger Bldg., (1a) $0.163 (1b) $0.72 (1c) $0.22 (1d) $0.06 (2e) $0.2384 (2f) $0.75 (2g) $0.08; Griffith Co., 25 14th St., (1a) $0.169 (1b) $0.72 (1c) $0.23 (1d) $0.10; G. R. Daley, 4430 Boundary St., (1a) $0.17 (1b) $0.65 (1c) $0.22 (1d) $0.70 (2e) $0.2075 (2f) $0.65 (2g) $0.07; Warren Constr. Co., P. O. Box 1082, (1a) $0.175 (1b) $0.70 (1c) $0.21 (1d) 0.11; H. H. Peterson, Loma Portal, (2e) $0.255 (2f) $0.78 (2g) $0.10. Noted Feb. 15.

Calif., San Diego—Improving 8th West St. between N and Imperial Sts., from Griffith Co., 25 14th St., 11,659 sq.ft. 2 in. wearing surface with 1 in. binder course on 5 in. concrete at $0.35 per sq.ft., etc.; Ft. Stockton Dr. and Ampudia St., from G. R. Daley, 4430 Boundary St., 1,037 cu.yd. earth excav. $0.65, 175 cu.yd. earth embankment $0.01, 22,308 sq.ft. 1½ in. asphaltic concrete on 2½ in. bituminous $0.174 4,490 sq.ft. walks $0.22, 903 ft. curbs $0.65. Noted Jan. 11 and Feb. 8.

Calif., Sanger—Improving portions of (1) 5th, 8th and O Sts., 265,143 sq.ft. grading, 245,993 sq.ft. 1½ in. warrenite bitulithic on asphaltic concrete, 10,150 sq.ft. gutter, 5,646 ft. curb, 894 ft. culverts, (2) portions of L St., etc., 26,860 sq.ft. grading, 26,100 sq.ft. 1½ in. warrenite bitulithic on asphaltic concrete, 750 sq.ft. concrete gutter, from California Constr. Co., Mattei Bldg., Fresno, (1) $70,433 (2) $7,129; J. A. Dowling, Bakersfield, (1) $75,516; Clark & Henery Constr. Co., Ochsner Bldg., Sacramento, (1) $79,062; W. F. Hanrahan, Fresno, (street address not available), (2) $7,648; California Street & Road Impvt. Co., Roosevelt and Divisadero Sts., Fresno, (2) $7,721.

CONTRACTS AWARDED

N. Y., New York — H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., to Spedero & Turriamo, 827 East 217th St., curbing, laying sidewalks and crosswalks on Fieldston Rd. $2,838, grading, setting curb and laying sidewalks on Buhre Ave. $12,960, Jarvis Ave. $5,470, Mahan Ave. $15,641; to Gregario & Gabriele, 1129 8th

Streets and Roads (Continued)

Ave., Bogart Ave. $10,647; to P. J. Donovan, 30 Church St., Crosby Ave. $16,661, Hobart Ave. $7,550, Gainsborg Rd. $30,721; to J. F. Cavaluzzo, 1530 Walton Ave., Gleason Ave. $25,065. Noted March 1.

N. J., Spring Lake—Mayor and Council improving East Lake Dr., to J. F. Burke Constr. Co., 309 Park Ave., Plainfield, $104,228. Noted March 1.

Md., Baltimore—Mayor and City Council, repaving with sheet asphalt St. Paul St. from North Ave. to 25th St. and North Ave. from Charles St. to Greenmount Ave., to P. Flanigan & Son, Hartford Rd., along tracks Baltimore & Ohio R.R. Engrs. est. $150,000.

S. C., Kingstree—Williamsburg Co., constructing 12 mi. road, Project 177, to Lawler Cartledge, Pine Apple, Ala., $43,013; bridge on above road to C. E. Storey, Augusta, Ga., $10,853. Noted March 1.

Alabama—State Hy. Comn., Montgomery, grading and surfacing with sand-clay 6.8 mi. road from Midland City to Houston Co. line, Dale Co., to Dale Co., Ozark, $52,700; grading and surfacing with chert and gravel, 20.2 mi. road from Centerville to Woodstock, Bibb Co., to T. C. Goodrich, Albany, $183,000, culverts on above to E. L. Batson, Birmingham, (street address not available), $41,000; grading and surfacing with gravel and sand-clay 20 mi. road from Fullers Cross Roads to Brantley, Crenshaw Co., also bridges and culverts on above to Stanley & Singer, La Fayette, $114,000 and $41,000 respectively. Noted Jan. 25 and Feb. 15.

Miss., Canton—Paving 7 blocks with Kentucky rock asphalt on 6 in. concrete, also 6 x 24 in. curb and gutter, to Lawrance, Nixon & Phillips, Jackson, $44,850; 18 in. storm sewers, to H. R. Covington, Canton.

Tennessee—State Hy. Dept., Nashville, paving, 2.63 mi. Federal Aid Project 5, 16 ft., Greene Co., 23,227 sq.yd. 6 in. stone base course, 24,477 sq.yd. 2½ in. waterbound macadam surface course, etc., to J. E. French, Greenville, $29,400. Noted Feb. 1.

O., Canton—Stark Co. grading and paving 1.74 mi. Sect. B Canton-Sherman-Church Rd., 16 ft., monolithic brick, to Urban Bros., Massillon, $65,683. Engrs. est. $70,000. Noted Feb. 22.

O., Cincinnati — Hamilton Co. grading and bituminous macadam paving 9,800 ft. Newton Rd., 16 ft., and 15,840 ft. Hopewell Rd., 16 ft., to A. C. Pickelheimer, 3555 Mooney Ave., $31,223 and $32,730 respectively. Noted March 1.

O., Columbus—Grading, curbing, laying mains and sewer connections and paving 2 mi. Parsons Ave., 44 ft., asphalt, to Franklin Asphalt Paving Co., 209 South High St., $151,330; 2,021 ft. Belmont Ave., 24 ft., asphalt, to B. F. Patterson, 1214 Neil Ave., $30,025. Noted Feb. 8.

Ind., Evansville — Venderburgh Co., crushed stone surfacing 16,400 ft. Green River Rd., 16 ft., to O. Edmond, Evansville, $25,795. Engrs. est. $27,706. Noted Feb. 22.

Ind., Indianapolis—Paving 2.8 mi. English Avenue Rd., 20 ft., 26,895 sq.yd. asphalt on concrete, 10,200 cu.yd. earth excav., 3,300 cu.yd. fill, 199 cu.yd. concrete for culvert, etc., to Marion County Constr. Co., 1600 South West St., $73,400. Engrs. est. $83,638. Noted March 1.

Ind., Peru—Paving 5,300 ft. 5th St., 20,476 sq.yd. brick on concrete, to C. P. Burke, Peru, $72,829. Engrs. est. $96,751. Noted Feb. 22.

Ind., Princeton — Gibson Co., crushed stone surfacing 5 mi. H. W. Barrett Rd., and 40,112 ft. Graper Rd., both 16 ft., to F. H. Hull, Tipton, $40,873 and $61,469 respectively. Engrs. est. $49,174 and $73,893 respectively. Noted Feb. 22.

Michigan—F. F. Rogers, state highway comr., at office Machinac Co. Rd. Comrs., St. Ignace, grading and surfacing 7.804 mi. Federal Aid Project 80, Sects. C and D, Machinac Co., to Regan-Baker Co., Kewadin, incl. 81.4 cu.yd. 1:2:4 concrete $27.25, 19 cu.yd. 1:3:6. concrete $25, 82,314 sq.yd. gravel surface, Class B $0.675, total $82,327; 5.254 mi. Federal Aid Project 80, Sect. G, Machinac Co., to S. J. Groves & Sons Co., 120 Manhattan Bldg., Duluth, Minn., incl. 5 acres clearing $100, 14,782 cu.yd. excav. $0.54, 34.7 cu.yd. 1:2:4 concrete $25, 30 sq.yd. 1:3:6 concrete $23, 55,465 sq.yd. gravel surface Class B $0.68, total $52,360.

Wis., New London—Will pave Cemetery Rd. from Wyman to Jennings Sts. and from Jennings St. to city limits, 10,000 sq.yd. rein.-con., by day labor. Former bids rejected. H. R. Albert, Court House, Green Bay, engr. Noted Feb. 15.

Wis., Racine—Racine Co. State Road and Bridge Com. grading and paving River Road, to J. R. Griffith, 526 Wisconsin St., 19,602 cu.yd. earth excav. $0.79, 50 cu.yd. loose rock excav. $1.75, 43,160 sq.yd. concrete surfacing $1.39, 219 cu.yd. concrete for culverts $23, etc., total $91,015. Noted Feb. 15.

Wis., Waukesha — Waukesha Co. Road and Bridge Comn., concrete surfacing, etc., Templeton-Menomonee Falls Rd., to Froemming Bros., 1326 Humboldt Ave., Milwaukee, $130,033; State Trunk Highway 83, to McGucken Constr. Co., 92 Mason St., Milwaukee, $58,242. Noted Feb. 15.

Minn., Duluth—To A. Bodin & Sons, 3531 East 4th St., paving 2,330 ft. Glendale St. from 49th Ave. E. to 54th Ave. E., $33,268, Engrs. est. $39,119, 2,330 ft. Regent St. from 40th Ave. E to 45th Ave. E., $24,835, Engrs. est. $27,293, 2.330 ft. Tioga St. from 49th Ave. E. to 54th Ave. E., $29,086. Engrs. est. $30,923. Noted Feb. 22.

Minn., Waseca—Waseca Co., 11.6 mi. Job 2301, State Rd. 4, 70,500 cu.yd. excav., 750 lin.ft. sectional concrete culverts, 770 lin. ft. corrugated metal culverts, to Roach Co., Mankato, $30,426; 7 mi. Job 2305, State Rd. 13, 67,200 cu.yd. excav., 150 ft. corrugated metal culverts, 935 ft. sectional concrete culverts, to C. Jorgenson, Stewart, $22,835. Noted Jan. 25.

Kan., Fredonia—Paving 46 blocks, gravel macadam, concrete curb and gutter, to J. L. Shinn, Independence, $100,989. Noted Feb. 15.

Kan., Girard — Crawford Co. paving 1.979 mi. Walnut Englevale Branch, 18 ft., 6-8 in. concrete, to Du Bois & Co., Pittsburgh, 2,370 cu.yd. earth excav. $0.70 per yd., 21,016 sq.yd. 1 course concrete $2.54, etc., total $56,745; 4.037 mi. Radley Ringo Rd., 16 ft., bituminous macadam, to Independent Constr. Co., Pittsburg, 15,330 cu. yd. earth excav. $0.55, 38,342 sq.yd. bituminous macadam $1.35, 95,855 gal. bitumen $0.16 per gal., etc., total, $86,554; 0.942 mi. Arcadia Branch, 18 ft., 6-8 in. concrete, to Ziegler & Dalton, Junction City, 2,100 cu.yd. earth excav. $0.70, 10,322 sq.yd. 1 course concrete $2.54, etc., total $30,149. Noted Dec. 28.

Kan., Oswego—Labette Co. will gravel 12.896 mi. Federal Aid Project 2-D, 16 ft., by day labor. Former bids rejected. H. K. Scheidler, Oswego, engr. Noted Jan. 1.

Missouri—State Hy. Dept., Jefferson City, 4.871 mi. State Project Route 1, Sect. 106, Newton Co., to J. P. Wolfenbarger, Neosho, $52,525; 0.284 mi. State Project Route 32, Sect. 4, Dent Co., to Illinois Steel Bridge Co., Laclede Gas Bldg., St. Louis, $19,026. Noted Dec. 28 and Feb. 22.

Mo., Joplin—Paving Main St. from 20th to 32nd Sts., 9,360 sq.yd. concrete, to V. E. Koch, 419 Joplin St., $25,740.

Tex., Commerce — Paving, curbing and guttering 30,000 sq.yd. Commerce, Washington, Monroe, Caddo, Bonham and Park Sts., Uvalde rock asphalt, to Genl. Constr. Co., Cotton Exch. Bldg., Ft. Worth, $120,700. Noted March.

Tex., Denton—Paving 1.2 mi. West Oak St., 26,934 sq.yd. 2 in. rock asphalt on macadam, to W. M. Jagoe Co., Denton, $55,740. Engrs. est. $60,000.

Calif., Los Angeles—Improving Larchmont St. between Melrose and Beverly Sts., to Tryon & Brian, Tajo Bldg., $175,696. Noted March 1.

Calif., San Diego—Common Council improving Imperial Ave., Clinton St., etc., to J. Engebretsen, McNeece Bldg., $56,369. Noted Feb. 15.

Calif., San Diego—Grading, curbing, guttering and laying sidewalks on 37th, 39th, 4th Sts., et al., to J. Engebretsen, McNeece Bldg., $56,380. Noted Feb. 22.

Calif., San Diego — Improving Ivy St. between Balboa Park and India St., to California Constr. Co., 528 Granger Bldg., $27,804. Noted Jan. 25.

Industrial Works

PROPOSED WORK

R. I., Providence—M. W. Norton, Dorrance St. Garage, soon lets contract 3 story garage addition, brick and steel, plain foundation, Dorrance St. $75,000. W. R. Walker & Son, 49 Weybosset St., archts.

Pa., Pittsburgh—Frank & Seder Co., 5th and Smithfield Sts., having plans prepared by W. E. Snaman, archt., Empire Bldg., 3 story and basement, 88 x 200 ft. warehouse and garage, concrete and brick, 1819-1823 Bluff St. $200,000.

Pa., Quakertown—Krupp Fdry. Co. Inc., Lansdale, plans 1 story, 125 x 200 ft. foundry, here. Engineer and architect not announced.

Pa., Sharon — Woodside Garage, 712 Spearman Ave., plans garage on Spearman Ave. $40,000. Engineer and architect not announced.

Pa., Uniontown—Uniontown Automobile Co. having plans prepared by H. W. Altman, archt., Fayette Title & Trust Bldg., 2 story, 41 x 80 ft. brick and stone garage. $40,000.

W. Va., Huntington—Motor Sales Co., 1611-6th Ave., soon takes bids 6 story, 90 x 109 ft., brick, tile, steel and terra cotta garage, 6th Ave. and 12th St. $200,000. Meanor & Handloser, Robson-Prichard Bldg., archts. Noted March 1.

W. Va., Parkersburg—Kesterson Ice Co., plans ice manufacturing plant $50,000. Engineer and architect not selected.

W. Va., Wheeling—U. S. Corrugated Box Co., 1315 Martindale Ave., Indianapolis, Ind., having plans prepared by C. E. Bacon, archt., 605 Old Fellows Bldg., 2 story, 80 x 200 ft., brick and steel factory, here.

N. C., Salisbury—Swink Mfg. Co., China Grove, plans large cotton mill and development of new town to be named Swink. Town site is located on Souther Ry., 6 mi. south of here, and involves development of 400 acres, power and sewer systems, etc. $2,000,000. W. J. Swink, China Grove, pres. C. A. Cannon, Concord, interested.

Ala., East Thomas (Birmingham, P. O.) —St. Louis & San Francisco R. R., St. Louis having plans prepared by R. C. Stephens, archt., c/o owner, and soon takes bids round house, car repair shop, storeroom, power house, machine shop, mill shop, etc; brick and concrete. $500,000.

O., Bridgeport—Dillon Bros. Machine Co. having plans prepared 1 story, 50 x 100 ft. machine shop, brick. Private plans.

O., Kent—Erie R. R., 50 Church St., New York City, plans a reclaiming rolling mill, here. $35,000-$40,000. Engineer and architect not selected.

Mich., Detroit—Cadillac Storage Co., c/o Bonnah & Chaffee, archts., 528 Farwell Bldg., having plans prepared 8 story and basement, 100 x 120 ft. rein.-con., brick and steel warehouse, plain foundation, 12th St. and Tuxedo Ave. $350,000. W. P. Bradley, pres.

Mich., Ionia—H. L. Mead, archt., Michigan Trust Bldg., Grand Rapids, takes bids March 15 for 5 story and basement, 112 x 300 ft., brick and timber factory, plain foundation, here, for Ypsilanti Reed Furniture Co., Ionia. $150,000.

Mich., Lansing — Reo Motor Car Co., South Washington St., having plans prepared 3 story, 365 x 577 ft. car storage plant, rein.-con. and brick, plain foundation, Cedar St., $500,000. Private plans.

Mich., Lansing—E. A. Bowd, archt., 127 West Allegan St., takes bids in April, 3 story and basement, 50 x 60 ft. brick and steel plant, Kalamazoo St., for Michigan Butter & Egg Co., 703 East Kalamazoo St. $50,000.

Wis., Delavan—H. C. Hengels, archt., 445 Milwaukee St., Milwaukee, preparing preliminary plans 2 story and basement, 36 x 60 ft. and 20 x 62 ft., brick and concrete garage, plain foundation, Main St. $40,000. Owners name withheld.

Wis., Manitowoc—Globe Steam Laundry, 14th St. and Washington Ave., having plans prepared 2 story, 46 x 120 ft., brick, rein.-con. and steel laundry, plain foundation, Washington Ave. $50,000. Private plans.

Wis., Manitowoc—Wiese Laboratory Furniture Co. plans 2 story, 70 x 80 ft., brick, rein.-con. and steel factory addition, plain foundation. $50,000. F. H. Wiese, pres. Engineer and architect not selected.

Wis., Milaukee — Salvation Army, 43 Juneau Ave., had plans prepared 2 and 3 story and basement, 35 x 75 ft., brick and concrete warehouse, plain foundation. $50,000. Private plans.

Wis., Mount Horeb—Hanley-Reilly Co. plans 2 story, 43 x 80 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation. $40,000. Engineer and architect not selected.

Wis., Oshkosh—Gustavus Milling Co., 506 Minnesota St., plans to rebuild 2 story, 75 x 95 ft., flour mill, etc., rein.-con., brick and steel, plain foundation, recently destroyed by fire. $50,000. H. F. Gustavus, mgr. Engineer and architect not selected.

Wis., Racine—Hamilton-Beach Co., Rapids Dr., having plans prepared by A. L. Flegel, archt., 530 Baker Blk., brick, rein.-con. and steel factory, plain foundation. $219,000.

Wis., Wisconsin Rapids—Blue Seal Iron Co. plans 2 story and basement, brick, rein.-con. and steel, casting shop, plain foundation. $40,000. O. R. Roenius, mgr. Engineer and architect not selected.

Mo., Kansas City — A. F. Seeded, c/o Kansas City Star, having plans prepared by J. Hunt, archt., 30 East Ontario Ave., Chicago, 2 story and basement, 40 x 230 ft., rein.-con., brick and stone factory addition, 18th and Grand Sts. $175,000.

Mo., Springfield—Lipscomb Grain & Seed Co., 540 Wall St., having plans prepared by Southwest Eng. Co., Woodruff Bldg., 2

Industrial Works (Continued)

story, 53 x 100 ft. brick warehouse, 28 x 32 ft. elevator, 136 ft. high, six 76 ft. tanks, 40,000 bu. capacity, 13 grain bins. $150,000.

Mo., St. Louis—St. Louis & San Francisco R. R., St. Louis, having plans prepared by R. C. Stephens, archt., c/o owner, and soon takes bids repair shop, round house, machine shop, power house, mill shop and store room all brick and concrete, Fyler Ave. and railroad right-of-way. $500,000.

Tex., Dallas—Texas Textile Co. having plans prepared by L. W. Robert, Jr., archt., Candler Bldg., Atlanta, Ga., cotton mills, in Lane Field Industrial Dist. $1,000,000. J. P. Burrus, McKinney, pres.

Wash., Tacoma—City Light Dept. plans substation to serve South Tacoma Dist. $45,000.

Calif., Emeryville—Doble Steam Motors Co., 714 Harrison St., San Francisco, plans 2 story, rein.-con., first unit of auto factory, on block bounded by Haven, Harlin and Park Sts. and Atchison, Topeka and Santa Fe R.R. tracks. $350,000. Engineer and architect not selected.

Calif., Roseville—Pacific Fruit Express Co., 65 Market St., San Francisco, having plans prepared rein.-con. and steel additions to ice plant, here. To exceed $150,000. Private plans.

Que., St. Lambert—Liberty Tire & Rubber Co., St. James St., plans factory, St. James St. $50,000. Engineer and architect not announced.

Ont., Dresden—C. Morrison, plans new mill. $50,000. Prices wanted on materials. Private plans.

Ont., Hamilton—Hydro Electric Comn., City Hall, plans electric sub-station, concrete, brick and steel. $100,000. W. Ellis, chn.

Ont., Jackfish—Canadian Pacific Ry., Windsor St., Montreal, Que., plans coaling plant here. J. M. R. Fairbairn, ch. engr.

Ont., Listowel—Perfect Knit Mills Ltd. having plans prepared new factory. $150,000. M. K. Becker, pres.

Ont., Melbourne — Campbell Bros. plans new garage and repair shop. $40,000.

Ont., Peterboro—Brinton Carpet Co., 63 Bay St., Toronto, soon takes bids 3 story and basement, 75 x 300 ft. concrete, brick and steel factory. $175,000. Private plans.

Ont., Stratford—Stratford Frames & Novelties Ltd., had plans prepared and soon takes bids 1 story, 46 x 200 ft. factory. $40,000. R. Gatehouse, Stratford, engr.

Ont., Tillsonburg—Norfolk Shoe Co., plans factory. $50,000. L. F. Greel, supt.

Ont., Toronto—Palmolive Soap Co., 64 Natalie St., plans rein.-con., brick and steel addition to factory, Natalie St. $150,000. Engineer and architect not selected.

BIDS DESIRED

Conn., New Haven—March 20, by C. B. Comstock, archt., 110 West 40th St., New York City, 4 story, 83 x 326 ft. bakery, rein.-con. and brick, plain foundation, Lombard St., here, for Ward Baking Co., Southern Blvd. and St. Marys St., New York City. Noted Nov. 9.

Pa., Bryn Mawr—P. H. Tyre, archt., 1509 Arch St., Phila., taking bids 1 story, 85 x 127½ ft., brick, steel and stone garage, plain foundation, here, for Neel-Cadillac Co., 142 North Broad St., Phila. $50,000.

Pa., Hatboro—Austin Co., engrs., Bulletin Bldg., Phila., taking bids 3 story, 60 x 200 ft. and 2 story, 40 x 150 ft. brick and steel plant, plain foundation, for Roberts & Manders Stove Co., 11th and Washington Sts., Phila.

Pa., Juniata—Pennsylvania R.R., Broad St. Sta., Phila., taking bids 1 story, 340 x 685 ft. machine and erecting shop, brick and steel, near Altoona. $300,000. A. C. Shand, engr., and W. H. Cookman, archt., both at Broad St. Sta., Phila.

Pa., Juniata—March 9, by Pennsylvania R.R., Broad St. Sta., Phila., 3 story and basement, 64 x 400 ft. rein.-con. and brick store house, near Altoona. A. C. Shand, engr., and W. H. Cookman, archt., both at Broad St. Sta., Phila.

Pa., Meadville—Bronze Metal Co. taking bids 1 story factory, corrugated iron siding, steel frame. $40,000. Private plans.

Pa., Pittsburgh—W. E. Snaman, archt., Empire Bldg., taking bids 3 story and basement, 88 x 200 ft. warehouse, 1819-1823 Bluff St., for Frank & Sider, 5th and Smithfield Aves. $200,000.

La., Elton—See "Waterworks."

Ill., Chicago—C. J. Dempsey, 2302 West Madison St., taking bids 2 story, 103 x 125 ft., rein.-con., brick and steel auto service building, Warren and Oakley Sts. $75,000. J. L. McConnell, 111 West Jackson Blvd., engr.

Ill., Oak Park—Weller & Rippel, archts., 40 South Dearborn St., Chicago, taking bids 1 story, 100 x 200 ft., rein.-con., brick and steel garage and sales building, 830-36 North Blvd., here, for Wulpi Garage, 811 West Harrison St. $100,000.

Okla., Weatherford—See "Waterworks."

Ont., Hamilton—March 15, by R. A. Foley, engr. United Gas & Fuel Co., plant and coke ovens. $2,000,000.

BIDS RECEIVED

Pa., Phila.—Director Bureau Highways, City Hall, opened bids Feb. 27, 1 and 2 story 59 x 217 ft. and 58 x 104 ft. stable, blacksmith shop and office, brick and steel, plain foundation, 26th St. and Glenwood Ave., from Bowden Constr. Co., 1935 Chestnut St., $59,900; F. A. Havens Co., 845 North 19th St., $61,300; Mitchell Bros., 2125 Race St., $62,400.

Calif., San Francisco—See "Miscellaneous."

CONTRACTS AWARDED

Me., Houlton—Bangor & Aroostook R. R., Graham Bldg., Bangor, will build 1 story repair shop, brick and timber, at yards, here, by day labor. $40,000. M. W. Burpee, Houlton, engr.

Mass., Lawrence—G. E. Kunhardt Corp., Union St., 1 story, 150 x 240 ft. dyehouse, brick and timber, plain foundation, to L. E. Locke & Sons Co., South Union St. Archts. est. $125,000.

Mass., Taunton—Weir Store Co., 134 West Water St., 4 story, 77 x 114 ft. factory addition, brick and timber, plain foundation, Weir Village, to M. Witherell & Sons, Court St. Archts. est. $40 000.

Conn., Bridgeport— New Haven Dairy Co., 201 Hazel St., New Haven, 3 story and basement, 75 x 85 ft. ice cream plant, rein.-con. and brick, plain and concrete pile foundation, Garden St. and South Ave., here, to T. J. Pardy Constr. Co., 1481 Seaview Ave. Archts. est. $150,000. Noted Feb. 22.

Conn., East Hartford (Hartford P. O.) —Hartford Despatch and Trucking Co., 103 Albany Ave., Hartford, 4 story and basement, 80 x 100 ft. warehouse with garage and machine shop adjoining, rein.-con. and brick, plain foundation, Prospect St., here, to R. G. Bent Co., 183 Ann St., Hartford. Archts. est. $100,000. Former contract rescinded. Noted Dec. 7, under "Hartford."

Conn., Hartford — Bryant & Chapman Co., Woodland St., altering and constructing 2 story and basement, dairy addition, rein.-con. and brick, plain foundation, Woodland St., to Industrial Constr. Co., 721 Main St. Archts. est. $50,000.

N. Y., Buffalo—New York Telephone Co., Telephone Bldg., 3 story, 150 x 200 ft. plant to be used for storage space for trucks and automobiles, store room, shops and offices, Jefferson Ave., to J. W. Cowper Co., Fidelity Bldg., $225,000.

N. Y., Youngstown—Chemical Cold Storage Co. 100 x 100 ft., brick and concrete plant, 31,000 bbl. capacity, to Laur & Mack, Highland and College Aves., Niagara Falls, who sublet same to M. Van Luven, Creek Rd. Archts. est. $100,000.

Pa., Coudersport—McCabe Furniture Co., 3-story and basement, 80 x 300 ft., brick, steel and stone addition to plant, to Chapman & Graham, 132 Blackstone Ave., Jamestown, N. Y.

Pa., Easton — Binney & Smith Co., Easton, 4 story, 80 x 100 ft. rein.-con. plant and power house, to Brillhart Bros., Bethlehem. Noted Jan. 11.

Pa., Phila.—Bd. Educ., 17th and Chestnut Sts., remodeling and building addition to warehouse and print shop, 2nd and New Sts., to Kober Constr. Co., 34 South 17th St., $107,977. Noted Feb. 15.

Pa., Phila.—Keystone Spinning Mills, 2nd and Turner Sts., 2 story and basement, 60 x 94 ft. rein.-con. and brick warehouse, plain foundation, 2nd and Turner Sts., to R. E. Lamb & Co., 843 North 19th St. Archts. est. $60,000.

Pa., Phila.—J. Boeskel, 516 Vine St., 4 story and basement, 85 x 149 ft., rein.-con. and brick factory, plain foundation, Vine and Randolph Sts., to Cramp & Co., Denckla Bldg., $250,000.

Pa., Warren — Seneca Oil Wks., Inc., South Carver St., addition to plant, South Carver St., to Hughes-Foulkrod Co. Inc., Commonwealth Bldg., Phila. Archts. est. $60,000.

Pa., Warren—Warren Garage Co., (T. T. Moll, owner) will remodel and build additional story to garage, concrete, brick and steel, Pennsylvania Ave., by day labor under supervision of R. T. Rogers, Corry, archt. $40,000. Noted Dec. 7.

Pa., Williamsport—Williamsport Storage Co., 3 story and basement, 50 x 165 ft. rein.-con. warehouse, Franklin St., to Turner Constr. Co., 11 Goodell St., Buffalo, N. Y., $90,000.

Del., Edgemoor—Edgemoor Iron Co. 2 story 98 x 369 ft. machine shop, brick and steel, plain foundation, to Barclay White Co., 1713 Sansom St., Phila. Engrs. est. $75,000.

Tenn., Memphis—Memphis Sash & Door Co., 673 South Dudley St., 2 story and basement, storage and office building, cabinet room and work shop, brick, Roland Ave. along tracks Southern R.R., to D. D. Thomas & Son, 463 North Dunlap St., $100,000.

O., Cincinnati—Cincinnati New Orleans & Texas Pacific Ry. Co., Ingalls Bldg., 2 story, 90 x 240 ft., fruit produce exchange, rein.-con., plain foundation, Front and Vine Sts., to Ferro Concrete Constr. Co., 3rd and Elm Sts. Archts. est. $160,000.

O., Cleveland—Amer. Steel & Wire Co., c/o H. L. Schuler, 8140 Jones Rd., 1 story, 39 x 68 ft., plant, steel frame, 650 East 67th St., to Amer. Bridge Co., Guardian Bldg. Archts. est. $42,000.

O., Cleveland — Fisher Bros. Co., 2323 Lakeside Ave., 1 and 2 story, 117 x 120 ft., brick, steel and concrete garage and machine shop, Lakeside Ave. near East 23rd St., to W. Moore Co., 1278 West 4th St. Archts. est. $100,000. Noted Feb. 15.

O., Galion—Galion Iron Wks. & Mfg. Co., 1 story, 110 x 400 ft. machine and electric shop, brick, iron and steel, to Massillon Iron Wks. Co., Canal St., Massillon.

O., Portsmouth—Ohio Stove Co., 100 x 300 ft. foundry and 40 x 40 ft. cupola building, to Austin Co., 16112 Euclid Ave., Cleveland.

O., Youngstown—Truscon Steel Co., will build 1 story, 80 x 400 ft. and 1 story, 80 x 200 ft. additions to plant, Albert St., by day labor. To exceed $40,000. Engineer and architect not announced.

Ind., South Bend—Studebaker Corp., 6 story and part basement, 100 x 820 ft. plant, rein.-con. and brick, Lafayette Blvd., to H. G. Christman Co., 315 Stevens Bldg., Detroit, Mich. Noted Jan. 18.

Mich., Detroit—S. E. Remey, archt., 1140 Griswold St., 2 story, 30 ft. high, 70 x 130 ft. rein.-con. and brick garage, plain foundation, Dix Ave., to W. S. Pocock Co., 815 Hammond Bldg., for Kessler Sales & Service Co., 4434 Dix Ave. $47,000. Noted Sept. 7.

Mich., Detroit—Roehm & Davison, 6450 Mack Ave., 2 story and basement, 120 x 153 ft. rein.-con. plant with depressed tracks, also 153 x 154 ft. steel mill building with 2 crane runaways and depressed tracks, to Everett Winters Co., 751-754 Book Bldg.

Mich., Detroit—Schroeder Paint & Glass Co., Cadillac Sq., 4 story, 125 x 195 ft. rein.-con. and brick warehouse, 12th St., to F. R. Patterson Constr. Co., 2631 Woodward Ave., $300,000. Noted Feb. 2.

Mich., Grand Rapids — Sligh Furniture Co., Logan St. S. W., 7 story, 104 x 132 ft. addition to factory, Logan St., to Owen-Ames-Kimball Co., 42 Pearl St., cost plus basis.

Mich., Grand Rapids—A. McColl, archt., Michigan Trust Bldg., 5 story and basement, 50 x 100 ft. brick and timber addition to factory, plain foundation, Monroe St., to Mastenbrook & Grove, Shephard Bldg., for Mueller Furniture Co., Grand Rapids, $32,450. Noted Feb. 1.

Ill., Chicago—Graham, Anderson, Probst & White, archts., 80 East Jackson Blvd., first unit power plant, Crawford Ave., to G. A. Fuller Co., 140 South Dearborn St., for Commonwealth Edison Co., Adams and Clark Sts. $3,000,000. Noted Feb. 8.

Wis., Columbus—Dry Milk Co., 15 Park Row, New York City, will build 2 story and basement, 200 x 250 ft., dry milk factory, brick and concrete, plain foundation, by day labor, here. $150,000. L. G. House, c/o owner, engr. Architect not announced.

Wis., Milwaukee—D. Rothman, 428 4th St., will build 2 story and basement, 80 x 119 ft., brick and timber, laundry, plain foundation, 29th and Vliet Sts., by day labor. $40,000. G. Zagel & Bros., 144 Oneida St., archts.

Wis., Milwaukee—Western States Envelope Co., 255 South Water St., remodeling 4 story, brick and timber warehouse, to J. C. Garvey, 128 Wisconsin St. Archts. est. $40,000. Noted Feb. 1.

Minn., Albert Lea—Amer. Gas Machine Co., 5 story and basement, 65 x 132 ft. factory, brick and concrete, general contract to J. F. Hanson, Albert Lea. $75,000.

Minn., Minneapolis — Murphy Transfer Co., 309 3rd Ave. N., 4 story and basement,

Buildings (Continued)

114 x 119 ft. warehouse, and 2 story and basement 68 x 149 ft. warehouse, rein.-con., brick and tile, 4th St. and 9th Ave. N, general contract to J. Peterson, 3152 10th Ave. S., $161,933. Noted March 1.

Mo., Osage—J. M. Hays Grain Product Co., general contract 5 story and basement mill, capacity 100 bbl. flour and 25 bbl. corn, also power house, to Monolith Builders, 509 Mutual Bldg., Kansas City, $100,000.

Mo., St. Louis—Anheuser-Busch, Inc., 721 Pestalozzi St., 5 story, 33 x 41 ft. addition to beverage factory, brick, plain foundation, to Acme Constr. Co., Odd Fellows Bldg. Archts. est. $50,000.

Mo., St. Louis — H. C. Tulley, 1155B Union Blvd., 1 story and basement, 124 x 152 ft. industrial building, rein.-con., brick and steel, plain foundation, Duncan Ave., to C. B. McCormack & Sons, 318 North 8th St. Archts. est. $150,000.

Mo., St. Louis—Bd. Pub. Serv., 208 City Hall, 2 story, 54 x 225 ft., rein.-con. and brick service building, plain foundation, for St. Louis Training School for Feeble Minded, at Scott Farm, to R. B. Higgins Contg. & Wrecking Co., 1143 Childress Ave., $111,819. Noted Feb. 1.

Ark., Little Rock—Hayes Grain & Comn. Co., 423 Poplar St., 64 x 129 ft. mill, 6 tanks, 17 in. diameter, 90 ft. high, 100,000 bu. total capacity, to Monolith Builders Inc., 509 Mutual Bldg., Kansas City, Mo. Engrs. est $100,000.

Tex., Dallas—Milam Fife Connor Investment Co., c/o Rucker & Jones, agents, 1317 Commerce St., 4 story and basement, concrete and steel factory, plain foundation, to Hughes-O'Rourk Constr. Co., Praetorian Bldg., $125,000. Chevrolet Motors, lessee.

Okla., Wynnewood—See "Waterworks."

Calif., Los Angeles—Ford Motor Car Co., 7th St. and Santa Fe Ave., 2 story, auto assembling plant addition, rein.-con. and brick, general contract to Edwards, Wildey & Dixon, Black Bldg., $175,000; steel to Llewellyn Iron Wks., Main and Rondondo Sts. Noted Jan. 25.

B. C., Powell River—Powell River Co. Ltd., 65 x 130 ft. steam plant, incl. six 500 hp. Babcock-Wilcox boilers, 250 ft. concrete stack, 21 ft. at bottom, 15 ft. at top, to C. C. Moore & Co., 1125 Standard Bank Bldg., Vancouver. $200,000. Company is also considering raising dam and putting in 2 new electrical units.

Buildings

PROPOSED WORK

Mass., Boston — Apartment — Kilsyth Realty Trust, c/o Silverman, Brown & Keenan, archts., 51 Cornhill, having plans prepared, six 3 story and basement, 75 x 300 ft., connected, brick and stone, wood pile foundation, Warren St. $450,000.

N. Y., Attica—High School—Bd. Educ., rejected bids opened Feb. 26, 3 story, 80 x 150 ft., brick and stone, Prospect St. $250,000. Will readvertise. Noted Feb. 1.

N. Y., Solvay (Syracuse P. O.)—High School—Bd. Educ. rejected bids for new high school. $400,000. Will readvertise. M. L. King, Snow Bldg., Syracuse, archt. and engr. Noted Feb. 1.

N. J., Atlantic City—Apartment—P. H. Johnson, archt., 1713 Sansom St., Phila., soon lets contract 10 story and basement, 53 x 150 ft., cut stone and brick, Indian and Pacific Aves., here, for W. Penn Apartment Co., c/o architect. $750,000.

Pa., Charleroi—High School—Bd. Educ., and J. C. Brenton, archt., 1st Natl. Bank Bldg., rejected bids for 2 story and basement, 115 x 177 ft. $150,000. Will readvertise in about one month.

Pa., Johnstown—Church and Parsonage—Trinity Evangelical Church, Willow St., takes bids about April 15, for 1 story and basement, 90 x 100 ft. brick, steel and stone, Somerset and Willow Sts. $150,000. S. V. Carmaney, pastor. J. E. Adams, Nemo Bldg., archt.

Pa., Johnstown — High School — School Dist. plans 3 story and basement, 200 x 200 ft. rein.-con., brick and steel, Somerset St. $1,000,000. S. J. Slawson, supt.

Tenn., Chattanooga — Hotel — Chamber Commerce having plans prepared by McKim, Mead & White, archts., 101 Park Ave., New York City, hotel containing 300 rooms, rein.-con., tile and stucco, Lookout Mt. $1,200,000.

O., Columbus—Medical Science—C. E. Steele, secy. Bd. Trustees Ohio State University rejected bids opened Feb. 20, 4 story and basement, 75 x 145 ft., brick, stone and concrete, on campus. Will readvertise. Noted March 1.

Mich., Detroit — Hotel — Cadillac Hotel Co., 234 Michigan Ave., having plans prepared for 18 story and basement, 800 rooms, rein.-con., brick and steel, plain foundation. $2,500,000. Architects name withheld.

Mich., Grand Rapids — Science — H. A. Brink, 117 Monroe Ave., representing owner, having plans prepared by B. K. Gibson Co., archts., 624 South Dearborn St., Chicago, 10 story, rein.-con., brick and terra cotta, Sheldon Ave. $1,000,000.

Mich., Jackson — Church — St. Marys Church, having plans prepared by Spier & Gehrke, archts., 310 Park Bldg., Detroit and soon takes bids 2 story, 105 x 165 ft., rein.-con., brick and steel, plain foundation, Mechanic and Wesley Sts. $200,000.

Ill., Chicago—Office—H. Bloomfield, c/o Great Western Discount Co., 118 North La Salle St., having plans prepared by Marshall & Fox, archts., 721 North Michigan St., 22 story, 80 x 80 ft., Wells St. near Madison St. $2,500,000.

Kan., Pittsburg — Temple — Masonic Lodge, had plans prepared and soon takes bids 2 story and basement, 150 x 180 ft., brick, steel, rein.-con. and stone. $300,000. T. W. Williams & Co., 312 Natl. Bank Bldg., Topeka, archts. Noted Dec. 28.

Neb., Fairbury—School—Bd. Educ., soon takes bids 1 story, 90 x 160 ft., rein.-con. and brick. $200,000 bonds voted. Fiske & McGinnis, Bankers Life Bldg., Lincoln, archts. Noted Dec. 14.

Neb., Omaha—Store—G. B. Prinz, archt., 1037 Omaha Natl. Bank Bldg., soon takes bids 3 story, 44 x 88 ft., brick and steel, addition, 1507 Dodge St., for T. Kilpatrick Co., 1507 Dodge St. $150,000-$175,000.

Tex., Houston—Chemistry—Rice Institute, Commercial Bank Bldg., soon takes bids 3 story, concrete and stone. $1,000,000. W. W. Watkins, Scanlan Bldg., Houston, engr.

Tex., San Antonio — Church — Catholic Church having revised plans prepared by M. L. Diver, engr., Calcasiun Bldg., and F. B. Gaenslen, archt., Bedell Bldg., 1 story, 90 x 110 ft., rein.-con., brick and stone. $300,000. Noted Nov. 2.

Tex., Texarkana — Union Depot — Texarkana Terminal Co. plans union depot. $750,000. Missouri Pacific, Texas & Pacific, St. Louis & South Western and Kansas City Southern Railroads interested. E. A. Hadley, Railway Exch., Kansas City, ch. engr.

Okla., Ardmore — Church — Methodist Church Congregation having plans prepared by Hawk & Parr, archts., 101 Magnolia Bldg., Oklahoma City, 2 story and basement, rein.-con., brick, stone and terra cotta, Main St. $175,000.

Okla., Okmulgee—Hotel—Smith & Senter, archts., 401 Commerce Investment Bldg., takes bids about May 1, 9 story and basement, 100 x 140 ft. rein.-con., stone and terra cotta, 3rd and Morton Sts., for Creek Hotel Co. $1,000,000. Noted Feb. 8.

Okla., Muskogee—Lodge—Masonic Lodge plans lodge. $200,000. W. F. Moffatt, chn. Engineer and architect not selected.

Colo., Denver—School—School Dist. had plans prepared and takes bids about March 12, combined grade and junior high school, brick, terra cotta, rein.-con. and tile, plain foundation, Lincoln St. and 44th Ave. $200,000. M. S. Fallis Architect Co., Ideal Bldg., archts.

Colo., Denver—School—School Dist. having plans prepared by Montjoy & Frewen, archts., Chamber Commerce Bldg., and takes bids in about 60 days 2 story, 80 x 250 ft., brick, rein.-con. and terra cotta, 22nd and Glenarm Sts. $300,000.

Wash., Olympia—Capitol—Senate appropriated $3,000,000 for new capitol building.

Wash., Tacoma—College of Puget Sound had plans prepared first unit of new college. $300,000. College complete to cost $1,750,000. E. H. Todd, pres.

Calif., Fresno—Bank and Office—Bank of Italy, Market and Powell Sts., San Francisco, plans fireproof, Bway. and Mariposa Sts. To exceed $250,000.

Calif., Glendale—School—March 15, to vote on $500,000 bonds for new school buildings. Noted Feb. 8.

Calif., Los Angeles—Store and Apartment—W. G. Terry, 457 South Western Ave., having plans prepared by L. Jones, archt., Grosse Bldg., 4 story and basement, 60 x 140 ft., brick, 5th and Western Aves. To exceed $150,000.

Calif., Sacramento—Hospital—Sister Hospital, c/o R. A. Herold, archt., Forum Bldg., takes bids in about two weeks, 5 story and basement, rein.-con. and terra cotta, 40th and J Sts. $600,000.

Calif., San Francisco — Office — W. B. Wagnon, c/o A. G. Headman, archt., New Call Bldg., having plans prepared 4 story and basement, 75 x 165 ft., rein.-con., Market St. near 7th St. $350,000. H. J. Brunnier, Sharon Bldg., engr.

Ont., Ottawa — Archives — Dept. Pub. Wks., having plans prepared by R. C. Wright, archt., Dept. Pub. Wks., and soon takes bids for addition to Archives Bldg., Sussex St. $150,000.

B. C., Point Grey—Dormitory, etc.—University of British Columbia, 10th and Willow Sts., having plans prepared by H. Whittaker, archt., c/o Dept. Pub. Wks., Parliament Bldg., Victoria, and takes bids in about 1 month 2 and 3 story frame buildings, incl. dormitories, power house, etc. $350,000.

BIDS DESIRED

Mass., Springfield—Office—March 15, by Brown & Von Buren, archts., 18 Church St., New Haven, Conn., 6 story, 70 x 111 ft., brick and steel plain foundation, Vernon St., for L. W. Besse, 21 Besse Pl., Springfield. $250,000. Noted Dec. 28.

Mass., Westfield — Gymnasium — March 19, by M. B. Harding, archt., 33 Elm St., 2 story, 75 x 100 ft., Elm St., for Father Mathew T. A. B. Society, c/o E. J. Cleary, 52 Union St. $150,000.

N. Y., Brooklyn—School—March 21, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., P. S. 190, Sheffield Ave. 100 ft. south of Riverdale Ave. Noted Oct. 26.

N. Y., New York—Schools—March 21, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, addition to P. S. 121, southerly side of East 103rd St. also annex to P. S. 72, Lexington Ave., East 104th and East 105th Sts., here. Noted Oct. 12 and Nov. 30.

N. Y., Rochester—Office—Hutchinson & Strutz, archts., 316 Cutler Bldg., receiving bids 4 story, 70 x 225 ft., brick and steel addition, 46 Clinton Ave. S., for B. Forman & Co. $150,000.

N. J., Newark—Temple—March 14, by Salaam Temple A. A. O. N. M. S., 1020 Broad St., brick and stone, plain foundation, Broad St. $1,000,000. F. Grad, 245 Springfield Ave., archt. Noted Jan. 4.

Pa., Allentown—School—March 13, by T. P. Weiner, secy. School Dist., 31 South Penn St., 24 rooms and gymnasium, St. Cloud and Walnut Sts. $150,000. Jacoby & Everett, Allentown, archts.

Pa., Clearfield—Temple—March 30, by Bd. Trustees of Loyal Order of Moose, 315 Market St., 3 story and basement, 70 x 100 ft. W. V. Justus, 329 East Mahoning St., Punxsutawney, archt.; adv. this issue. Noted Feb. 15.

Pa., Freeport—High School—April 1, by Bd. Educ., 2 story and basement, 100 x 200 ft., 4th St. $200,000. W. G. Eckles, Lawrence Savings Bldg., New Castle, archt.

Pa., Jeannette—Church—C. H. Strong, archt., Union Bank Bldg., Pittsburgh, taking bids 1 story and balcony, 86 x 156 ft., 7th St., for Sacred Heart Catholic Congregation. $150,000.

Pa., Mt. Carmel—Church—P. A. Monoghan, archt., 1713 Sansom St., Phila., taking bids 1 story and basement, 57 x 151 ft. rein.-con., brick and steel, plain foundation, for St. Josephs Roman Catholic Church, Mt. Carmel. $200,000.

Pa., Mt. Union—School—March 17, by School Bd., 2 story and basement, 42 x 63 ft. rein.-con. and brick, Market St. $150,000. Hersh & Sholler, Commerce Bldg., Altoona, archts.

Pa., Oil City—School—March 22 (change of date) by Bd. Educ., 3 story and basement, 147 x 150 ft. brick, Mylan, Harriot and Washington Aves. $50,000. E. Bailey, Chambers Bldg., archt. Noted Jan. 18.

Pa., Phila.—Apartment—L. B. Rothchild, archt., 145 South Broad St., taking bids 16 story and basement, 100 x 138 ft. rein.-con., brick, steel and stone, 19th and Chestnut Sts., for Heyman & Bros., 145 South Broad St. $2,000,000.

Pa., Phila. — Office — L. B. Rothchild, archt., 145 South Broad St., taking bids 12 story and basement, rein.-con. and brick, 1019-1023 Arch St., for W. Goldstein, c/o architect. $700,000.

Del., Wilmington—Hospital—F. R. Watson, archt., 1211 Walnut St., Phila., taking bids 4 story and basement, 41 x 175 ft. and 35 x 45 ft., stone and brick, plain foundation, 7th and Clayton Sts., here, for Sisters of St. Francis, Glen Riddle, Pa. Noted Jan. 11.

Md., Sykesville—Epileptic Colony—March 21, by Springfield State Hospital, c/o J. C. Clark, Room 502, 22 Light St., Baltimore, 3 story, 38 x 96 ft. administration, 1 story, 40 x 96 ft. dining room, two 2 story, 30 x 90 ft. dormitories, brick, plain foundations, here. $150,000 H. P. Hopkins, 347 North Charles St., Baltimore, archt.

Buildings (Continued)

D. C., Wash. — School — March 15, at Room 509 Dist. Bldg., altering and constructing addition to Garison School; adv. this issue. Noted Aug. 3.

Va., Roanoke—High School—March 15, by School Bd., c/o J. A. Page, stone and brick, plain foundation, 6th and Campbell Sts. $600,000. H. C. Richards, 608 Chestnut St., Phila., archt.

Tenn., Memphis — Office — March 21 (change of date), by L. T. Dinford, pres. Columbian Mutual Life Insurance Co., Main and North Court Sts., 22 story, 72 x 75 ft., rein.-con., steel and brick, concrete pile foundation, $1,000,000. Boyer & Baum, 428 Arcade St., St. Louis, Mo., archts. Noted Feb. 8.

O., Cleveland — Hospital — March 10, by Babies & Childrens Hospital, c/o A. Garfield, archt., Natl. City Bldg., 9 story, 60 x 151 ft., brick, steel and concrete, 11029 Euclid Ave. $500,000.

O., Marietta—Bank and Office—Weary & Alford, archts., 1907 South Michigan Ave., Chicago, taking bids 10 story and basement, 50 x 114 ft., brick, stone, steel and terra cotta, 2nd and Putman Sts., here, for Peoples Banking & Trust Co. $400,000.

Ill., Chicago — Apartment — Cochran & Downey, c/o W. E. Smith, archt., 305 East 55th St., taking bids 3 story, 135 x 200 ft., rein.-con., brick and steel, 72nd and Bennett Sts. $275,000.

Ill., Chicago — Apartment — Ludgin & Leviton, archts., 53 West Jackson St., taking bids 3 story, 150 x 188 ft., rein.-con., brick and steel, Shubert and Spaulding Sts. $350,000. Owners name withheld. Noted Feb. 8.

Ill., Evanston—Apartment—A. H. Quitsow, archt., 11 South La Salle St., Chicago, taking bids 3 story, 100 x 154 ft., rein.-con. brick and steel, Keeney Ave. and Sheridan St., here. $150,000. Owners name withheld.

Wis., Milwaukee—Club—March 19, by Milwaukee Elks Lodge, 448 Jefferson St., and R. A. Messmer & Bros., archts., 221 Grand Ave., superstructure for 9 story, 110 x 145 ft., brick and concrete, plain foundation, Juneau Pl. $1,000,000.

Wis., Milwaukee—Office—March 12, by Rosman & Wierdsma, archts., 424 Jefferson St., superstructure for 8 story, 60 x 120 ft., brick and concrete, Bway., for S. E. Tate Printing Co., 133 2nd St. $300,000.

Wis., Milwaukee—School and Convent—March 15, by A. C. Eschweiler, archt., 141 Wisconsin St., 3 story and basement, 100 x 200 ft. and 40 x 90 ft., brick, tile and concrete, plain foundation, Clybourn St., for St. Rose of Lima Congregation, 3007 Sycamore St. $350,000.

Wis., West Bend—High School—March 27, by Dist. 1, 2 story and basement, 160 x 180 ft., brick, tile and concrete, plain foundation. $180,000. F. W. Bucklin, clk. Foeller, Schober & Stephenson, Nicollet Bldg., Green Bay, archts.

S. D., Capa—Sanitorium—April 31, by J. C. Ewing, archt., Rapid City, Ia., 2 story and basement, 120 x 124 ft. rein.-con., brick and tile, for Capa Hydro Sanitorium Co. $150,000. Noted March 1.

S. D., Sioux Falls—School—March 30, by Bd. Educ., 2 story and basement, rein.-con., brick, stone and tile. $150,000. Perkins & McWayne, Paulton Blk., archts.

Ont., Midland—School—March 15, by C. A. Wilson, secy.-treas. Bd. Educ., 2 story and basement, 8 room, concrete, brick and stone addition. $150,000. W. F. Smith, Midland, archt.

BIDS RECEIVED

N. J., New Brunswick—Animal Husbandry—B. G. Lewis, comr. State House, Trenton, opened bids Feb. 26, general contract 2 story and basement, 80 x 105 ft., brick and limestone, here, for State Agricultural College, from G. B. Rule, 71 John St., $134,000; Gibbs-Mueller Co., 215 South Broad St., Phila., $159,989; T. H. Flynn, 390 George St., $179,000. Noted Feb. 8.

Pa., Phila.—Hall—F. H. Caven, dir. pub. wks., City Hall, opened bids Feb. 28, 3 story and basement, 67 x 122 ft concrete, brick and steel, plain foundation, Germantown Ave. and Haines St., from Mitchell-Houseworth Co., 2512 North 27th St., $424,713; P. H. Kelly Co., 1713 Sansom St., $475,000; W. R. Dougherty, 1608 Sansom St., $516,840.

O., Cleveland Heights (Warrensville P. O.)—School—Bd. Educ., 1005 Lee Rd., opened bids Feb. 21, 2 story, 100 x 211 ft., brick, steel and concrete, Euclid Heights Blvd., from C. Peterson Co., 4500 Euclid Ave., Cleveland, $216,000; Schirmer O'Hara Constr. Co., 2031 Euclid Ave., Cleveland, $233,068; M. B. Parker Constr. Co., 1836 Euclid Ave., Cleveland, $236,257. Noted Feb. 1.

O., Massillon—High School—Bd. Educ., 2 story and basement, North St., from N. Miller, 1918 Remont St., $172,577; A. F. Wendling, Erie St., $181,300; R. G. Witters, Cleveland & 3rd Sts., Canton, $183,500.

Calif., Stockton—High School—City, 1 and 2 story, brick, steel, concrete and terra cotta, general contract from Mathews Constr. Co., Forum Bldg., Sacramento, $383,266, K. E. Parker Co., Clunie Bldg., San Francisco, $386,683, W. Murcell, Ochsner Bldg., Sacramento, $388,274; plumbing and sewers from Hateley & Hateley, Mitau Bldg., Sacramento, $32,598; heating and ventilating from Hateley & Hateley, Mitau Bldg., Sacramento, $56,518; electrical work from Latourette-Fical Co., 907 Front St., Sacramento, $34,800; steel work from Palm Iron & Bridge Co., 1814 15th St., Sacramento, $53,640. Noted Feb. 15.

CONTRACTS AWARDED

Mass., Boston—Apartment—Abrams & Altman, c/o Silverman, Brown & Heenan, archts., 51 Cornhill, having plans prepared, three 4 story and basement, 90 x 150 ft., brick and stone, wood pile foundation, Audubon Rd. $375,000. Work will be done by day labor.

Mass., Boston—Business—S. S. Kresge Co., Kresge Bldg., Detroit, Mich., 6 story, brick, concrete, steel and stone, Bromfield St., to W. A. and H. A. Root, Inc., 1 Beacon St. Archts. est. $400,000.

Mass., Brighton (Boston P. O.)—Apartments—Meltzer & Snider, 1933 Beacon St., Brookline (Boston P. O.), will build four 4 story, rein.-con., steel and brick, plain foundations, Orkney and Strathmore Rds., here, by day labor. $350,000. Silverman, Brown & Heenan, 51 Cornhill, Boston, archts. Noted March 1.

Mass., Springfield — Office — Terminal Realty Trust, 318 Main St., 7 story, 50 x 75 ft., brick and steel, plain foundation, Main and Lyman Sts., to Klingberg Co., 318 Main St., $250,000.

Conn., New Haven—Club—Yale University, 3½ story and basement, 70 x 170 ft., cut stone, blue stone and granite, plain foundation, Campus, to F. T. Ley Co., Inc., 499 Main St., Springfield, Mass. Archts. est. $500,000.

N. Y., Brooklyn — Apartment — M. Ansorge, c/o B. W. Dorfman, archt. and engr., 26 Court St., brick, steel and stone, plain foundation, Quentin Ave., by day labor.

N. Y., Brooklyn—Apartment—J. Brooks & sons, c/o Seelig & Finkelstein, archts. and engrs., 44 Court St., brick, steel and stone, plain foundation, Farragut Rd., by day labor. $150,000.

N. Y., Jamestown—High School—Bd. Educ., general contract 3 story, 150 x 180 ft., brick, Buffalo St., to Mullen, Guinane & Ludwig, 10 Prendergast Bldg., $270,441; heating and ventilating work, to Chatfield & Sharp, 304 Pine St., $46,125. Noted Feb. 1.

N. Y., New York—Apartment—M. Adler, c/o Gronenberg & Leuchtag, archts. and engrs., 450 4th Ave., 6 story, 110 x 110 ft., brick, steel and stone, plain foundation, Nelson Ave., by day labor. $350,000.

N. Y., New York—Apartment—J. Silverson, c/o Sommerfeld & Steckler, archts. and engrs., 31 Union Sq., 5 story, 120 x 125 ft., brick, steel and stone, plain foundation, Burnside Ave., by day labor. $350,000.

N. Y., New York—Apartment—Schneider Holding Co., c/o W. Koppe, archt. and engr., 567 East Tremont Ave., 6 story, 150 x 200 ft., brick, steel and stone, plain foundation, Mott Ave. near 156th St., by day labor. $700,000.

N. Y., New York — Schoo. — W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, addition to P. S. 12, Frisby Ave., to G. E. Dekempe, New York Ave., Union Hill, N J., $239,000. Noted March 1.

N. Y., New York — Schoo. — W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, P. S. 63, brick, steel and stone, plain foundation, Franklin Ave. near 168th St., here, to P. J. Brennan & Sons, 624 Madison Ave., $717,775. Noted Feb. 22.

N. Y., Saratoga Springs—High School—Bd. Educ. general contract new high school, Lake Ave., to Kenneth Mackay & Co., 9 Culver St., Yonkers, $329,651; heating and ventilating work, to J. F. Craig & Co., 617 Communipaw Ave., Jersey City, N. J., $39,450. Noted Sept. 28.

N. J., Bloomfield—Community and School—Sacred Heart Parish, 76 Broad St., 125 x 150 ft., brick, steel and stone, plain foundation, to Gunn, Van, Dale Co., 9 Clinton St., Newark. Archts. est. $200,000. Noted Jan. 25.

N. J., Newark—Clubhouse—N. J. Convery, archt., 942 Broad St., and Warren & Wetmore, associated archts., 16 East 47th St., New York City, 12 story, 100 x 150 ft., brick, steel and stone, plain foundation, Broad and Camp Sts., here, to D. W. McGee Constr. Co., 142 1st St., for B. P. O. E., 27 Green St. $1,135,085. Noted Dec. 21.

Pa., Bryn Mawr — Hospital — A. H. Brockie, archt., 254 South 15th St., Phila., 2 story and basement, 40 x 117 ft. and 2 story, 10 x 65 ft. brick and stone, plain foundation, to Ketcham & McQuade, 1029 Brown St., Phila. for Bryn Mawr Hospital. $155,000. Noted Feb. 15.

Pa., Ellwood City—School—G. B. Hancher, secy. Bd. Educ., 2 story and basement, 87 x 190 ft., brick and steel, Crescent Ave., to Prahl Constr. Co., Erie. Archts. est. $220,000. Noted Feb. 8.

Pa., Hazelton—Hotel—Altamount Hotel Co., 8 story and basement, 92 x 144 ft. brick, steel and stone, plain foundation, to Wark & Co., 231 South Broad St. Archts. est. $500,000.

Pa., Lock Haven—Lodge—J. W. Dickey, chn. Bldg. Com. Masonic Temple Assn., 3 story and basement, 60 x 160 ft. brick and steel, Main and Grove Sts., to Boydhouse-Arey Co., 212 North Broad St., Phila., $148,376. Noted Feb. 1.

Pa., Natrona—High School—Bd. Educ., 2 story and basement, 156 x 179 ft. concrete, brick and steel, to Natl. Concrete Fireproofing Co., Citizens Bldg., Cleveland, O., $176,700.

Pa., Phila.—Recreation—H. Trumbauer, archt., Land Title Bldg., 10 story and basement, 50 x 136 ft., rein.-con., brick and steel, 307-311 South Broad St., to G. Fuller Co., Morris Bldg. Archts. est. $1,000,000. Owner's name withheld. Noted Jan. 11.

Pa., Phila.—Sales, etc.—C. Kahn, Morris Bldg., 4 story and basement, 37½ x 160 ft. sales and service building, 1415 North Broad St., to Nelson Pedley Constr. Co., 1615 Spruce St., E. Wilkie Motor Co., 917 North Broad St., lessee. Archts. est. $200,000.

Pa., Phila.—Schools—Director Bd. Educ., 19th and Chestnut Sts., 3 story and basement, 146 x 170 ft. school on Wakeling and Large Sts., to McCloskey & Co., 1620 Thompson St., $442,322; 3 story and basement, 146 x 171 ft. on Knoor and Cottman Sts., to Cramp & Co., Denckla Bldg., $443,931. Noted Feb. 15.

Pa., Phila. — Store and Office — C. P. Berger, archt., 1512 Walnut St., 4 story and basement, 44 x 230 ft., brick, steel and stone, plain foundation, 1924-26 Chestnut St., to Smith-Hardican Co., 1809 Callowhill St., for Phila. Art Galleries, 15th and Chestnut Sts. Archts. est. $175,000. Noted Feb. 1.

Pa., Pittsburgh—High School—Bd. Educ. Fulton Bldg., 3 story, basement and subbasement, 140 x 300 ft. addition, Margaretta and Beatty Sts., general contract to P. H. Kelly Co., Sansom St., Phila.; heating and ventilating to Ryan Heating Co., 53 Tunnel St., $90,652; plumbing to W. Hillbach, 651 West Baltimore Ave., Baltimore, Md., $36,900. Total est. $500,000. Noted Jan. 25.

Pa., Sharon—Church—First Methodist Church, brick church, North Irving Ave., to W. McIntyre & Sons, Sharon. Archts. est. $150,000.

Pa., State College—Clubhouse—Day & Klauder, archts., Franklin Bank Bldg., Phila., 4 story and basement, 79 x 170 ft. brick, steel and stone, plain foundation, to F. L. Hoover & Sons, 1023 Cherry St., Phila., for Penna. State College. Archts. est. $350,000. Noted Jan. 4.

Md., Baltimore — Apartment — Carolina Apartments Co., 111 North Charles St., two 4 story, 112 x 166 ft., brick, plain foundations, University Parkway near 39th St., to J. L. Robinson Constr. Co., 1130 West Lafayette Ave., $400,000. Noted Feb. 15.

Md., Baltimore—Club—City Club, Munsey Bldg., 6 story, 50 x 175 ft., brick and steel, plain foundation, St. Paul and Saratoga Sts., to J. H. Miller, Inc., Eutaw and Frankline Sts., $500,000. Noted Jan. 18.

Md., Baltimore—Laboratory—Johns Hopkins University, 4 story, 98 x 148 ft., brick and steel, Charles St., to Consolidated Eng. Co., Calvert Bldg., $600,000. Noted Jan. 11.

Md., Baltimore—Store—W. T. Grant Co., 28 West 23rd St., New York City, altering 5 story, brick, 214-20 West Lexington St., here, to T. Hicks & Son, 106 West Madison St., $150,000.

D. C., Wash.—Office—Potomac Electric Power Co., 231 14th St., N. W., office building, 13½ St. and C St., N. W., to Parson & Hyman, 816 14th St., $200,000. Noted Feb. 22.

W. Va., Huntington—Office—H. A. Robson and F. C. Prichard, Robson-Prichard Bldg., 10 story and basement, 40 x 40 ft., addition, to Arnold Co., 105 La Salle Ave., Chicago. Archts. est. $150,000.

Fla., De Land—Hotel—Putnam Hotel Co., 3 and 5 story, brick and steel, general contract to Emerson Constr. Co., Eustis, $150,000.

Buildings (Continued)

Tenn., Chattanooga — Office — Provident Life & Accident Insurance Co., Broad St., 12 story, tower type, 3 floors extending in north and south wings and 9 stories above, to Parks & Co., Ham. Bank Bldg., $450,000. Noted Feb. 22.

Tenn., Memphis—Administration—Southwestern College, 2 story, (1st unit), Arkansas stone, brick, etc., Poplar Blvd., to Kaucher-Hodges Co., Exch. Bldg., $150,000.

Tenn., Memphis—Apartment—Hobson & Kerns, U. & P. Bank Bldg., apartment building, brick, 1508 Madison Ave., to Cude & Co., Candler Bldg., Atlanta, Ga., $150,000.

O., Cincinnati — School — Bd. Educ., 511 West Court St., 5 story, 76 x 121 ft., brick, plain foundation, McMillan and Clifton Aves., concrete work to Ross-Meyer-Heck Co., Cincinnati (street address not available); stone to David Hummel Building Co., 2629 Spring Grove, C. W.; carpentry to J. Griffith & Sons Co., Reading Rd. and East 12th St.; iron to Grimm Iron Wks. Co., 2431 Spring Grove; marble to Cassino Marble Co., Cincinnati, (street address not available); plumbing to E. Black Plumbing Co., 123 East 12th St. Archts. est. $400,000. Noted Dec. 14.

O., Columbus—Administration—C. E. Steele, secy. Bd. Trustees Ohio State University, 3 story and basement, 100 x 180 ft., brick, concrete and stone, on campus, to D. W. McGrath & Sons, 255 East Broad St., $304,700. Noted March 1.

O., Oxford—Library—Trustees Miami University, 2 story, 78 x 109 ft., brick and concrete addition to Alumni Library, to Boyajohn & Barr, 8 East Broad St., Columbus, $110,000. Noted Jan. 25.

Mich., Coldwater—High School—R. Leroy, archt., Pratt Bldg., Kalamazoo, superstructure for high school for Bd. Educ., to Gratton Bros., Shiawassee St., Lansing, $125,000. Noted Feb. 22.

Mich., Detroit—School—Bd. Educ., 1354 Bway. Ave., 2 story and basement, rein.-con., brick and steel, plain foundation, Linwood Ave., to Culbertson & Kelly, 872 West Milwaukee Ave., $320,160.

Mich., Detroit—Store and Office—Donovan Bldg. Co., c/o A. Kahn, archt., 1000 Marquette Bldg., 10 story and basement, 60 x 200 ft., rein.-con., brick and steel, plain foundation, Woodward Ave. and Duffield St., to A. A. Albrecht, 1130 Penobscot Bldg. Noted Nov. 30.

Mich., Grand Rapids—High School—Bd. Educ., City Hall, 3 story, rein.-con., brick and steel, plain foundation, to E. Gentz, Powers Bldg., $308,400. Noted Feb. 8.

Wis., Kenosha—Grade Schools—School Bd. two story and basement, brick, tile and concrete schools, plain foundations, one on Fairfield St. other on North Bronson St., to M. Madsen, Builders Exch., Minneapolis, Minn., $117,500 each. Noted March 1.

Wis., Milwaukee—School—St. Michaels Congregation, 469 24th St., 2 story and basement, 60 x 150 ft., brick, tile and concrete, plain foundation, 24th and Cherry Sts., to E. Steigerwald & Sons, 2303 Galend St. Archts. est. $150,000. Noted Feb. 9.

Wis., Whitefish Bay — Apartment — E. R. Tompkins, 445 Milwaukee St., 3 and 2 story, 50 x 72 ft. and 26 x 115 ft., brick, tile and concrete, plain foundation, Newhall St., to R. L. Reisinger & Co., 464 Oakland Ave., Milwaukee. Archts. est. $150,000.

Minn., Chisholm — High School — Bd. Educ., 3 story, 200 x 402 ft. rein.-con., general contract to J. and W. A. Elliott, Lumber Exch. Bldg., Minneapolis, $562,933. Archts. est. $650,000. This corrects report in Feb. 1 issue.

Minn., Minneapolis—High School—Bd. Educ., 2 story and unfinished basement, 45 x 250 x 300 ft., with 1 story, 60 x 80 ft. wing, rein.-con., brick and tile, 26th St. and Emerson Ave. S., general contract to Standard Constr. Co., 1101 Plymouth Bldg., $361,325 (incl. concrete piling). Noted March 1.

Minn., Minneapolis—School and Rectory—Church of Annunciation, c/o F. Lang, 5101 Nicollet Ave., 2 and 3 story and basement, 39 x 104 x 169 ft. school, and 2 story and basement, 19 x 50 x 60 ft. rectory, brick and tile, 50th St. and Lyndale Ave. S., general contract to E. J. Dunnigan, 315 Guardian Life Bldg., St. Paul. Building complete $200,000. Noted Jan. 25.

Tex., Dallas—Club—Dallas Athletic Club, general contract 14 story and basement, 200 x 300 ft., rein.-con., brick, stone and steel, plain foundation, Elm, St. Paul and Live Oak Sts., to Central Contg. Co., Deere Bldg., $878,000. Total $1,500,000. Noted Feb. 8.

Okla., Oklahoma City—Office—Mann Co., Amer. Natl. Bank Bldg., will build 6 story and basement, 100 x 100 ft., rein.-con., brick and stone, 2nd and Harvey Sts., by day labor. $250,000. Hawk & Parr, 101 Magnolia Bldg., archts. Noted Feb. 22.

Colo., Denver—Hall—Regis College, West 50th St. and Lowell Blvd., general contract 4 story and basement, 150 x 175 ft., residence hall, to W. Tamminga, 1620 South Washington St., $162,000. Archts. total est. $230,000.

Calif., Los Angeles—Office—Wholesale Property Co., 8 story, rein.-con., Orange St., to Wallace & Bush, Van Nuys Bldg., $300,000.

Calif., San Diego — Hotel — Hotel San Diego, 7 story, 100 x 110 ft., rein.-con. addition, to Lange & Bergstrom, Washington Bldg., Los Angeles, $450,000. Noted Feb. 22.

Calif., San Francisco—Apartment—Huntington Apartments, 12 story, brick, steel and terra cotta, incl. incinerator, refrigerators, etc., Taylor and California Sts., to Cahill Bros., 110 Sutter St., $1,300,000. Noted March 1.

Calif., San Francisco — Office — Spring Valley Water Co., 475 Sutter St., 7 story and basement, 60 x 70 ft., rein.-con., Mason and Derby Sts., concrete work to H. L. Petersen, 62 Post St.; carpentry work to W. D. Henderson, Monadnock Bldg.; brick and hollow tile to W. N. Reed, 180 Jessie St.; heating and ventilating to Scott Co., 243 Minna St.; plumbing to J. H. Pinkerton, 927 Howard St. Noted Nov. 9.

Que., Montreal—Court House—A. Galipeault, minister Pub. Wks. 96 x 224 x 225 ft. rein.-con., brick, steel and stone annex to Court House, Notre Dame St., general contract to A. Gratton and Atlas Constr. Co., Belmont St., $1,943,560; plumbing to J. Ballantyne, 163 Nazareth St., $216,987; foundation to Foundation Co., 511 St. Catherine St. W., $350,000; structural steel to Dominion Bridge Co., Lachine, $182,500. Noted Jan. 11.

Federal Government Work

PROPOSED WORK

N. H., Portsmouth — Barracks — Spec. 4795—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans remodeling marine barracks, here.

D. C., Wash.—Conservatory—Director Botanical Gardens plans altering and repairing conservatory, 1st and Pennsylvania Aves., N. W.

Md., Annapolis—Mechanical Equipment—Spec. 4796—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans mechanical equipment for swimming pool, here.

Va., Norfolk—Wharf—Spec. 4777—Bureau Yards & Docks, Navy Dept., Wash., D. C., soon takes bids extension to Wharf C, here.

Fla., Pensacola—Pump House, etc.—Spec. 4793—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans pump house, timber trestle, piping and equipment, here.

La., New Orleans — Rock Protection — Superintendent Lighthouses soon takes bids furnishing and placing approximately 1,800 ton rock protection around Sand Island Light Station, Ala.

Tenn., Memphis—Tank—U. S. Engineer plans fuel oil storage tank for Mississippi River Dist.

Panama—Towers—Spec. 4794—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans dismantling towers at St. Petersburg, Fla., and erecting same, here.

T. H., Pearl Harbor—Water Supply—Spec. 4792—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans auxiliary water supply, here.

BIDS DESIRED

N. Y., Staten Island—Machine Shop—March 26, by Superintendent Light Houses, 3 story, rein.-con. machine shop addition, at General Lighthouse Depot, Tomkinsville.

Fla., Jacksonville—Dredging, etc.—April 3, at office U. S. Engineer, Jacksonville, dredging and rock removal in Tampa Harbor, Fla.; adv. this issue.

Ala., Florence—Head-Gate Track, etc.—April 2, at office U. S. Engineer, Florence, furnishing head-gate track, screen track, seal castings, etc., for power house section of Wilson Dam; adv. this issue.

Ky., Louisville—Piling, April 5, at office of U. S. Engineer, P. O. Box 72, furnishing and delivering steel sheet piling for Dam 44, Ohio River; adv. this issue. Noted March 1.

La., New Orleans—March 14, by Superintendent of Lighthouses, furnishing and placing approximately 1,800 ton rock protection around Sand Island Sta., Ala.; adv. this issue.

Mich., Detroit—Dredging, March 17, at office U. S. Engineer, Detroit, dredging in Rouge River, Mich., adv. this issue.

Calif., San Diego—Water Softening Plant—Spec. 4768—March 31, by Bureau Yards & Docks, Navy Dept., Wash., D. C., water softening plant, here. Noted March 1.

Cuba, Guantanamo—Distilling Apparatus, etc.—March 14, (change of date), by Bureau Yards & Docks, Navy Dept., Wash., D. C., distilling apparatus and heater, at Naval Station, here. Noted Feb. 15.

BIDS RECEIVED

Tex., Galveston—Dredging—U. S. Engineer, opened bids Feb. 21, dredging at Brazos Island Harbor, 1,130,000 cu.yd. excav., from J. Jackobsen, 2217 Ave. C, $0.16 and $0.15 per cu.yd., total $181,200; United Dredging Co., Galveston (street address not available) $0.28 and $0.20, $255,600. Noted Jan. 11.

CONTRACTS AWARDED

Pa., Phila.—Dredging, etc.—Spec. 4738 A and B—Bureau Yards & Docks, Navy Dept., Wash., D. C., dredging, filling, wood bulkhead and concrete drain, here, to Amer. Dredging Co., 308 Chestnut St., $0.33 per cu.yd.; to McLean Contg. Co., 1415 Fidelity Bldg., Baltimore, Md., (item 4a) $14,345. Noted Oct. 12.

Pa., Pittsburgh—Houses—U. S. Engineer, two lockkeepers houses at Lock 6, Monongahela River, to Charleroi Lumber Co., Charleroi, Pa., $18,130. Noted March 1.

O., Cincinnati—Horses and Props—Office U. S. Engineer, horses and props for Dams 34, 36 and 38, Ohio River, lot A, to Amer. Car Fdry. Co., Jeffersonville, Ind., $41,458; lot B, to Amer. Bridge Co., 1304 Union Trust Bldg., $33,443.

Miss., Gulfport—Hospital—Spec. 4774—Bureau Yards and Docks, Navy Dept., Wash., D. C., construction of U. S. Veterans Hospital, Part 1 (completed) to Algernon Blair, 11 South Lawrence St., Montgomery, Ala., $498,580; Part 2 water, sewer and drainage, to Hamilton Bros., Co., Gulfport, $45,802; Part 3 inside heating and outside steam, etc., to W. Wilby, Selma, Ala., $68,621; Part 4 electric work, to H. Andrae Electrical Co., 136-40 2nd St., Milwaukee, Wis., $25,022; Part 5, boiler house, to F. J. Elsinger, Brooklyn, N. Y. (street address not available) $53,594. Noted Feb. 1.

O., Cincinnati—Office U. S. Engineer, steel, etc., for Dams 36 and 38, Ohio River, lots A, B and C, to Independent Bridge Co., May Bldg., Pittsburgh, Pa., $15,715; lot D, to Center Fdry. & Mchy. Co., Wheeling, W. Va. (street address not available), $6,035. Noted Jan. 18.

Mich., Detroit — Dredging — U. S. Eng. Dept., 337 Federal Bldg., dredging channel, moving (a) 323 cu.yd. earth and (b) 175,000 cu.yd rock with possible overdepths of 16,000 cu.yd. earth and 86,000 cu.yd. rock excav., involving 323,000 yd. floating dredgework and 175,000 yd. submarine rock excav., to M. Sullivan Dredging Co., 853 Iroquois Ave., (a) $0.50 per yd. (b) $3.50.

Miscellaneous

PROPOSED WORK

Drydock—Brooklyn, N. Y.—Todd Shipyards Corp., 25 Bway., New York City, plans 800 ft. or 900 ft. drydock, here, will accommodate vessels of 40,000 to 50,000 ton capacity.

Elimination of Grade Crossing—Celoron, N. Y.—Village and Erie R.R., 50 Church St., New York City, plan eliminating grade crossing by constructing roadway under tracks of above railroad on Dunham Ave. $25,000. Z. L. Squier, village representative.

Stadium—Pittsburg, Pa.—University of Pittsburgh, Bigelow and Parkman Sts., plans rein.-con. and steel athletic statium, seating capacity 60,000 to 65,000. F. W. Hindman, Columbus, O., (street address not available), engr.

Asphaltic Cement, etc.—Scranton, Pa.—Dept. Pub. Wks., plans to purchase 400 ton asphaltic cement in tank cars, and 400 ton limestone dust. W. LaFontaine, dir.

Light and Power System—Baton Rouge, La.—See "Waterworks."

Aerial Cable, etc.—Madison, Wis.—See "Buildings."

Dikes — St. Louis, Mo. — See "Waterworks."

Grain Elevator — Springfield, Mo. — See "Industrial Works."

Subway—Pittsburg, Kan.—Having plans prepared 70 ft. rein.-con. traffic subway under Kansas City Southern Ry. tracks on East 11th St., two 12 ft. drives, two 5 ft. sidewalks, approaches 180 ft. long. L. D. Cornelius, Pittsburg, engr.

Wharf and Terminals—Corpus Christi, Tex.—Having plans prepared for wharf and terminals along harbor. $4,000,000. Sands & Cummings, Houston, engrs.

Pipe Line—Chickasha, Okla.—Nichols Oil & Drilling Co., plans complete pipe line with several auxiliary pumping plants. $300,000.

Miscellaneous (Continued)

Generator, Accessories, etc.—San Rafael, Calif.—Pacific Gas & Electric Co., 445 Sutter St., San Francisco, plans new generator and accessories, $43,091; 125 hp. compressor, $15,295.

Transmission Line—San Rafael, Calif.—Pacific Gas & Electric Co., 445 Sutter St., San Francisco, plans 8 in. transmission line. $215,750.

Swimming Tank—Santa Clara, Calif.—See "Buildings."

Extending Gas Mains—Sausalito, Calif.—Pacific Gas & Electric Co., 445 Sutter St., San Francisco, plans extending gas mains between Sausalito and Mill Valley. $192,235.

Electrical Distribution System—Venice, Calif.—Defeated $100,000 bonds for electrical distributing system. Noted Feb. 15.

Subway—Ailsa Craig, Ont.—Town and Grand Trunk Ry., London, plans subway under tracks, here, steel deck, concrete abutments. $50,000. J. Wyllie, town clk. C. Forrester, c/o Grand Trunk Ry., London, engr.

Electric Lighting and Power Systems—Blenheim, Ont.—Councils of Erieau, Cedar Springs and Erie Beach having plans prepared electric lighting and power systems from here to each of above named towns. $40,000. Work will be done under supervision of V. A. Beacock, engr., 190 University Ave., Toronto.

Chute Development—Bronson, Ont.—Canadian Marble Quarries Ltd., plans to develop Egan Chutes. $250,000. Engineer not selected.

Electric Power Lines—Durham, Ont.—Hydro Electric Comn., 190 University Ave., Toronto, plans to extend lines through Grey Co. with Durham as central point. $25,000. F. A. Gaby, c/o owner, ch. engr.

Ornamental Lighting System—London, Ont.—Utilities Comn., Hydro Bldg., plans extending and enlarging ornamental street lighting system. $30,000. E. V. Buchanan, Hydro Bldg., engr.

Underground Wiring—London, Ont.—Canadian Pacific Telegraph Co., Dominion Savings Bldg., plans to place all wires in downtown section underground. Cost may run to $50,000. R. Coates, mgr.

Electric Lighting and Power System—Meaford, Ont.—Plans hydro-electric transmission line and power system. $65,000. G. G. Albery, town clk.

Grain Elevators—Port Arthur, Ont.—Gillespie Grain Co., 187 Grain Exch. Annex, Winnipeg, Man., plans to rebuild and extend rein.-con. grain elevators, here. $800,000. Engineer not selected.

Grain Elevator—Port Arthur, Ont.—J. Richardson & Sons, Royal Bank Bldg., Toronto, plan concrete addition to grain elevators, here. $500,000. Engineer not selected.

Harbor Improvements—Port Stanley, Ont.—Plans to improve harbor. $100,000

Transmission Line—Stouffville, Ont.—Plans 11 mi. transmission line to Yonge St., etc. J. Urquhart, town clk.

Subway—Toronto, Ont.—Dept. Pub. Highways, University Ave. and Dundas St., soon takes bids for subway under Grand Trunk Ry. tracks about 1 mi. east of city, 60 ft. wide, 16 ft. high. $150,000. G. Hogarth, ch. engr.

Subway—Toronto, Ont.—Voted $39,000 bonds for subway under Grand Trunk Ry. on Morley Ave., plate girder beams, concrete abutments. R. C. Harris, city engr. Noted Feb. 1.

BIDS DESIRED

Shovel, etc.—Binghamton, N. Y.—Montville Constr. Co., Peoples Trust Bldg., taking bids one No. 4 Keystone shovel (steam) and one 12 ton Buffalo-Pitts road roller.

Dump Motor Truck—Endicott, N. Y.—Village Bd. taking bids 3 yd. end dump motor truck, for Dept. Pub. Wks. C. F. Hunt, village engr.

Bulkhead and Filling—Mineola, N. Y.—March 12, by Bd. Supervs. Nassau Co., Court House, bulkhead and filling on Long Beach Rd. between Barnum Island Creek and the Upland. J. Merrith, clk. Former bids rejected; adv. this issue. Noted Jan. 18.

Mowers and Tractors—New York, N. Y.—March 13, by Bd. Purch., Municipal Bldg., furnishing and delivering mowers and tractors, to Dept. Parks—Bronx. Former bids rejected. Noted Feb. 22.

Paving Blocks—New York, N. Y.—March 13, by Bd. Purch., Municipal Bldg., furnishing and delivering creosoted wood paving blocks, to Dept. Plant & Structures.

Special Work—New York, N. Y.—March 16, by Transit Comn., 49 Lafayette St., supply of special work (frogs and switches) and track fittings for use in construction of various parts of dual system of Rapid Transit R.R.

Cable, etc.—Niagara Falls, N. Y.—March 14, by E. J. Fort, city mgr., Gluck Bldg., 1,700 ft. 12 conductor lead encased cable, 6 mi. No. 10 hard drawn copper wire with triple braid insulation and 3 police call boxes. $5,000.

Asphaltic Cement, etc.—St. George, N. Y.—March 15, by J. A. Lynch, pres. Richmond Boro, Boro Hall, furnishing and delivering 170 ton asphaltic cement at asphalt plant of Bureau of Highways, Tompkins Ave., Clifton, 100,000 gal. bituminous road surfacing material, tar, for cold application, in tank cars at any railroad station in Boro, 1,300 cu.yd. ¾ in. broken stone or trap rock or limestone 12-12, and 1,000 cu.yd. screenings of trap rock at asphalt plant of Bureau of Highways, 4,100 cu.yd. 1½ in. broken stone, 150 cu.yd. ¾ in. broken stone and 100 cu.yd. screenings of limestone 6-6 in Dist. 3; furnishing and applying 170,000 gal. asphaltic macadam binder and 170,000 gal. tar macadam binder on streets in Boro.

Sand, Stone, Gravel, etc.—Erie, Pa.—March 16, by City Council, 2,000 ton sand, 500 ton crushed stone, 500 ton gravel, 400 ton refined asphalt, 275 ton limestone dust, 750 bbl. portland cement, 24,000 gal. fuel oil. F. G. Lynch, city engr.

Cement, Gravel, etc.—Phila., Pa.—March 12, by T. F. Armstrong, purch. agt., City Hall, furnishing 2,250 bbl. portland cement $7,000, 9,100 ton crushed gravel $30,000, 130,000 gal. fuel oil $15,000, 20,000 ft. lumber $10,000.

Power Plant Machinery, etc.—Jacksonville, Fla.—March 19, power plant machinery and electric line material. W. A. Evans, chn.; adv. this issue.

Gas Mains—St. Petersburg, Fla.—March 12, by City Comrs. extending gas mains, etc. $50,000. E. C. Garvin, St. Petersburg, engr. Noted Nov. 23.

Steel Frame—New Orleans, La.—March 22, by Bd. Port Comrs., Suite 200 New Court Bldg., furnishing, erecting and painting steel frame for wharf, at Poland St. landing. J. H. Walsh, genl. mgr.; adv. this issue.

Road Grading Machine—Northfield, O.—W. H. Hale, village clk., taking bids 1 road grading machine.

Centrifugal Pump—Peru, Ind.—March 13, by city, centrifugal pump and motor. J. W. Moore, Indiana Pythian Bldg., Indianapolis, consult. engr.

Materials—Clinton, Ia.—March 12, by Auditor Clinton Co., furnishing 90,000 lb. reinforcing, 2 cars standard sawed fir lumber, 4,000 ft. corrugated metal or concrete culvert pipe. E. B. Lorenzen, Clinton, engr.

Road Tractor—Granite Falls, Minn.—March 21, by G. H. Wilson, aud. Yellow Medicine Co., road tractor. F. Van Krevelen, Granite Falls, engr.

BIDS RECEIVED

Cement, Traprock, etc.—Holyoke, Mass.—Bd. Pub. Wks., furnishing seasons supply cement, traprock, pitch, cold patch and curbing as follows: cement from C. B. Sampson & Co., Holyoke, not over 10,000 bbl. $3.01 per bbl., Prentiss Brooks Co., Holyoke, 5,000 bbl. $3.70 per bbl.; trap rock—Holyoke Street Ry. Co., 2 in. $1.60, 1½ in. $1.70, ¾ in. $1.85, ½ in. $1.95, dust $1.20 per ton, J. S. Lane & Sons, 2 in. $0.90, 1½ in. $1, ¾ in. $1.20, ½ in. $1.25, dust $0.60, all f.o.b. cars at Westfield Quarry, Amherst (notch) quarry, 2 in. $1, 1½ in. $1.10, ¾ in. $1.25, ½ in. $1.25, dust $0.60, f.o.b. cars, there, all by ton; curbing—H. E. Fletcher Co., West Chelmsford, Vt., 6 in. granite, straight, $1.40 per ft., circular $2 per ft., straight 4 in. $0.90 per ft., circular $1.30, L. P. Palmer & Sons, Graniteville, 6 in. straight $1.25, circular $1.50, 4 in. straight $0.90, circular $1.25, F. G. Rogers, Monson, 6 in. straight $2.08, circular $3.12, 4 in. straight $1.58 circular $2.37. (a) cold patch, (b) pitch—T. J. Gibson & Co., Holyoke, (a) $0.20 per gal. (b) $24.50 per ton, Barrett Co., 35 Wendell St., Boston, (a) $0.187 per gal. (b) $27.30 per ton, S. Cabot Inc., 141 Milk St., Boston, (b) $26.40 per ton, M. Moulton Jr., Inc., 6 Beacon St., Boston, (a) first grade, "Aztec," carload lots, $0.20 per gal., less than carload $0.22 per gal., (b) $32.48 ton carload lots, less than carloads $33.64 per ton, 2nd grade (a) $0.164 per gal., carloads, less than carload $0.18 per gal., Atlantic Refining Co., 3144 Passyunk St., Phila., (a) $0.209 per gal. in barrels, carload lots. Noted Feb. 15.

Paving Sand, etc.—Brooklyn, N. Y.—E. Riegelmann, boro pres., Boro Hall, opened bids Feb. 28, furnishing and delivering (1) 7,000 cu.yd. paving sand (2) 5,000 cu.yd. 1½ in. gravel (3) 400 ton paving pitch (4) 3,000 cu.yd. paving gravel (5) 35,000 gal. asphalt road binder, from High Grade Builders Supply Co., 6th St. and 2nd Ave., (1) $7,980 (2) $12,700 (4) $7,770; T. E. McCormick, 810 Lincoln Rd., Flatbush, (1) $8,050; J. Grillo (1) $8,645; B. Turrecamo Contg. Co., 8706 Bay 12th St., (2) $12,850; Washington-Bulkely Co., Inc., 666 Kent Ave., (2) $13,200 (4) $8,610; F. J. Lewis Mfg. Co., 177th St. and Ferris Ave., New York, (3) $10,160; Barrett Co., 17 Battery Pl., New York, (3) $10,400; Rosoff Sand & Gravel Corp., 152 West 42nd St., New York, (4) $7,350; Standard Oil Co. of New York, 26 Bway., New York, (5) $4,725. Noted Feb. 22.

Alterations—New York, N. Y.—Transit Comn., 49 Lafayette St., making alterations in Railroad Structure Routes 4 and 36, Sect. 5 to permit widening roadway of East 60th St., Agreement "CC" to Benedetto, Saussez & Bottino, 62 Franklin St., Astoria, $60,317.

Concrete, Bituminous and Crushed Stone—Phila., Pa.—Opened bids Feb. 24, furnishing mixed concrete, from West Jersey Sand & Supply Co., Delaware Ave. and Marlboro St., $10,663, Union Paving Co., 37th and Spruce Sts., $11,652; bituminous materials from Atlantic Refining Co., 1225 Chestnut St., $21,450, Barrett Co., 34th St. and Grays Ave., $29,375, Barber Asphalt Co., Land Title Bldg., $43,062; 20,800 ton crushed stone from Birdsboro Stone Co., Land Title Bldg., $55,120, E. F. Bennis, Phila., $59,488.

Wharf—Detroit, Mich.—Pub. Lighting Comn., East Atwater St., opened bids 1,049 ft. rein.-con. wharf, 36 ft. wide, also intake flume and sewer outlet, from Gass-Thurston Co., 1550 15th St., $379,000; Candler Dock & Dredge Co., 8145 Medina Ave., $423,700; Natl. Constr. Co., 1031 Dime Bank Bldg., $426,900. Noted Dec. 28.

Structural Steel—San Francisco, Calif.—City and San Francisco Co., furnishing, delivering and erecting structural steel for Moccasin Creek Power Plant, from Dyer Bros., 17th and Kansas Sts., $59,400; Union Constr. Co., Balfour Bldg., $60,720; Pacific Rolling Mill Co., 17th and Mississippi Sts., $64,240; Ralston Iron Wks., 20th and Illinois Sts., $64,240. Noted Feb. 1.

CONTRACTS AWARDED

Steam Ashes—Long Island City, N. Y.—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., furnishing and delivering 13,000 ton steam ashes, to E. B. Simpson, Hempstead Turnpike, Hollis, $11,760. Noted Feb. 22.

Corporation Cocks, etc.—New York, N. Y.—Bd. Purch., Municipal Bldg., furnishing and delivering corporation cocks and hydrant repair parts to Dept. Water Supply, Gas & Electricity, to H. Mueller Mfg. Co., 145 West 30th St. Noted Feb. 15.

Steam or Motor Roller—Flemington, N. J.—Hunterdon Co., one 10 ton steam or motor roller, to J. I. Case Threshing Machine Co., West Allis, Wis., $3,870 and old roller. Noted Feb. 1.

Transmission Lines—Sharon, Pa.—Penn-Ohio Electric Co., Sharon, will build transmission and power lines from here to Orangeville, O., etc., by day labor. $25,000.

Steel Tipple—Glen White, W. Va.—E. E. White Coal Co., steel tipple, to Link Belt Co., Huntington Park, Phila., who will take bids on actual construction work and motors. Archts. est. $75,000.

Caterpillar Tractor, etc.—Rochester, Minn.—Olmsted Co., 1 caterpillar tractor, 40 hp. draw bar capacity, to Holt Mfg. Co., 417 Washington Ave. N., Minneapolis; 1 truck with pneumatic tires and dump body, to Case Auto Co., Rochester; one 12 ft. blade grader with engine hitch, to J. D. Adams & Co., 310 North 1st St., Minneapolis. Noted Feb. 1.

Pipe—Kansas City, Kan.—For 4 car loads of 6 in. c.i. Class C bell and spigot pipe, to U. S. Cast Iron Pipe & Fdry. Co., 604 Interstate Bldg., Kansas City, Mo., $50 per ton.

Transmission Line—Shickley, Neb.—Cities of Shickley and Ong, constructing transmission line from Shickley to Ong and distribution system, to M. B. Messeller, Falls City, $14,981 and $13,277 respectively.

Elevator—Dallas, Tex.—Pearlstone Mill & Elevator Co., Hickory St., rein.-con. addition to grain elevator, 200,000 cu. capacity, to Jones Hettelsater Constr. Co., 706 Mutual Bldg., Kansas City, Mo., $60,000.

Electric Distribution System—Wynnewood, Okla.—See "Waterworks."

Grain Elevator—Ft. William, Ont.—Western Terminal Elevator Co., rein.-con. addition to elevator, to Eagles Constr. Co., Ft. William. Engrs. est. $500,000.

Conduit and Cable Work—Toronto, Ont.—Bell Telephone Co., Adelaide St. W., will buy materials and construct glazed tile conduits, cement manhole covers, lead cable, phone wires in Hillcrest Dist., by day labor. $177,000. Private plans.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ADVERTISEMENTS ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE.

OFFICIAL PROPOSALS

Bids: March 20.

Park Slope and Fort Hamilton Conduits

CONTRACT 197

New York, N. Y.

Sealed Bids will be received by the Board of Water Supply, at its offices, twenty-second floor, Municipal Building, Park Row, Centre and Chambers Streets, New York City, until 11 a.m., Eastern Standard time, on Tuesday, March 20, 1923, for Contract 197, for the construction of the Park Slope and Fort Hamilton conduits, portions of the City conduits of the Catskill aqueduct, extending from Shaft 23 of the City tunnel at Schermerhorn street and Third avenue along Third avenue, Dean street, Fourth avenue, Douglass street, St. Johns place, Eighth, Prospect, Tenth and Gravesend Avenues, Fort Hamilton parkway and 86th street to Shore road and along Shore road to 79th street, in the Borough of Brooklyn, New York City.

The conduits will consist of about 39,290 linear feet of 72-inch and 2,140 linear feet of 66-inch steel pipe, about 310 tons of cast-iron pipe and special castings of various sizes, a Venturi meter, valves and other appurtenances, all of which will have to be maintained for one year.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders, forms of bid and contract, specifications, contract drawings, etc., can be obtained at the office of the Secretary at the above address, by depositing the sum of ten dollars ($10) in cash or its equivalent for each pamphlet. For further particulars apply to the office of the Chief Engineer at the above address.

GEORGE J. GILLESPIE,
President.
JAMES P. SINNOTT,
PHILIP F. DONOHUE,
Commissioners, Board of Water Supply.
BENJ. F. EINBIGLER,
Secretary.

Bids: April 4 (date extended)

Waterworks Improvements

Wheeling, W. Va.

Intake Pier; Intake Line; Substructures and Superstructures for a 20 Million Gallon Filtration Plant and Pumping Station; Heating Plant; Filter Equipment; Sluice Gates; Distributing Mains; Valves; Cast Iron Pipe; 30" Steel and Cast Iron Force Mains; Five One Million Gallon Storage Tanks; and Appurtenances.

Sealed proposals for the construction of 2 20 Million Gallon Filtration Plant and Pumping Station, Steel Reservoirs, Force Mains, Distribution System Piping and Appurtenances as outlined above will be received by the City of Wheeling, W. Va., until 12 o'clock noon, Eastern Standard Time, on the 4th day of April, 1923, and will then be publicly opened and read.

Official Proposal Blanks, Instructions to Bidders, Specifications, Form of Contract and Bond may be seen at the office of the City Clerk, Wheeling, W. Va., or two (2) copies of each may be obtained by bona fide bidders upon application to The J. N. Chester Engineers, Union Bldg., Pittsburgh, Pa., or to the City of Wheeling, W. Va., and deposit of Twenty-five Dollars ($25.00) which amount will be refunded to bidders on receipt of a bona fide bid or upon the return within 30 days after receipt of bids of both copies in good order.

The right is reserved to reject any or all bids.

C. H. DOWLER,
City Manager.

Attest:
W. H. EVANS,
City Clerk.
February 24th, 1923.

OFFICIAL PROPOSALS

Bids: Mar. 21.

Water Works Improvements

Roxboro, N. C.

Sealed proposals will be received by the Mayor and Board of Commissioners of the Town of Roxboro, North Carolina, until 2 o'clock p.m., Wednesday, March 21st, 1923, for developing a new source of water supply. The principal items entering into the work are as follows:

Laying 20,000 feet of 12-inch cast iron B & S water pipe.

Building concrete and brick filter plant; concrete and brick pumping station; concrete reservoir; and earth dam with masonry spillway.

Furnishing and erecting filter equipment.

Furnishing and installing one 500 GPM centrifugal pump with electric motor and one 500 GPM centrifugal pump with gas engine drive.

Clearing impounding reservoir site—60 acres.

Plans will be on file and may be seen at the office of The Ludlow Engineers at Winston-Salem, N. C., or at the office of the Mayor at Roxboro, N. C., after March 1st. After that date copies of the Specifications, Bid Blank, and Contract Form may be obtained from the Engineers.

For the convenience of prospective bidders the Engineers will furnish full set of blue print copies of the plans upon application accompanied by a check for $7.50 to cover the cost, or separate prints at $1.00 each.

Each bid must be accompanied by a certified check payable to the Treasurer of the Town of Roxboro, in the sum of $4,000 with complete bids, or approximately 5% of the amount of partial bids.

Proposals will be opened publicly with the usual rights reserved.

DR. W. A. BRADSHER.
G. W. KANE,
R. L. HARRIS,
Water Works Committee.
THE LUDLOW ENGINEERS,
Winston-Salem, N. C.
J. L. LUDLOW,
Consulting Engineer.

Bids: Mar. 29.

Levee Work

Beardstown, Ill.

Sealed bids will be received by the Commissioners of the South Beardstown Drainage and Levee District of Cass County, Illinois, at the First State Bank Building, at Beardstown, Illinois, up to the hour of 2:00 p.m., March 29, 1923.

The work for which bids are asked is as follows:

A—Enlarging old sand levee, Stations 0 to 18, by hauling sand. Approximately 14,000 yds. (Wheeler or wagon work.)

B—Enlarging old Sand Levee, Stations 18 to 67, approximately 32,000 yds. (Drag line or floater.)

C—Enlarging old dirt levee, Stations 67 to 329, approximately 120,000 cu.yds. (Floater with 90 ft. boom.)

D—Building of 5 dams across borrow pit.

Monthly payments in cash, to the extent of 80% of work performed, will be paid on estimates of the Engineer. Certified check for $500.00 must accompany each bid.

Plans and specifications on file and may be seen at the office of L. B. Kinsey, Engineer, Pekin, Illinois, and John McDorman, Secretary, Beardstown, Illinois.

Bids will be received on separate sections or on the whole work.

L. B. KINSEY,
Civil Engineer,
Pekin, Illinois.

OFFICIAL PROPOSALS

Bids: Mar. 27.

Bridge

Wilkes-Barre, Pa.

Sealed proposals will be received at the office of the City Clerk, City Hall, Wilkes-Barre, Pa., until twelve o'clock noon, Tuesday, March 27,-1923, for the construction of the South Street Bridge in the City of Wilkes-Barre, Pa., in accordance with the plans and specifications on file in the office of the City Engineer.

The bridge will cross the Pennsylvania, Lehigh Valley and Central Railroad of New Jersey's tracks, extend along the north side of South Street, from Washington Street to Park Avenue, be composed of steel trusses over the railroad tracks and reinforced concrete arches and retaining wall approaches thereto. The total length is about 1,735 feet.

Instructions to bidders, plans, specifications, proposal and contract forms may be seen in the office of J. E. Greiner & Company, Consulting Engineers, Lexington Building, Baltimore, Md., and Union Arcade Building, Pittsburgh, Pa., and can be obtained at the office of the City Engineer on and after Tuesday, Macrh 6, 1923, for a deposit of $10.00 for each set, which deposit will be refunded on the day of the letting to those submitting bids, provided the sets are returned complete and in good condition.

Each proposal must be accompanied by a certified check on a solvent bank or trust company in the sum of Five Thousand ($5,000.00) Dollars, made payable without reservations to the Treasurer of the City of Wilkes-Barre, Pa., as a guarantee that if the proposal be accepted a contract will be entered into.

Proposals must be made so as to conform with the instructions to bidders in every respect. Must be endorsed "Proposals for South Street Bridge" and addressed to Fred H. Gates, City Clerk. The City reserves the right to reject any or all bids and to award the contract as may be deemed to the best interests of the City.

MARTIN C. MURRAY,
Superintendent of Streets & Public Improvements.

Bids: March 20.

Sewers

Paducah, Ky.

Sealed proposals will be received until 10 o'clock a.m., Tuesday, March 20, 1923, at the office of the Commissioner of Public Works, City Hall, Paducah, Kentucky, for the construction of the following, 14,833 feet of sewers:

Diameter	Length	Average Depth
42"	407'	8.0'
36"	2,817'	11.7'
33"	307'	11.6'
21"	2,286'	10.3'
18"	1,725'	11.1'
15"	2,845'	13.3'
12"	3,506'	7.8'
10"	940'	11.0'

Borings and test pits indicate clay, sand and gravel.

Materials of construction: Concrete Pipe, Monolithic Concrete, Segment Block, Vitrified Clay, Cement Pipe or Brick.

Certified check for $2,000.00 to accompany bids. Money already available and payments will be cash, 85% monthly.

Right is reserved to reject any or all bids.

Plans and specifications will be furnished upon deposit of $3.00, which will be refunded upon return of same.

HENRY A. PULLIAM,
Commissioner of Public Works and Chief Engineer.

CONSTRUCTION NEWS

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close — See Eng. News-Record

Mar. 19 Lake City, Minn. .....Mar. 8
Mar. 19 Pennington, N. J. .....Mar. 15
Mar. 20 Brooklyn, N. Y. .....Feb. 22
Adv. Feb. 22 to Mar. 15.
Mar. 20 Davenport, Neb. .....Mar. 8
Mar. 20 Mount Greenwood, Ill. ....Mar. 8
Adv. Mar. 8 and 15.
Mar. 20 Milwaukee, Wis. .....Mar. 8
Mar. 20 Brooklyn, N. Y. .....Mar. 1
Adv. Mar. 1 to 15.
Mar. 20 Canandaigua, N. Y. .....Mar. 1
Mar. 20 Lamberton, Minn. .....Mar. 15
Mar. 21 Roxboro, N. C. .....Mar. 1
Adv. Mar. 1 to 15.
Mar. 21 Cleveland, O. .....Mar. 15
Mar. 21 North Branch, Minn. .....Mar. 15
Mar. 21 Baltimore, Md. .....Mar. 15
Mar. 22 Niagara Falls, N. Y. .....Mar. 15
Mar. 22 Phila., Pa. .....Mar. 15
Mar. 22 Bellevue, Neb. .....Mar. 8
Mar. 23 Wallingford, Conn. .....Mar. 15
Mar. 23 Milwaukee, Wis. .....Mar. 15
Mar. 26 Compton, Calif. .....Mar. 8
Mar. 27 Weatherford, Okla. .....Mar. 15
Mar. 27 New Ulm, Minn. .....Mar. 15
Mar. 29 Waldwick, N. J. .....Mar. 15
Adv. Mar. 15.
Apr. 1 Cresson, Pa. .....Mar. 8
Apr. 2 West Chester, Pa. .....Mar. 15
Adv. Mar. 15.
Apr. 4 Wheeling, W. Va. .....Mar. 8
Adv. Mar. 8 and 15.
Apr. 5 Fayetteville, N. C. .....Mar. 15
Adv. Mar. 15.
Apr. 10 Toronto, O. ..... Mar. 15
Adv. Mar. 15.
Apr. 12 Astoria, Ill. .....Mar. 15
Apr. 26 New Orleans, La. .....Mar. 8
Adv. Mar. 8 and 15.

SEWERS

Mar. 19 Lake City, Minn. .....Mar. 8
Mar. 19 Pleasant Ridge, Mich. ....Mar. 1
Mar. 19 Plainfield, N. J. .....Mar. 1
Mar. 19 Newark, N. J. .....Mar. 8
Mar. 19 Wash., D. C. .....Mar. 15
Adv. Mar. 15.
Mar. 19 Scranton, Pa. .....Mar. 15
Mar. 19 Chicago, Ill. .....Mar. 15
Mar. 20 South Bend, Ind. .....Mar. 8
Adv. Mar. 8 and 15.
Mar. 20 Paducah, Ky. .....Mar. 8
Adv. Mar. 8 and 15.
Mar. 20 Nacona, Tex. .....Mar. 15
Mar. 20 Chicago, Ill. .....Mar. 15
Mar. 20 Long Island City, N. Y. ..Mar. 15
Mar. 21 Brooklyn, N. Y. .....Mar. 1
Mar. 21 Tonawanda, N. Y. .....Mar. 8
Mar. 21 Kenmore, N. Y. .....Mar. 15
Mar. 21 Chicago, Ill. .....Mar. 15
Mar. 21 Bedford, Wis. .....Feb. 22
Mar. 22 Marion, Wis. .....Mar. 8
Mar. 22 Mamaroneck, N. Y. .....
Adv. Mar. 8 and 15.
Mar. 22 Cleveland, O. .....Mar. 15
Mar. 23 Chicago, Ill. .....Mar. 15
Mar. 24 Milwaukee, Wis. .....Mar. 15
Adv. Mar. 15.
Apr. 2 Glen Rock (Ridgewood P. O.), N. J. .....Mar. 15
Adv. Mar. 15.
Apr. 6 Lyndonville, N. Y. .....Mar. 15
Adv. Mar. 15.
Apr. 7 Pottstown, Pa. .....Mar. 15
Adv. Mar. 15.
Apr. 10 Toronto, Ont. .....Mar. 8
Apr. 10 Toledo, O. .....Mar. 15
Adv. Mar. 15.
Apr. 16 Urbana, Ill. .....Mar. 15
Adv. Mar. 15.

WASTE DISPOSAL

Mar. 27 Tampa, Fla. .....Mar. 8

BRIDGES

Mar. 20 Manchester, N. H. .....Feb. 22
Mar. 20 Indiana .....Mar. 15
Mar. 20 Montezuma, Ia. .....Mar. 15
Mar. 21 Brainerd, Minn. .....Feb. 15
Mar. 22 Eau Claire, Wis. .....Mar. 8
Adv. Mar. 8 and 15.
Mar. 23 Leamersville, Pa. .....Mar. 8
Mar. 24 Brantford, Ont. .....Mar. 8
Mar. 24 Missouri .....Mar. 15
Mar. 26 Bowling Green, O. .....Mar. 8

Bids Close — See Eng. News-Record

Mar. 27 Wilkes-Barre, Pa. .....Mar. 1
Adv. Mar. 1 to 15.
Apr. 1 Wilkes-Barre, Pa. .....Dec. 14
Apr. 3 North Carolina .....Mar. 15
Apr. 6 Fresno, Calif. .....Mar. 15
Apr. 10 Fonda, N. Y. .....
Sept. 1 Sydney, New South Wales, Australia .....Aug. 3

EXCAVATION, DRAINAGE, IRRIGATION

Mar. 19 Selmer, Tenn. .....Mar. 1
Mar. 20 New York, N. Y. .....Mar. 15
Mar. 21 Newton, Ia. .....Mar. 1
Mar. 22 Buffalo, N. Y. .....Mar. 15
Mar. 23 Houston, Tex. .....Mar. 15
Mar. 26 Winchester, Ill. .....Mar. 8
Mar. 27 Lamar, Colo. .....Mar. 8
Mar. 29 Beardstown, Ill. .....
Adv. Mar. 8 and 15.
Apr. 2 Webster City, Ia. .....Mar. 15

STREETS AND ROADS

Mar. 19 Hammond, Ind. .....Mar. 8
Mar. 19 Spokane, Wash. .....Mar. 8
Mar. 19 San Diego, Calif. .....Mar. 8
Mar. 19 Mineola, N. Y. .....
Adv. Mar. 8 and 15.
Mar. 19 Greensboro, N. C. .....Mar. 15
Mar. 19 Clarion, Ia. .....Mar. 15
Mar. 19 Scranton, Pa. .....Mar. 8
Mar. 20 Granite Falls, Minn. .....Mar. 8
Mar. 20 Tampa, Fla. .....Feb. 22
Mar. 20 Alabama .....Mar. 8
Mar. 20 Sioux Falls, S. D. .....Mar. 15
Mar. 20 Columbus, O. .....Mar. 15
Mar. 20 Charlottesville, Va. .....Mar. 15
Mar. 20 Long Island City, N. Y. ..Mar. 15
Mar. 21 Washington, Pa. .....Mar. 8
Mar. 21 Madison, Wis. .....Feb. 22
Mar. 21 Ontario .....Mar. 8
Mar. 21 Independence, Kan. .....Mar. 8
Mar. 21 Preston, Minn. .....Mar. 8
Mar. 21 Cleveland, O. .....Mar. 15
Mar. 21 Enfield, N. C. .....Mar. 15
Mar. 21 Baltimore, Md. .....Mar. 15
Mar. 21 South Dakota .....Mar. 15
Mar. 22 St. George, N. Y. .....Mar. 15
Mar. 22 East Providence (Providence P. O.), R. I. .....Mar. 8
Mar. 22 Worthington, Minn. .....Mar. 8
Mar. 22 Madison, Wis. .....Feb. 22
Mar. 22 Jefferson, Wis. .....Mar. 15
Mar. 22 Fort Mill, S. C. .....Mar. 15
Mar. 22 York, S. C. .....Mar. 15
Mar. 22 South Dakota .....Mar. 15
Mar. 22 Cleveland, O .....Mar. 15
Mar. 22 Cresco, Ia. .....Feb. 22
Mar. 23 Madison, Wis. .....Mar. 15
Mar. 23 Cincinnati, O. .....Mar. 15
Mar. 23 South Dakota .....Mar. 8
Mar. 24 Charlottesville, Va. .....
Adv. Mar. 8 and 15.
Mar. 24 Missouri .....Mar. 15
Mar. 24 South Dakota .....Mar. 15
Mar. 26 San Rafael, Calif. .....Mar. 15
Mar. 26 West Allis, Wis. .....Mar. 15
Mar. 26 Des Moines, Ia. .....Mar. 15
Mar. 26 Aberdeen, S. D. .....Mar. 8
Mar. 27 St. Louis, Mo. .....Mar. 15
Mar. 27 Washington .....Mar. 15
Mar. 27 Peru, Ind. .....Mar. 15
Mar. 27 Louisiana .....Mar. 15
Mar. 27 Quebec .....Mar. 15
Mar. 27 Michigan .....Mar. 15
Mar. 27 Clinton, Ia. .....Mar. 15
Mar. 27 Prairie du Chien, Wis. ....Mar. 15
Mar. 27 Albert Lea, Minn. .....Mar. 15
Mar. 27 South Dakota .....Mar. 15
Mar. 28 Kalamazoo, Mich. .....Mar. 15
Mar. 28 Owatonna, Minn. .....Mar. 15
Mar. 28 Michigan .....Mar. 15
Mar. 29 Michigan .....Mar. 15
Mar. 30 Michigan .....Feb. 8
Apr. 1 Huntingdon, Pa. .....Mar. 15
Apr. 2 Stoneboro, Pa. .....Mar. 15
Apr. 2 Hastings, Minn. .....Mar. 15
Apr. 2 Hastings, Pa. .....Mar. 15
Apr. 2 Lucerne, Minn. .....Feb. 1
Apr. 3 Amsterdam, N. Y. .....Mar. 15
Apr. 3 Rowland, N. C. .....Mar. 15
Apr. 3 North Carolina .....Mar. 15
Apr. 3 Pennsylvania .....
Adv. Mar. 15.
Apr. 4 Holton, Kan. .....Mar. 8
Apr. 4 Kentucky .....Mar. 15
Apr. 4 South Dakota .....Mar. 15
Apr. 5 Topeka, Kan. .....Mar. 8
Apr. 5 South Dakota .....Mar. 15
Apr. 6 Holton, Kan. .....Mar. 15
Apr. 6 South Dakota .....Mar. 15
Apr. 7 South Dakota .....Mar. 15
Apr. 10 Washington .....Mar. 15

Bids Close — See Eng. News-Record

INDUSTRIAL WORK

Mar. 20 New Haven, Conn. .....Mar. 8
Mar. 27 Oswego, N. Y. .....Mar. 1
Adv. Mar. 1 to 15.
Mar. 9 Juniata, Pa. .....Mar. 8
Mar. 15 Hamilton, Ont. .....Mar. 8
Mar. 17 Baltimore, Md. .....Mar. 15
Mar. 30 Bridgeport, Conn. .....Mar. 15
Apr. 1 Birmingham, Ala. .....Mar. 15

BUILDINGS

Mar. 17 Fairfield, Conn. .....Mar. 15
Mar. 19 Erie, Pa. .....Feb. 15
Mar. 19 Milwaukee, Wis. .....Mar. 8
Mar. 19 Westfield, Mass. .....Mar. 8
Mar. 19 New Osborn, O. .....Mar. 15
Mar. 20 Stockton, Calif. .....Feb. 22
Mar. 20 Phila., Pa. .....Mar. 15
Mar. 21 Sykesville, Md. .....Mar. 8
Mar. 21 New York, N. Y. .....Mar. 8
Mar. 21 Memphis, Tenn. .....Mar. 8
Mar. 21 Brooklyn, N. Y. .....Mar. 8
Mar. 22 Oil City, Pa. .....Mar. 8
Mar. 22 Taunton, Mass. .....Mar. 15
Mar. 22 Duluth, Minn. .....Mar. 15
Mar. 23 Shreveport, La. .....Nov. 3
Mar. 23 West Union, Ia. .....Mar. 15
Mar. 24 Delanson, N. Y. .....Mar. 15
Mar. 26 Cincinnati, O. .....Mar. 1
Mar. 26 Ann Arbor, Mich. .....Mar. 15
Mar. 26 West Orange, N. J. .....Mar. 15
Mar. 27 New York, N. Y. .....Mar. 15
Mar. 27 West Bend, Wis. .....Mar. 8
Mar. 27 Fullerton, Calif. .....Mar. 15
Mar. 29 Milwaukee, Wis. .....Mar. 15
Mar. 30 Clearfield, Pa. .....Mar. 8
Mar. 30 Sioux Falls, S. D. .....Mar. 8
Mar. 31 Fairfield, Ia. .....Mar. 15
Apr. 1 Freeport, Pa. .....Mar. 8
Apr. 2 Syracuse, N. Y. .....Mar. 1
Apr. 2 Morris Plains, N. J. .....Mar. 15
Apr. 4 Marysville, O. .....Mar. 15
Apr. 4 New Rochelle, N. Y. .....Mar. 15
Apr. 10 Columbus, O. .....Mar. 15
Apr. 31 Capa, S. D. .....Mar. 8

FEDERAL GOVERNMENT WORK

Mar. 20 Dredging—Detroit, Mich...Feb. 22
Adv. Feb. 22 to Mar. 15.
Mar. 21 Dredging—Phila., Pa.....Feb. 22
Adv. Feb. 22 to Mar. 15.
Mar. 21 Dredging—Detroit, Mich...Feb. 22
Adv. Feb. 22 to Mar. 15.
Mar. 22 Tank and Tower — Memphis, Tenn. .....Mar. 1
Adv. Feb. 22 to Mar. 15.
Mar. 22 Coal, etc.—Phila., Pa.....Mar. 15
Mar. 22 Coal—Memphis, Tenn. ...Mar. 15
Adv. Mar. 8 and 15.
Mar. 26 Machine Shop—Staten Island, N. Y. .....Mar. 8
Mar. 26 Extension — Kansas City, Mo. .....Mar. 1
Mar. 26 Fuel Oil—Phila., Pa.....Mar. 15
Mar. 26 Wire, etc.—Memphis, Tenn.Mar. 15
Adv. Mar. 15.
Mar. 28 Gates—Cincinnati, O. ...Mar. 15
Adv. Mar. 15.
Mar. 29 Dredging — New York, N. Y. .....Mar. 1
Adv. Mar. 1 to 15.
Mar. 29 Hospital — Livermore, Calif. .....Mar. 1
Adv. Mar. 1 to 15.
Mar. 29 Acetylene Cylinders—Staten Island, N. Y. .....Mar. 15
Mar. 30 Stone Work, etc. — Oswego, N. Y. .....Mar. 15
Adv. Mar. 15.
Apr. 2 Head-Gate Track, etc. — Florence, Ala. .....Mar. 8
Adv. Mar. 8 and 15.
Apr. 3 Dredging, etc. — Jacksonville, Fla. .....Mar. 8
Adv. Mar. 8 and 15.
Apr. 3 Rope—Memphis, Tenn.....Mar. 15
Adv. Mar. 15.
Apr. 3 Dwelling, etc. — Shinnecock, N. Y. .....Mar. 15
Adv. Mar. 15.
Apr. 5 Piling—Louisville, Ky.....Mar. 8
Adv. Mar. 8 and 15.
Apr. 6 Dredge Tender—San Francisco, Calif. .....Mar. 15
Apr. 7 Metal—Vicksburg, Miss....Mar. 15
Adv. Mar. 15.
Apr. 9 Dredging — New Orleans, La. .....Mar. 15
Adv. Mar. 15.
Apr. 9 Cement—Louisville, Ky...Mar. 15
Adv. Mar. 15.
Apr. 10 Lock—Newburg, Ind.....Mar. 1
Apr. 11 Removing Fenders — Norfolk, Va. .....Mar. 15
Adv. Mar. 15.

Close Bids		News-Record See Eng.
Apr. 12	Machinery, etc. — Honolulu, H. T.	Mar. 1
Apr. 16	Tunnel, etc. — Mitchell, Neb.	Mar. 1
Apr. 16	Barges—Galveston, Tex. Adv. Mar. 15.	Mar. 15
May 10	Post Office — Cordova, Alaska	Jan. 25

MISCELLANEOUS

Mar. 19	Power Plant Machinery — Jacksonville, Fla.	Mar. 8
Mar. 19	Road Oil—St. Paul, Minn.	Mar. 15
Mar. 19	Lighting System — St. Paul, Minn.	Mar. 15
Mar. 20	Elevating Grader, etc.—St. Cloud, Minn.	Mar. 1
Mar. 20	Trucks, etc.—Trenton, N. J.	Mar. 15
Mar. 20	Asphalt Binder, etc. — New York, N. Y.	Mar. 15
Mar. 20	Asphalt Wearing Surface Sand—New York, N. Y.	Mar. 15
Mar. 21	Road Tractor — Granite Falls, Minn.	Mar. 8
Mar. 22	Steel Frame—New Orleans, La.	Mar. 8
Mar. 23	Heating and Ventilating Apparatus, etc.—Brooklyn, N. Y.	Mar. 15
Mar. 23	Retards—Clayton, Mo.	Mar. 15
Mar. 27	Transmission Line — Kanoroda, Kan.	Mar. 15
Mar. 29	Coliseum—Syracuse, N. Y. Adv. Mar. 15.	Mar. 15
Mar. 29	Concrete Aggregates — Michigan	Mar. 15
Apr. 9	Stadium—East Cleveland (Cleveland P. O.), O.	Mar. 15

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y., Binghamton—Bd. Pub. Wks. plans new mains in De Russey, LeRoy and Frederick Sts., Highland, Wheeler, Howard, Mason, Woodland and Guilfoyle Aves. $40,000-$50,000. W. E. Weller, city engr.

N. Y., LaSalle—Plans election to vote on $15,000 bonds for extending mains, also $24,500 bonds for 288,000 gal. water standpipe. Engineer not announced.

N. Y., Saranac Lake—March 20, to vote on $8,500 for installing new water pump.

W. Va., Wellsburg—City retained Hudson & Myron, engrs., Wabash Bldg., Pittsburgh, Pa., to prepare comprehensive report, plans and to supervise construction of filter plant, new pump and other improvements.

Tenn., Lewisburg—Plans to expend $125,000 for waterworks improvements. J. N. McCord, Mayor.

O., Columbus—See "Streets and Roads."

Wis., Dousman—Having plans prepared combined concrete foundation and reservoir, 30 ft. diameter, 10 ft. deep, and 20,000 gal. elevated steel tank on 80 ft. steel tower, concrete footings. $25,000. Mead & Seastone, Journal Bldg., Madison, engrs.

Wis., Madison—Plans main extensions in various streets. $25,000 appropriated. L. A. Smith, City Hall, supt. Water Dept.

Kan., Winfield—April 3 to vote on $112,000 bond issue for waterworks improvements. J. Wilfelt, waterworks mgr.

Minn., Sebeka — Plans complete waterworks system. $32,000. A. E. Olson, clk. Engineer not announced.

Mo., Kansas City—City retained Fuller & Maitland, engrs., 600 Warren St., to prepare plans for a new water plant. $11,000,000.

Mo., Kirksville—Voted $260,000 bonds and preparing plans filtration plant, pumps, tank, tower and addition to distribution system. Black & Veatch, 701 Mutual Bldg., Kansas City, engrs. Noted Feb. 22.

Mo., Wellston (St. Louis P. O.) — See "Streets and Roads."

Tex., Corsicana—April 3, to vote on $15,000 bond issue for water extensions. W. W. Harrison, city engr.

Tex., Granbury—March 20, to vote on $47,000 bond issue for waterworks improvements. A. T. Kieth, mayor.

Tex., Knox City—Voted $45,000 bonds issue for waterworks improvements. Address A. E. Arnold, mayor. Noted Feb. 22.

Tex., Dallas—April 3, to vote on $5,000,000 bond issue for water supply. G. D. Fairtrace, city engr.

Tex., Roscoe—March 24, to vote on $24,000 bond issue for waterworks and municipal improvements. Address Mayor.

Okla., Helena — Having plans prepared new well, water pumps and extensions to lighting distribution system. J. D. Bomford, Masonic Temple Bldg., Enid, engr.

Okla., Nowata — Having plans prepared 2,000,000 gal. filtration plant, 1,000,000 gal. concrete reservoir and pipe line. $62,500. Benham Eng. Co., Gumbel Bldg., Kansas City, Mo., engr. Noted Dec. 28.

Ore., Astoria—Soon takes bids on 30 tons 6 in. c.i. pipe and fittings. O. A. Kratz, city mgr.

Calif., Anaheim—City soon takes bids furnishing and delivering 3,530 lin.ft. 4 in., 4,700 lin.ft. 6 in. and 1,640 lin.ft. 10 in. water pipe.

Calif., Clarksburg — See "Excavation, Drainage, Irrigation."

BIDS DESIRED

N. Y., Lyndonville—See "Sewers."

N. Y., Niagara Falls—March 22, by E. J. Fort, city mgr., Gluck Bldg., furnishing 5 hydrants, three 10 in. and sixty-three 6 in. valves, 36 tons 10 in., 3.75 tons 8 in. and 29.76 tons 6 in. c.i. pipe and 5,650 lb. specials. W. B. Bennett, Convention Hall, city engr. Noted Jan. 11.

N. J., Penington — March 19, by Boro Council, reconstructing water plant and installing duplicate gasoline driven pump and engine. H. L. Laning, 103 South Main St., engr.

N. J., Waldwick—March 29, by W. R. Evans, Jr., boro clk., furnishing 6.7 mi. c.i. pipe and special castings, etc. J. L. Collins, engr.; adv. this issue.

Pa., Phila.—March 22, by F. H. Caven, dir. pub. wks., chlorine apparatus for Roxboro filters, $10,000, furnishing 38 and 48 in. check valves, $10,000, c.i. water pipe, $75,000, structural iron, pipe and fittings, etc., $25,000 portable pneumatic air utility machine, $3,000. C. E. Davis, City Hall, engr.

Pa., West Chester—April 2, Boro Council, storage reservoir and dam. T. G. Colesworthy, boro engr., Remington & Vosbury, 601 Market St., Camden, N. J., consult. engrs.; adv. this issue.

Md., Baltimore — March 21, by Bd. Awards, furnishing and delivering c.i. pipe and fittings to Water Dept. W. A. Megraw, City Hall, engr.

N. C., Fayetteville—April 5, by Pub. Wks. Conn., waterworks and sewerage improvements. W. C. Olsen, Kinston, engr.; adv. this issue.

O., Cleveland—March 21, by Cuyahoga Co., 6,065 ft. 6 and 8 in. c.i. mains in Impvt. 27, for Co. Sewer Dist. 1. $40,000. R. F. MacDowell, Court House, engr.

O., Columbus—See 'Streets and Roads."

O., Toronto—April 10, by Bd. Trustees of Pub. Affairs, water filtration plant. Hudson & Myron, 808 Wabash Bldg., Pittsburgh, Pa., engrs.; adv. this issue.

Ill., Astoria—April 12 by City Clerk, complete waterworks, incl. 30,000 gal. impounding reservoir, 2.5 mi. 6 in. c.i. pipe, 200,000 gal. per day rapid sand filter, 2 motor driven pumps, etc. $40,000. W. A. Fuller Co., 1917 Railway Exch., St. Louis, Mo., engrs. Noted Oct. 12.

Wis., Milwaukee—March 23, by R. E. Stoelting, comr. Pub. Wks., constructing Riverside Pumping Station, 1 story, 130 x 240 ft., brick and concrete, Humboldt Ave. Cost complete $1,500,000. G. Staal, City Hall, engr.

Minn., Lamberton — March 20, by city, main extensions, 18,000 lin.ft. c.i. pipe, 22 hydrants, etc. $27,000. F. A. Beiersdorf, clk. Druar & Milinowski, 500 Globe Bldg., St. Paul, engrs. Noted March 8.

Minn., New Ulm — March 27, by W. Backer, city clk., water and sewer improvements, 5,979 lin.ft. 6 in. pipe, 209 water services, 5,602 lin.ft. 2, 3 and 1 in. lead pipe; 3 lateral sewers, 780 lin.ft. 8 in. pipe, 3 brick manholes, fifteen 6 in. wyes, 3 flush connections, 216 sewer services. $23,300. F. D. Minium, city engr.

Minn., North Branch—March 21, by village, waterworks system, 20,415 lin.ft. 4-8 in. c.i. pipe, 49 hydrants, pump house, 20 x 100 ft., steel standpipe, etc. $30,000. C. L. Pillsbury Co., 1200 2nd Ave. S., Minneapolis, engrs. Noted Sept. 22.

Neb., Bellevue—March 22, by W. J. B. Kast, village clk., 5,550 lin. ft. 4 in. c.i. pipe, hydrants, stop valves, etc. $7,000. Trimble Co., 610 World-Herald Bldg., Omaha, engrs.

Calif., Compton—March 26, by Supervs. Los Angeles Co. (Los Angeles), waterworks system, near here, incl. (a) c.i. pipe and fittings (b) wrought iron pipe and fittings (c) steel tank and tower (d) pumping equipment and accessories (e) water distributing system, concrete pump house, pipe ducts and cleaning bed (f) iron body water valves (g) brass angle valves (h) steel A frame.

BIDS RECEIVED

Md., Baltimore—Bd. Awards opened bids March 7, addition to Montibello Filtration plant, Contr. 63, 365,000 cu.yd. excav., 74,000 cu.yd. rolled embankment, 45,400 cu.yd. concrete 3,760,000 lb. reinforcing, 800 tons setting c.i. pipe, valves and sluice gates, from Carozza-Rowe Constr. Co., 624 North Gilmor St., $1,248,955; Consolidated Eng. Co., Calvert Bldg., $1,310,194; Sanford & Brooks, Commerce and Water Sts., $1,414,816. Noted Feb. 15.

Calif., Antioch—For two 250,000 gal. concrete tanks, concrete flume and pump from G. H. Field Co., Antioch, $12,340; two 2,000 gal. per minute horizontal centrifugal pumps, direct connected to two 20 hp motors, from United Iron Wks., 580 2nd St., Oakland, $2,750; furnishing and installing 200 lin.ft. c. i. piping, fittings and 1 flow meter, from Tieslau Bros., 2819 Grove St., Berkeley, $3,000. Noted Jan. 15.

Calif., San Francisco—Constructing high pressure fire mains in portions Leavenworth, Jones and Beach Sts., (city to furnish material), from H. McGill, 763 San Bruno Ave., $15,771; J. R. McElroy, 180 Jessie St., $15,996; L. J. Cohn, 180 Jessie St., $16,484. Noted March 1.

Que., Montreal—Opened bids 13,300 ft. mains, from McAvity Co. Ltd., St. John, N. B., $56 per ton; Canada Iron Co. Ltd., Three Rivers, Que., $52.50 per ton; Cochrane Co., Ltd., Middlesborough, England, $53.25 per ton. Engrs. est. $300,000.

Porto Rico, San Juan—Bd. Awards received bids Nov. 29 at office M. Travieso, comr. Pub. Serv., 10,500,000 gal. filtration plant and 10,500,800 gal. filtered water reservoir, from Adriano Gonzalez, $349,000; F. Benitez Rexach $488,120; Robert Filter Mfg. Co., $645,000. All bids rejected. Noted Oct. 19.

CONTRACTS AWARDED

N. C., Greensboro—City Council, 7 mi. water pipe and 5 mi. sewers, to P. N. Howard, 118 West Martin St., Raleigh, $40,783. Noted March 1.

S. C., Canton—Furnishing 9,000 lin.ft. 15 in., 29,000 lin.ft. 18 in., 8,000 lin.ft. 24 in. and 1,500 lin.ft. 30 in. concrete pipe, to Canton Block & Tile Co., Canton.

O., Dayton—Montgomery Co. mains in lower Westwood Dist., to F. Krumholtz, Springfield (street address not available), $131,938; higher Lakeside Dist., to Crumley, Jones & Crumley, 2301 Concord St., Cincinnati, $79,861; lower Lakeside Dist., to C. F. Smith & Son, 54 Davies St., $32,131. Noted Feb. 15.

O., Wellsville—Dept. Pub. Serv., earthen reservoir and dam, to A. W. Hinaman, Canton, Pa., $110,333; furnishing 300 ft. 30 in., 11,000 ft. 16 in., 52,744 ft. 16 in. and 78 ft. 4 in. c.i. pipe, to U. S. Cast Iron Pipe & Fdry. Co., 412 Oliver Bldg., Pittsburgh, Pa., $56,029; laying above pipe, to Allison-Harris Constr. Co., East Liverpool, $53,428. Noted March 1.

Mo., St. Louis—Missouri, Kansas & Texas R.R., Railway Exch. Bldg., 24 Graver Type K water softeners along its lines, to Graver Corp., 4809 Todd Ave., East Chicago, Ind.

Tex., Dallas — Water well to Trinity Sands in Oak Cliff, to Randolph & Steelsmith, Dallas, (street address not available) $43,606. Engrs. est. $60,000.

Tex., Dallas—See 'Streets and Roads."

Colo., Walsenburg—Will lay 5 mi. c. i. Class B pipe, by day labor. $150,000. D. Cory, Walsenburg, engr.

Utah, Price—For 160 tons 4 and 6 in. c.i. pipe, etc., to D. C. Dunbar Co., 325 Walker Bank Bldg., Salt Lake City, $16,000; 460 tons 8 and 10 in. c.i. pipe, to U. S. Cast Iron Pipe Co., Dooley Bldg., Salt Lake City, $30,360.

Ont., Toronto—Plans reconstructing distribution system at Toronto Island, incl. 30,000 ft. c. i. pipe, mostly 6 in. $221,000. R. C. Harris, city engr.

Sewers

PROPOSED WORK

N. Y., Cuba—Village Trustees received no bids Feb. 24, sewerage system and sewage disposal works. Will readvertise. Hopkins & Field, 349 Cutler Bldg., Rochester, engrs. Noted Feb. 1.

Pa., Grove City—Voted $50,000 bonds for sewage disposal plant. Engineer not announced.

O., Cleveland — Plans sewage disposal plant in East 71st St., Cuyahoga Heights village. $3,000,000. R. Hoffman, City Hall, engr.

O., Columbus—See "Streets and Roads."

O., Grandview Heights (Columbus P. O.) —Preparing plans 8 and 10 in. sewers in various streets. $30,000. Burgess & Niple, 141 East Broad St., Columbus, engrs.

O., Warren — Plans sanitary sewers in Milliken Rd., Tennessee and Arlington Aves. $25,000. G. T. Hecklinger, clk. Engineer not announced.

Mich., Detroit—Had plans prepared 4,669 ft. 4 ft. 3 in. to 5 ft. cylinder sewer in Blaine Ave. Arm east in Blaine Ave. from

Sewers (Continued)

Lawton to **Wilson Sts., 1,842 ft. 4 ft. 3 in.** cylinder in **Blaine Ave. Arm west from** Lawton Ave. to **Dexter Blvd., 6,603 ft. 4** ft. to 6 ft. 6 in. **cylinder McGraw Ave. Arm** in McGraw and Hudson from Hartford to Linwood Aves., incl. 250 ft. 6 ft. 6 in., 1,186 ft. 6 ft. 3 in., 1,614 ft. 5 ft. 9 in., 1,090 ft. 5 ft., 870 ft. 4 ft. 9 in., 1,259 ft. 4 ft. cylinder. J. W. Reid, city engr.

Mich., Detroit — Had plans prepared vitr. crock sewers in Alley 3813, incl. 715 ft. 12 in.; Alley 3814, 2,816 ft. 12-24 in.; Alley 3821, 1,430 ft. 24-30 in.; Alley 3818, 1,172 ft. 12 in.; Alley 3805, 2,234 ft. 12-18 in.; Alley 3836, 1,600 ft. 12-18 in.; Alley 3837, 1,564 ft. 12-20 in.; Alley 3838, 1,062 ft. 12-18 in.; Alley 3808, 1,118 ft. 12 x 20 in.; Alley 3820, 5,000 ft. 12-24 in.; Alley 3824, 5,420 ft. 12 x 24 in.; Alley 3825, 3,580 ft. 12 x 20 in.; Alley 3817, 1,200 ft. 10-24 in.; Alley 3819, 313 ft. 12 in.; Alley 3839, 1,944 ft. 12-18 in.; Alley 3840, 1,874 ft. 12-18 in.; Alley 3841, 1,841 ft. 12-20 in.; Alley 3842, 1,421 ft. 12-18 in.; Alley 3843, 1,550 ft. 12 x 18 in.; Alley 3844, 725 ft. 12 in.; Alley 3845, 2,376 ft. 12-18 in.; Alley 3815, 202 ft. 12 in.; Alley 3823, 4,700 ft. 10-24 in., Alley 3827, 394 ft. 15 in., Alley 3828, 681 ft. 12 in. J. W. Reid, city engr.

Mich., Lansing—Plans water softening plant. $700,000. Alvord, Burdick & Howson, 8 South Dearborn St., Chicago, engrs.

Ill., North Brooke—Plans sanitary and storm sewers. $130,000. Consoer Eng. Co., 140 South Dearborn St., Chicago, engrs.

Kan., Frontinac—A. T. Archer & Co., engrs., 609 New England Bldg., Kansas City, Mo., soon takes bids sanitary sewerage system. $50,000-$75,000.

Mo., University (St. Louis P. O.)—April 4, to vote on $136,000 bonds sewer through River Des Peres Valley.

Mo., Wellston (St. Louis P. O.) — See "Streets and Roads."

Tex., Dallas—April 3, to vote on $500,000 bond issue for sewage disposal improvements, also $150,000 for sanitary sewers. G. D. Fairtrace, city engr.

Calif., Newport Beach—Plan election in May to vote on $25,000 bonds for sewerage system and disposal plant.

BIDS DESIRED

N. Y., Brooklyn—March 21, by E. Rigelmann, boro pres., Boro Hall, sewers in Ocean Ave. between Ave. N and Ave. O, 41st St. between 15th and 16th Aves., Crown St. from Schenectady to Utica Aves., sewer basins on Rutherford Pl. north and south sides, about 165 ft. east of east building line of 17th Ave., northeast corner of Bay 16th St., northeast and northwest corners of Bay 17th St., southwest corner of Barrett St. and Livonia Ave., Flushing Ave., northeast corner of East Ave., southwest corner of 81st St. and 4th Ave., northeasterly curb line of 86th St., northeast corner of 18th Ave. and 68th St., also delivering manhole heads and covers to Bureau of Sewers.

N. Y., Long Island City—March 20, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sewers in Winsor Pl. from 2nd to 4th Aves., Madison St. from Prospect Ave. to crown 420 ft. east of Prospect Ave., Pulaski St. from Hinman to Morton Aves., Speer St. from Central Ave. to Pulaski St., Griffith Ave. from Pulaski St. to Metropolitan Ave., Darrow St. from Griffith to Morton Aves., Wayne St. from Hinman St. to Griffith Ave., Steuben St. from Hinman St. to Morton Ave., Tiemann Ave. from Radcliff to Strong Sts., Vandeventer Ave. from 2nd to 5th Aves., Grand St. from Monteverde Ave. to crown 80 ft. east of center line of Ramsey St., Rockaway Blvd. from 90th to 91st Sts.

N. Y., Lyndonville—April 6, by Bd. Village Trustees, sewerage system, disposal works, and waterworks system. Hopkins & Field, 349 Cutler Bldg., Rochester, engrs.; adv. this issue.

N. J., Glen Rock (Ridgewood P. O.)—April 2, by Mayor and Boro Council, Smith-Singer Bldg., sewerage system, sewage disposal works and pumping station. H. J. Harder, 129 Market St., Paterson, civil engr.; adv. this issue.

Pa., Pottstown—April 7, at office M. L. Seasholtz, secy. Council, sanitary sewers. Gannett, Seelye & Fleming, inc., 1 North Market Sq., Harrisburg, engrs.; adv. this issue.

Pa., Scranton—March 19, by City Controller, City Hall, furnishing 1 carload 12 in. and 1 carload 10 in. terra cotta sewer pipe. W. Lafontaine, dir. pub. wks.

D. C., Wash.—March 19, by Dist. Comrs., Room 509, Dist. Bldg., 1,285 ft. sewer; adv. this issue.

N. C., Fayetteville—See "Waterworks."

O., Cleveland — March 22, sewers in Avalon Rd. N. E. from Olympia Rd. N. E. to Roseland Rd. N. E., Alcoy Rd. N. E. from Euclid Ave. to northerly end, Algonac Rd. N. E. from Euclid Ave. to Olympia Rd. N. E., Austin Ave. N. E. from East **128th St. to 215 ft. easterly, Catalpa Rd. N. E. from Euclid Ave. to northerly end, Euclid Ave. from Wayside Rd. N. E. to** city limits, Syracuse Ave. N. E. and Amsterdam Rd. N. E. from St. Clair Ave., N. E. to East 179th St., Syracuse Ave. N. E. and Brussels Rd. N. E. from Amsterdam Rd. N. E. to St. Clair Ave. N. E., Syracuse Ave. N. E. and Nottingham Rd. N. E. from Brussels Rd. N. E. to St. Clair Ave. N. E. R. Hoffman, City Hall, engr.

O., Columbus—See "Streets and Roads."

O., Toledo—April 10, by W. T. Jackson, dir. Pub. Serv., constructing intercepting sewerage system. Contr. 6. Fuller & McClintock, 319 Summit-Cherry Bldg., engrs.; adv. this issue.

Ill., Chicago—March 19 by Bd. Local Impvts., 207 City Hall, sewers in various streets. $155,792. C. D. Hill, ch. engr.

Ill., Chicago—March 20 by Bd. Local Impvts., 207 City Hall, sewers in various streets. $217,795. C. D. Hill, ch. engr.

Ill., Chicago—March 21 by Bd. Local Impvts., 207 City Hall, 107th St. Sewer. $475,600. C. D. Hill, ch. engr.

Ill., Chicago—March 23 by Bd. Local Impvts., 207 City Hall, sewers in various streets. $205,700. C. D. Hill, ch. engr.

Ill., Urbana—April 16, by Bd. Trustees Urbana & Champaign Sanitary Dist., Flat Iron Bldg., intercepting sewers, sewage treatment plant and appurtenances. P. W. Wright, pres.; adv. this issue. Noted Dec. 14.

Wis., Milwaukee—March 24, by Metropolitan Sewerage Comn. of Milwaukee Co., 508 Market St., main sewer in 1st St., St. Francis, Elizabeth, Pensylvania and Thompson Aves. J. H. Fowles, secy., adv. this issue.

Wis., Prarie Du Chien—See "Streets and Roads."

Ia., Bedford—March 21, for Sect. 1, 21,-413 ft. 8 in. and 2,637 ft. 10 in. sewers, 59 manholes, 10 flush tanks, etc.; Sect. 2, sludge bed, sprinkling filter, dosing chamber, etc. $34,000. Henningson Eng. Co., National Bldg., Omaha, Neb.

Minn., New Ulm—See "Waterworks."

Tex., Nacona—March 20, by City Council, 36,900 ft. 6-10 in. sewer pipe, 58 manholes, 24 lampholes, 3 disposal plants. Elrod Eng. Co., 3206 Elm St., Dallas, engrs. Noted Feb. 1.

BIDS RECEIVED

N. Y., Blasdell—Village Trustees opened bids Feb. 26, sewers from M. Heltz, 960 Ridge Rd., Lackawanna, $82,582, Irwin & Son, Barnesville, O., $89,[illegible]; disposal plant from G. W. Moore, 82 Richfield Ave., Buffalo, $63,557, Crooker & Carpenter, Inc., Niagara Life Bldg., Buffalo, $73,573. Noted Feb. 15.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., opened bids March 9, storm water sewer in 25th St. from point about 100 ft. northerly from north line of Riker Ave. to Ditmars Ave., etc., from Booth & Flynn, Ltd., Green and Tompkins Aves., Brooklyn, $528,002; Necaro Co. Inc., 97 Court St., Brooklyn, $536,890; Awixa Corp., Mt. Vernon, $575,-039. Noted March 1.

O., Ashtabula—Opened bids Feb. 21, East Side Main Sanitary Sewer, 8,000 ft. 15-27 in. vitr. clay and 2,000 ft. 42 in. segmental block pipe, from C. Hukari, Ashtabula, $116,536; W. J. Erwin, Greenville, $118,520. Noted Feb. 15.

Wis., Milwaukee—Opened bids March 9, East High Level Sewer, Sect. 1 from Mason St. and Bway. to Cambridge and Brady Sts., 9,562 ft. 54-84 in. concrete sewer, 655 ft. 18 in. terra cotta pipe, from Wenzel & Henoch Co., 498 27th St., $495,-468; H. Hohensee, Ludington Ave., Wauwatosa, $641,814; Knowles & Fehr, Inc., 314 North Dearborn St., Chicago, $774,642. Noted March 1.

Calif., Fresno—City Council opened bids March 1, sewers in Stanislaus St., 16,400 ft. 18-24 in. concrete and 1,772 ft. 8-12 in. vitr. pipe, from Merced Concrete Pipe Co., 16 and H Sts., Merced, $20,878; Frederickson & Shannon, Cory Bldg., $24,749; Thomson Bros., Divisadero and G Sts., $27,405. Noted Feb. 22.

CONTRACTS AWARDED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, sewers in East New York Ave. and Crown St., to A. Mannino, 263 86th St., 97.49% of engineers est. $8,773 and 95% engrs. est. $3,473 respectively; East 7th St., Ocean Ave. and Colonial Rd., to C. F. Vacharias, 643 40th St., 95% engrs. est. $8,517, 93% engrs. est. $4,122 and 107% engrs. est. $989 respectively; Belmont Ave., East 12th and Cleveland Sts., to G. L. Schrade, 693 Flatbush Ave., 94% engrs. est. $1,663, 90.4% engrs. est. $7,990 and 76% engrs. est. $2,296 respectively; Ave. O, to Tomasetti & Co., Inc., 1133 60th St., 97% engrs. est. $350. Noted Feb. 22.

N. Y., Scottsville—Bd. Village Trustees, sewerage system, to F. W. Hamilton, Rochester (street address not available), $54,-000. Noted Feb. 1.

Pa., Phila.—Sewers in Ashdale St., to A. Pascuzzi, Lincoln Bldg., $14,564; Charles St., to O'Neill Co., 127th St. and Mermaid Lane, $39,985; Germantown Ave. and Haines St., to A. J. Ellis, 5724 North Marshall St., $6,882; Pratt St. and Grays Ave., to A. DeVite, 1721 Hicks St., $5,452 and $5,698 respectively. Noted March 8.

N. C., Greensboro—See "Waterworks."

O., Akron—W. F. Peters, dir. Pub. Serv., 2,930 ft. 39 in. and 340 ft. 45 in. brick sewer, Ohio Canal Intercepter, to T. E. McShaffrey Constr. Co., 171 South Forge St., $76,353. Engrs. ets. $62,000. Noted March 1.

O., Akron—W. F. Peters, dir. Pub. Serv., 1,400 ft. segmental block and vitr. sewer in West North St., to S. Erslan, 370 Bowery St., $12,707, engrs. est. $12,477; 3,705 ft. vitr. and brick sewer in South Arlington St., Contr. 2, 5th Ave. trunk, to T. E. McShaffrey Constr. Co., 171 South Forge St., $16,501, engrs. est. $16,631; 4,180 ft. segmental block sewer in Bye St. Contr. 1, to Iafornaro Constr. Co., 2218 Murray Hill Rd., Cleveland, $62,947, engrs. est. $67,662; 3,855 ft. segmental block and vitr. sewer in Bye St. Contr. 2, to C. Ruhlin, 518 Metropolitan Bldg., $54,530, engrs. est. $61,353; 860 ft. brick sewer in West Market St., to M. O. Toole, 155 Gale St., $30,005, engrs. est. $29,554. Noted Feb. 1.

Mich., Springwells—B. P. Esper, village clk., sewers in Sect. 25, Barclay Ave., 97[illegible] ft. 72 in., 867 ft. 60 in. pipe to J. Porath, 745 Griswold St., Detroit, $35,667; Sect. 26 in Michigan Ave., 758 ft. 72 in., 423 ft. 66 in., 355 ft. 60 in., 637 ft. 54 in., 303 ft. 48 in., 372 ft. 72 in., 393 ft. 36 in. pipe. Sect. 28 in Ford Rd., 597 ft. 60 in., 553 ft. 54 in., 2,668 ft. 48 in. pipe, Sect. 29 in Donald Ave., 739 ft. 62 in., 834 ft. 54 in., 2,675 ft. 48 in., 574 ft. 39 in., 412 ft. 27 in. pipe, Sect. 30 in Arthur Ave., 753 ft. 60 in., 3,513 ft. 48 in., 574 ft. 36 in., 287 ft. 24 in., to G. R. Cooke, 1260 Penobscot Bldg., Detroit, $43,951, $47,169, $65,415, and $65,353 respectively; Sect. 27 in Colson Ave., 1,279 ft. 10 ft., 1,314 ft. 9 ft. 6 in. sewer to R. Mercier 5435 Wesson Ave., Detroit, $107,345; Sect. 32 incl. 818 ft. 48 in., 915 ft. 42 in., 740 ft. 30 in. to P. Frandsen, 1167 Sellick Ave., Kenosha, Wis., $25,-986; Sect. 31 in alley north of Pere Marquette R.R., 290 ft. 36 in., 840 ft. 30 in., 840 ft. 20 in. pipe, Sect. 33 in Warren Ave., 508 ft. 42 in., 241 ft. 39 in., 1,189 ft. 36 in., 600 ft. 33 in., 319 ft. 30 in., 300 ft. 27 in., 309 ft. 24 in., 319 ft. 20 in., to Hammen & Co., 4612 Woodward Ave., Detroit, $14,-217 and $35,071 respectively; Sect. 35 in Rome Ave., 451 ft. 60 in., 638 ft. 48 in., to Lennane & McIlvenna, 1205 Book Bldg., Detroit, $16,197. Noted Jan. 18.

Ill., Villa Park—Sewerage system to H. Reese, Quincy, Engrs. est. $100,000. Noted Oct. 19.

Ill., Dwight—Sewage disposal plant, to C. D. Reeber, Dwight. Engrs. est. $25,000. Noted April 27.

Mo., Harrisonville — C. A. Burke, city clk., rein.-con. disposal plant, 45,000 ft. 6-12 in. sewers, trench work, flush tanks, etc., to J. O'Neil, 119 4th Ave., Leavenworth, Kan., $47,395. Work includes furnishing and laying 8 in. pipe at $0.37 per ft., 10 in. $0.50, 12 in. $0.60, 15 in. $0.85 and 6 in. $0.26. Noted Feb. 22.

Calif., Santa Ana—Constructing ocean end of joint outfall sewer line, to Deward & Cobham, Granger Bldg., San Diego, $43,-000; screening work to Teget & Cox, 222 Harvard Pl., Antario, $10,900. Noted March 1.

Waste Disposal

PROPOSED WORK

Wis., West Allis—Preparing specifications and soon takes bids new garbage incinerator, first unit 20 ton capacity, eventually 40 ton. $25,000-$30,000. W. Darby, City Hall, engr.

Ont., Birchcliffe—Scarboro Twp. having plans prepared for garbage incinerator, brick. $50,000. C. E. Fraser, Birchcliffe, engr.

CONTRACTS AWARDED

Pa., Phila.—Foundation for Harrowgate incinerator, to G. F. Dobbins, 4615 Springfield Ave., $91,638. Noted March 8.

Bridges

PROPOSED WORK

Conn., Ansonia—Plans repairs to bridge, Maple St., steel and concrete. $40,000. Dept. Pub. Wks., City Hall, engrs.

Bridges (Continued)

N. Y., Troy—Preparing plans converting one section of present steel span bridge into lift span, over Hudson River, Harrington, Howard & Ash, Orear-Leslie Bldg., Kansas City, Mo., engrs.

O., Lakewood (Cleveland P. O.)—Cuyahoga Co. (Cleveland) plans concrete bridge, probably on Hillard Rd., here. $800,000. F. R. Lander, Court House, Cleveland, engr.

Kan., Solomon—Dickinson Co. (Abilene), having plans prepared 150 ft. rein.-con. bridge over Solomon River, 20 ft. roadway. Marsh Eng. Co., 205 Masonic Temple, Des Moines, Ia., engrs.

Mo., Kansas City—Kansas City Terminal Ry. Co., Union Sta., having plans prepared 820 ft. steel and rein.-con. viaduct, 30 ft. wide with one 5 ft. sidewalk, also preparing preliminary plans for rein.-con. and steel viaduct over railroad tracks, both in East Boctoms. Latter costs $150,000-$200,000. J. V. Hanna, c/o owner, engr.

Tex., Guadalupe—Seguin Co. having plans prepared 172 ft. concrete girder bridge, 4 spans, 20 ft. roadway, over Nash Creek on State Highway 3. $25,000. S. C. McCarty, co. engr.

Wash., Seattle—See "Streets and Roads."

Calif., Merced—See "Streets and Roads."

Ont., Barrie—Simcoe Co. voted $35,000 for bridges. R. J. Fletcher, clk.

Ont., Toronto—Plans to remove and replace Winchester St. Bridge, probably concrete. $25,514. R. C. Harris, city engr.

Ont., Walkerton — See "Streets and Roads."

BIDS DESIRED

N. Y., Fonda—April 10, by E. S. Walsh, supt. Pub. Wks., Albany, bridge across Mohawk River between here and Fultonville, 1,722 cu.yd. 2nd class concrete, 5,350 sq.ft. concrete sidewalk on approaches and bridge spans, 733, 500 lb. structural steel, 68,000 lb. metal reinforcement and 465 cu.yd. concrete roadway on bridge spans and approaches. $163,867.

North Carolina—April 3, by State Hy. Comn., Raleigh, constructing bridges and culverts on State Project 971, Madison Co., 1,782 cu.yd. concrete, 205,430 lb. reinforcing, 1,750 lb. plates and bolts, $60,000; State Project 293, Wilson Co., 766 cu.yd. concrete, 88,080 lb. reinforcing, 41,000 lb. structural steel, etc., $32,000; State Project 437, Harnett Co., 1,074 cu.yd. concrete, 124,000 lb. reinforcing, 2,200 ft. untreated timber piles, 1,790 lb. plates and bolts, $40,000; State Project 392, Robeson Co., 1,020 cu.yd. concrete, 150,000 lb. reinforcing, 3,250 lb. plates and bolts, 4,000 ft. untreated timber piles, $43,000; State Project 485 A, Wake Co., 1,570 cu.yd. concrete, 222,800 lb. reinforcing, 2,160 lb. plates and bolts, $65,000; State Project 616, Cabarrus Co., 1,546 cu.yd. concrete, 196,900 lb. reinforcing, 1,840 lb. plates and bolts, $50,000; State Project 944, Haywood Co., 1,271 cu. yd. concrete, 137,000 lb. reinforcing, 1,080 lb. plates and bolts, $45,000; State Project 213, Craven Co., 5,200 ft. untreated timber sheet piling, 1,240 cu.yd. concrete, 145,120 lb. reinforcing, 3,000 ft. untreated timber piles, 1,480 lb. plates and bolts, $49,000. C. M. Upham, state highway engr. Noted March 8.

Indiana—March 20, by J. D. Williams, dir. State Hy. Comn., Indianapolis, constructing following bridges: one 60 ft. steel truss over Otter Creek, on State Rd. 4C, Warrick Co.; rein.-con. arch two 82 ft., over Lost River and rein.-con. arch two 60 ft., over Lick Creek on State Rd. 4K, Orange Co.; one 28 ft. rein.-con. girder over Knowles Ditch, one 40 ft. steel truss over drainage ditch and one 30 ft. arch extension over dredged ditch on State Rd. 10A, Vanderburgh Co.; one 60 ft. steel truss over Hurricane Creek, State Rd. A, one 55 ft. steel truss over drainage ditch, one 28 ft. rein.-con. girder over dredged ditch and one 72 ft. steel truss over dredged ditch, on State Rd. 10B, Gibson Co.; one 50 ft. rein.-con. arch over Lake Drain Creek, on State Rd. 18A, Spencer Co.; one 84 steel truss over Sycamore Creek, on State Rd. 22F, and one 30 ft. rein.-con. girder over drainage ditch on State Rd. 12I, Morgan Co.; one 30 ft. rein.-con. girder over drainage ditch and one 30 ft. rein.-con. girder over Price Ditch on State Rd. 5C, Daviess Co.; three 12 ft., five 16 ft., three 18 ft. and one 20 ft. rein.-con. slabs in Orange, Daviess, Greene, Morgan, Delaware, Gibson and Owen Counties.

Wis., Jefferson—See "Streets and Roads."

Wis., Madison—E. E. Parker, engr., City Hall, taking bids rein.-con. and steel bridge, 60-65 ft. rein.-con. arch span, 36 ft. roadway, on East Johnson St. $25,000. Noted July 27.

Ia., Montezuma—March 20 by Auditor Poweshiek Co., 13 box culverts, 4 I-beam bridges and 4 pony trusses. C. E. Olson, Montezuma, engr.

Kan., Holton—See "Streets and Roads."

South Dakota—See "Streets and Roads."

Missouri—March 24, by State Hy. Dept., Jefferson City, one 25 ft. rein.-con. deck girder, one 80 ft. steel truss, one 20 ft. and one 35 ft. rein.-con. slab spans, 20 ft. roadways, 6 rein.-con. abutments, on road from De Soto to Potosi, State Project Route 21, Sect. 4, Washington Co.; one 30 ft. I beam, one 80 ft. and one 70 ft. steel truss spans, 20 ft. roadways, 4 rein.-con. bents and 2 rein.-con. abutments, on road from Portageville to Arkansas state line, State Project Route 9, Sect. 142, Pemiscot Co.; six 25 ft. and one 40 ft. I beam, twenty 10 ft. rein.-con. and one 80 ft. steel truss spans, 20 rein.-con. piers, 4 rein.-con. bents and 4 rein.-con. abutments, on road from Fisk to Dexter, State Project Route 16, Sect. 83, Stoddard Co.; two 20 ft. rein.-con., slab, three 30 ft. and three 40 ft. rein.-con. deck girder, one 25 ft. rein.-con. girder and one 60 ft. steel spans, 20 ft. roadways, 16 rein.-con. abutments, etc., on road from St. Louis to Festus, State Project Route 9, Jefferson Co.; five 120 ft. steel truss spans, 4 rein.-con. piers, 2 rein.-con. bents, over Little Piney River, on road from St. Louis to Springfield, State Project Route 14, Sect. 48 A, Phelps Co.; one 60 ft. steel truss span, 2 rein.-con. abutments, 20 ft. roadway, over Loter Hollow Branch, State Project Route 14, Sect. 48A, Phelps Co.; one 30 ft. rein.-con. deck girder span, 2 rein.-con. abutments, 20 ft. roadway, on road from Appleton City to Henry Co. line, State Project Route 24, Sect. 13, St. Clair Co.; one 120 ft. and two 80 ft. steel truss spans, 2 rein.-con. piers, 2 rein.-con. bents, 20 ft. roadway, over Cedar Creek, on road from Jefferson City to Columbia, State Project Route 7, Sect. 43, Callaway Co.; one 35 ft. rein.-con. deck girder span, 2 rein.-con. abutments, 20 ft. roadway, over Hooker Branch, on road from Waynesville to Arlington, State Project Route 14, Sect. 46, Pulaski Co.; fifteen 20 ft. rein.-con. slab spans, 16 rein.-con. pile bents, over Bowdry Lake, on road from Waverly to Carrollton, State Project Route 3, Sect. 35, Carroll Co.; three 60 ft. steel and one 30 ft. rein.-con. deck girder spans, 20 ft. roadway, 2 rein.-con. piers, 2 rein.-con. bents, 2 rein.-con. abutments, over Nodaway River, on road from Oregon to Savannah, State Project Route 1, Sect. 21, Andrew and Holt Counties; three 100 ft. steel truss spans, 2 rein.-con. piers, 2 rein.-con. bents, 20 ft. roadway, over Nodaway River, on road from Oregon to Savannah, State Project Route 1, Sect. 21, Holt Co.; three 70 ft. steel truss spans, 2 rein.-con. piers, 2 rein.-con. bents, 20 ft. roadway, over Turnback Creek, on road from Phelps to Halltown, State Project Route 14, Sect. 9, Lawrence Co.; one 60 ft. steel truss span, 2 rein.-con. abutments, 20 ft. roadway, over Billies Creek, on road from Phelps to Halltown, State Project Route 14, Sect. 10, Lawrence Co.; one 80 ft. steel truss span, skewed, 2 rein.-con. abutments, 20 ft. roadway, over Drainage Ditch on road from North Kansas City to Liberty State Project Route 10, Sect. 1, Clay Co.; one 40 ft. rein.-con. deck girder span, 2 rein.-con. abutments, 20 ft. roadway, over Salt River, on road south of Lancaster, State Project Route 7, Sect. 6, Schuyler Co.; one 100 ft. steel truss span, 20 ft. roadway, 2 rein.-con. abutments, over Johnson Creek, on road from Phelps to Halltown, State Project Route 14, Sect. 9, Lawrence Co.; one 20 ft. rein.-con. slab and one 25 ft., rein.-con. deck girder spans, 4 rein.-con. abutments, 20 ft. roadways, on road from Neosho to Anderson, State Project Route 1, Sect. 108, McDonald Co.; one 40 ft. rein.-con. deck girder span, 2 rein.-con. abutments, 20 ft. roadway, over Branch of Fabines River on road from Lancaster to Kirkville, State Project Route 7, Sect. 3, Schuyler Co.; one 40 ft. rein.-con. deck girder span, 2 rein.-con. abutments, 20 ft. roadway, over Dicks Creek, on road from Golden City to Lamar, State Project Route 36, Sect. 6, Barton Co. B. H. Piepmeier, state highway engr.

Calif., Fresno—April 6, by D. M. Barnwell clk., Fresno Co., constructing 2 trestle bridges, total length 629 ft. Work includes 130,000 ft. lumber, 150 piles, each 30 ft. long. C. P. Jensen, Cory Bldg., co. surv.

BIDS RECEIVED

Virginia—See "Streets and Roads."

Colorado—See "Streets and Roads."

CONTRACT AWARDED

Pa., Lewistown—Mifflin Co., 780 ft. rein.-con. bridge, 7 spans, connecting Lewistown with Lewistown Junction, to Whittaker & Diehl, Union Trust Bldg., Harrisburg, $269,400.

West Virginia—State Rd. Comn., Charleston, Linn Bridge 848, Project 3100, Gilmer Co., concrete and steel, substructure to P. J. Wallace, Kitzmiller, Md., $7,606, superstructure to E. R. Mills, Newport, Ky., $7,097, Tannery Bridge 83, Project 3149, Gilmer Co., concrete and steel, substructure to Wisely-Clark Constr. Co., Waynesboro, Va., $4,653, superstructure to E. R. Mills, Newport, Ky., $9,497; steel bridge across K. & M. tracks, Witcher Co., to Wisely Clark Constr. Co., Waynesboro, Va., $42,952. Noted Feb. 15, under "Streets and Roads."

S. C., Converse—State Hy. Comn., at office Spartanburg Co. Highway Comn., Spartanburg, constructing bridge over Pacolet River, here, to P. S. Minus, Spartanburg, $73,541. Former contract rescinded. Noted Feb. 8.

Wis., Black River Falls—Wisconsin Hy. Comn., Madison, 521 ft. deck plate girder bridge, here, to Wausau Iron Wks., Wausau, additional concrete at no greater depth $25 per cu.yd., additional concrete at greater depth $35, reduction in concrete $8, etc., total $82,300; approach to J. Tormoen, Black River Falls, 172 cu.yd. earth excav. $0.30, 4,122 cu.yd. borrow excav. $0.60, 2,005 sq.yd. concrete surfacing $1.45, etc., total $7,650. Noted Feb. 22.

Ia., Northwood — Worth Co., 3 pony trusses and 1 beam, to A. Olson Constr. Co., Waterloo, $21,350; two I beams to C. W. Pederson, Northwood, $10,800; 23 box culverts to C. Jensen, Thompson, $5,555.

Minn., Duluth — McDougall Terminal Warehouse Co., 600 ft. rein.-con. and steel viaduct, 24 ft. driveway, 6 ft. sidewalk, over railroad tracks, to Stack Constr. Co., 306 Sellwood Bldg., $100,000.

Tex., Liberty—Liberty Co. concrete pile trestle bridges on State Highway 3, to Tibbetts Constr. Co., 209½ 8th St., Ft. Worth, $217,995, sublet to Austin Bros. Bridge Co., Coombs St., Dallas. Noted March 8.

Wash., Westport — Grays Harbor Co. (Montesano), building 7 small trestle bridges and rebuilding South Bay Trestle, near here, to Pacific Constr. Co., Aberdeen, $28,733. Engrs. est. $30,000.

Ore., Portland — Repairing Burnside Bridge draw, 20 ft. span, 202,000 lb. steel, to S. R. Booth, Railway Exchange Bldg., $39,390. Noted Feb. 15.

Dams

PROPOSED WORK

N. J., Hightsown—See "Miscellaneous."

BIDS RECEIVED

Calif., Napa—City opened bids Feb. 26, constructing dam for Milliken Canyon water project (a) stripping, using Channeler Cut, concrete rock secured adjacent to dam site, and grout holes and gunite (b) same as "a" but eliminating Channeler Cut (c) stripping, using Channeler Cut, concrete rock secured elsewhere than dam site, also grouting and gunite (d) same as "c" but eliminating Channeler Cut (e) stripping, using cut, concrete rock adjacent to dam site, with sand made from the rock, grouting and gunite (f) same as "e," but eliminating cut, from J. May, Napa, (a) $257,567 (b) $241,617 (c) $331,527 (d) $315,577 (e) $201,637 (f) $185,687; Bent Bros., 1714 Eagle St., Los Angeles, (b) $226,469; L. F. Youdall, Commercial & Savings Bank Bldg., Stockton, (a) $219,107 (b) $196,457 (c) $295,647 (d) $272,997 (e) $185,947 (f) $163,297; Sherman & Kraner, Balboa Bldg., San Francisco, (a) $206,216 (b) $216,898 (c) $306,418 (d) $289,918 (e) $177,138 (f) $160,638; Bordwell & Zimmerman, Calistoga, (a) $150,790 (b) $141,800 (c) $199,978 (d) $190,988 (e) $126,970 (f) $117,980; Constr. Co. of North American, Mills Bldg., San Francisco, (a) $241,754 (b) $222,354 (c) $326,754 (d) $307,354 (e) $218,674 (f) $199,274; Arndt & Vensano, 58 Sutter St., San Francisco, (b) $272,118 (d) $310,518 (f) $210,198; Schultz Constr. Co., 46 Kearny St., San Francisco, (a) $191,666 (b) $172,516 (c) $250,276 (d) $231,126 (e) $176,346 (f) $157,196. Noted Feb. 8.

Calif., Oroville—Oroville-Wyandotte Irrigation Dist., earth fill dam (material to be furnished by owner), from C. A. Bayles, Biggs, $35,711; Hughes & Murphy, Marysville, $36,512. Noted Feb. 22.

Railways

PROPOSED WORK

Washington — Longview, Portland & Northern Ry. Co., Kelso, withdrew former plans for railway. Will have revised plans prepared for 26 mi. double track. Bids limited to firms who bid on 8½ mi. advertised Jan. 1. $1,000,000. Noted Dec. 7.

California—Atchison, Topeka & Santa Fe R.R. 6th and Main Sts., Los Angeles, double tracking 60 mi. road from Daggett to Bagdad, to Sharp & Fellows, Central Bldg., Los Angeles, $3,000,000.

California—City of Oakland having plans prepared constructing belt line railroad to connect with main lines in and about Oakland estuary. To exceed $25,000. R. Beebee, city harbor engr.

Railways (Continued)

CONTRACTS AWARDED

California — See "Miscellaneous" under Eureka.

Excavation, Drainage, Irrigation

PROPOSED WORK

Ia., Carroll — Carroll Co. having plans prepared constructing D. D. 90, 4,000 lin.ft. open ditch, 20,000 cu.yd. excav., 69,650 lin. ft. 6-48 in. tile. $55,000. I. W. Hoffman, Carroll, engr.

Ia., Sioux City—W. M. Prichard, aud. Woodbury Co., takes bids in April, drainage work. $175,000. C. Moriarty, 513 U. S. Bank Bldg., engr.

Mo., Corning—Mill Creek Dyke & Drainage Dist., plans about 14 mi. open ditch incl. main and lateral ditches, 430,000 cu. yd. dry earth excav., on part of work, excavated earth will be used as levees on each side of ditch. $51,600. B. B. Hurst, Rockport, engr.

Calif., Clarksburg — Holland Land Co. having plans prepared irrigating 1,245 acres in Yolo Co., water to be pumped by either 10 in. pump and motor of two 8 in. pumps and motors. Project includes pumping plants, concrete pipe line and ditches. $50,000. Eng. Dept. of C. C. Morse Seed Co., 729 Front St., San Francisco, engrs.

Canada—Dominion Government, Ottawa, plans dredging in Yarmouth Harbor $85,000, Little Current $71,000, Maritime Provinces $600,000, Ontario and Quebec $735,000. Manitoba, Saskatchewan and Alberta $130,000, British Columbia $400,000.

BIDS DESIRED

N. Y., Buffalo—March 22, by Dept. Pub. Wks., Municipal Bldg., dredging Buffalo Inner Harbor to completed contract depth for maintenance of channel. A. W. Kreinheder, comr. G. H. Norton, Municipal Bldg., engr.

N. Y., New York—March 20, by Holmes & Winslow, archts., 134 East 44th St., excavation for erection of bank addition, for North Side Savings Bank, 3230 3rd Ave. $75,000.

Ill., Winchester—March 26, by Comrs. Scott Co. Drainage and Levee Dist., at office W. L. Bagshaw, secy., raising and strengthening levees of District, 443,327 cu. yd. excav. Jacksonville Eng. Co., Jacksonville, engrs.

Ia., Webster City—April 2, by Auditor Hamilton Co., D. D. 246, Sect. 1, excav. at tile outlet, Sect. 2, railroad crossing, Sect. 3, 7,580 ft. 22-30 in. tile, Sect. 4, 2 brick manholes, etc. $25,000. R. G. Austin, Webster City, engr.

Tex., Houston—March 23, by D. D. 1 of Harris Co., 500,000 cu.yd. earth excav., culverts, etc. $25,000. J. S. Burhe, 1518 Walker Ave., engr.

BIDS RECEIVED

Calif., Oroville—See "Dams."

CONTRACTS AWARDED

O., Cleveland—Dredging Cuyahoga River, 140,000 cu.yd. excav., to Great Lake Dredge & Dock Co., Williamson Bldg., $49,557. Noted March 1.

Minn., Jackson — Jackson Co., County Ditch 3, Jobs 3 and 4, 42,641 cu.yd. excav., 5 retaining walls, 52 cu.yd. concrete, to M. Sorenson, Windom, $10,500; 28,000 lin.ft. 6-26 in. tile, to O. M. Sanderson, Windom, $14,289. Noted Nov. 1.

Mo., Whitham—Whitham D.D., cleaning 12 mi. drainage ditch, about 50,000 cu.yd. excav., also 2½ mi. levee, about 130,000 cu. yd. excav., to McWilliams Dredging Co., 332 South Michigan St., Chicago, $36,000. Noted Feb. 15.

Streets and Roads

PROPOSED WORK

Conn., Ansonia — Plans paving Lester, Central and North Main Sts., and Wakelee Ave., asphalt or concrete. $80,000. Dept. Public Wks., City Hall, engrs.

N. Y., Binghamton—Broome Co. plans to expend $133,000 for highways. Engineer not announced.

N. Y., Binghamton—Plans repaving 1,800 ft. Moffatt Ave.; paving 500 ft. Center St., 1,800 ft. Shenango St., 1,400 ft. Murray St., 3,000 ft. State St., 500 ft. Newton Ave., 1,400 ft. Sherwood Ave. and 5,600 ft. Broad Ave., all brick. W. E. Weller, city engr.

N. Y., Elmira—Bd. Pub. Wks. soon takes bids resurfacing and new pavements on streets. To exceed $25,000. G. W. Jarchow, clk.

N. Y., Holley—Plans paving 1 mi Main St., macadam. $35,000. N. L. Cole, village pres.

ROAD WORK—LIBERTY, TEX.

Following are lowest three bids opened by Liberty County, Feb. 16, for grading and constructing bridges on State Highway No. 3. (A) Howard Kenyon Dredging Co., 3603 McKinney Ave., Houston; Smith Bros., 311 Central State Bank Bldg., Dallas; J. F. Hamer, Stop Interurban 6, Ft. Worth. The unit bids were as follows:

	A	B	C	D
172.5 acres clearing	$30.00	$65.00	$40.00	$25.00
86.64 acres grubbing	85.00	85.00	80.00	90.00
29120.4 cu. yd. earth roadway excavation	.175	.17	.156	.24
667481.0 cu. yd. earth borrow excavation	.175	.19	.156	.24
275000.0 cu. yd. earth borrow excavation (Dragline)	.175	.16	.156	.24
44223.3 sta. yd. earth overhaul	.03	.035	.04	.03
1781.5 sta. yd. sodding embankment	1.50	2.50	4.00	3.25
34176.0 lin. ft. wood guard fence	.40	.60	.65	.75
Extended totals bridges	$200,232	$220,837	$196,500	$278,037
687769.0 lbs. reinforcing steel	$0.045	$0.0475	$0.05	$0.065
7040.16 cu. yd. class A concrete	17.25	16.00	18.75	22.00
340.0 cu. yd. 1:1½:3 concrete	18.00	17.50	21.25	17.50
8090 cu. yd. structural excavation	1.00	.50	.75	.50
20045.0 lin. ft. concrete piles	2.45	2.70	2.90	3.25
100.0 lin. ft corrugated iron pipe 24 in.	3.50	3.30	3.20	2.50
200.0 lin. ft. ½ round C. I. pipe 42 in.	5.00	5.60	5.00	3.65
8275.0 lin. ft. type "C" (concrete rail)	1.50	1.30	2.10	2.25
Extended totals	$222,194	$217,995	$251,051	$290,688
Extended grand totals	$422,426	$438,832	$447,552	$568,808

N. Y., Medina—Plans paving Park Ave. $35,000-$40,000. C. H. Pettis, village pres.

N. Y., Niagara Falls—Plans paving 3,123 ft. Royal Ave., 30 ft., granite, wood block, asphalt block, sheet asphalt, brick or bitulithic. $86,600 based on granite or wood block. W. Bennett, Convention Hall, city engr.

N. Y., Perry — March 20, to vote on $50,000 bonds for new pavements and macadamizing streets. G. H. Peddle, village pres.

N. Y., Schenectady—Bd. Pub. Wks. plans resurfacing Van Vranken Ave. $30,000. G. I. Howard, city engr.

Pennsylvania — Armstrong Co., Kittanning plans 3½ mi. Kittanning-Indiana Rd., 18 ft., brick on concrete base or rein.-con., $130,000. Elderton Boro. to pay 40% and county 60% of cost. Indiana Co., (Indiana) will also build 2 mi. of above mentioned road, $100,000.

Pa., Erie—Plans paving 4 streets in Frontier Pl. Subdivision, asphalt, $254,000. F. G. Lynch, city engr.

Pa., New Castle—Plans paving Sampson St., brick. $25,000. Engineer not announced.

Pa., Scranton—Plans paving Walnut and Clearview Sts., sheet asphalt and stone blocks on concrete. $30,717. W. Lafontaine, dir. pub. wks.

Pa., Wilkes-Barre—Plans paving Sherman and Madison Sts., sheet asphalt with stone or concrete curbs. $25,000. F. H. Gates, city clk.

Va., Portsmouth—Norfolk Co. plans constructing 3.5 mi. concrete road and 13 mi. surface treated macadam on Route 12, from here to South Mills, N. C., 16 or 18 ft., $175,000; 12½ mi. concrete road on Route 27 from Great Bridge to Northwest, 16 or 18 ft., $275,000. R. B. Preston, New Kirn Bldg., co. engr.

West Virginia—State Rd. Comn., Charleston, rejected bids opened March 6, concrete paving 3 mi. road from Kanawha Co. line toward Walton, Project 3240, Roane Co., $105,745; grading and concrete paving 4.53 mi. road from Project 3025 to Harrison Co. line, Project 125, Taylor Co., $316,762; grading and gravel surfacing 2.8 mi. Ravenswood-Sandyville Rd., Project 3132 A, Jackson Co., $82,928. Noted Feb. 15.

W. Va., Logan — Logan Co. election March 31, to vote on $600,000 bonds for road work. If passed State will add $472,000. J. M. McClaren, co. engr.

W. Va., Williamson—Stafford Dist., Mingo Co., voted $360,000 bonds for improving Tug River Highway. L. C. Linkous, Williamson, engr.

N. C., Lincolnton — Lincoln Co. plans hardsurfacing 7 mi. road from Aspen St., Lincolnton, to Catawba Co. line, and 5 mi. road from Aspen St. to Gaston Co. line. $360,000. R. C. Goode, chn. Bd. Co. Comrs.

N. C., Rockingham—City plans grading and paving various streets. $100,000.

Fla., Miami—Dade Co. plans election to vote on $205,000 bonds paving and repaving Dixie Highway. H. Crabtree, co. engr.

Ky., Hartford—Ohio Co. voted $300,000 bonds for road work.

Ohio—Dept. Highways and Pub. Works, Columbus, canceled bids which were to be opened March 13, grading, bridging and brick paving 1.085 mi. Sect. "D" Columbus-Wooster Rr., Delaware Co., $53,904. Noted March 8.

Ohio, Cincinnati—Hamilton Co. plans grading and paving 6,740 ft. Sect. "Cleves" Cincinnati-Louisville I.C.H., 38, 16 ft., 16,000 sq. yd. concrete and concrete gutter, 3,650 cu. yd. earth excav., $61,249; 24,200 ft. Sheed Rd., 16 ft., 15,000 cu. yd. earth excav., 2,040 cu. yd. 1:2:4 concrete 43,050 sq. yd. bituminous macadam, $122,425; 9,800 ft. Boomer Rd., 16 ft., 4,000 cu. yd. grading, 13,100 sq. yd. bituminous macadam, $34,165. E. A. Gast, Court House, co. surv.

Ohio, Columbus—Preparing plans grading, laying necesary water services and sewer conections and paving 1,320 ft. Bellows Ave. from Hawkes to Glenwood Aves., 26 ft., brick $23,053, asphalt $13,738; 288 ft. Olentangy St. from Indianola Ave. to Kensington Court, 50 ft., asphaltic concrete $5,912; 807 ft. Broderick St. from Jones Ave. to Hartford St., 28 ft., brick $3,584, concrete $3,002; 2,092 ft. Montrose Way from Olentangy Blvd. to Torrence Rd., 50 ft., asphalt, $33,149; 457 ft. alley north of Mithoff St., 20.68 ft., brick $3,666, concrete $2,898; 1,754 ft. alley north of Lane Ave., 20 ft. brick $13,123, concrete 10,215; 351 ft. alley west of Summit St., 20 ft. brick $2,686, concrete $2,115; 461 ft. alley north of Rich St., 16 ft., brick $2,959, concrete $2,334; 455 ft. alley north of 4th Ave., 20 ft., brick $2,686, concrete $2,115; 400 ft. alley west of Henry St., 20 ft., brick $2,906, concrete $2,270; 375 ft. alley north of 3rd Ave., 20 ft. brick $2,853, concrete $2,235; 347 ft. alley north of King Ave., 18 ft. brick $2,408, concrete $1,901; 287 ft. 2nd alley north of King Ave., 18 ft. brick $1,868, concrete $1,475; 443 ft. alley north of Vermont Ave., 20 ft. brick $3,523, concrete $2,783. R. H. Simpson, city engr.

Ohio, Grand View Heights (Columbus P. O.)—Preparing plans, grading, curbing and macadam or asphalt paving on concrete 4,500 ft. Northwest Blvd., 40 ft., 2 driveways with park between, each 20 ft.; 300 ft. Holly Ave., 800 ft. Parkway North, 600 ft. Norton Ave., 300 ft. Dover Road, 1,800 ft. 2nd Ave., 800 ft. Parkway Dr., 1,200 ft. Bulford Rd., 1,500 ft. Thomas Ave., and 600 ft. Timberman Dr., all foregoing 25 ft., $225,000. Burgess & Niple, 141 East Broad St., Columbus, engrs.

O., Warren—Plans cement sidewalks and paving Trumbull Parkway, Butler Rd. and Crescent Dr., various materials. $25,000. G. T. Hecklinger, clk.

Michigan—State Hy. Dept., Lansing soon takes bids grading and concrete surfacing 6 mi. State Trunk Line Rd. 11-25, Oceana Co., 6 mi. Federal Aid Project 76, Macomb Co., 4 mi. Federal Aid Project 118, Muskegon Co., 3 mi. State Trunk Line Rd. 27-16, Sect. A, St. Clair Co., 4½ mi. Federal Aid Project 71, Sect. A. F. F. Rogers, state highway engr

Michigan—State Hy. Dept., Lansing, soon takes bids grading and surfacing 1½ mi. Federal Aid Project 68, Sect. C, Clinton Co., concrete. F. F. Rogers, state comr.

Ill., Cerro Gordo—Plans paving 20,000 yd. various streets. $100,000. Marr, Green & Co., 400 North Michigan St., Chicago, engrs.

Ill., Lemont — Plans paving various streets. $150,000. Marr, Green & Co., 400 North Michigan St., Chicago, engrs.

Ill., Norris—Plans paving Freemont and Vine Sts., $45,000. Consoer Eng. Co., 140 South Dearborn St., Chicago, engrs.

Ill., Park Ridge—Preparing plans paving various streets. $110,000. Consoer Eng. Co., 140 South Dearborn St., Chicago, engrs.

Ill., Rochelle—Plans paving 15,000 yd. various streets. $90,000. Marr, Green & Co., 400 North Michigan St., Chicago, engrs.

Ill., Wenona—Plans paving Walnut St. $50,000. Consoer Eng. Co., 140 South Dearborn St., Chicago, engrs.

Wis., Fond du Lac—Bd. Pub. Wks., soon takes bids paving Rose Ave., 8th, 7th, 5th, Connell, McWilliams, 13th, Garfield, Ellis and Ruggles Sts., alternate bids on 57,393 sq.yd. concrete, sheet asphalt or asphaltic

Streets and Roads (Continued)

concrete, 42,690 lin.ft. combined concrete curb and gutter, 1,417 lin.ft. concrete retaining curb. G. H. Stanchfield, City Hall, engr. Noted Dec. 21.

Ia., Centerville—Appanose Co. takes bids July grading 9 mi. road. F. L. Davis, Centerville, engr.

Ia., Council Bluffs—Plans resurfacing 5 streets, 50,000 yd., various types. E. E. Spetman, Council Bluffs, engr.

Ia., Ottumwa—Auditor Wapello Co. soon receives bids paving 20,000 yd. Federal Aid Project 13, brick $66,000, concrete $58,000. J. N. Brody, Ottumwa, engr.

Kan., Girard—Crawford Co. had plans prepared and soon takes bids constructing 11.5 mi. Jefferson Highway, Federal Aid County Project 6 Sect. 221, 18 ft. chat. C. M. Cooper, co. engr.

Kan., Hutchinson—Plans asphalt paving 41 blocks. R. B. Lee, city engr.

Kan., St. Francis—Cheyenne Co. soon takes bids constructing 14 mi. earth road Federal Aid Project 145, Sects. A and B, Air Line Rd., 28 ft. Kansas Eng. Co., Topeka. (street address not available), engr.

Kan., Topeka—Shawnee Co. having plans prepared paving 5.465 mi. Federal Aid Project 141, Sects. A and B, 18 ft., 35,078 cu. yd. earth excav., 68,923 sq. yd. concrete, 37,655 lb. reinforcing, etc. Kansas Eng. Co., Topeka, (street address not available), engrs.

Kan., Topeka—Soon takes bids 31 blocks asphaltic concrete paving and 21 blocks concrete alley paving. W. E. Baldry, city engr.

South Dakota—State Hy. Dept., Pierre, plans improving 12 mi. Federal Aid Project 134, from Armour to Tripp Rd., Douglas Co., 84,000 cu.yd. excav., 336 cu.yd. concrete, 33,000 lb. reinforcing steel, etc., $58,639; 7.06 mi. Federal Aid Project 140, from Sturgis to Whitewood Rd., Lawrence and Mead Counties, 57,000 cu.yd. excav., 350 cu.yd. concrete, 35,000 lb. reinforcing steel, 3 concrete viaducts, $65,050.

South Dakota—State Hy. Dept., Pierre, plans 280.9 mi. surfacing in 1923 as follows: 3.3 mi. Project 14 B, Stanley Co.; 17.5 mi. Project 28, Charles Mix Co.; 2.4 mi. Project 34, Spink Co.; 14.4 mi. Project 45, Grant Co.; 6 mi. Project 54, Grant Co.; 9.6 mi. Project 55, Deuel Co.; 11.9 mi. Project 56, Sully Co.; 13.1 mi. Project 61 A, Brule Co.; 12.8 mi. Project 61 B, Brule and Turora Counties; 12.4 mi. Project 61 C, Aurora Co.; 12.4 mi. Project 63, McPherson Co.; 9.4 mi. Project 73, Campbell Co.; 12.4 mi. Project 74, Douglas Co.; 11.7 mi. Project 82, Brookings Co.; 14.6 mi. Project 83, Kingsbury Co.; 8.7 mi. Project 85, Clark Co.; 6.6 mi. Project 86, Sanborn Co.; 6.9 mi. Project 87, Lake Co.; 13.4 mi. Project 88, Meade Co.; 5.5 mi. Project 93, Miner Co.; 14.4 mi. Project 94, Spink Co.; 14.2 mi. Project 96, Roberts Co.; 6.6 mi. Project 99, Brown Co.; 13 mi. Project 125, McCook Co.; 11 mi. Project 138, Lawrence and Meade Counties. F. D. Hudgins, state highway engr.

N. D., Carrington—Plans paving 5 blocks. $30,000. C. C. Carnahan, city clk.

Mo., Kansas City—Preparing plans paving Locust St., 15,000 sq.yd. bituminous macadam. A. McCabe, park engr.

Mo., Marysville—Preparing plans concrete paving various streets, $50,000. Shockey Eng. Co., 801 Graphic Arts Bldg., Kansas City, engrs.

Mo., Odessa—Preparing plans concrete paving various streets $50,000. Shockey Eng. Co., 801 Graphic Arts Bldg., Kansas City, engrs.

Mo., University (St. Louis, P. O.)—April 4, to vote on $35,000 bonds resurfacing Delmar Blvd. from eastern city limits to Harvard Ave.

Mo., Wellston (St. Louis P. O.)—Tegethoff & Vatterott, Tegethoff Bldg., Clayton, having surveys made for streets, walks, mains, electric wire conduits and sewers, for new subdivision at Ferguson and Etzel Aves., here. $150,000.

Tex., Alice—Jim Wells Co. voted $600,000 bonds for highway improvements. Engineer not selected.

Tex., Corsicana — April 3, to vote on $75,000 bond issue for street paving. W. W. Harrison, city engr.

Tex., Dallas—City Com. soon takes bids paving Forest Ave. from Meadow to 2nd Aves., 40 ft., bituminous or wood block. $26,994. G. D. Fairtrace, city engr.

Texas, Dallas — April 3, to vote on $1,250.00 bond issue for street improvements. G. D. Fairtrace, city engr.

Tex, Marshall—State Hy. Comn., Austin, granted Harrison Co. $36,500 aid for bituminous surfacing Jefferson Highway east and west from here. G. A. McClellan, co. engr.

Okla., Okmulgee—Plans paving 12 blocks 6th St. from Alabama St. to St. Louis and San Francisco R.R. tracks, vitr. brick. T. J. Embree, Okmulgee, engr.

Okla., Ponca City — Plans paving 60 blocks North 7th St., various types pavement. A. M. Stalnaker, city engr.

Colo., Grand Junction—City Clerk opens bids about April 11, concrete paving 19,294 sq.yd. East Main St., Dist. 7. $82,890. T. E. Thompson, city engr.

Colo., Grand Junction—Plans paving 24 Streets and 4 alley blocks in Dist 8, probably concrete. T. E. Thompson, city engr.

Utah, Ogden—Weber Co. soon takes bids hardsurfacing road from 24th St. viaduct to Wilson St., various types. $50,000. A. Brown, co. engr.

Washington—State Hy. Dept., Olympia, had plans prepared and soon receives bids, grading and gravel surfacing Chelan-Okanogan Highway, 4 mi. from Ophir Grade to Brewster, and 6 mi. from Riverside to Omak, also 7 mi. State Rd. 4 from Anglin 7 mi. southeast; grading and surfacing with crushed rock and gravel 30 mi. Jared-Metalline Falls Rd., in Pend Oreille Co., 4 concrete bridges; grading and surfacing with crushed rock 7 mi. Inland Empire Highway from Colville to Meyers Falls, Stevens Co., 8 mi. Sunset Highway, revision of line at Hairpin curve, 1 mi. west of Spokane, Spokane Co., 7 mi. Chelan-Okanogan Highway, from Columbia River bridge to Rock Island, Douglass Co.; grading and paving with 7 in. concrete 0.6 mi. Sunset Highway crossing Deep Creek Canyon, Spokane Co., $25,000, 7 mi. Sunset highway from Spokane Lincoln County line west to Reardon, in Lincoln Co. Address G. G. Harvey, Realty Bldg., Spokane, engr. for State Rd. Dist. 7.

Wash, Seattle—City and King Co. having plans prepared and take bids about March 29, preliminary work in connection with paving 3 mi. arterial highway, 7 in. concrete, 20 ft. Grading and relocation wark $75,000, paving $75,000. J. D. Blackwell, city engr. T. R. Beeman, co. engr.

Wash., Seattle—King Co. having plans prepared and takes bids about March 29 constructing 2 mi. Stuckey Rd. from Dockton to Molita on Maury Island, incl. piling trestle. $70,000. T. R. Beeman, co. engr.

Oregon—State Hy. Comn., Salem, plans to expend about $10,000,000 on road work during 1923. Work will include about 60 mi. pavement, 300 mi. broken stone and gravel surfacing, and 300 mi. grading. H. Nunn, state highway engr.

Calif., Fresno—Had plans prepared improving McKenzie Ave. between Fresno Ave. and 9th St., 49,450 sq.ft. concrete sidewalks, 10,023 lin.ft. concrete curbs; Olive Ave. between Forthcamp and Harrison Sts., 14,137 sq.ft. concrete sidewalks. W. Stranahan, city engr.

Calif., Merced—Merced Co. takes bids about March 20, sub-grading and paving with rock screenings 4 in. thick, also several small bridges in Rd. Impvt. Dist. 5. To exceed $25,000. A. E. Cowell, Merced, engr.

Calif., Newport Beach—Plan election in May to vote on bonds paving 1½ mi. main streets.

Calif., San Bernardino—San Bernardino Co. takes bids about March 28, paving with macadam 5 mi. Big Bear Valley Rd. E. T. Ham, co. surv.

Calif., San Francisco — City and San Francisco Co. soon takes bids improving Vicente St. between Forest and 19th Aves. Former bids rejected. M. M. O'Shaughnessy, city engr. Noted March 1.

Calif., Santa Rosa—Soon takes bids grading, reshaping, paving, curbing and guttering Benton St. between Mendocino and Ripley Sts., 58,501 sq. ft. 3 in. warrenite bitulithic, $11,115; 5th St. from D to North Sts., 47,377 sq.ft. 3 in. warrenite bitulithic, $9,001; North St. from 4th to 24th Sts., 64,026 sq.ft. 1½ in. warrenite bitulithic on 2½ in. bituminous concrete, $14,728; Benton St. between North and Mendocino Sts., 80,167 sq.ft. 1½ in. warrenite bitulithic on 2½ in. bituminous concrete, $18,408. L. L. Mills, city engr.

Calif., Vacaville—Plan to vote on $40,000 bonds paving various streets. F. A. Steiger, Fairfield, engr.

Ontario—Dept. Pub. Highways, Dundas St. and University Ave., Toronto, plans to take over 25 mi. road from Acton through Milton to Bronte, and convert into provincial highway, macadam. $500,000. G. Hogarth, ch. engr.

Ont., Kitchener—Waterloo Co. plan 2½ mi. concrete road between St. Clements and Heidleburg, 30,000 sq.yd. concrete. $80,000. S. Cassell, County Bldg., clk.

Ont., L'Orignal—Prescott Co. plans to expend $25,000 on roads this year, mostly gravel construction, and large part of work will be done by day labor. F. H. Senecal, clk.

Ont., Toronto—Soon receives bids grading Byron Ave. from Chatham to Danforth Aves. and Chatham Ave. from Jones to Byron Aves. $62,000. R. C. Harris, city engr.

Ont., Walkerton—Bruce Co. voted $220,000 bonds for gravel and macadam roads and bridge work. G. A. Stevenson, Walkerton, engr.

BIDS DESIRED

N. Y., Buffalo—March 21, by Dept. Pub. Wks., Municipal Bldg., constructing and repairing concrete sidewalks and sidewalk approaches, grading opening gutters and hard surfacing unpaved streets, etc. A. W. Kreinheder, comr.

N. Y., Long Island City—March 20, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., curbing, laying sidewalks, etc. on Crescent and Hallett Sts. from Ditmars to Woolsey Aves.; grading sidewalk and sidewalk spaces and laying sidewalks, etc., on northerly side of Sackett St. from point about 100 ft. east of 42nd to 46th Sts.; grading, curbing and laying sidewalks on Sherwood St. from Rowan to Lenox Aves., 80th St. from Atlantic to 101st Aves. 156th St., from Sanford to 43rd Aves., 44th St. from Jackson to Polk Aves.; grading and sheet asphalt paving 80th St. from Atlantic to 101st Aves.

N. Y., St. George—March 22, by J. A. Lynch, pres. Richmond Boro, Boro Hall, grading and concrete paving Satterlee St. from Amboy Rd. to Satterlee Lane, Satterlee Lane from Satterlee St. to property line of city of New York, Terminal of new ferry to South Amboy; grading Livermore Ave. from Watchogue Rd. to point 800 ft. southerly to width of 30 ft., centrally located, bituminous macadam paving same to width of 16 ft. centrally located.

Pennsylvania — April 3, by State Hy. Dept., Harrisburg, reconstructing 40 mi. bituminous surface on concrete or one-course rein.-con. pavement, 30 mi. one-course rein.-con. and 3 mi. bituminous macadam. P. D. Wright, state highway comr.; adv. this issue.

Pa., Hastings—April 2, by Boro Council, repaving 2,370 ft. Bridge Ave. and Beaver St., brick on concrete or rein.-con. $30,000. I. J. Pfeister, Spangler, engr.

Pa., Scranton—March 19, by W. Lafontaine, dir. pub. wks., paving Richmont St. from Blvd. Ave. to city line, $36,055, Myrtle Ave. from Washington to Monroe Aves. $34,477, Sherman Ave. from Luzerne to Washington Aves. $24,637, Grandview St. from Blvd. St. to Wyoming Ave. $23,538, 4th Ave. from Emmett to Railroad Aves. $23,239, William St. from Wayne to Margaret Sts. $17,207, Orchard St. from Cedar to Pittston Sts. $14,035, Myrtle St. from Quincy to Clay Aves. $10,041, Kirst Court from Rosen Court to Coyle Pl. $7,784, Evans Court from Lafayette to Swetland Sts. $7,716, Costello Court from Ash to Poplar Sts. $4,651, Page Pl. from Franklin to Mifflin Aves, $2,491, Buenzil Court from Linden to Mulberry Aves. $3,097.

Pa., Stoneboro—April 2, by E. E. Smith, boro. secy., pavements on Lake and Walnut Sts. T. F. Pattinson, boro. engr.; adv. this issue.

Md., Baltimore — March 21, by Bd. Awards, building Phoenix Rd., Contr. 64, Water Dept., 5,200 sq.yd. concrete roadway, 10,040 cu.yd. earth excav. and embankment. W. A. Megraw, City Hall, engr.

Va., Charlottsville—March 20, by Clerk Albermarle Co., improving 5.59 mi. Monticello Rd. from Scottsville Rd. to Overton, 21,000 cu.yd. excav., 5,558 lb. reinforcing, 23,792 sq.yd. 8 in. bituminous macadam; 1 mi. Scottsville Rd. between Sta. 365-20 and 418-00, 1,000 cu.yd. excav., 8,800 sq. yd. concrete surfacing; 0.62 mi. Woolen Mills Rd. between here and Woolen Mills, 15 ft., 2,000 cu.yd. excav., 5,500 sq.yd. concrete.

North Carolina—April 3, by State Hy. Comn., Raleigh, improving 6.74 mi. State Project 971, Madison Co., 29 acres clearing, 72,000 cu. yd. common and 11,700 cu. yd. rock excav., 2,958 ft. 18-30 in. concrete pipe, 211 cu. yd. concrete, 16,350 cu. yd. gravel or shale surfacing, $57,000; 5.67 mi. State Project 802, Avery Co., 17,500 cu. yd. common and 34,100 cu. yd. rock excav., 2,734 ft. 18 and 24 in. pipe, 703 cu. yd. rubble masonry, 46,520 sq. yd. waterbound or penetration macadam, $120,000; 6.97 mi. State Project 835, Henderson Co., 94,700 cu. yd. common excav. and borrow, 29,600 cu. yd. rock excav., 1,100 ft. 18 and 30 in. concrete pipe, 76,190 sq. yd. concrete or asphaltic paving, 488 cu. yd. concrete, 32,000 lb. reinforcing, $283,000; 10.43 mi. State Project 213, Craven Co., 94,100 cu. yd. common excav., 1,464 ft. 18 and 24 in. concrete pipe, 110 cu. yd. concrete, 109,700 sq yd. hard surfacing, $350,000; 12.89 mi. State Project 329, Columbus Co., 15,700 cu. yd. common excav., 136,100 sq. yd. concrete or asphaltic paving, $380,000; 8.57 mi. State Project 643, Iredell Co., 52,800

Streets and Roads (Continued)

cu. yd. common excav., 2,562 ft. 18 and 30 in. concrete pipe, 90,470 sq. yd. concrete or asphaltic paving, 378 cu. yd. concrete, 20,540 lb. reinforcing, $286,000; 22.1 mi. State Project 570, Moore Co., 47 acres clearing, 130,500 cu. yd. common excav., and borrow, 2,658 ft. 18-30 in. concrete pipe, 58,400 cu. yd. topsoil, 263 cu. yd. concrete, 6,240 lb. reinforcing, $77,900; 3.54 mi. State Project 723, Caldwell Co., 36,960 cu. yd. common and 34,100 cu. yd. rock excav., 2,528 ft. 18 and 24 in. concrete pipe, 407 cu. yd. rubble masonry, 35,930 sq. yd. waterbound or penetration macadam, $114,000; 4.4 mi. State Project 151 B, Hyde Co., 14,000 cu. yd. common excav., 25,700 sq. yd. concrete or asphaltic paving, $72,000; 2.92 mi. State Project 930 A, Graham Co., 3,700 cu. yd. common excav., 23,980 sq. yd. waterbound or penetration macadam, $34,000; 11.83 mi. State Project 115, Chowan and Perquimans Counties, 17 acres clearing, 73,700 cu. yd. common excav. and borrow, 5,000 cu. yd. drainage ditches, 1,706 ft. 18 and 24 in. concrete pipe, 79,300 sq. yd. concrete or asphaltic paving, 554 cu. yd. concrete, 36,580 lb. reinforcing, $268,000; 3.53 mi. State Project 713, Ashe Co., 25,000 cu. yd. common and 1,800 cu. yd. rock excav., 994 ft. 18-30 in. concrete pipe, 33,570 sq. yd. concrete or asphaltic paving, $103,000; 11.66 mi. State Project 944, Haywood Co., 59,400 cu. yd. common and 1,500 cu. yd. rock excav., 1,886 ft. 18-30 in. concrete pipe, 99 cu. yd. concrete, 123,190 sq. yd. concrete or asphaltic paving, $375,000; 9 mi. State Project 293, Wilson Co., 69,000 cu. yd. borrow, 8,000 cu. yd. drainage ditches, 1,468 ft. 18 and 24 in. concrete pipe, 98 cu. yd. concrete, 84,000 sq. yd. concrete or asphaltic paving, $268,000; 7.97 mi. State Project 578, Randolph Co., 44,100 cu. yd. common and 1,700 cu. yd. rock excav., 1,618 ft. 18-30 in. concrete pipe, 84,100 ft. concrete or asphaltic paving, 241 cu. yd. concrete, 17,070 lb. reinforcing, $262,000; 8.27 mi. State Project 961 A, extension Macon Co., 11,500 cu. yd. common excav., 55 cu. yd. concrete, 58,930 sq. yd. concrete or asphaltic paving, $87,000; 6.42 mi. State Project 146, Hertford and Bertie Counties, 15 acres clearing, 26,900 sq. yd. common excav., 1,500 cu. yd. drainage ditches, 950 ft. 18 and 24 in. concrete pipe, 15,100 cu. yd. topsoil, 538 cu. yd. concrete, 68,000 lb. reinforcing, 1,500 ft. untreated timber piles, $40,000; 10.74 mi. State Project 437, Harnett Co., 18 acres clearing, 80,800 cu. yd. common excav., 1,480 ft. 18-30 in. concrete pipe, 110 cu. yd. concrete, 28,230 cu. yd. topsoil, $60,000; 7.45 mi. State Project 457 A, Orange Co., 28 acres clearing, 65,000 cu. yd. common and 6,800 cu. yd. rock excav., 1,894 ft. 18-30 in. concrete pipe, 658 cu. yd. concrete, 57,190 lb. reinforcing, $59,000; 1.06 mi. State Project 392, Robeson Co., 39,200 cu. yd. common excav., 7,400 cu. yd. drainage ditches, 415,000 sta. yd. overhaul, 2,600 cu. yd. topsoil, $30,000; 7.81 mi. State Project 485 A, Wake Co., 50,200 cu. yd. common and 3,900 cu. yd. rock excav., 188 cu. yd. concrete, $42,000; 8.59 mi. State Project 616, Cabarrus Co., 31 acres clearing, 57,300 cu. yd. common and 2,800 cu. yd. rock excav., 125 cu. yd. concrete, 22,500 cu. yd. topsoil, $47,000. C. M. Upham, state highway engr. Noted March 8.

N. C., Enfield—March 21, by Mayor and Bd. Comrs., 25,000 sq.yd. asphaltic paving on concrete, 17,500 ft. combined curb and gutter, 8,500 sq.yd. concrete sidewalks, 18,000 cu.yd. excav., 5,500 ft. vitr. pipe, etc. W. C. Olsen, Kinston, engr.

N. C., Greensboro—March 19, by City Council, 150,000 sq.yd. paving, concrete, sheet asphalt and bituminous concrete. P. C. Painter, city mgr.

N. C., Rowland—April 3, by Mayor, 5,383 sq.yd. street pavement, 1,515 lin.ft. curbing, 9,339 sq.yd. sidewalks, etc. Ryan Eng. Co., Arcade Bldg., Columbia, S. C., engrs. Noted March 8.

S. C., Fort Mill—March 22, 6,300 sq. yd. asphaltic concrete surfacing on 4 in. cement concrete. H. S. Jaudon Eng. Co., Elberton, Ga., engrs.

S. C., York—March 22, at office T. B. Spratt, 1st Trust Co., Fort Mill, constructing 2.28 mi. State Route 7, from Catawba River to northern limits of Fort Mill, 20,617 cu. yd. excav., 30,486 sq. yd. sheet asphalt or asphaltic concrete, 18,596 sq. yd. combination concrete header curbing and base course, 13,423 sq. yd. concrete base, 11,420 lin. ft., combination curb and gutter, for York Co.

Louisiana—March 27, by State Hy. Comn., Reymond Bldg., Baton Rouge, grading and gravel surfacing 6.58 mi. Federal Aid Project 129, St. Francisville-Baton Rouge Highway, West Feliciana Parish, 4,426 cu.yd. washed and screened gravel and 8,235 cu. yd. sand clay gravel, containing not less than 40 per cent stone retained on ¼ in. screen. J. Fourmy, ch. engr.

Kentucky—April 4, by State Hy. Dept., Frankfort, surfacing 3.9 mi. Lawrenceburg-Versailles Rd., State Project 20, Sect. C, Anderson Co., 8,150 tons crushed stone, 2,002 tons screenings, 110 lin.ft. 18 in. and 44 lin.ft. 24 in. corrugated metal pipe, 31 cu.yd. concrete, etc. J. S. Boggs, state highway engr. Noted March 1.

O., Cincinnati—March 23, by Hamilton Co., grading and paving 14,008 ft. Blue Ash Rd., 20 ft., 1,000 cu.yd. earth excav., 31,130 sq.yd. bituminous macadam, $44,951. E. A. Gast, Court House, co. surv.

O., Cleveland—March 21, by Cuyahoga Co., Court House, grading, curbing and paving Clague Rd., 3, vitr. brick, to exceed $25,000; Noble Rd. from Euclid Ave. to Mayfield Rd., vitr. brick, $150,000. F. R. Lander, Court House, engr.

O., Cleveland—March 22, stone and cement sidewalks in southerly, northerly and westerly sidewalk districts. $125,000. R. H. Hoffman, City Hall, engr.

O., Columbus—March 20, by W. H. Duffy, dir. Pub. Wks., Grant and State Sts., grading, curbing, laying necessary water services and sewer connections and paving 1,902 ft. Mt. Vernon Ave. from Cleveland to St. Clair Aves., 66 ft., brick $48,442, asphalt $48,442. R. H. Simpson, city engr.

Michigan—March 27, by State Hy. Dept., Lansing, grading and surfacing 4.009 mi. Federal Aid Project 118, Muskegon Co., 8,298 cu.yd. excav., 42,444 sq.yd. concrete. F. F. Rogers, state comr.

Michigan—March 28, by State Hy. Dept., Lansing, grading and surfacing 1.342 mi. State Trunk Line Rd. 11-32, Sect. B, Oceana Co., 8,024 cu.yd. excav., 14,064 sq. yd. concrete. F. F. Rogers, state comr.

Michigan—March 29, by State Hy. Dept., Lansing, grading and surfacing 4.853 mi. Federal Aid Project 76, Macomb Co., 9,506 cu.yd. excav., 51,214 sq.yd. concrete. F. F. Rogers, state comr.

Michigan—March 30, by State Hy. Dept., Lansing, grading and surfacing 3.489 mi. State Trunk Line Rd. 27-16, Sect. A, St. Clair Co., 11,542 cu.yd. excav., 40,988 sq yd. concrete. F. F. Rogers, state comr.

Mich., Kalamazoo—March 28, for 28,000 sq.yd. sheet asphalt paving top. H. A. Bland, purch. agt.

Wis., Jefferson—March 22, by Jefferson Co. State Road and Bridge Com., grading and surfacing 4.59 mi. Ixonia-Watertown Rd., State Trunk Highway 19, beginning at west end of present concrete pavement west of Ixonia and extending westerly to city of Watertown, 21,138 cu.yd. earth excav., 48,060 sq.yd. concrete surfacing, 54,326 lb. steel, etc., concrete bridge across Rock River at Watertown, near Tourist Park, five 50 ft. spans; 6.83 mi. Whitewater-Ft. Atkinson Rd., State Trunk Highway 12, beginning at Walworth Co. line and extending northwesterly into city of Ft. Atkinson, 26,555 cu.yd. earth excav., 78,161 sq.yd. concrete surfacing, 147,187 lb. steel, etc.; 10.11 mi. Ft. Atkinson-Cambridge Rd., State Trunk Highway 12, beginning in city of Ft. Atkinson and extending northwesterly to Jefferson Co. line, Sect. A, Sta. O to Sta. 238 plus OO, 19,573 cu.yd. earth excav., 48,154 sq.yd. concrete pavement, Sect. B, Sta. 238 to Sta. 535 plus 96.1, 28,560 cu.yd. earth excav., 59,654 sq. yd. concrete pavement. R. D. Royce, co. highway comr.

Wis., Prarie du Chien—March 27, by F. R. Honzel, city clk., paving North and South Church Sts., alternate bids on 16,300 sq.yd. one course rein.-con., asphaltic concrete on concrete, tarvia double seal on concrete or vibrolithic concrete, 6,700 cu. yd. earth excav., 8,200 lin.ft. cobination concrete curb and gutter, 450 ft. 12 in. vitr. pipe storm sewer, etc. Private plans.

Wis., West Allis—March 26, by W. Henika, city clk., 48,381 sq.yd. pavement, 11,012 cu.yd. grading on George St. from 60th to 79th Aves., Greenfield Ave. from 66th to 74th Aves., 74th and 70th Aves. from National to Greenfield Aves., 65th Ave. from National Ave. to Burnham St., 52nd Ave. from Mitchell to Burnham Sts., Greenfield Ave. from 51st to 53rd Aves. Alternate bids on concrete, vibrolithic concrete, sheet asphalt, (heavy and light binders) and creosoted blocks. W. Darby, City Hall, engr.

Ia., Clarion—March 19, by Auditor Wright Co., grading 6.942 mi. road from Eagle Grove south, 94,388 cu.yd. excav., 19,292 ft. 6 in. and 2,500 ft. 10 in. tile, etc. J. K. Hilton, Clarion, engr.

Ia., Clinton—March 27, curbing and paving 7 mi. Sect. A-23 to M-23, 26-64 ft., 88,000 sq.yd. paving, 67,000 lin.ft. combined curb and gutter, etc. Alternate bids on vertical fibre brick, asphalt and waterbound bituminous concrete. $400,000. B. R. Anderson, city engr. Noted Feb. 15.

Ia., Cresco—March 22, 9,800 sq.yd. paving 4,400 lin.ft. concrete curb and gutter, 3,000 cu.yd. grading, etc. Alternate bids on concrete, vibrolithic, rein.-con., sheet asphalt, asphaltic concrete and bitulithic. $33,000. J. H. Howe, city engr.

Ia., Des Moines—March 26, by Auditor Polk Co., grading and incidental work on 14.4 mi. Polk City-Sheldahl and Mitchellville-Farrar Rds., 126,681 cu.yd. excav., 7,100 ft. 6 in and 2,600 ft. 8 in. tile, etc. F. O. Laing, co. engr.

Kan., Holton—April 6, by Comrs. Jackson Co. earth road with bridges on 8.797 mi. Holton to Mayetta Rd., Federal Aid Project 149, A and B, 30 ft., 38,400 cu.yd. earth excav. $50,000. P. Wright, co. engr. Noted March 8.

Minn., Albert Lea—March 27, by C. Holway, aud. Freeborn Co., 5.5 mi. Job 23-23, State Rd. 23, 51,925 cu.yd. excav., 59,860 cu.yd. overhaul, install 1,331 lin.ft. portable culverts; 3 mi. Job 23-07, State Rd. 7, 27,000 cu.yd. excav., install 350 lin.ft. portable culverts; 1 mi. Job 22-07B, 12,800 cu.yd. excav., install 200 lin.ft. portable culverts. $25,000. C. W. Squires, Albert Lea, engr.

Minn., Hastings—April 2, by R. W. Downs, aud. Dakota Co., Job 2315, State Rd. 15, 39,409 cu. yd. earth and 240 cu. yd. loose rock excav., 33,152 cu. yd. overhaul, 2,240 lin. ft. 15-24 in. corrugated metal culverts, 9 monolithic culverts, and 8 end walls, incl. 260 cu. yd. concrete, 15,102 lb. steel; Job 2316, State Rd. 16, 54,177 cu. yd. excav., 181,813 cu. yd. overhaul, 842 ft. 15-30 in. corrugated metal culverts, 2 monolithic culverts and 8 end walls, incl. 67 cu. yd. concrete, 3,759 lb. steel; Job 2305, State Rd. 5, 48,476 cu. yd. excav., 20,488 cu. yd. overhaul, 2,650 lin. ft. 15 and 24 in. corrugated metal culverts, 3 monolithic culverts, 8 end walls, 83 cu. yd. concrete, 4,434 lb. steel. $33,000. J. Swan, Hastings, engr.

Minn., Luverne—April 2, by O. Skyberg, aud. Rock Co., gravel surfacing 10 mi. Job 2301 State Rds. 6 and 7, 15,000 cu. yd. $25,000. J. Brown, Luverne, engr.

Minn., Owatonna—March 28, by G. Griffin, aud. Steele Co., Job 2302, State Aid Rd. 73-104, 69,176 cu.yd. excav., 46,444 cu. yd. overhaul, install 308 lin.ft. corrugated metal culverts, 278 cu.yd. concrete culverts. $25,162. R. W. Hosfield, Owatonna, engr.

Washington—March 27, by State Hy. Comn., Olympia, concrete paving 4.7 mi. Pacific Highway from Castle Rock south, $170,000, 5.3 mi. Pacific Highway from Kelso north, Cowlitz Co., $180,000. J. Allen, Olympia, state highway engr. Noted March 8.

Washington—April 10, by State Hy. Comn., Olympia, concrete paving 4.7 mi. Pacific Highway from Castle Rock north, Cowlitz Co., $160,000, 5.5 mi. from Loughlins Mouth north, Lewis Co., $180,000, 4.8 mi. from Toledo south, $160,000. J. Allen, Olympia, state highway engr. Noted March 8.

Calif., San Rafael—March 26, by City Clerk, 279,000 sq.ft. asphaltic concrete surfacing, 90,000 sq.ft. asphalt macadam surfacing. To exceed $30,000. H. J. Brainerd, city engr.

Calif., Visalia—City receiving bids improving section bounded by South Court St. Bridge, East Mineral, King and East Tulare Aves., 58,120 sq.ft. 3½ in. concrete walks, 10,675 lin.ft. concrete curbs. L. H. Gadsby, city engr.

Quebec—March 27, by J. L. Boulanger, minister Dept. Pub. Wks., Quebec, 5,056 ft. Quebec-St. Simeon Highway, oil waterbound macadam; 29,790 ft. Levis-Rimouski Highway, 9,040 ft. concrete and 20,750 ft. oil waterbound macadam. M. Nectkar, ch. engr.

South Dakota—March 21, by State Hy. Comn. at office Auditor Charles Mix Co., Lake Andes, 7.86 mi. Federal Aid Project 111, Chamberlain-Lake Andes Rd., 86,960 cu.yd. excav., 170.5 cu.yd. concrete, 13,415 lb. reinforcing steel, also one 67 ft. concrete viaduct, 90.4 cu.yd. concrete, 12,272 lb. reinforcing steel, etc. F. D. Hudgins, ch. engr.

South Dakota—March 22, by State Hy. Comn., at office Auditor Bon Homme Co., Tyndall, 12.5 mi. Federal Aid Project 113, Yankton-Tripp Rd., 97,515 cu.yd. excav., 200 cu.yd. loose rock excav., 498.85 cu.yd. concrete, 1,965 lin.ft. concrete pipe, 47,163 lb. reinforcing steel, one 96 ft. concrete viaduct, 149.2 cu.yd. concrete, 14,550 lb. reinforcing steel, 46,996 lb. structural steel, etc. Bids opened same date at office Auditor Hutchinson Co., Olivet, 15.14 mi. Federal Aid Project 116, Yankton-Olivet Rd., 170,156 cu.yd. common excav., 275.9 cu.yd. concrete, 3,460 ft. concrete pipe, one 120 ft., one 432 ft., and one 203 ft. concrete viaducts, 947 cu.yd. concrete, 93,350 lb. reinforcing steel, 284,073 lb. structural steel, etc. F. D. Hudgins, ch. engr.

South Dakota—March 23, by State Hy. Comn. at office Auditor Moody Co., Flandreau, 9.04 mi. Federal Aid Project 120, State Trunk 15, incl. 86,590 cu.yd. excav., 358.85 cu.yd. concrete, 1,510 lin.ft. concrete pipe, 30,960 lb. reinforcing, one 60 ft. concrete viaduct, 76.1 cu.yd. concrete, 8,670

STREET IMPROVEMENT—LAREDO, TEX.

Following are lowest and highest bids opened by City Council, Jan. 23, for paving various streets. The contract has been awarded to Southwest Bitulithic Co., Gunter Bldg., San Antonio, at $387,167.

	Vitrified Brick		Two Course Concrete		Sheet Asphalt, 2½ in.		Bitulithic 2 In.	Rock Asphalt
27,000 cu.yd. earth excavation	$0.25	$0.90	$0.80	$0.90	$0.25	$0.85	$0.50	$0.50
62,082 ft. concrete curbs	.42	.78	.70	.70	.42	.65	.65	.63
120,062 sq.yd. 6-in. concrete foundation	1.14	1.58	....	....	1.14	1.36	1.25	1.02
120,062 sq.yd. pavement	1.96	2.36	2.58	2.79	....	....	..	..
2,576 ft. concrete headers	.55	.49	.90	.65	.55	.65	.75	.75
186 adjusting st. structures	2.00	5.00	5.00	5.00	2.00	2.95	5.00	2.00
238 catch basins	50.00	35.00	70.00	54.00	50.00	56.50	45.00	45.00
3,192 ft. curb protecting steel	.25	.35	.30	.25	.25	.30	.25	.30
100 ft. 12-in. vitrified pipe	1.35	1.10	1.40	.75	1.35	2.40	2.25	1.50
10 12-in. vitrified elbows	3.00	3.15	3.50	4.00	3.00	2.75	4.00	3.00
15 12-in. vitrified ⅛ bends	3.00	3.15	3.50	4.00	3.00	2.65	4.00	3.00
2,025 ft. excavating and concrete on 8-ft. ry. strip	2.50	4.00	5.00	6.00	2.50	4.01	4.35	3.55
6,000 sq.ft. concrete walks and drives	.22	.25	.30	.27	.22	.23	.25	.28
105,724 sq.yd. surfacing	.....	.....	.....	.....	1.40	1.60	1.60	1.58
7,083 sq.yd. vitrified brick gutters	.....	.....	.....	.....	2.06	2.76	2.50	2.40
7,083 sq.yd. concrete gutters	.....	.....	.....	.....	1.70	1.15	1.00	1.00
Extended totals	$426,096	$567,196	$409,336	$434,180	$350,829	$430,327	$387,166	$372,267

Streets and Roads (Continued)

lb. reinforcing steel, 32,750 lb. structural steel, etc.; gravel surfacing 7.83 mi. Federal Aid Project 128, Madison-Pipestone Rd., 11,744 cu.yd. gravel. Bids opened on same date at office Auditor Brookings Co., Brookings, 15.92 mi. Federal Aid Project 89, Brookings-Elkton Rd., 137,111 cu.yd. excav., 471.62 cu.yd. concrete, 2,115 lin.ft. concrete pipe, 44,751 lb. reinforcing, one 90 ft. and one 45 ft. concrete viaducts, 164.9 cu.yd. concrete, 19,775 lb. reinforcing, 48,330 lb. structural steel. F. D. Hudgins, ch. engr.

South Dakota—March 24, by State Hy. Comn. at office Auditor Beadle Co., Huron, 14.15 mi. Federal Aid Project 91, Wessington-Wolsey Rd., 143,500 cu.yd. excav., 2,110 lin.ft. concrete pipe, 150.2 cu.yd. concrete, 13,133 lb. reinforcing steel, two 50 ft. pony trusses, one 84 ft. and one 78 ft. concrete viaducts, 484.79 cu.yd. concrete, 89,335 lb. structural steel, 53,659 lb. reinforcing, also 8.9 mi. Federal Aid Project 121, Huron-De Smet Rd., 111,399 cu.yd. excav., 1,280 lin.ft. concrete pipe, 349.2 cu.yd. concrete, 34,720 lb. reinforcing steel, one 60 ft. and one 40 ft. concrete viaducts, 143.56 cu.yd. excav., 15,560 lb. reinforcing, 62,213 lb. structural steel. F. D. Hudgins, ch. engr.

South Dakota—March 27, by State Hy. Comn., Todd Co., Pierre, 5.65 mi. Federal Aid Project 107, Winner-Martin Rd., 75,561 cu.yd. excav., 968 ft. 18 in. corrugated metal pipe, 50 lin.ft. 24 in. corrugated metal pipe, 444.9 cu.yd. concrete, 42,449 lb. reinforcing steel. F. D. Hudgins, ch. engr.

South Dakota—March 27, by State Hy. Dept., Pierre, 8.95 mi. Federal Aid Project 110, Gettysburg-Faulkton Rd., 66,497 cu. yd. excav., 1,415 lin.ft. concrete pipe, 275.5 cu.yd. concrete, one 32 ft. I beam bridge, 76.3 cu.yd. concrete, 4,534 lb. reinforcing, 13,092 lb. structural steel; one 90 ft. and one 72 ft. concrete viaducts on Federal Aid Project 118 A, Kennebec-Winner Rd., 313.48 cu.yd. concrete, 29,885 lb. reinforcing, 95,431 lb. structural steel; 9.478 mi. Federal Aid Project 95 A, Faulkton-Redfield Rd., 87,095 cu.yd. excav., 1,142 lin.ft. concrete pipe, 308.68 cu.yd. concrete, 26,986 lb. reinforcing; 10.04 mi. Federal Aid Project 95 B, Faulkton-Redfield Rd., 92,000 cu. yd. excav., 1,967 lin.ft. concrete pipe, 191.96 cu.yd. concrete, 12,100 lb. reinforcing; 6.85 mi. Federal Aid Project 117, Philip-Midland Rd, 105,283 cu.yd. excav., 1,005 lin. ft. concrete pipe, 163.1 cu.yd. concrete, 13,646 lb. reinforcing steel, one 48 ft., one 60 ft., one 52 ft. concrete viaducts, 247 cu.yd. concrete, 24,810 lb. reinforcing, 98,398 lb. structural steel. F. D. Hudgins, ch. engr.

South Dakota — April 4, by State Hy. Comn. at office Auditor Codington Co., Watertown, 6.11 mi. Federal Aid Project 124, Watertown-Hayti Rd., 52,776 cu.yd. excav., 905 lin.ft. concrete pipe, 115.04 cu.yd. concrete, 8,838 lb. reinforcing, one 90 ft. concrete viaduct, 171.6 cu.yd. concrete, 34,550 lb. reinforcing, also 9.94 mi. Federal Aid Project 122, Watertown-Clear Lake Rd., 105,129 cu.yd. excav., 1,755 lin.ft. concrete pipe, 276.36 cu.yd. concrete, 24,027 lb. reinforcing. F. D. Hudgins, ch. engr.

South Dakota—April 5, by State Hy. Comn., at office Auditor Grant Co., Milbank, 10.89 mi. Federal Aid Project 119, Webster-Milbank Rd., 99,924 cu.yd. excav., 1,390 lin.ft. concrete pipe, 257.18 cu.yd. concrete, 24,053 lb. reinforcing, one 72 ft. concrete viaduct, 88.02 cu.yd. concrete, 9,882 lb. reinforcing, 38,101 lb. structural steel, also 10.47 mi. Federal Aid Project 92 A, Webster-Milbank Rd., 123,185 cu.yd. excav., 1,962 lin.ft. concrete pipe, 101.61 cu.yd. concrete, 5,851 lb. reinforcing. F. D. Hudgins, ch. engr.

South Dakota—April 6, by State Hy. Comn., at office Auditor Roberts Co., Sisseton, 6.81 mi. Federal Aid Project 139, Sisseton-Watertown Rd., 67,000 cu.yd. excav., 444 cu.yd. concrete, 43,523 lb. reinforcing, 1,152 lin.ft. concrete pipe, one 34 ft. concrete viaduct, 60.9 cu.yd. concrete, 8,500 lb. reinforcing. F. D. Hudgins, ch. engr.

South Dakota—April 7, by State Hy. Comn., at office Auditor Walworth Co., Mobridge, 6.19 mi. Federal Aid Project 20 B, Mobridge-Selby Rd., 79,493 cu.yd. excav., 925 lin.ft. concrete pipe, 218.68 cu.yd. concrete, 27,200 lb. reinforcing; 8.15 mi. Federal Aid Project 101, Mound City-Leola Rd., 66,930 cu.yd. excav., 1,356 lin.ft. concrete pipe, 130.59 cu.yd. concrete, 9,324 lb. reinforcing; 8.95 mi. Federal Aid Project 131, Mound City-Leola Rd., 72,950 cu.yd. excav., 1,460 lin.ft. concrete pipe, 103 cu. yd. concrete, 5,570 lb. reinforcing; 9.74 mi. Federal Aid Project 132, Mound City-Leola Rd., 79,640 cu.yd. excav., 1,595 lin.ft. concrete pipe, 4,560 lb. reinforcing. F. D. Hudgins, ch. engr.

S. D., Aberdeen—March 26 at office City Auditor, paving various streets. $300,000. F. LeCocq, city engr.

Missouri—March 24, by State Hy. Dept., Jefferson City, 0.489 mi. road from Albany to Stanberry, 24 ft., State Project Route 4A, Sect. 2, Gentry Co., 13,660 cu.yd. earth excav., etc.; 5 mi. road north of Cabool, 16 ft., State Project Route 7, Sect. 86, Texas Co., 12,157 cu.yd. surfacing; 5 mi. road south of Bloomfield, 34 ft., State Project Route 15, Sect. 49, Callaway Co., 41,000 cu.yd. earth excav., etc.; 4.7 mi. road from Lafayette Co. line east, 34 ft., State Project Route 2, Sect. 22, Saline Co., 36,810 cu.yd. earth excav.; 5 mi. road from Lafayette Co. line east, 34 ft., State Project Route 2, Sect. 21, Saline Co., 37,900 cu.yd. earth and 4,600 cu.yd. rock excav.; 5 mi. road from Lafayette Co. line east, 34 ft., State Project Route 2, Sect. 20, Saline Co., 91,390 cu.yd. earth and 3,000 cu.yd. rock excav.; 4.7 mi. road from Lafayette Co. line east, 34 ft., State Project Route 2, Sect. 19, Saline Co., 50,470 cu.yd. earth excav.; 5 mi. road from Lafayette Co. line east, 34 ft., State Project Route 2, Sect. 18, Saline Co., 66,303 cu.yd. earth excav.; 0.488 mi. road north and south of Princeton, 30 ft., State Project Route 3, Sect. 5, Mercer Co., 7,986 cu.yd. earth excav.; 2.267 mi. road west of Maryville, 30 ft., State Project Route 18, Sect. 11, Nodaway Co., 17,589 cu.yd. earth excav.; 2.727 mi. road west of Maryville, 30 ft., State Project Route 18, Sect. 6, Nodaway Co., 29,969 cu.yd. earth excav.; 0.36 mi. road west of Lamar, 24 ft., State Project Route 36, Sect. 6, Barton Co., 11,792 cu.yd. earth excav.; 2.55 mi. road west of Savannah, 30 ft., State Project Route 1, Sect. 22, Andrew Co., 46,832 cu.yd. earth and 276 cu.yd. rock excav.; 4.982 mi. road west of Savannah, 30 ft., State Project Route 1, Sect. 23, Andrew Co., 77,130 cu.yd. earth and 1,543 cu.yd. rock excav.; 2.5 mi. road south of Dexter, 16 ft., State Project Route 25, Sect. 50, Stoddard Co., 10,182 cu.yd. earth excav.; 5 mi. road west of Jackson, 34 ft., State Project Route 9, Sect. 112, Cape Girardeau Co., 63,210 cu.yd. earth excav.; 5 mi. road west of Jackson, 34 ft., State Project Route 9, Sect. 111, Cape Girardeau Co., 78,702 cu.yd. earth excav.; 3.655 mi. road from Fredericktown to Jackson, 34 ft., State Project Route 9, Sect. 103, Bollinger Co., 34,224 cu.yd. earth excav.; 4.955 mi. road from Fredericktown to Jackson, 34 ft., State Project Route 9, Sect. 102, Bollinger Co., 50,367 cu.yd. earth excav.; 4.559 mi. road from Fredericktown to Jackson, 34 ft., State Project Route 9, Sect. 101, Bollinger Co., 87,011 cu.yd. earth and 10,461 cu.yd. rock excav.; 4.89 mi. road from Fredericktown to Jackson, 34 ft., State Project Route 9, Sect. 100, Bollinger Co., 30,938 cu.yd. earth and 3,054 cu.yd. rock excav.; 2.695 mi. road from Lineville to Mercer, 30 ft., State Project Route 3, Sect. 2, Mercer Co., 19,625 cu.yd. earth excav.; 5 mi. road from Jefferson City to Fulton, 34 ft., State Project Route 15, Sect. 48, Callaway Co., 43,470 cu.yd. earth excav.; 0.848 mi. road from Stanberry to Albany, 24 ft., State Project Route 4, Sect. 18 A, Gentry Co., 27,029 cu.yd. earth excav.; 2.476 mi. road from Lineville to Mercer, 30 ft., State Project Route 3, Sect. 1, Mercer Co., 13,053 cu.yd. earth excav.; 4.82 mi. road west of Union, 16 ft., State Project Route 12, Sect. 52, Franklin Co., 7,935 cu.yd. earth and 500 cu.yd. rock excav.; 3.551 mi. road west of Springfield, 34 ft., State Project Route 14, Sect. 11, Greene Co., 33,932 cu.yd. earth and 4,365 cu.yd. rock excav.; 1.628 mi. road from West Plains to Thayer, 12 ft., State Project Route 7, Sect. 102, Oregon Co., 2,525 cu.yd. gravel surfacing; 4.261 mi. road from Houston to Salem, 12 ft., State Project Route 32, Sect. 5, Dent Co., 7,973 cu.yd. gravel surfacing; 5 mi. road from Houston to Cabool, 18 ft., State Project Route 7, Sect. 85, Texas Co., 11,977 cu.yd. surfacing; 4.856 mi. road west of Salem, 12 ft., State Project Route 36, Sect. 6, Dent Co., 9,002 cu.yd. gravel surfacing; 2.954 mi. road west of Springfield, 34 ft., State Project Route 14, Sect. 13, Greene Co., 22,999 cu. yd. earth and 6,780 cu.yd. rock excav.; 4.997 mi. road west of Rolla, 34 ft., State Project Route 14, Sect. 49, Phelps Co., 48,438 cu.yd. earth excav.; 2.338 mi. road northeast of Lebanon, 34 ft., State Project Route 14, Sect. 38 A, Laclede Co., 20,161 cu.yd. earth and 4,856 cu.yd. rock excav.; 4.761 mi. road northeast of Lebanon, 34 ft., State Project Route 14, Sect. 37, Laclede Co., 53,408 cu.yd. earth and 9,241 cu.yd. rock excav.; 4.037 mi. road west of Springfield, 34 ft., State Project Route 14, Sect. 12, Greene Co., 48,397 cu.yd. earth and 12,371 cu.yd. rock excav.; 0.636 mi. road south of Springfield, 34 ft., State Project Route 3, Sect. 97, Greene Co., 28,160 cu.yd. earth excav.; 1.398 mi. road south of Springfield, 18 ft., State Project Route 3, Sect. 94, Greene Co., 7,397 cu.yd. earth excav.; 1.526 mi. road from Appleton City to Butler, 16 ft., State Project Route 24, Sect. 13, St. Clair Co., 12,975 cu.yd. earth and 342 cu.yd. rock excav.; 3.846 mi. road north of Potosi, 30 ft., State Project Route 21, Sect. 4, Washington Co., 32,704 cu.yd. earth and 5,706 cu.yd. rock excav.; 3.1 mi. road north of Festus, 34 ft., State Project Route 9, Sect. 73, Jefferson Co., 35,183 cu.yd. earth and 7,598 cu.yd. rock excav.; 4.7 mi. road north of Festus, 34 ft., State Project Route 9, Sect. 72, Jefferson Co., 81,904 cu.yd. earth and 1,547 cu.yd. rock excav.; 4.6 mi. road north of Festus, 34 ft., State Project Route 9, Sect. 71, Jefferson Co., 86,124 cu.yd. earth excav.; 1.827 mi. road from Jefferson City to Columbia, 34 ft., State Project Route 7, Sect. 43, Callaway Co., 36,673 cu.yd. earth excav.; 3.159 mi. road north of Kansas City to Liberty, 18 ft., State Project Route 10, Sect. 1, Clay Co., 10,550 cu.yd. earth and 341 cu.yd. rock excav.; 4.561 mi. road south of Carrollton, 30 ft., State Project Route 3, Sect. 35, Carroll Co., 109,771 cu. yd. earth excav.; 4.115 mi. road south of Lancaster, 30 ft., State Project Route 7, Sect. 6, Schuyler Co., 26,782 cu.yd. earth excav.; 3.38 mi. road from Oregon to Savannah, 30 ft., State Project Route 1, Sect. 120, Holt Co., 73,753 cu.yd. earth and 3,600 cu.yd. rock excav.; 4.942 mi. road southwest of Waynesville, 34 ft., State Project Route 14, Sect. 41, Pulaski Co., 42,786 cu.yd. earth excav.; 2.032 mi. road northwest of Waynesville, 34 ft., State Project Route 14, Sect. 44, Pulaski Co., 39,217 cu.yd. earth and 11,792 cu.yd. rock excav.; 3.161 mi. road west of Rolla, 34 ft., State Project Route 14, Sect. 48, Phelps Co., 47,652 cu.yd. earth and 61,836 cu.yd. rock excav.; 4.622 mi. road from St. Louis to Springfield, 34 ft., State Project Route 14, Sect. 46, Pulaski Co., 77,404 cu.yd. earth and 8,945 cu.yd. rock excav.; 3.284 mi. road west of Rolla, 34 ft., State Project Route 14, Sect. 47, Phelps Co., 23,944 cu.yd. earth excav.; 2.923 mi. road west of Dexter, 18 ft., State Project Route 16, Sect. 83, Stoddard Co., 42,402 cu.yd. earth excav.; 1.155 mi. road west of Moberly, 18 ft., State Project Route 10, Sect. 36, Randolph Co., 4,579 cu.yd. earth

Streets and Roads (Continued)

excav.; 4.95 mi. road from Fredericktown to Ironton, 34 ft., State Project Route 9, Sect. 99, Madison Co., 45,528 cu.yd. earth and 11,338 cu.yd. rock excav.; 4.996 mi. road from Fredericktown to Jackson, 34 ft., State Project Route 9, Sect. 97, Madison Co., 61,314 cu.yd. earth excav.; 4.058 mi. road from Portageville to Arkansas State line, 18 ft., State Project Route 9, Sect. 142, Pemiscot Co., 41,152 cu.yd. earth excav.; 4.167 mi. road from Portageville to Arkansas State line, 18 ft., State Project Route 9, Sect. 141, Pemiscot Co., 30,310 cu. yd. earth excav.; 2.4 mi. road from Phelps to Halltown, 34 ft., State Project Route 14, Sect. 10, Lawrence Co., 25,629 cu.yd. earth and 6,737 cu.yd. rock excav.; 3.158 mi. road south of Neosho, 30 ft., State Project Route 1, Sect. 108, McDonald Co., 39,433 cu.yd. earth and 1,125 cu.yd. rock excav.; 4.8 mi. road west of Springfield, 34 ft., State Project Route 14, Sect. 9, Lawrence Co., 62,932 cu.yd. earth and 4,069 cu.yd. rock excav. B. H. Piepmeier, state highway engr.

BIDS RECEIVED

Md., Baltimore — Paving Comn. opened bids Contr. 231-OANA, from Baltimore Asphalt Block & Tile Co., 1320 North Monroe St., $86,692; Amer. Paving Co., Montebello Ave., $90,924; P. Flanigan & Sons, Harford Rd. and Baltimore and Ohio R.R., $93,749. Noted March 1.

Virginia—State Hy. Dept., Richmond, constructing (1) 2.9 mi. road between Tasley and Onancock, Project 268 A and B (2) 7.26 mi. road, Project F 246 A and B (3) 6 mi. concrete road from Tasley 6 mi. west (4) 77 ft. concrete bridge, 22 ft. wide, over Spottsylvania Power Co. canal, Project 225 B (5) concrete bridge over Marland Creek, Project F 192 C (6) bridge over Sandy River at Danville, Project F 186 B, from Harrison Eng. & Constr. Co., Elicott Sq., Buffalo, N. Y., (1) $103,221 (3) $216,767; Royer & Ferguson, High Point, N. C., (1) $105,404 (3) $207,938; Robertson Bonsier & Co., Norfolk, (street address not available) (1) $105,412; Allport Constr. Co., Mutual Bldg., Richmond, (2) $273,568 (6) $11,369; J. A. Addenback & Son, Norfolk, (street address not available) (2) $287,304; R. G. Lassiter & Co., Arcade Bldg., Norfolk (2) $292,804; H. Roberts, Clara, Md., (3) $198,812; Major Engr. Co., Front Royal (4) $5,337; A. C. Bailey, 210 9th St., Phillipsburg, Pa., (4) $6,327; L. R. Boyd, Chester (4) $6,374; H. A. Donald, Lexington (5) $3,014; Ellis, Brooks Co., Lynchburg (street address not available) (5) 3,058; Pace Constr. Co., Box 744, Roanoke, (5) $3,504; Roanoke Iron Works, Roanoke, (6) $9,426; Atlantic Bridge Co., Roanoke, (6) $1,703. Noted Jan. 25.

O., Cincinnati—Hamilton Co. opened bids March 9, grading and paving (1) 8,980 ft. Van Zandt Rd., 16 ft., 16,000 sq.yd. bituminous macadam, engrs. est. $25,595 (2) 4,230 ft. Oak Rd., 16 ft., 7,525 sq.yd. bituminous macadam, engrs. est. $15,128 (3) 8,530 ft. Baughman Rd., 16 ft., 15,200 sq.yd. bituminous macadam, engrs. est. $23,272, from J. Rubel Constr. Co., 1872 Hanfield St., (1) $20,327 (2) $14,769; W. P. Flynn, 1252 Chase St., (1) $21,507 (3) $21,342; Brenson & Van Horn, 2381 Kemper Lane, (1) $21,597 (2) $12,474; J. L. Radabaugh, Montgomery, (2) $14,709; Nugent & Scull, R.R. 3, Harrison, (3) $19,598; E. Hines & Son, Harrison, (3) $20,359.

O., Cleveland—Grading, curbing and paving (1) East 117th St. (2) East 145th St. (3) West 48th St. (1 to 3 inclusive) involve 12,620 lin.ft. stone curb and 4 in. tile drain gutter, 8,900 cu.yd. earth excav., 20,710 sq.yd. (a) vitr. brick or (b) asphalt on concrete (4) West 49th St. (5) West 48th St. (6) Marvin Ave. (7) Tampa Ave. (8) West 73rd St. (9) West 115th St. (4 to 9 inclusive) involve 25,340 lin.ft. stone curb and 4 in. tile drain gutter, 12,000 cu. yd. earth excav., 20,926 sq.yd. (a) vitr. brick or (b) asphalt on concrete, from A. M. Pejsa, Euclid Heights Blvd., (1a) $24,961 (1b) $20,764; Baldwin Bros., 4500 Euclid Ave., (1a) $25,623 (1b) $20,963 (2a) $40,685 (2b) $34,547 (6a) $8,258 (8b) $7,960; Cleveland Trinidad Paving Co., The Arcade, (2b) $37,063; W. E. McHugh, Pavers Exch., Society for Savings Bldg., (3b) $38,051 (4b) $35,688 (5b) $38,051 (7b) $23,600; Roehl Bros., West 25th St. and Clark Ave., (3a) $45,050 (4a) $42,135 (5a) $45,050 (6b) $7,695 (7b) $23,638; Freshwater Constr. Co., Natl. Bldg., (8a) $9,358 (9a) $11,344; Highway Constr. Co., 903 Lorain Co. Bank Bldg., Elyria, (9b) $9,422. Noted Jan. 25.

O., Cleveland — Opened bids Feb. 28, grading, curbing and paving, (1) West 71st St. (2) East 118th St. (3) West 33rd St. (4) East 117th St. (5) West 116th St. (1 to 5 inclusive involve) 7,420 lin.ft. stone curb and 4 in. tile drain gutter, 8,500 cu. yd. earth excav., 6,515 sq.yd. asphalt, 10,896 sq.yd. vitr. brick on concrete (6) Scoville Ave. from East 26th to East 55th Sts., 4,062 cu.yd. earth excav., 14,265 sq. yd. granite block and asphalt, 13,116 sq. yd. concrete base, from Freshwater Constr. Co., Natl. Bldg., (1) $11,371 (5) brick $15,550; Baldwin Bros., 4500 Euclid Ave., (1) $11,509 (3) $8,363 (4) asphalt $20,963, brick $25,623; A. M. Pejsa, Euclid Heights Blvd., (2) $4,643 (4) aspnalt $20,764, brick $24,963; Rieley Bros., The Arcade, (2) $4,768; Roehl Bros., West 25th St. and Clark Ave., (3) $6,938; Highway Constr. Co., 903 Lorain Co. Bank Bldg., Elyria, (5) asphalt $13,112; Bentley Bros., 1836 Euclid Ave., (6) asphalt $87,135, granite $128,386; Cleveland Trinidad Paving Co., The Arcade, (6) asphalt $88,202, granite $131,712. Noted Feb. 22.

Wis., Appleton—Outagamie Co. opened bids (1) Clintonville-New London Rd., (a) 7,946 cu.yd. earth excav. (b) 8,315 sq.yd. concrete surfacing, etc. (2) Appleton-Seymour Rd. (a) 13,332 cu.yd. earth excav. (b) 12,866 sq.yd. concrete surfacing, etc., from Hoffman Constr. Co., 1087 Oneida St., Appleton, (1a) $0.90, (1b) $1.58, etc., total $32,007, (2a) $0.84, (2b) $2.55, etc., total $47,127; Will Tate, Bear Creek, (1a) $0.85 (1b) $2.60, etc., total $30,690; Wilson Johnson Concrete Co., Appleton (1a) $1 (1b) $2.05, etc., total $35,431; Simpsen Parker, Appleton, (2a) $0.80 (2b) $1.47, etc. total $47,416; P. Wunderlick, Appleton, (2a) $0.65 (2b) $2.49, etc., total $47,058.

Wis., Green Bay—Brown Co. State Road and Bridge Com. opened bids Feb. 27, Blake Rd., (a) 40,771 cu.yd. earth excav. (b) 3,500 cu.yd. solid rock (c) 97,195 sq. yd. concrete surfacing, etc., from Brogan & Schaefer, Green Bay, (a) $0.78 (b) $3 (c) $1.43, etc., total $208,068; Universal Eng. Co., Ingram Blk., Eau Claire, (a) $0.78 (b) $2.75 (c) $1.51, etc. total $215,106; Henkel Constr. Co., Mason City, Ia., (a) $0.85 (b) $2.75 (c) $1.55, etc., total $217,414. Noted Feb. 15.

Wis., Jefferson—Jefferson Co. State Road and Bridge Com., surfacing, etc., from Campbell Constr. Co., 3050 Hennepin Ave., Minneapolis, Minn., Portland-Waterloo Rd., Sect. A, 3,723 cu.yd. earth excav. $0.80, 11,882 sq.yd. concrete surfacing exclusive of cement and joints $1.52, etc., total $23,684, Madison St. Village of Waterloo, Sect. B, 3,410 cu.yd. earth excav. $0.80, 13,110 sq.yd. concrete pavement $1.47, etc., Waterloo-Marshall Rd., Village of Waterloo, Sect. C, 7,136 cu.yd. earth excav. $0.80, 9,369 sq.yd. concrete surfacing exclusive of cement and joints $1.52, total $22,370; from O'Dea & Shafer, 824 East Washington St., Madison, Milwaukee and Watertown Sts., Village of Jolson Creek, 2,144 cu.yd. earth excav. $0.79, 7,803 sq.yd. reinforcement pavement $1.62, etc., total $18,165; from L. C. Christianson, Cambridge, Madison St. in Lake Mills, 6,407 cu.yd. earth excav. $0.77, 16,341 sq.yd. concrete surfacing exclusive of cement and joints $1.29, etc., total $32,810. Noted Feb. 15.

Wis., Wausau—Paving 10,600 sq.yd. various streets, from C. Lotz, 1016 Grand Ave., vibrolithic concrete $2.28 per yd., brick $4.

Tex., Dallas—Paving 25,000 sq.yd. Pacific Ave. from Lamar St. to Central Ave., 50 ft., (a) 3 in. vertical fibre brick (b) 2 in. Uvalde rock asphalt (c) bitulithic (d) asphaltic concrete (e) sheet asphalt, all on 7 in. concrete, from Smith Bros. Constr. Co., Sumpter Bldg., (a) $104,737 (d) $106,981; Central Bitulithic Co., Praetorian Bldg., (a) $110,828 (c) $106,838; Fuller Constr. Co., Southwestern Life Bldg., (a) $118,845 (b) $109,618 (d) $104,879 (e) $107,373; Valient-Toomey, 8th St., Ft. Worth, (a) $118,289; Uvalde Paving Co., Insurance Bldg., (b) $108,275. Noted March 1.

Texas, Kaufman—Kaufman Co. grading and gravel surfacing 10.74 mi. Highway 40 from Big Bushy Creek to Dallas Co. line, 16 ft., from F. P. McElwrath, Corsicana, $87,490; Smith & Pursifull, Kaufman, $89,912; Scarborough & Davis, Gaston Bldg., Dallas, $90,082. Noted Feb. 1.

Tex., Seguin—Guadalupe Co. grading and gravel surfacing 9.5 mi. State Highway 3 between here and Gonzalez Co. line, 18 ft. 77,665 cu. yd. roadway and 15,986 cu. yd. borrow, 761.8 cu. yd. concrete, 28,986 cu. yd. gravel, etc., from Tibbetts Constr. Co., 209½ 8th St., Ft. Worth, $58,640; McClung Constr. Co., Cleburne, $62,559; J. W. Goodrun, Seguin, $62,757. Engrs. ets. $75,000.

Colorado — State Hy. Dept., Denver, opened bids gravel surfacing and bridging 0.454 mi. road located at Six Mile Creek, about 2 mi. west of Avondale, Federal Aid Project 231, Pueblo Co., from A. O. McCormick & Voss, 552 South Penn Ave., Denver, $23,088, Rogers & Pickard, 1735 Stout St., Denver, $25,968, P. C. Croll, 612 Jackson St., Pueblo, $26,478; gravel surfacing 6.86 mi. road beginning at Lamar and extending west via Santa Fe Trail, Federal Aid Project 168 B, Prowers Co., from Standard Eng. Co 518 E & C Bldg., Denver, $41,984, H. C. Lallier Eng. & Constr. Co., Hudson, $45,003, W. A. Colt & Son, Las Animas, $46,896; 1.957 mi. road extending westerly to Ft. Logan from Petersburg, State Project 791, Arapahoe Co., cement concrete, from W. F. Pigg & Son, 301 Engineers Bldg., Denver, $51,678, A. J. Collins, 2363 Blake St., Denver, $54,358, Brodie & Anderson, 609 Interstate Trust Bldg., Denver, $55,402, Topeka specifications bituminous pavement, from Western Paving Co., 601 First Natl. Bank Bldg., Denver, $62,795, R. M. Larson, 1309 Kalamath St., Denver, $63,794, E. L. Don, Pueblo, $64,447.

Calif., Auburn—Improving portions High, El Dorado Sts., etc., 82,000 sq.ft. grading, 82,000 sq.ft. 5 in. concrete pavement, 3,400 lin.ft. curb and gutter, 870 lin.ft. concrete open ditch, 360 ft. terra cotta 12 in. drains, from Skeels & Hudson, 1720 Oxford St., Berkeley, $19,017; M. C. Hillard, Sacramento, (street address not available), $20,202; General Constr. Co., Sharon Bldg., San Francisco, $21,175. Noted Feb. 15.

Calif., Los Angeles—Improving Alexandria Ave. between Beverly Blvd. and 1st St., from G. H. Oswald, 366 East 58th St., 94,725 sq.ft. grading $0.05, 50,798 sq. ft asphaltic pavement $0.30, 12,027 sq.ft. 5 in. concrete pavement $0.235, 13,070 sq. ft. 6 in. concrete pavement $0.25, 18,831 sq.ft. warranite bitulithic $0.27, 2,302 ft. curb $0.75, 10,030 sq.ft. walks $0.22; Hillhurst St. between Los Feliz and Hollywood Blvd., from W. Liddington, 420 East 60th St., 296,270 sq.ft. 6 in. concrete pavement $0.226, 1,282 sq.ft. oiling $0.06, 4,169 ft. curb $0.65, 2,976 sq.ft. walks $0.198, 256 sq.ft. gutter $0.25; Wilcox Ave. between Santa Monica Blvd. and Willoughby Ave., from W. Liddington, 420 East 60th St., 53,606 sq.ft. grading $0.03, 53,606 sq.ft. 5 in. concrete pavement $0.2075, 2,242 ft. curb $0.60, 3,142 sq.ft. walks $0.195; Alexandria Ave. between 3rd St. and Wilshire Blvd., from G. R. Curtis, 2440 East 26th St., 117,459 sq.ft. warrenite bitulithic $0.26, 274 ft. curb $0.75, 1,166 sq.ft. walks $0.25, 5,091 sq.ft. gutter $0.28.

Calif., Oakland — Improving 89th Ave. between B and E Sts., D St. between 87th and 92 Aves., (a) 74,315 sq.ft. grading (b) 4,231 ft. concrete curb (c) 8,316 ft. concrete gutter (d) 65,644 sq.ft. asphaltic macadam (2) Walnut Ave. between 55th and Seminary Aves., (e) 76,801 sq.ft. grading (f) 2,372 ft. concrete curb (g) 5,120 ft. concrete gutter (h) 35,628 ft. oil macadam pavement (i) 15,360 ft. sidewalks, from Heafey, Moore & McNair, 2030 High St., (1a) $0.065 (1b) $0.75 (1c) $0.26 (1d) $0.12; S. Deguarda, Oakland, (street address not available) (1a) $0.05 (1b) $0.65 (1c) $0.26 (1d) $0.12; Bates & Borland, Bank of Savings Bldg., (1a) $0.06 (1b) $0.75 (1c) $0.26 (1d) $0.12 (2e) $0.055 (2f) $0.75 (2g) $0.25 (2h) $0.115 (2i) $0.17; Hutchinson Co., 1706 Bway., (2e) $0.06 (2f) $0.78 (2g) $0.26 (2h) $0.12 (2i) $0.175; Oakland Paving Co., 5000 Bway., (2e) $0.059 (2f) $0.75 (2g) $0.25 (2h) $0.12 (2i) $0.18.

Calif., Oroville—Butte Co. grading and gravel surfacing Chico-Butte City Rd., Route 11, Sect. D, from Collins & Seppi, Stockton (street address not available), $39,857, D. Bayles, Biggs, $40,570; Honcut-Palermo Rd., (material to be furnished by county, $21,691) from Heafey, Moore & McNair, 2030 High St., Oakland, $52,218, Christensen Constr. Co., Palo Alto, $61,537. Noted Feb. 22.

Calif., Redwood City—San Mateo Co., improving Pescadero-Santa Cruz Rd., from W. W. Thompson, Redwood City, $39,149; A. J. Grier, 480 Chetwood St., Oakland, $43,538; W. J. Wilkinson, (address not available), $45,645.

Calif., San Diego — Common Council opened bids March 5, improving 14th St. between C St. and Imperial Ave., (a) 161,910 sq.ft. 1½ in. asphaltic concrete, 1 in. binder course on 4 in. concrete (b) 269 lin.ft. concrete curb, etc., from Griffith Co., 25 14th St., (a) $0.237 (b) $0.70; G. R. Daley, 4430 Boundary St., (a) $0.245 (b) $0.70. Noted Jan. 25.

Calif., Tulare—Paving with 4 in. concrete, curbing, guttering and laying sidewalks on L St., from Frederickson & Shannon, Cory Bldg., Fresno, $51,732; Martin Constr. Co., Brix Bldg., Fresno, $54,513; F. A. Mero, 401 16th St., Richmond, $56,420.

Calif., Whittier—Improving portion Pickering Ave., from Griffith Co., Los Angeles Ry. Bldg., Los Angeles, 182,000 sq.ft. grading $0.043, 182,000 sq.ft. 6 in. concrete pavement $0.257, 670 ft. curbing $0.60, 6,100 sq.ft. walks $0.21, etc.

CONTRACTS AWARDED

Conn., Norwalk—City, 1 mi. road leading to Calf Pasture Beach, to Strycker & Strycker, 198 Monmouth St., Red Bank, N. J., $26,000. Noted Feb. 22.

Streets and Roads (Continued)

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, recurbing and paving Bay 23rd St. and grading, curbing and flagging Ave. D, to Cranford Co., 52 9th St., $5,126 and $8,497 respectively; grading, curbing and flagging Conselyea and Maple Sts., to G. H. Cooper, 1674 Bway., New York, $2,909 and $7,912 respectively; paving Conselyea St. and curbing and paving Livonia Ave., both asphalt, to Borough Asphalt Co., 1301 Metropolitan Ave., $4,680 and $6,995 respectively; grading, curbing, flagging and laying sidewalks on 72nd St. also cement sidewalks on 18th Ave., West 5th and West 30th Sts., to Simonelli & Sons, Inc., 26 Conselyea St., $3,416, $1,596, $1,203 and $1,465 respectively. Noted Feb. 22.

Pa., Ebensburg—Supervs. West Carroll Twp., c/o Cambria Co. Controller, 8,135 ft. Bakerton-Spangler Rd., brick on concrete, to Bell-Bockel Co. Inc., 543 Vine St., Johnstown, $85,965. Noted Feb. 22.

Pa., Ford City—Grading, paving and curbing 5th and 6th Aves., 5th to 14th Sts. inclusive, incl. 25,000 cu.yd. grading, 56,000 sq.yd. paving and 33,000 lin.ft. curbing, to McCrady Bros., 6th Ave., Braddock, $282,593.

Pa., Phila.—Paving (1) Dists. 5, 6 and 7 (2) Dist. 1 (3) 48th St. (4) Schiller St. (5) 15th St. (6) Callowhill St. (7) paving several streets (8) 56th and Price Sts. (9) Broad and Robinson Sts. (10) Barbara, Bermuda, Howard, Marvine and Oxford Sts. (11) Sansom St. (12) 16th St. (13) Dist. 3 (14) 13th St., to United Paving Co., Colonial Trust Bldg., (1) $26,815 (2) $22,164; Union Paving Co., 37th and Spruce Sts. (3) $26,442 (4) $4,236; J. Mehan & Sons, 915 West Dauphin St., (5) $69,538; Barber Asphalt Paving Co., Land Title Bldg., (6) $39,223 (7) $28,454 (8) $25,108 (9) $25,685 (10) $26,570; Acchione & Canuso, 804 South 12th St., (11) $2,533 (12) $20,278; Ryan Constr. Co., Real Estate Trust Bldg., (13) $11,512; Centroni & Mezzola, Lincoln Bldg., (14) $42,610. Noted March 8.

D. C., Wash.—Dist. Comrs. paving certain streets, to Cranford Paving Co., 2620 E St. N. W., $371,514. Noted March 8.

West Virginia—State Rd. Comn., Charleston, grading and concrete paving 6.6 mi. road west to Upshur Co. Line Rd., Project 3159, Lewis Co., 34,652 lin.ft. clearing, 75,000 cu.yd. unclassified and 2,342 cu.yd. dry excav., 646 cu.yd. concrete, 16,830 lb. reinforcing, 2,380 lin.ft. 18 and 24 in. rein.-con. pipe, 12,918 cu.yd. one course concrete pavement, to Fuccy Bros. and Tully Constr. Co., Weston, $267,292, 0.4 mi. Gardner Ave., in Charleston, Kanawha Co., to Harris & Moore, Charleston, $16,011, 1.54 mi. Salem-Doddridge Co. Line Rd., Project 3204, Harrison Co., 8,162 lin.ft. clearing, 14,000 cu.yd. unclassified and 794 cu.yd. dry excav., 3,545 sta.yd. overhaul, 168 cu. yd. concrete, 2,631 lb. reinforcing, 2,956 cu.yd. one course concrete pavement, etc., to Salem Bridge & Constr. Co., Salem, $55,659. Projects 3227, 3084 A-B, 66, 3083 and 3009 A, Wood and Wirt Counties, 20,624 lin.ft. clearing, 55,250 cu.yd. unclassified, 1,500 cu.yd. dry and 1,225 cu.yd. borrow excav., 1,590 cu.yd., concrete, 1,804 lin.ft. 12-18 in. rein.-con. pipe, 29,205 cu. yd. one course concrete pavement, 3,100 lb. metal reinforcing for concrete pavement, etc., to Connell, Laub, & Bracht, Dayton, O. (street address not available), $482,058; grading and draining 3.4 mi. Low Gap-Madison Rd., Project 3151 B, Boone Co., 18,000 lin.ft. clearing, 61,350 cu.yd. unclassified, excav., 1,800 sta.yd. overhaul, 588 cu.yd. concrete, 6,675 lb. reinforcing, to Echols Constr. Co., Marlinton, $56,278, Maryland State Line-Aurora Rd., Project 126, Preston Co., 21,120 lin.ft. clearing, 52,000 cu.yd. unclassified, 1,808 cu.yd. dry and 1,792 cu.yd. borrow excav., 1,052 cu.yd. concrete, 18,575 lb. reinforcing, 1,931 lin.ft. 18 in. corrugated metal pipe, etc., to H. H. Bruffey, Webster Springs, $61,020, 9 mi. Robinson Run-Maysville Rd., Project 3146, Grant Co., 43,000 lin.ft. clearing, 55,300 cu.yd. unclassified, and 1,020 cu.yd. dry excav., 15,000 sta.yd. overhaul, 760 cu.yd. concrete, 13,000 lb. reinforcing, 1,910 lin.ft. 15-24 in. rein.-con. pipe, 6,400 cu.yd. shale surfacing, etc., to Dayton Constr. Co., Elkins, $76,503, 2.2 mi. McGuire Gap-Webster Springs Rd., Project 3199, Webster Co., 11,800 lin.ft. clearing, 50,000 cu.yd. unclassified, and 729 cu.yd. dry excav., 290 cu.yd. cement and 1,365 cu.yd. dry rubble masonry, to H. H. Bruffey, Webster Springs, $36,410, 3.8 mi. road from end of Project 3047 B to Project 96, Project 3180, Nicholas Co., 20,060 lin.ft. clearing, 27,500 cu.yd. unclassified, 607 cu. yd. concrete, 18,600 lb. reinforcing, etc., to Lookout Constr. Co., Lookout, $34,630, 15.3 mi. Spanishburg-Flat Top Rd., Project 121, Mercer Co., 81,000 lin.ft. clearing, 274,000 cu.yd. unclassified, 500 cu.yd. wet, 4,000 cu.yd. dry and 1,000 cu.yd. borrow excav., 77,000 sta. yd. overhaul, 3,030 cu.yd. concrete, 56,000 lb. reinforcing, to C. S. Waugh, Williamson, $254,680, 3.82 mi. road from end of Project 3170 A to Kansas Co. line, Project 3170 B, Clay Co., 20,180 lin.ft. clearing, 95,800 cu.yd. unclassified, 1,061 cu.yd. concrete, 9,855 lb. reinforcing, 1,390 lin.ft. 18 in. vitr. clay pipe, etc., to Messinger & Hager, Huntington, (street address not available) $80,435; grading and paving with bituminous macadam 6.7 mi. Hamlin-Griffithsville Rd., Project 3201, Lincoln Co., 35,000 lin.ft. clearing, 34,000 cu.yd. unclassified, 850 cu.yd. dry and 4,000 cu.yd. borrow excav., 500 cu.yd. concrete, 7,000 lb. reinforcing, 2,100 lin.ft. 18 in. rein.-con. pipe, 300 cu.yd. loose stone or slag, 2,000 cu.yd. stone sub-base course, 13,500 cu.yd. broken stone base, 68,500 sq.yd. bituminous macadam surface course, 154,000 gal. bituminous material for penetration macadam, etc., to Smith Constr. Co. Youngstown, O., (street address not available) $216,280; paving with brick on 5 in. concrete 250 ft. Garvin Ave., Kanawha Co., to G. T. Fogle & Co., Charleston, $4,964; grading and gravel surfacing Projects 58 A and B, 3080, 3092 and 103 A and B, Tyler and Pleasants Counties, 23,432 cu.yd. unclassified and 640 cu.yd dry excav., 44,396 sta. yd. overhaul, 1,000 cu.yd. concrete, 3,723 lb. reinforcing, 41,820 cu.yd. gravel surfacing, etc., to Connell, Laub & Bracht, Dayton, O., (street address not available) $129,890; grading and paving with oil and Trinidad asphalt 1 mi. Crescent Rd., Mary St. and Park Dr. in Charleston, Kanawka Co., to Andrews Asphalt Paving Co., 717 Rentschler Bldg., Hamilton, O., $28,217, ¾ mi. Couch, Elm, Car and Spring Sts. in Charleston, Kanawha Co., and Youny, North Rano, Broad and Alley Sts. and Ohio Ave. in Charleston, Kanawha Co., to Board & Haley, Charleston, $25,685 and $18,626 respectively; paving with waterbound macadam 5 mi. Mechanicsburg Gap-Mineral Co. line Rd., Project 3011 B, Hampshire Co., 10,000 cu.yd. unclassified excav 3,000 cu.yd. stone subbase course, 6,500 cu. yd. broken stone base, 46,800 sq.yd. waterbound macadam, and Project 3010, Mineral Co., 20,000 cu.yd. unclassified excav., 1,000 cu.yd. stone subbase course, 13,500 cu.yd. broken stone base, 97,000 sq.yd. waterbound macadam, 1,000 ton cover coat, to Russel & Gray, Youngstown, O., (street address not available) $68,144 and $140,135 respectively; paving with bituminous macadam road from end of Project 77 to Clintonville, Project 3041, Greenbrier Co., 500 cu.yd. stone subbase course, 6,680 cu. yd. broken stone base, 30,100 sq.yd. bituminous macadam, 75,250 gal. bituminous material for penetration macadam, to Sutton Constr. Co., Ashland, Ky., $98,034; gravel surfacing 3 mi. New Martinsville-Wileyville Rd., Project 3081, Wetzel Co., 6,000 cu.yd. excav., 9,400 cu.yd. gravel surfacing, to Keeley Constr. Co., Clarksburg, $30,340. Noted Feb. 15

W. Va., Wheeling—Repaving Market and Main Sts., vitr. brick, to Coss & Otto, Wheeling, (street address not available), $126,733.

N. C., Charlotte—Mecklenburg Co. paving with topeka asphalt, 4½ mi. County Home Rd., 4 mi. Derita Rd. and 3 mi. Cornelius Rd., to Noll Constr. Co., Charlotte, $257,244. Noted March 1.

N. C., Red Springs—Grading and asphaltic paving Main St., to R. G. Lassiter & Co., Citizens Natl. Bank Bldg., Raleigh, $40,000. Noted Jan. 11.

Ala., Birmingham—Jefferson Co., paving ½ mi. Pratt City-Birmingham Rd., 11,000 sq.yd. asphalt on concrete, to H. N. Bowdry, Empire Bldg., $26,943.

La., New Orleans—Comn. Council let contracts for paving various streets to (A) Craven & Lang, Carondelet Bldg. (B) Hampton-Reynolds, Maison Blanche Bldg. (C) Globe Constr. Co., Louisiana Bldg. (D) H. W. Bond & Co., New Orleans, (street address not available), refined Trinidad Lake asphalt on 1,080 ft. Audubon St. from Ferdinand to Magazine Sts., to (A), subsurface drainage to J. O. Chisholm, 210 Saratoga St., $16,661; 1,830 lin.ft. Audubon St. from St. Charles to Zimple Sts., to (A), drainage to Hercules Co., Cotton Exch. Bldg., $24,646; 2,340 lin.ft. Poland St. from St. Claude to Dauphine Sts., to (A), drainage to A. P. Boh & Co., 4148 Banks St., $26,009; 730 lin.ft. Poland St. from Dauphine to Chartres Sts., to (A), drainage to A. P. Boh & Co., 4148 Banks St., $7,350; 2,800 lin.ft. Constance St. from St. Mary to 3rd Sts., to (A), drainage to Hercules Co., Cotton Exch. Bldg., $34,139; 680 lin.ft. Pine St. from Fontainbleau Dr. to Mobile St., to (A), drainage to A. P. Boh & Co., 4148 Banks St., $10,005; 5,000 lin.ft. Fontainbleau Dr. from South Carrolton to Audubon Sts., to (A), drainage to T. Egan Sons, 4330 Canal St., $54,664; 140 lin.ft. Pine St. from Mobile to South Claiborne Sts., to (A), drainage to A. P. Boh & Co., 4148 Banks St., $4,385; 730 lin.ft. Pine St. from Broad St. to Fontainbleau Dr., to (A), drainage to A. P. Boh & Co., 4148 Banks St., $2,600; 2,370 lin.ft. Cadiz St. from St. Charles to Constance Sts., to (A), drainage to Hercules Co., Cotton Exch. Bldg., $32,015; 910 lin.ft. Dufossat St. from St. Charles to Prytania Sts., to (A), drainage to A. P. Boh Co., 4148 Banks St., $12,492; 2,240 lin.ft. Elenore St. from St. Charles to Coliseum Sts., to (A), drainage to Hercules Co., Cotton Exch. Bldg., $28,467; 360 lin.ft. St. Mary St. from Magazine to Constance Sts., to (A), drainage to (A), $3,845; 770 lin.ft. Villere St. from Canal to Tulane Sts., to (A), drainage to M. Mitchell, 2646 Banks St., $17,218; creosoted wood block on 750 lin.ft. Calliope St. from South Peters to Water Sts., to (B), drainage to (B), $2,815; 780 lin.ft. Girod St. from St. Charles to Magazine Sts., to (B), drainage to A. P. Boh & Co., 4148 Banks St., $8,400; 230 lin.ft. Magazine St. from Audubon to Walnut Sts., to (B), drainage to A. P. Boh & Co., 4148 Banks St., $4,581; 1,030 lin.ft. South Peters St. from Terpsichore to Race Sts., to (B), drainage to (B), $15,808; bituminous concrete on 420 lin.ft. Hagan Ave. from Bell to DeSote Sts., to (C), drainage to Craven & Lang, Carondelet Bldg., $3,632; 240 lin.ft. Sycamore St. from Bway. to Audubon St., to (C), drainage to A. P. Boh & Co., 4148 Banks St., $2,711; 6,800 lin.ft. St. Claude St from Elysian Fields to Montegut St., to (C), drainage to H. A. Forest, 918 Short St., $68,530; 980 lin.ft. Washington St. from Coliseum to Magazine Sts., to (C), drainage to A. P. Boh & Co., 4148 Banks St., $20,716; creosoted wood block on 8,210 lin.ft. Magazine St. from Napoleon Ave. to Exposition Blvd., to (D), drainage to Hampton-Reynolds, Maison Blanche Bldg., $78,299; 3,940 lin.ft. Magazine St. from Louisiana to Napoleon Aves., to (D), drainage to Hampton-Reynolds, Maison Blanche Bldg., $56,430; Uvalde rock asphalt on 5,000 lin.ft. Fontainbleau Dr. from South Carrolton Ave. to Audubon St., to Uvalde Rock Asphalt Co., Central Trust Bldg., San Antonio, Tex., drainage to T. Egan Sons, 4330 Canal St., $54,664; sheet asphalt on 500 lin.ft. Walnut St. from Magazine to Leake Sts., to Southern Roads Co., Weiss Bldg., drainage to Craven & Lang, Carondelet Bldg., $7,881.

O., Akron—W. F. Peters, dir. Pub. Serv., opened bids March 8, grading and laying sidewalks on (1) 1,500 ft. Clifton Ave., 1,500 lin.ft. concrete gutter, 9,710 sq.ft. cement sidewalk, 5,350 cu.yd. earth excav., engrs. est. $9,150 grading and paving with (a) brick (b) concrete (c) asphalt on (2) 320 ft. Lee Dr., 16 ft. (3) 450 ft. Bank alley, 16 ft. (4) 400 ft. Marion Pl., 24 ft. (5) 1,200 ft. 5th Ave., 26 ft., 2,185 lin.ft. stone curb, 6,160 sq.ft. sidewalk, 3,400 cu.yd. earth excav., 3,890 sq.yd. vitr. brick or asphalt on concrete, from Schroeder & Caputa Constr. Co., 1950 West Federal St., Youngstown, (1) $8,630 (3a) $3,537 (3b) $2,897; H. G. Baltes, 883 Bloomfield Ave., (1) $9,149; H. T. French Constr. Co., 683 Noah Ave., (1) $9,888; Hollinger & Davidson, 435 South Bway., (2a) $3,480 (2b) $3,021 (3a) $3,988 (3b) $3,628 (4a) $8,495; McAlonan Bros., 197 West Buchtel Ave., (2a) $3,721 (2b) $3,127 (3a) $3,896 (3b) $3,456 (4a) $9,157 (5a) $30,230; H. Gilbert, 19 North Martha Ave., (2a) $4,308 (2b) $3,639; Di Fotl Constr. Co., 72 Furnace St., (4a) $9,885 (4c) $9,491; T. E. McShaffrey Constr. Co., 171 South Forge St., (5a) $32,562 (5c) $32,162; V. Olson Contg. Co., 501 Herberich Bldg., (5a) $34,288. Noted March 1.

O., Cleveland—Grading, curbing and paving Elk Ave. from East 106th to East 107th Sts., to River Constr. Co., 2402 Mapleside Rd., $5,502; Oak Ave., to Rieley Bros., The Arcade, $11,789; West 100th St. from Loretta to Walford Aves., to Roehl Bros., West 25th St. and Clark Ave., $17,913; East 110th St. from Miles Ave. to point 610 ft. northerly, to Enterprise Paving & Constr. Co., 8444 Bway., $10,309. Work involves 5,200 lin.ft. stone curb and 4 in. tile drain gutter, 3,760 cu.yd. earth excav., 7,840 sq.yd. vitr. brick. Noted Jan. 11.

O., Cleveland—Grading, curbing and paving East 108th St. from Miles to Howard Aves., to O. J. Leach, Eddy Rd., $18,396 East 122nd St. from Miles to Puritan Ave., to Enterprise Paving & Constr. Co., 8444 Bway., $17,948. Work involves 5,020 lin. ft. stone curb and 4 in. tile drain gutter, 3,800 cu.yd. earth excav., 8,860 sq.yd. vitr. brick on concrete. Noted March 1.

O., Shaker Heights (Cleveland P. O.)—Grading and asphalt paving East 150th St., Helena Ave., North Moreland Blvd., Milverton and Warwick Rds., to Cleveland Trinidad Paving Co., The Arcade, $148,338. Noted March 1.

Streets and Roads (Continued)

Ill., Columbia—City and State, paving and curbing 6,000 ft. Main St., 36 ft., 17,872 sq.yd. 7 in. concrete, 11,113 lin.ft. concrete curb, 4,618 cu.yd. excav., etc., to Dawson & Bowers, Century Bldg., St. Louis, Mo., $55,311. Noted Feb. 22.

Wis., Evansville—Paving East Main St., 10,692 sq. yd. concrete etc., to O'Dea & Shafer, 1019 Oregon St., Madison, $35,546. Noted Feb. 22.

Wis., Fond du Lac—Fond du Lac Co. opened bids improving Fond du Lac-Eden-Waucousta-Kewaskum Rd., Sect. A, from P. C. Kroeck, 1000 Humboldt Ave., Milwaukee, 24,436 cu.yd. earth excav. $0.80, 71,400 sq.yd. concrete surfacing $1.48, etc. total $140,212; Sect. B, from Lampert Constr. Co., 11 Algoma St., Oshkosh, 33,103 sq.yd. concrete surfacing $1.58, etc., total $65,290; Sects. A and B combined, from Lampert Constr. Co., 11 Algoma St., Oshkosh, 24,436 cu.yd. earth excav. $0.84, 104,503 sq.yd. concrete surfacing $1.48, etc., total $201,889. Noted March 1.

Wis., Hartford—Paving Union, State, Main, Branch and Grand Sts., 2 course concrete, to Manitowoc Constr. Co., 826 South 8th St., Manitowoc, $125,395.

Wis., Jefferson—Jefferson Co. State Road and Bridge Com., surfacing, etc. Helenville-Sullivan Rd., to Peppard, Burrell & Lynch, Minneapolis, Minn., (street address not available), 6,500 cu.yd. earth excav. $0.75, 39,000 sq.yd. concrete surfacing $1.43, etc., total $71,754; Oconomowoc-Watertown Rd., to McGucken Constr. Co., 425 East Water St., Milwaukee, 18,476 cu.yd. earth excav. $0.82, 1,133 cu.yd. borrow $1, 39,838 cu.yd. concrete surfacing without joints and cement $1.38, etc., total $83,390. Noted Feb. 15.

Wis., Kenosha—Kenosha Co. State Road and Bridge Com., surfacing, etc. Antioch-Salem Rd., to Brennan & Bounsel Co., Kenosha, (street address not available), 8,692 cu.yd. earth excav. $0.85, 18,598 sq. yd. concrete surfacing $1.40, etc., total $41,176; concrete widening Geneva Rd., to G. R. Wade Constr. Co., 704 Lake Ave., 10,500 sq.yd. concrete surfacing $1.43, etc., total $18,108. Noted Feb. 15.

Wis., Milwaukee—Milwaukee Co. concrete surfacing, etc., 2 mi. Lisbon Rd. 2, 24 ft., concrete, to Kroening Constr. Co., 39th Ave. and Mitchell St., $68,504. Noted Feb. 22.

Wis., Owen—Concrete paving Central Ave., 1,925 lin.ft. concrete curb, 1,300 cu.yd. earth excav., 5,570 sq.yd. concrete to W. F. Weaver, Owen, $20,216; street lighting to Lenmark & Graham, Owen, $3,742. Noted Feb. 8.

Wis., Racine—Racine Co. will concrete surface, etc., 1 mi. Windlake relocation on State Trunk Highway 36, 1.25 mi. Burlington-Geneva Rd., on State Trunk Highway 36, from Burlington to Walworth Co. line, 2 mi. Browns Lake Rd., northeasterly from Burlington, by day labor. Wisconsin Hy. Comn., Madison, engrs.

Wis., Waterloo—Paving various streets with rein.-con., concrete curbs and gutters, to Campbell Constr. Co., 3050 Hennepin Ave., Minneapolis, Minn., $29,173 exclusive of cement. Engrs. ets. $30,000.

Ia., Bettendorf—Paving 15 blocks Washington Ave., to Central Eng. Co., 809 Putnam Bldg., Davenport, $79,283. Noted Feb. 1.

Ia., Le Mars—To Moore-Young Constr. Co., Waterloo, approximately 100 blocks vibrolithic concrete paving, $2.44 per yd. Engrs. est. $350,000.

Ia., Northwood—Worth Co. grading 9.5 mi. Primary Rd. Project 216, through Fertile west and Northwood west, 113,113 cu. yd. excav. to Leach Bros., Omaha, Neb. (street address not available), $0.24 per cu. yd.; 1,100 ft. 6 in. drains, 2,565 ft. 12 in. drains and 3 intakes, to Lofdal & Curtis, Northwood, $0.11, $0.30 and $20 respectively. Noted Feb. 15.

Minn., Fergus Falls—Paving 20,009 sq. yd. various streets, 3 in. brick block on 5 in. gravel, to W. E. Kennedy, Fargo, N. D. (street address not available), $3.65 per sq.yd., total incl. excavation, etc., $81,935. Noted Feb. 15.

Minn., Minneapolis—Plans to expend $1,306,871 during 1923 for paving, incl. 110,811 sq.yd. asphaltic concrete $402,497, 80,468 sq.yd. creosoted wood block $400,591, 64,132 sq.yd. brick $316,870, 21,750 sq.yd. concrete $80,490, 8,145 sq.yd. recut granite $42,677, 8,958 sq.yd. granite $63,735. Work will be done by day labor under supervision of City Eng. Dept. E. R. Dutton, asst. city engr.

Kan., Frontenac—Paving various streets, 10,917 sq.yd. vitr. brick, to J. Stanton, 6th & Kiowa Sts., Leavenworth, $2.67 per sq. yd., etc., total $41,052. Noted Nov. 23.

Kan., Salina—Grading and brick paving various streets, to M. R. Amerman, 248 North Market St., Wichita, $301,200; Noted March 1.

Neb., Tekamah—Paving various streets, 33,140 sq.yd. vifr. brick, to Bauer & Johnston Constr. & Supply Co., 1124 Cass St., Omaha, $127,931. Noted Feb. 8.

N. D., Wahpeton—Paving 37 blocks, 50,000 sq.yd. concrete, 27,700 lin.ft. curb and gutter, to W. E. Kennedy, Fargo, $190,136.

Tex., Abilene—Taylor Co. grading 11.32 mi. and gravel surfacing 8.33 mi. State Highway 7, Federal Aid Project 182, 16 ft., to Womack Constr. Co., Sherman, $61,000. Noted Feb. 15.

Tex., Bryan—Resurfacing 25,000 sq.yd. Main St., et. al., 2 in. rock asphalt, to Smith Bros. Constr. Co., Sumpter Bldg., Dallas, $1.58 per sq.yd. Engrs. est. $30,000. Noted Jan. 18.

Tex., Dallas—McNeny & McNeny, Dallas, paving 13 blocks incl. Montivello, Ridgedale, Vanderbilt, McMillan and Workola Sts. in Greenland Hills, 30 ft., 2 in. Uvalde rock asphalt on 5 in. concrete, to Uvalde Rock Asphalt Co., Insurance Bldg., $3.18 per sq. yd.; walks, curbs and gutters on various streets in Greenland Hills addition, to W. G. Marshall Co., Southwestern Life Bldg., $21,775; grading, to Cullum & Haralson, North Texas Bldg., $9,125; water mains to W. G. Cullum, 4018 Gilbert St., $12,800; gas mains, to Dallas Gas Co., 2016 Jackson St., $17,880.

Tex., Del Rio—Val Verde Co. grading and gravel surfacing 11.82 mi. Highway 12, to Rice & Bates, Comstock, $54,806. Noted March 8.

Tex., Henderson—Rusk Co. gravel and clay surfacing 14.93 mi. State Highway 26, 12 ft., to Standifer & Wood, Royce City, $32,472; 9,516 cu.yd clay and 26,261 cu.yd. gravel to be furnished by county $7,000. Noted Dec. 14.

Tex., Highland Park—Paving curbing and guttering 26 blocks, here and in Mt. Vernon, 30 ft., 1½ in. asphaltic concrete on 5 in. concrete, to Fuller Constr. Co., Sumpter Bldg., Dallas, $120,000.

Tex., Houston—Graveling 1 mi. Truxillo Ave. from Almeda to Austin Sts., Galveston St. from Thompson to Patterson Sts., Columbia St. from 14th to 15th Sts., 4th St. from Arlington to Oxford Sts., 30 ft. to Griswold & Walling, Carter Bldg., $38,016.

Tex., Liberty—Liberty Co. grading, etc. 34.54 mi. State Highway 3, Beaumont-Houston Highway, 30 ft., to H. Kenyon Dredging Co., 3603 McKinney Ave., Houston, $196,500. Noted March 8.

New Mexico—State Hy. Dept., Santa Fe, grading, surfacing, etc., 16.067 mi. road between Hondo and Picacho, Federal Aid Project 82, Lincoln Co., to H. E. Williams, 2914 Tularosa St., El Paso, Tex., $127,752, contractor to furnish culvert material; 16.989 mi. road between Kermit and Kenna, Federal Aid Project 89, Roosevelt Co., to J. F. Hamer, Route 4, Box 200, Ft. Worth, Tex., $69,959; 9.927 mi. road between Kenna and Elkins, Federal Aid Project 103, Chaves Co., to Peterson Shirley & Gunther, W. O. W. Bldg., Omaha, Neb., $51,919; 14.227 mi. road east and west through Lordsburg, Federal Aid Project 87, Hidalgo Co., to O. R. Smith, 1911 Grant St., Denver, Colo., $55,588; 1.562 mi. road across Eight Mile Draw, west of Roswell, Federal Aid Project 71, Chaves Co. and 7.165 mi. road between Hot Springs and Arrey, Federal Aid Project 104, Sierra Co., to J. Mulligan, 4131 Cambridge St., El Paso, Tex., $18,788 and $58,966 respectively; 10.32 mi. road between Raton and Meloche, Federal Aid Project 92, Colfax Co. and 8.005 mi. road between Meloche and Dedman, Federal Aid Project 93, to Morrison & Morrison, Denver, Colo., (street address not available), $69,976 and $37,307 respectively, State to furnish culvert material except where otherwise specified. Noted Jan. 18.

Wash., Spokane—Spokane Co., grading and surfacing 7.63 mi. Coulee-Hite Rd., 24 ft., 17,000 cu.yd., waterbound macadam, 80,000 cu.yd. earth excav., 3,400 cu.yd. rock excav., to Campbell & Barr, Colfax, $73,978, engrs. est. $75,000; 7.03 mi. Cheney-Plaza Rd., 24 ft., crushed rock macadam, 50,000 cu.yd. earth and 900 cu.yd. rock excav., to Mohr Constr. Co., Waterville, $64,458; 8.67 mi. Trent Rd. from Irvine to Idaho State line, 20-24 ft., 102,700 sq.yd. 7 in. concrete, 50,000 cu.yd. gravel excav., to Independent Asphalt Paving Co., Seaboard Bldg., Seattle, $219,295. Noted Dec. 21.

Wash., Spokane—City Comrs., grading and paving 1.9 mi. Northwest Blvd. from G. St. to west city limits, 24,079 cu.yd. 7 in. concrete, 20,593 lin.ft. 3 x 8 in. wood headers, 8,189 cu.yd. earth excav., etc., to G. H. Waller, North 618 Medalia St., $50,621. Engrs. est. $51,000. Noted Feb. 1.

Oregon—State Hy Dept., Salem, Bauers & Bauers, Dayton, Wash., clearing, grubbing, grading and surfacing 14.08 mi. John Day Highway from Coles Bridge to Cummings Creek, Grant Co., $156,650, engrs. est. $176,000, 12.6 mi. Sherman Highway from Grace Valley to Kent, Sherman Co., $108,440, engrs. est. $142,500; 7.91 mi. Sherman Highway from Kent to county line, Sherman Co., $79,297, engrs. est. $105,250; to J. Hampshire, Grants Pass, 8.61 mi. Crater Lake Highway, Cascade Gorge section, Jackson Co., $132,228 (corrugated galvanized iron pipe), engrs. est. $175,000; to J. K. Shotwell, Hermanton, furnishing 12,000 cu.yd. broken stone, 2.1 mi., Old Oregon Trail from Echo to Pendleton, Umatilla Co., $15,480, engrs. est. $17,250.

Calif., Los Angeles—Improving Compton St. between Vernon Ave. and south city limits, 306,386 sq.ft. 6 in. concrete, to G. H. Oswald, 366 East 58th St., $80,175. Noted March 8.

Calif., Los Angeles—Improving Crenshaw St. between Washington and Adams Sts., to G. R. Curtis, 2240 East 26th St., $93,221. Noted Jan. 25.

Calif., Oroville—Butte Co. will construct 5.2 mi. Neal Rd., Sect. B, by day labor under supervision of H. H. Hume, co. road engr. Noted Feb 22.

Calif., San Francisco—City and San Francisco Co. improving boulevard connecting Sutro heights with Lincoln Park, to J. D. McElroy, 180 Jessie St., $56,615. Noted March 1.

Quebec—Provincial Government, Quebec, 42,661 ft. oil macadam road in St. Louis de Lotbiniere, to J. E. Paquin, DeNormanville St., Montreal, $184,000.

Industrial Works

PROPOSED WORK

Mass., Baldwinsville—Kenney Bros.—Walters Co. plans to rebuild factory recently destroyed by fire. Cost, incl. equipment $100,000.

Mass., Cambridge—National Biscuit Co., 10th Ave. and 15th St., New York City, plans rein.-con. bakery, here. $200,000. Engineer and architect not announced.

Mass., Holyoke—Oliver Motor Co., Race St., plans 3-story garage, rein.-con. $50,000-$70,000.

Mass., South Boston (Boston, P. O.)—Gillette Safety Razor Co., 41 West 1st St., had plans prepared by C. T. Main, archt., 49 Federal St., Boston, 8 story and basement, 80 x 100 ft. addition to plant, rein.-con. and brick. $200,000. Noted Dec. 21.

R. I., Providence—J. Trambukis, care B. S. D. Martin, archt., 86 Weybosset St., having plans prepared 1-story, 60x110 ft. garage and service station, concrete, brick and steel, plain foundation, Delaine St. and Manton Ave. $40,000.

R. I., Providence—F. D. McKendall, care B. S. D. Martin, archt., 86 Weybosset St., having plans prepared 2-story, 75x100 ft. garage and service station, concrete and brick, plain foundation; Elmwood Ave. $50,000.

R. I., Providence—D. Bellore, Aborn St., having plans prepared 1-story, 16 ft. high, 50x150 ft. garage, repair and service station, brick and steel, Aborn St. $40,000. Private plans.

R. I., Providence—G. Gush, 218 Sackett St., having plans prepared 1-story, 95x100 ft. garage, brick and steel, Elmwood Ave. and Warrenton St. $45,000. Architect and engineer not announced.

Conn., Georgetown—Greenwood & Noerr, archts. and engrs., 847 Main St., Hartford, open bids about March 19, 3 story, 50 x 135 ft. addition to wire mill, rein.-con. and brick, also 1 story, 40 x 45 ft. cleaner house, brick and steel, here, for Gilbert & Bennett Mfg. Co. $100,000.

Conn., Putnam—Adams Mfg. Co. plans altering and building, large 1 story weave shed, brick and steel, also additional story on top of present main mill. Engineer and architect not selected.

N. Y., Binghamton—Kroehler Mfg. Co., Ely St., plans 4 story and basement, 60 x 200 ft., brick, concrete and steel factory. $100,000-$125,000.

N. Y., Binghamton—Larrabee-Deyo Motor Truck Corp., 23 Washington St., plans concrete, steel and brick plant, 50,000 sq. ft. floor space, Main and Emma Sts. $200,000. F. T. Macey, vice pres.

N. Y., Falconer—Amer. Mfg. Co., plans 3 story, 60 x 106 ft. timber and sheet tin, Work St. To exceed $45,000. Engineer and architect not announced.

N. Y., Hornell—Hornell Lumber Co., 290 Main St., plans rebuilding plant recently destroyed by fire. Loss $100,000. R. M. Smith, 2 East Main St., owner.

Industrial Works (Continued)

N. Y., New York—Dept. Plant & Structures, Municipal Bldg., soon takes bids 2-story, 50x150 ft. housing station, brick, steel and concrete, plain foundation, Cornwall Ave. Private plans.

N. Y., New York—W. S. Ferguson Co., archts., 1900 Euclid Ave., Cleveland, O., soon lets contract 6 story, 175 x 200 ft. rein.-con. service building, West 131st St., here, for Studebaker Corp., 2020 Euclid Ave., Cleveland, O.

N. Y., Rochester—Cullinan-Malcolm Co., Inc., 4322 Lake Ave., plans 50 x 150 ft., auto sales and service station, brick, Lake Ave. $40,000. Engineer and architect not announced.

N. Y., Syracuse—Bendixen Tobacco Co., 1103 Lodi St., plans 3 story, brick factory, West Belden Ave. $50,000.

N. Y., Utica—Dairymen's League Co-operative Assn., 333 Lafayette St., had plans prepared 2 story, 60 x 180 ft. plant, steel and concrete, Wurz Ave. $70,000. H. A. Sieck, 222 Lafayette St., ch. engr.

N. J., Bloomsbury—Bloomsbury Graphite Co. plans rebuilding portion of its graphite products and foundry facings plant, recently destroyed by fire. $40,000. Engineer and architect not anounced.

Pa., Allentown—Allen Laundry Co., 39-41 North 10th St., plans 100x120 ft. laundry, concrete blocks, Allen and Jefferson Sts., to exceed $50,000. Engineer and Architect not announced.

Pa., Altoona—Birshitz & Goldberg, 2214 Beale Ave., having plans prepared for 2 or 3 story, 50 x 150 ft., concrete and brick garage, 2210 Beale Ave. $40,000. Private plans.

Pa., Bernville—Bernville Light & Heat Co. plans additions to power plant and extensions to power lines, to exceed $50,000. Address O. C. Showers, pres.

Pa., Erie—Erie Lithographing & Printing Co., plans brick and steel plant. $1,000,000. Engineer and architect not announced.

Pa., Erie—Keystone Fish Co., Erie, plans to rebuild warehouse recently destroyed by fire, French St. $75,000. Engineer or architect not announced.

Pa., Hazleton—Hazleton Iron Wks. Co. plans to rebuild portion of plant recently destroyed by fire. $65,000. Engineer and architect not announced.

Pa., Hughesville — Shindel Silk Corp., plans 2 story and basement, 60 x 100 ft., brick and steel addition to mill. $50,000. M. R. Rosendale, mgr.

Pa., Lebanon—Lebanon Iron Co. plans to rebuild plant recently destroyed by fire. $200,000-$250,000. Engineer and architect not announced.

Pa., New Castle—New Castle Metal Products Co., 716 West Brant St., plans 1 story, 40 x 185 ft. plant, West Brant St. Engineer and architect not announced.

Pa., Oil City—Penn-Amer. Refining Co., Oil City, plans 1 story, 45 x 60 ft. brick power house. $75,000. Rust Eng. Co., 311 Ross St., Pittsburgh, engrs.

Pa., Pittsburgh—H. Posner, care Alpha Sign Co., 231 Spahr St., plans 4-story and basement, 100x138 ft. rein.-con., brick and steel garage, Baum Blvd. and Neville St. $150,000. Engineer and architect not selected.

Pa., Pittsburgh—Jones Motor Car Co., 10th and Muriel Sts., having plans prepared by C. R. Geisler, archt., Ferguson Bldg., 3 story and basement, 42 x 120 ft., brick, steel and tile garage, Carson and Bingham Sts. $40,000.

Pa., Pittsburgh—Allen-Kirkpatrick Co., 903 Liberty Ave., having plans prepared by Hunting-Davis Co., archts., Century Bldg., 2 story and basement, 100 x 100 ft., brick and steel warehouse, Galveston Ave. $150,000.

Pa., Pittsburgh — K. G. Snyder, Natl. Pittsburgh Auto Co., Baum Bldg., plans 4 story and basement, 50 x 87 x 120 ft., rein.-con. and brick garage, Baum Blvd. and Fairmount Ave. $100,000. Engineer or architect not selected.

Pa., Verona—Pittsburgh Wire Rope Co. plans 1-story and basement, 120x150 ft. rein.-con., brick and steel plant. $150,000. Engineer or architect not selected.

Md., Baltimore—Archers Laundry, Howard and Mulberry Sts., plans 3-story laundry, brick, 700 Block North Eutaw St. $500,000. J. Archer, pres. Engineer and architect not selected.

Md., Baltimore—Baltimore Ice Mfg. Co., care A. Beard, pres., Hopkins Apartment, plans 2-story, 60x165 ft. plant, rein.-con. and brick, 409-11 North Exeter St., $175,000. Architect and engineer not selected.

W. Va., Wheeling—McGraw Motor Co., 1000 Main St., having plans prepared by F. F. Faris, archt., Wheeling Steel Bldg., 2-story, 85x125 ft., service station, brick, stone and steel, 2011 Main St. $40,000.

N. C., Belhaven—Interstate Co-operative Co. plans to rebuild portion of woodworking plant, destroyed by fire. $50,000. Engineer and architect not announced.

N. C., Biltmore—William-Brownell Lumber Co. plan to rebuild mill, partially destroyed by fire. $90,000. Engineer and architect not announced.

N. C., Concord—Gibson Mfg. Co. plans addition to cotton mill. Lockwood-Greene & Co., Piedmont Bldg., Charlotte, engrs.

N. C., Lumberton—Lockwood, Greene & Co., engrs., Piedmont Bldg., Charlotte, soon lets contract 1 story, 180 x 280 ft. cotton mill, brick, for Mansfield Mills. $75,000. Noted Feb. 1.

N. C., Worthville—Riverside Mfg. Co., plans adition to cotton mill, to house 5,000 spindles, 150 looms. Lockwood-Greene & Co., Piedmont Bldg., Charlotte, engrs.

O., Cleveland—Cleveland Ice Cream Co., West 47th St. and Train Ave., having plans prepared by K. W. Schontz, archt. and engr., Buffalo, N. Y. (street addres not available), 1 and 3 story, brick, steel and concrete factory addition. $200,000.

O., Cleveland—See "Buildings."

O., Cleveland—M. Glick Mfg. Co., 711 Woodland Ave., plans 2-story and basement, 25x145 ft., brick and steel factory addition. $40,000. Private plans.

O., Cleveland—W. H. Foote, 1571 Columbus Rd., had plans prepared by Christian, Schwarzenberg & Gaeda, archts., 1900 Euclid Ave., 2-story and basement, 42x110 ft., brick and steel factory, East 140th St. north of St. Clair Ave. $40,000.

O., Cleveland—A Teachout Co., 321 Prospect Ave., N. W., plans 1-story sash and door mill, brick, steel and concrete. $250,000. D. W. Teachout, pres. Engineer and architect not selected.

O., Cleveland—Salvation Army, care V. Post, 122 West 14th St., New York City, having plans prepared by H. V. Chase, archt., care owner, 4-story, 60x180 ft. industrial building, brick, steel and concrete, East 55th St. near Longfellow Ave., here. $200,000.

O., East Palestine—W. S. George, plans 2 story, 156 x 400 ft. pottery plant, brick, in 9 units. Engineer and architect not selected.

O., Grandview Heights (Columbus, P. O.)—Preparing plans 6 in. c.i. mains in various streets. $50,000. Burgess & Niple, 141 East Broad St., Columbus, engrs.

O., Salem—Victor Stove Co. plans rebuilding plant, recently destroyed by fire. Loss $250,000.

Ind., Indianapolis — Chandler & Taylor Co., 205 South Addison St., plans to rebuild foundry recently destroyed by fire. $150,000.

Mich., Detroit—Kroger Grocery & Baking Co., 1812 Clay Ave., having plans prepared by J. G. Kastler & Co., archts., 523 Detroit Savings Bank Bldg., 1 story and part basement, 50 x 150 ft. rein.-con., brick garage and repair shop, Merritt and Junction Aves. $40,000.

Wis., Green Bay—Bay Verte Machine Co., 317 West Walnut St., plans 2 story and basement, 50 x 95 ft., repair and machine shop, brick, rein.-con. and steel, plain foundation. $50,000. W. Hinklo, mgr. Engineer and architect not selected.

Wis., Madison — L. F. Schoelkopf, 210 East Washington Ave., having plans prepared by J. R. and E. J. Law, archts., First Central Bldg., 1 story, 66 x 150 ft., garage and service station, brick, rein.-con. and steel, plain foundation, Washington St. $40,000.

Wis., Manitowoc—S. W. Randolph having plans prepared by W. J. Raeuber, archt., Manitowoc, 1 story, 125 x 400 ft., dock warehouse and equipment, brick and steel, plain foundation, on Inner Harbor. $75,000.

Wis., Phillips—G. J. Goetsch plans 2 story and basement, 62 x 80 ft., brick and concrete garage, plain foundation. $40,000. Engineer and architect not selected.

Ia., Denison—Denison Bulletin & Herald, c/o Finern & Bosgeran, having plans prepared by E. L. Barber, archt., Denison, 2 story and basement, 40 x 80 ft., brick and concrete, newspaper plant. $40,000.

Ia., Des Moines—Eagle Iron Wks., Court and southeast 3rd Sts., having plans prepared by W. B. Holtzman, Jr., archt., 406 Flynn Bldg., 2 story and basement, 80 x 280 ft., brick and concrete factory, Court and southeast 3rd St. $100,000.

Tex., Belton—Belton Ice & Refrigerating Co. plans to rebuild 2 story, brick plant, plain foundation, recently destroyed by fire. $65,000. Engineer and architect not announced.

Tex., Houston—J. Finger, archt., Woolworth Bldg., receives bids about March 28, 3 story, concrete factory, plain foundation, San Jacinto St., for Houston Typewriter Exch., 408 Fannin St. $60,000.

Tex., Mesquite — Mesquite Textile Mills Co. having plans prepared by L. E. Robert, Jr., archt., Tuft Bldg., Atlanta, Ga., 6,000 spindle cotton mill. $400,000. J. S. Lawrence, secy.

Tex., Stamford—West Texas Utilities Co. soon takes bids 2 story power house, brick, plain foundation. $90,000. S. E. Morley, supt.

Tex., Texas City—Texas Sugar Refining Co. plans refinery. $5,500,000. Private plans.

Tex., Waco—B. D. Easterwood, archt., 412 Praetorian Bldg., soon takes bids 2 story, 85 x 165 ft., brick, mill, plain foundation, for L. B. Smyth, 828 North 17th St. $500,000.

Calif., Emeryville — See "Contracts Awarded."

Calif., Folsom—Pratt Building Material Co., Hearst Bldg., San Francisco, plans rock crushing and gravel plant, also industrial railroad, here. Cost incl. equipment, $200,000. C. F. Pratt, pres.

Calif., Fullerton—County Brick & Tile Co., headed by F. C. Krause, plans plant, 50,000 brick daily capacity. $60,000.

Calif., Los Angeles—Ganahl Lumber Co., 830 East 1st St., plans woodworking plant and planing mill, South Park Ave. To exceed $100,000.

Calif., Los Angeles—J. Overell Co., c/o A. C. Martin, archt., Higgins Bldg., having plans prepared 4 story, 80 x 150 ft., brick warehouse, Santa Fe Ave.

Calif., Los Angeles—E. H. Rosenthal, Loew State Bldg., plans part 1 and 2 story, 250x325 ft., brick warehouse, Stephenson Ave. To exceed $150,000.

Calif., Oakland—National Lead Co. of California, 485 California St., San Francisco, having plans prepared addition to factory, 47th Ave. $40,000. Private plans.

Calif., San Francisco—C. E. Phillips & Co., 907 Bryant St., having plans prepared by O'Brien Bros., Inc., archts., 315 Montgomery St., 2-story, rein.-con. warehouse, Brannan and Gilbert Sts. $85,000.

Ont., Glencoe—C. C. Morrison, Fort Erie, plans flour mill, 200 bbl. daily capacity, here. $50,000.

Ont., Ottawa — Dominion Government, Ottawa, having plans prepared and soon takes bids rein. con. and brick printing bureau. $500,000. R. C. Wright, Dept. Pub. Wks., archt.

Ont., Timmins—Northern Canada Power Co. plans to install fourth hydro electric power plant on Mattagami River at Kenogamissee Falls, 5,000 hp., 70 ft. head, incl. transmission line, etc. Probably $750,000. J. H. Black, 36 Toronto St., Toronto, genl. mgr.

B. C., Port Alberni—C. J. V. Spratt, Rockland St., Victoria plans sawmill here. $250,000. Engineer and architect not announced.

BIDS DESIRED

Conn., Bridgeport—March 30, by Lockwood-Greene Co., archts. and engrs., 101 Park Ave., New York City, factory, brick, steel and concrete, plain foundation, for Jenkins Bros., 510 Main St. $250,000. Noted Nov. 23.

Pa., Pittsburgh—J. S. Long, archt., Citizens Savings Bldg., taking bids 3-story and basement, 54x110 ft. rein.-con. and brick garage, Webster Ave., for Webster Ave. Garage Co., care architect. $40,000.

Pa., Shinglehouse—Company c/o A. Hartman, engr., Arlington Hotel, taking bids silk mill, incl. main building 52 x 102 ft., engine room 24 x 30 ft. and boiler room 36 x 40 ft., 1 and 2 story. $175,000.

Pa., Williamsport—Winner-Franck Baking Co., Arch and West 3rd Sts., taking bids 2 story and basement, 48 x 126 ft. rein.-con. addition to bakery, Arch and West 3rd Sts. $50,000.

Md., Baltimore—March 17, by T. W. Pietsch, archt., Amer. Bldg., 7 story, 37 x 82 ft. factory, rein.-con. and brick, Holliday and Saratoga Sts., for Maryland Meter Wks., 224 North Holliday St. Noted Feb. 1.

Ala., Birmingham — April 1, by B. L. Werthelmer, pres. Amer. Laundry Co., 1720 2nd Ave., 2 story, 100 x 140 ft., brick laundry, 2nd Ave. and 17th St. $250,000. H. B. Wheelock, Steiner Bldg., archt.

Industrial Works (Continued)

Mich., Detroit — Bonnah & Chaffee, archts., 528 Farwell Bldg., taking bids and opens same about March 30, for 8 story and basement, 100 x 120 ft. rein.-con., brick and steel warehouse, plain foundation, for Cadillac Storage Co., c/o architects. $350,000. Noted March 8.

Mich., Detroit — Cowles & Mutscheller, archts., Chase Blk., Saginaw, taking bids and opens same about March 30, for 3 story and basement, 130 x 150 ft. rein.-con. and brick warehouse, plain foundation, 14th and Porter Sts., for Natl. Grocery Co., 125 West Larned St. $150,000.

Wis., Milwaukee—Leiser & Holst, archts., 105 Wells St., taking bids and opens same about March 19, 1 story, 90 x 122 ft., battery service building, brick and concrete, plain foundation, Van Buren St., for Wisconsin Magneto Co., 528 Milwaukee St. $45,000.

Wis., Milwaukee—F. E. Gray, archt., 133 2nd St., taking bids 5 story and basement, 52 x 100 ft., brick and concrete warehouse, plain foundation, Grand Ave. $150,000. Owner's name withheld.

Wis., Milwaukee—Milwaukee Wadding & Comfort Mills, 415 3rd St., taking bids 1 story, 50 x 160 ft., brick and concrete factory, plain foundation, Clybourn St. $40,000. Private plans. Noted Feb. 22.

Wis., Milwaukee—G. Rehm, archt., 1165 19th St., taking bids and opens same about March 19, 2 story, 42 x 72 ft., brick and concrete garage, plain foundation, Green Bay Ave. $40,000. Owners name withheld.

Wis., Milwaukee — McClymont Marble Co., 27th and Canal Sts., taking bids rebuilding 1 story, 60 x 250 ft. brick and steel factory, recently destroyed by fire. $65,000. Private plans.

Mo., Kansas City—Busche & Klapmeyer Ford Sales Co., 2800 East 31st St., taking bids 2 story and part basement, 50 x 113 ft., brick, steel and stone garage and salesroom, 30th and Prospect Sts. $40,000. R. E. Peden & Co., 945 New York Life Bldg., archts.

Tex., Snyder—G. Finberg Co. taking bids rein.-con. cotton compress building, plain foundation, West Bridge St. $150,000. Engineer and architect not announced.

CONTRACTS AWARDED

Me., Lewiston—Hill Mfg. Co., 30 State St., Boston, 7-story mill addition, brick and timber, plain foundation, at plant, here, to McNally Bldg. Co., 41 Concord St., Framingham, Mass. Archts. est. $200,000.

Me., Sanford—Sanford Mills, 5-story, 80 x236 ft. factory, brick and rein.-con., plain foundation, to Turner Constr. Co., 178 Tremont St., Boston. Archts. est. $300,000.

Mass., Cambridge — Elliott Addressing Machine Co., Albany St., 4 story and basement, 50 x 75 ft. addition to plant, rein.-con. and brick, Albany St., to S. C. Sperry Co., Inc., 299 Main St., $50,000.

Mass., South Boston (Boston, P. O.)—Boston Wharf Co., 259 Summer St., 5 story, 50 x 155 ft. warehouse, brick and concrete, to J. M. and C. J. Buckley, 164 Federal St., Boston. Archts. est. $400,000. Dwinnell-Wright Co., 311 Summer St., lessee. Noted March 1 under "Boston."

R. I., Providence—Mayflower Stores, Inc., West Exchange St., 3-story warehouse, brick and steel, plain foundation, West Exchange St., to C. S. Cunningham Co., Union Trust Bldg. Archts. est. $60,000.

Conn., Bridgeport—Salts Textile Mfg. Co., Kossuth St., 1-story, 60x200 ft. weave shed, 14 ft. high, brick and steel, to O. F. Burghart, 57 Kent Ave. Archts. est. $50,000.

N. Y., Brooklyn—C. Fleischer, c/o Slee & Bryson, archts. and engrs., 154 Montague St., 2 story, 100 x 150 ft., brick, steel and concrete garage, plain foundation, Newkirk Ave., by day labor. $40,000.

N. Y., Jamestown—Jamestown Chair Co., 20 Winsor St., brick and concrete factory addition, to Warren Constr. Co., Gokey Bldg. Archts. est. $50,000.

N. Y., Jamestown — Jamestown Upholstery Co., Inc., 308 Crescent St., 4 story, 77 x 80 ft. factory addition, to Jamestown Constr. Co., River St.

N. Y., Long Island City—Ditmar Ave. Development Corp., c/o Seelig & Finkelstein, archts. and engrs., 44 Court St., Brooklyn, two 1 story, rein.-con., brick and steel garages, 9th Ave., here, by day labor. $75,000 each.

N. Y., New York—W. M. Cory, archt. and engr., 30 Church St., 5 story, 127 x 215 ft., brick steel and concrete machine shop, plain foundation, 12th Ave. and 44th St., to Ettinger Contg. Co., 44 Court St., Brooklyn, for F. L. Smithe Machine Co., 11th Ave. and 21st St. Noted Feb. 22.

Pa., Carbondale—T. J. Mulholland, 22 6th Ave., 3-story, concrete, brick and steel plant in Simpson Sect., to R. D. Richardson Co., Connell Bldg., Scranton. Archts est. $100,000.

Pa., Clearfield—Clearfield Textile Co., 1 story and basement, 88 x 148 ft. concrete and brick mill, Turnpike Ave., to Ashley-Rishell, Market St. Archts. est. $60,000.

Pa., Phila.—Director Bureau Highways, City Hall, 1 and 2 story, 59 x 217 ft. and 58 x 104 ft. stable, blacksmith shop and office, brick and steel, plain foundation, 26th St. and Glenwood Ave., to Bowden Constr. Co., 1935 Chestnut St., $59,900. Noted March 8.

Pa., Wilkinsburg (Pittsburgh P. O.)—C. C. McKallip, Magee Bldg., Pittsburgh, 1-story, 100x140 ft. concrete, brick and steel garage, Penn Ave., to Inland Constr. Co., 5612 Penn Ave. Archts. est. $40,000.

Miss., Moss Point—Southern Paper Mills Inc., group of buildings from 1-5 story, 75 x 800 ft., steel, concrete and brick, concrete and pile foundations, incl. addition to power plant, to G. J. Glover, Whitney Bldg., New Orleans, La., $400,000.

La., Reserve—Godchaux Co. Inc., Chartres and Canal Sts., New Orleans, 4 story, rein.-con. and steel charfilter house, here, to Doullut & Williams, 816 Howard Ave., New Orleans. $250,000.

Tenn., Nashville—J. C. McQuiddy Printing Co., 5th Ave. N., 2 story and basement, brick and rein.-con. plant, 110 7th Ave., to Foster Creighton Co., 4th and 1st Natl. Bank Bldg., $85,000. Noted Feb. 1.

859 Items

in this issue breaks the record. Greatest previous mark for a single issue was 800, May 4, 1922

O., Cleveland — Lindsay Wire Weaving Co., 14025 Aspinwall Ave., 2 story and basement, 120 x 200 ft., brick, steel and concrete factory and office building, to J. C. F. Shafer, Erie Bldg. Archts. est. $200,000. Noted Feb. 15.

O., Cleveland—G. S. Rider & Co., archts. and engrs., Century Bldg., 6-story, 119x221 ft., brick and rein.-con. factory, 3803 Superior Ave., to Hunkin-Conkey Constr. Co., Century Bdlg., for W. S. Tyler Co., 3615 Superior Ave. Archts. est. $500,000. Noted March 1.

O., Mansfield — Barnes Mfg. Co., 701 North Main St., brick, steel and concrete foundry, to Zediker & Armstrong, Mansfield (street address not available). Archts. est. $100,000. Noted March 1.

Ill., Chicago—Bowman Dairy Co., 140 West Ontario St., 1 story, 200 x 278 ft., distribution station, rein.-con., brick and steel, 41st, 42nd and State Sts., to C. E. Clark Co., 69 West Washington St. Archts. est. $300,000.

Ill., Peru—V. A. Matteson, archt., 8 South Dearborn St., Chicago, 2 story and basement, rein.-con., brick and steel factory, here, to V. Jobst & Sons, Lehmann Bldg., Peoria, for Western Clock Co. Archts. est. $250,000. Noted Dec. 21.

Wis., Cudahy — Milwaukee Vinegar Co., 79 Buffalo St., Milwaukee, general contract 3 story, 56 x 109 ft. yeast house, brick, steel and concrete, plain foundation, to E. S. Steigerwald Co., 3603 Vliet St.; steel to Worden-Allen Co., Port Washington Ave., Milwaukee. Archts. est. $60,000. Noted Feb. 22.

Mo., St. Louis — Missouri Pacific Ry., Railway Exch. Bldg., 1 and 2 story, 147 x 202 ft., brick, steel and concrete machine shop, plain foundation, 3033 Chouteau Ave., to J. J. Wuellner & Son, Oak and Front Sts., Alton, Ill., $96,000. This corrects report in March 1 issue.

Tex., Dallas—Dallas Gas Co., 2016 Jackson St., 1 story, 50 x 40 ft., garage and workshop, brick, plain foundation, Logan St., to Inge Constr. Co., Swiss and Hawkins Sts., Engrs. est. $60,000. Noted Dec. 21.

Utah, Salt Lake City — Hustler Flour Mill, 6 story, 165 x 500 ft. flour mill, elevators and office building, rein.-con. and steel, 5th St. S., and 3rd St., W., to Burrell Eng. & Bldg. Co., 323 La Salle St., Chicago. Archts. est. $500,000.

Wash., Seattle — Banner Refining Co., Kohl Bldg., San Francisco, refinery, here, to J. J. Irwin, 801 Cabrillo St., San Francisco, $175,000. Private plans.

Ore., Oregon City—Crown Williamette Paper Co., 736 Pittock Blk., will build new plant and repair old one, by day labor. $250,000. A. J. Lewthwaite, mgr.

Ore., Portland—Pacific Fruit & Produce Co., East 2nd and Alder Sts., 2 story, 100 x 200 ft. warehouse and cold storage plant, rein.-con. and timber, plain foundation, to Bingham & McClelland, 416 Worcester Bldg., $100,000.

Calif., Emeryville—Doble Steam Motors Co., 714 Harrison St., San Francisco, (1st unit) 2 story, 82 x 240 ft. factory, rein.-con., Haven and Harlin Sts., to Lindgren Co., Monadnock Bldg., San Francisco, $90,000. Plans will be made for complete plant, providing for 3 additional stories to first unit and increase ground area to 240 x 400 ft. Noted March 8.

Calif., Los Angeles—Banner Refining Co., Kohl Bldg., oil refining plant, to J. J. Irwin, 801 Cabrillo St., San Francisco, $170,000.

Calif., San Francisco—See "Miscellaneous."

Ont., London — Orange Crush Bottlers Ltd., addition to plant, to J. Hayman & Sons, 432 Wellington St. Engrs. est. $60,000.

Ont., Ottawa—City let contract new concrete, brick and steel service building at civic hospital, Carling Ave. to Ross-Meagher, Albert St., $134,979.

T. H., Honolu—Amer. Can Co., Mills Bldg., San Francisco, Cal., will build 4 story rein.-con. addition to plant, here, by day labor, to exceed $150,000.

Buildings

PROPOSED WORK

N. H., Gorham — High School — School Com. plans 3 story, 75 x 150 ft., brick, plain foundation. To exceed $160,000. Engineer and architect not selected.

Mass., Boston — Apartment — Rotman & Hurwitz, c/o Silverman, Brown & Heenan, archts., 51 Cornhill, having plans prepared, six 3 story and basement, 80 x 300 ft., brick and stone, wood pile foundation, Commonwealth Ave. and Colonial Rd. $450,000.

Mass., Boston—Apartment—S. Rudnick, 11 Buckminster St., Brighton (Boston P. O.), plans 5 story, 75 x 95 ft., brick, Boylston St., $150,000; 5 story, 90 x 200 ft., brick, Boylston St., $400,000. Engineer and architect not selected.

Mass., Boston—Apartment—J. F. Rudnick, 701 Scollay Bldg., plans three 4 story and basement, 75 x 200 ft., brick, Pilgrim Rd. and Riverway. $350,000. Engineer and architect not selected.

Mass., Boston—Apartment—M. Rudnick, 40 Court St., plans two 5 story, 75 x 150 ft., brick, Boylston St. $200,000. Engineer and architect not selected.

Mass., Brookline (Boston, P. O.)—Apartment—C. H. Wolk, 110 Salem St., Malden, having plans prepared by Silverman, Brown & Heenan, archts., 51 Cornhill, five 3 story and basement, brick and stone, wood pile foundation, Green and Johns Sts. $300,000.

Mass., Dalton — High School — School Building Com., c/o F. G. Crane, Jr., chn., plans 2 story, brick, Main St. $150,000. Engineer and architect not selected.

Mass., Franklin — High School — School Bd. plans 3 story, brick and steel, Elm St. $200,000. Engineer and architect not announced.

Mass., Longmeadow — Clubhouse — Longmeadow Golf Club, care M. L. Reach, 229 Atwater Rd., Springfield, having preliminary plans prepared by Patterson King Corp., archts., 452 Lexington Ave., New York City, 2-story, field stone and stucco. $200,000.

Mass., Orange — High School — School Comn., plans 2 story and basement, 70 x 142 ft., brick and steel, Pleasant St. $150,000. Engineer and architect not announced.

Mass., Pittsfield — Hospital — Catholic Hospital Assn., c/o B. S. Conaty, chn., 414 North St., plans 3 story, brick, East St. $150,000. Engineer and architect not selected.

Mass., South Hadley — Dormitory — Mt. Holyoke College having plans prepared by Putnam & Cox., archts., 114 State St., Boston, 4-story, 100x145 ft. $300,000. Noted Feb. 8.

Mass., Springfield—Office and Warehouse —H. J. Perkins Co., 435 Dwight St., having plans prepared by Smith & Annable, archts. and engrs., 145 State St., and lets contract in spring, 6 story, 92 x 163 ft., rein.-con. and brick, Chestnut and Taylor Sts. $275,000.

Mass., Springfield—Temple—Masonic Hall Assn., Main and State Sts., having plans prepared by McClintock & Craig, archts., 33 Lyman St., 4-story, 100x160 ft., brick and steel, plain foundation, State St. $600,000. E. Blodgett, pres.

R. I., Cranston—City Hall—City plans City Hall, Park Ave. $500,000. D. D. Waterman, city clk. Engineer and architect not selected.

Buildings (Continued)

R. I., Providence—School and Chapel—St. Adelberts Roman Catholic parish having plans prepared by H. F. Ludorf, archt., 122 Main St., New Britain, Conn., 2 story, 70x 140 ft., brick and steel, Wells Ave. $150,000. P. J. Switala, Wells Ave., pastor.

R. I., South Kingston—Hospital—South County Hospital Assn., c/o T. G. Hazard, Jr., treas., plans 2 or 3 story, brick. $150,000. Engineer and architect not selected.

Conn., Bridgeport—Professional—Bridgeport Medical Society, care S. M. Garlick, chn., 474 State St., having sketches made by Monks & Johnson, archts., 99 Chauncey St., Boston, 6-story, Broad and Gilbert Sts. $150,000.

Conn., Hartford—Apartment — J. M. Howard, 28 Lancaster Rd., West Hartford (Hartford P. O.), having plans prepared by Berenson & Moses, archts., 1026 Main St., 5 story, brick, stone and concrete, Capitol Ave. $250,000.

Conn., Hartford — Church — Swedish Evangelical Lutheran Church plans 52 x 110 ft., brick and artificial stone, granite foundation, Capitol Ave. and Hungerford St. $170,000. R. F. Barker, 43 Farmington Ave., archt. Bids by invitation only.

N. Y., Bayside—School—Bd. Educ. 500 Park Ave., New York, plans brick, steel and stone addition to P. S. 41, plain foundation, here. $500,000. W. H. Gompert, Flatbush Ave. extension and Concord St., Brooklyn, archt. and engr.

N. Y., Belleville—School—Building Com. of Union Academy, plans modern school, to replace one recently destroyed by fire. $150,000-$175,000. W. K. Mott, Woolworth Bldg., Watertown, chn.

N. Y., Binghamton — Clubhouse — Bd. Dirs. Binghamton Club plans new clubhouse, 83 Front St. $150,000-$175,000.

N. Y., Brooklyn—School—Bd. Educ., 500 Park Ave., New York, plans P. S. 210, brick, steel and stone, plain foundation, in vicinity of Park Pl. and Rochester Ave., here. $700,000. W. H. Gompert, Flatbush Ave. extension and Concord St., archt. and engr.

N. Y., Hornell—School—Bd. Educ. having plans prepared by Tooker & Marsh, archts., 101 Park Ave., New York City, new school to replace Lincoln School, recently destroyed by fire. $350,000.

N. Y., Endicott—Church—Building Com. First Baptist Church plans new church. $160,000-$180,000. G. B. Crane, chn.

N. Y., Ilion—School—Plans election to vote on $150,000 bonds for new school. Address R. B. Redway of Bd. Educ.

N. Y., Jamaica—School—Bd. Educ., 500 Park Ave., New York, having sketches made by W. H. Gompert, archt. and engr., Flatbush Ave. extension and Concord St., Brooklyn, P. S. 116, brick, steel and stone, plain foundation, Wren Pl., here. $750,000.

N. Y., Jamaica—School—Bd. Educ., 500 Park Ave., New York, plans P. S. 214, brick, steel and stone, plain foundation, Conduit Ave., here. $700,000. W. H. Gompert, Flatbush Ave. extension and Concord St., Brooklyn, archt. and engr.

N. Y., Kenmore—High School—Bd. Educ. having plans prepared by Kidd & Kidd, archts., 524 Franklin St., Buffalo, for school on Delaware Rd. $500,000. Noted Feb. 1.

N. Y., Lockport—City Hall—Plans new city hall, brick or similar material. $150,000. Engineer and architect not announced.

N. Y., Mount Morris—High School—Bd. Educ. having plans prepared by C. A. Foote & Son, archts., Mount Morris, 2 story and basement, 200 x 200 ft., rein.-con., brick and stone, Chapel St. To exceed $200,000.

N. Y., New York—Bank—North Side Savings Bank, 3230 3rd Ave., soon takes bids 1 story, brick, stone and marble addition, plain foundation, 162nd St. and 3rd Ave. $225,000. Holmes & Winslow, 134 East 44th St., archts. Noted April 27.

N. Y., New York—Church and School—St. Joachims Roman Catholic Church, soon takes bids 75x100 ft., brick, steel and stone, plain foundation, Catherine St. $300,000. V. Januzzi, pastor. M. W. Del Guadio, 158 West 45th St., archt. and engr.

N. Y., Palmyra—School—Bd. Educ., soon takes bids brick, steel and stone, plain foundation. $250,000. Tooker & Marsh, 101 Park Ave., New York City, archts. and engrs. Noted May 11.

N. Y., Prattsburg — School—Bd. Educ. plans new school to replace one recently destroyed by fire. $250,000.

N. Y., Rome—High School—Bd. Educ. plans new high school. $500,000. W. B. Reid, mayor.

N. Y., Salamanca—Church—Holy Cross Polish Church plans 55 x 120 ft., brick, Broad St. A. Giehy, pastor. Engineer and architect not selected.

N. Y., Schenectady — Exchange — New York Telephone Co., Barrett St., plans brick, steel and concrete addition. $150,000. F. M. Cozzens, mgr.

N. Y., Schenectady—School—Bd. Educ. Union Free Dist. 12, plans Woodlawn School. $150,000. G. L. Jones, 4½ Albany Rd., pres.

N. Y., Waddington—Church—St. Marys Parish plans new church to replace one recently destroyed by fire. $150,000-$175,000. J. J. Bent, pastor.

N. Y., Watertown—Hotel—Local Syndicate plans 4 or 5 story, Benedict and Stone Sts. $225,000-$250,000. Address G. J. Izay, Otis Bldg. Engineer and architect not selected.

N. J., Bogota (Hackensack, P. O.)—High School—Bd. Educ. opens bids about May 1, 2 story and basement, 125 x 125 ft., brick, fireproof construction. $225,000. C. V. R. Bogert, 167 Main St., Hackensack, archt. Guilbert & Bettelle, 2 Lombardy St., Newark, consult. archts.

N. J., Dover—Lodge—B. P. O. E. having plans prepared by J. J. Vreeland, archt. 16 West Blackwell St., for lodge. $150,000.

N. J., Somerville—Hospital—Bd. Trustees Somerville Hospital having sketches made by Crow, Lewis & Wick, archts. and engrs., 200 5th Ave., New York City, brick, steel and stone, plain foundation. $200,000. Noted Nov. 16.

Pa., Avella—School—School Bd. Independence Twp., having plans prepared by G. H. Schwan, Peoples Bank Bldg., Pitsburgh, 2 story and basement, 80 x 120 ft., $150,000.

Pa., Canton—Clubhouse, etc.—Bd. Directors Canton Country Club, purchased 45 acre site between here and Troy and plan to build 2 story and basement, 80 x 90 ft., brick and stone clubhouse, and golf course. $150,000.

Pa., Clairton—High School—Bd. Educ. plans high school. C. W. Bates, 77 12th St., Wheeling, W. Va., archt. $350,000.

Pa., Clairton—School—Bd. Educ. having plans prepared by C. W. Bates, archt., 77 12th St., Wheeling, W. Va. and Marshall Bldg., Cleveland, O., 2 story, concrete, brick and steel. $400,000.

Pa., Derry — High School — Bd. Educ. Derry Twp., having plans prepared by Batholomew & Smith, archts., Keenan Bldg., Pittsburgh, 1 story and basement, brick and tile, near here. $150,000.

Pa., Dubois—Y. M. C. A., c/o W. Roumsley, having plans prepared by Howard & Hatcher, archts., Deposit Natl. Bank Bldg., 1 and 3 story and basement, 50 x 90 ft. and 80 x 120 ft., brick and tile, Liberty Blvd. $150,000.

Pa., Ebensburg—Hospital—Comrs. Cambria Co., c/o H. T. Jones, controller, having plans prepared by W. R. Myton, archt., 1204 First Natl. Bank Bldg., Johnstown, 3 story, concrete, brick and steel. $250,000.

Pa., Greensburg—Bank and Office—First Natl. Bank, having plans prepared by H. O. Chapman, archt., 334 5th Ave., New York City, 7 story and basement, 80 x 96 ft., brick and granite. $200,000.

Pa., Greensburg—Store—A. E. Troutman Co., having plans prepared by Bartholomew & Smith, archts., 1702 Keenan Bldg., Pittsburgh, 6 story and basement, 62 x 95 ft., brick and steel, 2nd Ave. and Main St. $200,000.

Pa., Philadelphia—Apartment—L. H. Cahan & Sons, Walnut and Juniper Sts., soon takes bids 12 or 15 story, 176x230 ft. brick and stone, 19th and Chestnut Sts. $6,000,000. Engineer and architect not selected.

Pa., Philadelphia — Apartment — Owner, c/o R. Beard, archt., Shubert Bldg., soon takes 4-story and basement, 55x108 ft., brick, steel rein.-con. and stone, plain foundation, 39th and Walnut Sts. $500,000.

Pa., Philadelphia—Theatre and Office—Stanley Co., c/o Hoffman-Henon Co., archts., Finance Bldg., soon takes bids 2-story and basement, rein.-con., brick and steel, plain foundation, 52nd and Chestnut Sts. $500,000.

Pa., Pittsburgh—Clubhouse—Da-Sevi-Di Country Club, Keenan Bldg., having plans prepared by B. H. Prack, archt., Keystone Bldg., 3 story and basement, 220 x 300 ft., rein.-con. and tile, Evergreen Rd., $300,000.

Pa., Pittsburgh—School—Bd. Educ., Fulton Bldg., having plans prepared 2-story and basement, 35x60 ft. and 4-story and basement, 60x120 ft., brick and stone, Hall St. $200,000. Private plans.

Pa., Pittsburgh — Synagogue — B'Nai Israel Congregation, c/o B. A. Licker, 5436 Jackson St., having plans prepared by Sharove & Friedman, archts., Berger Bldg., 1 and 2 story and basement, 327 North Negley St. $500,000.

Pa., Pottsville—Orphans Home—Roman Catholic Church, c/o A. Dougherty, cardinal, 18th and Race Sts., Phila., soon takes bids 3 story and basement, brick and steel, plain foundation, here. $300,000. P. A. Monaghan, 1713 Sansom St., Phila., archt.

Pa., Sayre—Nurses Home—Robert Packer Hospital plans brick home. $250,000 to $300,000. Engineer and architect not announced.

Pa., Scranton — School — Holy Rosary Roman Catholic Church, c/o R. C. Moyland, soon takes bids 3 story and basement, 80 x 150 ft. brick and steel, plain foundation. $175,000. E. G. Perot, 1211 Arch St., Phila., archt.

Pa., Torresdale (Philadelphia P. O.)—Convent—Sisters of Nazareth, c/o H. F. Ludorf, archt., 122 Main St., New Britain, Conn., having plans prepared 3-story, first unit of convent. $200,000.

Pa., Wilkes-Barre—Hotel and Theatre—Mallow Hotel Co., c/o R. H. Mallow, pres., plans 130x185 ft. concrete, brick and steel, South Franklin St. $1,000,000. Engineer and architect not announced.

Md., Baltimore—School—Mayor and City Council had plans prepared by Owens & Sisco, archts., Continental Bldg., 3 story, 260 x 295 ft., brick and steel, Calhoun, Carey and Baker Sts. $500,000. H. F. Doeleman, 507 North Charles St., engr.

D. C., Wash.—Hospital—Dist. Comrs. having plans prepared by A. L. Harris, archt., Dist. Bldg., constructing 2 wards to hospital buildings at Gallagher Hospital. $160,000.

W. Va., Charleston — Office — Kanawha Investment Co., soon lets contract 8 story and basement, 130 x 190 ft., rein.-con. and brick. $500,000. Carmichael & Millspaugh, 67 East Long St., Columbus, O., archts. Noted Aug. 17.

W. Va., Charleston—Store and Office—Summer St. Realty Co., c/o Knapp & Haviland, archts., Capitol Bank Bldg., having plans prepared 7-story and basement, 90x 90 ft., rein.-con., brick, title and stone, Summer St. $150,000.

W. Va., Princeton—College—Emory & Henry College having plans prepared by Wysong & Jones, archts., Odd Fellows Bldg., Charleston, 3-story and basement, 50x200 ft. and 50x75 ft., brick, stone and steel. $150,000.

N. C., Asheville—Hotels—G. Vanderbilt and Battery Park Hotel Companies having plans prepared by W. L. Stoddart, archt., Asheville, for above named hotels. $1,500,000.

N. C., Charlotte—Courthouse, etc. City and Mecklenburg Co. plan 12 story courthouse, jail anl office. $1,000,000. M. E. Boyer, Jr., Trust Bldg., archt. Noted Feb. 8.

N. C., Durham—Church—Trinity Methodist Church plans to rebuild church and Sunday school, recently destroyed by fire. $300,000. M. E. Newsome, Durham, interested. Engineer and architect not announced.

N. C., Raleigh—Library—North Carolina State College of Agriculture and Engineering plans library. $200,000. W. C. Riddick, pres. Engineer and architect not selected.

Ala., Birmingham—Store—J. Blach & Sons, 3rd Ave., plan 7 to 10 story, 140 x 150 ft., 4th Ave. and 19th St. $1,000,000. Engineer and architect not selected.

Ala., Birmingham—Theatre and Hotel—Southern Amusement Co., Dallas, Tex. (street address not available), plans 8 to 12 story, 150 x 190 ft., 5th and 19th Sts. $1,500,000. Engineer and architect not announced.

Tenn., Nashville—Institution—State will sell $250,000 bonds for erecting and equipping deaf and dumb institute. L. W. Pope, dir. institutions.

O., Akron—Church—Arlington St. Baptist Church plans new church. $150,000.

O., Canton—Parish House—First Methodist Episcopal Church, Cleveland Ave. and Tuscarawas St. W., plans 4 story, parish house, Cleveland Ave. S. W. $150,000. A. E. Day, pastor. Engineer and architect not selected.

O., Cincinnati—School—Bd. Educ. 511 West Court St., had sketches made by A. L. Fecheimer, archt., 325 East 4th St., school, Pintree and Waverly Aves. $250,000. W. E. Bodenstein, 2nd Natl. Bank Bldg., engr.

O., Cleveland—Apartments—W. B. Gongwer, Federal Bldg., having preliminary plans prepared by F. W. Ball, archt., Hanna Bldg., three 3 story and basement, brick and timber, on 140 x 180 ft. site, East 132nd St. near Moreland Circle. $200,000.

O., Cleveland—Apartment—M. L. and I. G. Kohn, 722 Natl. City Bldg., plans 3 story and basement, 100 x 100 ft., brick and steel, East 114th St. and Superior Ave. $150,000. Engineer and architect not selected.

O., Cleveland—Commercial, etc.—L. O. Skeel, 7016 Euclid Ave., having plans prepared by F. D. Skeel, archt., 7016 Euclid Ave., 85 x 120 ft., commercial building and

Buildings (Continued)

102 x 165 ft. service building, 1 and 2 story and basement, brick, steel and concrete, 1111 Euclid Ave. $200,000.

O., Cleveland—Sunday School and Recreation—Pearl Rd. Methodist Episcopal Church, 3528 Muriel Ave., conducting compaign to raise $150,000 for 2-story, brick, steel and concrete, Pearl Rd. W. H. Nicklas, 1910 Euclid Ave., archt.

O., Cleveland Heights (Warrensville, P. O.)—School—Bd. Educ., 1005 Lee Rd., plans brick, steel and concrete, in Idlewood Village School Dist. $150,000. F. C. Warner, Hippodrome Annex, Cleveland, archt.

O., Cleveland Heights (Warrensville, P. O.)—School—St. Anns Church, c/o J. Powers, pastor, 2115 Coventry Rd., having plans prepared by G. H. Ingraham, archt., 2138 B. F. Keith Bldg., Cleveland, 3 story and basement, 65 x 192 ft., brick, steel and concrete, Coventry Rd. near Cedar Rd. $250,000.

O., Columbus — Office — M. L. Yuster, Parkview and Broad Sts., having plans prepared by F. L. Packard, archt., 16 East Broad St., 8 story and basement, 80 x 96 ft., brick, concrete and terra cotta, 4th and Broad Sts. $500,000.

O., East Cleveland (Cleveland P. O.)—Apartment—L. Cahn, 10615 Grantwood Ave., Cleveland, having plans prepared by A. F. Janowitz, archt., Permanent Bldg., Cleveland, 3 story and basement, brick and timber, on 50 x 200 ft. site, Euclid Ave. and Stanwood Rd., here. $150,000.

O., Girard—High School—Bd. Educ. having plans prepared by Miller & Son, archts., 408 Dollar Bank Bldg., Youngstown, brick high school. $280,000. Noted Jan. 25.

O., Youngstown—Church, etc.—Stanislaus Parish plans brick and steel, church, school and community hall, Williamson Ave. $150,000. J. M. Zeglen, pastor. Engineer and architect not announced.

O., Youngstown—Clubhouse—Youngstown Aerial 213 F. O. E. had preliminary sketches made by Stanley & Scheibel, archts., Wick Bldg., 4 story, West Rayen Ave. and Holmes St. $200,000.

Mich., Battle Creek—Church and Office—First Baptist Church, 119 Fountain St., plans 6 story, rein.-con., brick and stone, Main St. $300,000. G. E. Merrill, 23 East 26th St., New York City, advisory archt. Noted Jan. 4.

Mich., Detroit—Apartment—Abraham & Wood, archts., 705 Kresge Bldg., preparing plans 4 story and basement, 37 x 159 ft., brick and steel, plain foundation, Davenport St. $200,000. Owner's name withheld.

Mich., Detroit—Clubhouse—J. Kasurin, archt., 512 Empire Bldg., preparing plans 4 story and basement, 90 x 150 ft. brick, steel and stone, plain foundation, West Side. $175,000. Owner's name withheld.

Mich., Detroit—College—College of Immaculate Heart, St. Marys College, Monroe, having plans prepared by D. A. Dohlen & Son, archts., Indianapolis, Ind., 3 story, 165 x 350 ft. rein.-con., brick, steel and stone, plain foundation, Palmer Blvd. and Wyoming Ave., here.

Mich., Detroit—Hotel and Clubhouse—Detroit Harmonie Society, Grand River Ave. and Center St., plans 18 story, 60 x 100 ft. rein.-con., brick and steel, plain foundation. Engineer and architect not selected.

Mich., Detroit—Office—S. J. Murphy Co., 1330 Penobscot Bldg., plans 25 story and basement, 120 x 150 ft. rein.-con., brick and steel, Fort and Griswold Sts. Architect and engineer not selected.

Mich., Detroit—Temple and Clubhouse—Elks Lodge 34, Lafayette Blvd. and Cass Ave., having plans prepared 10 story and basement, 60 x 145 ft. rein.-con., brick and steel, plain foundation, Lafayette Blvd. and Cass Ave. Engineers and architects name withheld.

Mich., Flint—School—Bd. Educ. having plans prepared by Malcomson, Higginbotham & Palmer, archts., 405 Moffat Bldg., Detroit, 3 story and basement, 175 x 350 ft. rein.-con., brick and steel, plain foundation. $750,000.

Mich., Grand Rapids—Apartment—Owners, c/o F. Hollingsworth, 18 Munroe St., having plans prepared by Ohrenstein & Hild, archts., 232 Erie St., Chicago, 3-story and basement, brick and stone, plain foundation, Fisk Lake. $6,000,000.

Mich., Grand Ledge—High School—Bd. Educ. having plans prepared by J. Churchill, archt., Oakland Bldg., Lansing, 2 story, rein.-con., brick, steel and stone, plain foundation. $160,000.

Mich., Highland Park (Detroit P. O.)—Nurses Home—Highland Park General Hospital, Glendale and Lincoln Aves., plans 3 story and basement, steel rein.-con. and brick, plain foundation, Glendale Ave. $150,000. Engineer and architect not selected.

Mich., Pontiac—Apartment—Abraham & Wood, archts., 705 Kresge Bldg., Detroit, preparing plans 3 story and basement, 100 x 150 ft., brick and steel. $225,000. Owners name withheld.

Mich., Sault Ste. Marie — Hospital — Chippewa Co. Memorial Hospital Assn., having plans prepared by C. Arnstzen, archt., 341 West Lake St., Minneapolis, Minn., and 716 Ludington St., Escanaba, 3 story and basement, rein.-con., brick, stone and tile. $200,000.

Mich., South Haven—Hotel—L. A. Shuaper, South Haven, having sketches made by Nichol, Scholer & Hoffman, archts., Lafayette, Ind., 6-story, basement and subbasement, rein.-con., brick, stone and terra cotta, Phoenix St. $300,000.

Ill., Chicago—Apartment—R. W. Matteson, 140 North Dearborn St., having plans prepared by P. F. Olsen, archt., 720 Cass St., 4 story, 125 x 250 ft., rein.-con., brick and steel, Hampden and Lehman Sts. $500,000.

Ill., Chicago — Apartment — Silverman & Goldberg c/o Loewenberg & Loewenberg, archts., 111 West Monroe St., having plans prepared apartment, Hyde Park and Dorchester Ave. $1,000,000.

Ill., Chicago—Store, Office and Dance Hall—Plotke & Grosby, 2532 North Clark St., plans 2 story, rein.-con., brick and steel, Wells and North Park Sts., $500,000. Engineers and architects name withheld.

Ill., Chicago—Theatre, Store and Office—R. Levine, 6951 South Green St., plans 2 story, 100 x 160 ft., rein.-con., brick and steel, 22nd St. near Central Park. $200,000. E. P. Rupert, 19 South La Salle St., archt.

Wis., Green Bay—Church—Presbyterian Congregation, 210 South Ashland St., having plans prepared by W. E. Reynolds, archt., Roosevelt St., 2 story, 80 x 105 ft., brick and tile, plain foundation, Howard Ave. $150,000. H. Easly, pastor.

Wis., Janesville—Theater—H. F. Jones, 107 North Franklin St., plans 2 story and basement, 80 x 150 ft., brick, steel and concrete, plain foundation. $150,000. Engineer and Architect not selected.

Wis., Kenosha—School—St. James Congregation, 305 Sheridan Rd., having plans prepared by Lindl, Lesser & Schutte, archts., Grosvenor Bldg., Kenosha, and 82 Wisconsin St., Milwaukee, 2 story and basement, 70 x 118 ft. and 60 x 60 ft., brick, tile and concrete, plain foundation, Sheridan Rd. $150,000. R. J. Smith, pastor. Noted Jan. 11.

Wis., Madison — Exchange — Wisconsin Telephone Co., 16 South Carroll St., plans 3 story addition, also reconstructing existing pole, aerial cable, wire ground conduits and underground plant. $600,000. J. R. Brohany, mgr. Engineer and architect not selected.

Wis., Madison—Hotel—Hotel Wisconsin Realty Co., 86 Michigan St., Milwaukee, having plan prepared by Holabird & Roche, archts., 104 South Michigan Ave., Chicago, 8 story and basement, 130 x 180 ft., brick and concrete, plain foundation, Fairchild and West Washington Sts. $900,000.

Wis., Madison—Pharmacy—University of Wisconsin, Administration Bldg., plans brick and steel, plain foundation. $250,000. M. E. McCaffery, secy. Engineer and Architect not selected.

Wis., Milwaukee—Business—M. Tullgren & Sons Co., archts., 425 East Water St., preparing plans 3 story and basement, 100 x 100 ft., brick, tile and concrete, plain foundation, 3rd St. $150,000. Owners name withheld.

Wis., Shorewood (Milwaukee P. O.)—Theatre and Business—Kel-Nau Investment Co., 86 Mason St., having plans prepared by Backes & Pfaller, archts., 216 West Water St., 3 story and basement, 105 x 120 ft., brick and concrete, plain foundation, Farwell Ave. $175,000.

Ia., Cedar Rapids—Hospital—St. Lukes Hospital Assn., S. C. Armstrong, chn. building com., 2nd St. and 2nd Ave. E., plans 4 story and basement, rein.-con., brick, tile and stone addition, 12th St. and A Ave. E. $150,000.

Kan., Pittsburg—Hotel—Company being organized plans hotel at 4th St. and Bway. $300,000-$400,000. Address Chamber of Commerce. Engineer and architect not selected.

Kan., Wellington — High School — Bd. Educ. having plans prepared by Williamson & Co., archts., 312 Central Natl. Bank Bldg., Topeka, 3 story and basement, rein.-con., brick, stone and steel. Election soon to vote on $300,000 bonds.

Neb., Grand Island—High School—Bd. Educ. soon takes bids 2 story and basement, 63 x 150 ft., brick and stone. $150,000. Kirschke & Crocker, Grand Island, archt.

S. D., Milbank—School Community—Municipality having plans prepared by Hugill & Blatherwick, archts., Sioux Falls, and C. F. Tweed, engr., 515 Metropolitan Bank Bldg., Minneapolis, Minn., 2 story and basement, concrete and brick. $150,000.

Mo., Chillicothe—High School—March 16, to vote on $300,000 bonds for high school. Engineer and architect not selected.

Mo., Columbia—Armory—Missouri University had plans prepared by Jamieson & Spearl, archts., Arcade Bldg., St. Louis, 2 and 3 story, 130 x 350 ft., rein.-con. and stone, plain foundation, on campus.

Mo., Kansas City—Apartment Hotel—W. Jewel, Jr., 227 Rialto Bldg., had plans prepared by Wilkinson & Crans, archts., 608 Interstate Bldg., 5 story and basement, 150 x 168 ft., 4550 Warwick Blk. $400,000.

Mo., Kansas City—Depot—Interurban Central Station Co., Scarritt Bldg., having plans prepared by Wright & Wright, archts., 1st Natl. Bank Bldg., and soon takes bids 10 story and basement, 130 x 200 ft., rein.-con., brick, stone or terra cotta, 10th and McGee Sts. $3,000,000.

Mo., Kansas City—Fire House—Plans new fire house, fire alarm equipment, underground cables and equipment. $216,420.

Mo., Kansas City—Office—Kansas City Life Insurance Co., Rialto Bldg., having preliminary plans prepared by Wight & Wight, archts., 1st Natl. Bank Bldg., 3 story and basement, Bway. and Armour Blvd. $500,000. Noted Jan. 25.

Mo., Kansas City—Y. W. C. A. having plans prepared by Croft & Boerner, archts., 1006 Marquette Ave., Minneapolis, Minn., brick, steel and rein.-con. $175,000.

DAM—ILLINOIS

Following are lowest three bids opened by G. R. Miller, dir. Dept. Pub. Wks. & Bldgs., Springfield, Feb. 28, for Starved Rock Lock and Dam, Illinois Waterway, Contr. No. 2, La Salle Co., (A) Byrne Bros. Constr. Co., 358 East 115th St.; (B) C. E. Carson Co., 601 St. Clair St.; Green & Sons Co., 705 Tower Bldg.; contractors all of Chicago. The unit bids were as follows:

	A	B	C
Clearing (lump sum)	$1,000.00	$1,000.00	$7,500.00
Cofferdam, pumping, etc. (lump sum)	80,000.00	150,000.00	343,350.00
409,000 cu.yd. excavation	1.10	1.85	1.50
6,000 sq.ft. channeling	.60	.75	1.00
1,000 cu.yd. embankment	1.50	.50	1.06
1,000 sq.yd. stone paving	1.75	1.00	3.00
50,000 ft. b.m. pine and fir timber	75.00	100.00	100.00
10,000 ft. b.m. white oak timber	150.00	100.00	200.00
387,000 lb. structural steel	.10½	.10	.10
60,000 lb. steel castings	.16¾	.15	.15
60,000 lb. steel castings	.16¾	.14	.14½
36,000 lb. gray iron castings	.12½	.10	.10
36,000 lb. gray iron castings	.12	.09	.09
116,000 lb. steel forgings	.30	.25	.20
96,000 cu.yd. concrete	5.00	6.75	8.50
162,000 lb. metal reinforcement	.06	.05	.05
5,000 lin.ft. vitrified pipe, 6 in. diameter	.50	.50	1.00
3,000 lb. pipe railing and w.s. pipe	.40	.50	.30
2,000 lin.ft. fibre conduit, 3 in. diameter	.66	.25	.50
3,700 lin.ft. gravel road	2.00	2.00	2.00
1 30-in. sluice gate	445.00	500.00	350.00
1 6-in. gate valve	45.00	50.00	50.00
1 6-in. flap valve	15.00	50.00	20.00
250 lb. bronze, nuts, etc.	.45	1.00	.50
Extended totals completing work in two years	$1,309,442	$1,717,880	$1,919,795
Extended totals completing work in three years	$1,135,693	$1,668,800	$1,889,795

Buildings (Continued)

Mo., Milan—Court House—Sullivan Co. plans election to vote on $200,000 bonds for court house.

Mo., Normandy—Clubhouse—North Hill Country Club, United Home Builders Bldg., St. Louis, had plans prepared by T. P. Barrett Co., archts., 1559 Arcade Bldg., St. Louis, 1 and 2 story, 75 x 400 ft., brick and stucco, Natural Bridge Rd., here. $300,000.

Mo., Pleasant Hill—High School—Voted $150,000 bonds and having plans prepared by W. H. Sayler & Co., arcnts., 306 Mutual Bldg., Kansas City, rein.-con., brick and stone.

Mo., St. Louis—Office—McKinley Traction System, Champaign, Ill., (owner and archt.) preparing plans 14 story, 75 x 135 ft., rein.-con. and brick, concrete pile foundation, 12th Blvd., here. $1,000,000.

Mo., University (St. Louis P. O.)—Theatre, Store and Apartment—University Co., c/o W. A. Hays, Central Natl. Bank Bldg., soon lets contract 3-story, 110x193 ft., rein.-con., brick and steel, plain foundation, Delmar Blvd. $400,000. H. Newhouse, 4630 Prairie St., Chicago, archt. Noted Dec. 21.

Tex., Austin—University—University of Texas, Bd. Regents, plans large improvement program incl. new buildings here and at medical branch, Galveston. H. M. Green Co., North Texas Bldg., Dallas, archts. $2,500,000 loan available.

Tex., Dallas—Office—M. H. Thomas, Cotton Exch., had plans prepared by A. F. Korn, archt., Andrews Bldg., 7 story and basement, 50 x 174 ft., brick and rein.-con., plain foundation, Wood and Akard Sts. $150,000.

Tex., Dallas—Schools—April 3, to vote on $1,000,000 bond issue for schools. G. D. Fairtrace, city engr.

Tex., Greenville — Office — Fraternal Aid Union takes bids in summer 5 story and basement, rein.-con. and brick, plain foundation. $200,000. Engineer and architect not announced.

Tex., Houston—Hospital—City and Harris Co., having plans prepared by W. A. Dowdy, city archt., rein.-con. and brick, plain foundation, 200 bed capacity. $200,000.

Okla., Norman — Church — University Methodist Episcopal Church having plans prepared by R. H. Hunt, archt., James Bldg., Chattanooga, Tenn., and soon receives bids 3 story and basement, 126 x 175 ft., bedford stone. $300,000. L. S. Barton, pastor.

Okla., Tulsa — Business — Jansen-Upp-Meyer Mfg. Co., 11 North Cheyenne St., plans 4 story and basement, 100 x 140 ft., rein.-con. $150,000. Engineer and architect not selected.

Colo., Denver—Office—Capitol Life Insurance Co., Colorado Theatre Bldg., plans office building, probably 2 story and basement, East 16th Ave. between Sherman and Grant Sts. $400,000. Engineer and architect not selected.

Utah, Salt Lake City—Office—See "Industrial Works."

Ore., Portland—Hotel—P. Wessinger, 555 Davis St., having plans prepared by C. Lind, archt., 208 Artisan Bldg., and takes bids about April 29, 12 story, 145 x 169 ft. hotel, and 3 story, 62 x 110 ft. garage, rein.-con., and terra cotta, plain foundation, Portland Heights. $1,000,000.

Calif., Gridley — High School — Gridley Union High School Dist. plans for vote on $200,000 bonds for high school. Engineer and architect not selected.

Calif., Los Angeles—Apartment—E. C. Comer, c/o Walker & Eisen, archts., Pacific Finance Bldg., having plans prepared 8 story and basement, rein.-con., Hollywood St. near Hudson Ave. $350,000.

Calif., Los Angeles — Apartment — C. Morris, c/o Walker & Eisen, archts., Pacific Finance Bldg., having plans prepared 15 story and basement, rein.-con. and brick, Catalina and Wilshire Sts. To exceed $1,000,000.

Calif., Los Angeles—Apartment—T. Harrison, Garland Bldg., having plans prepared by Allen & Hillier, archts., Union Bank Bldg., 3-story, brick, 9th and Hoover Sts. $150,000.

Calif., Los Angeles—Office—Hill Street Building Co., c/o E. Bergstrom, archt., Citizens Natl. Bank Bldg., having plans prepared 5 story, fireproof addition, Hill and 6th Sts. To exceed $300,000.

Calif., Los Banos—Hotel and Store—Business men all members of Chamber of Commerce having preliminary plans prepared by E. J. Kump Co., archts., Rowell Bldg., Fresno, 4 story, brick and concrete. $150,000.

Calif., Modesto—Schools—Modesto Grammar School Dist. will receive bids March 19, two brick grammar schools, $60,000 each, also alterations and additions to present structure, $55,000. J. J. Donovan, 1916 Bway., Oakland, archt. Noted Dec. 7.

Calif., Montebello — School — Montebello High School Dist. having plans prepared by Jeffry & Schaefer, archts., Kerchkoff Bldg., Los Angeles, group of buildings, brick. $300,000. Noted Oct. 19.

Calif., Pasadena — Club — American Legion conducting campaign to raise $200,000 for 4 story. N. J. Shupe, chn.

Calif., Piedmont — Schools — Piedmont School Dist., soon takes bids Junior High and Primary Schools, each 2 story and basement, rein.-con. $150,000 and $35,000 respectively. W. H. Weeks, 369 Pine St., San Francisco, archt.

Calif., Redondo—High School—Redondo Union High School Dist. having plans prepared by Allison & Allison, archts., Hibernian Bldg., Los Angeles, brick. To exceed $150,000. Noted Feb. 15.

Calif., San Francisco—Apartment—W. Groall, c/o W. Knowles, archt., Hearst Bldg., having plans prepared 8 story, rein.-con., Chestnut and Larkin Sts. $400,000.

Calif., San Francisco — Hospital — A. Abrams, 2151 Sacramento St., had plans prepared by M. I. Schwartz, archt., Nevada Bank Bldg., 9 story and basement, 56 x 137 ft., rein.-con. and steel, Sutter St. near Larkin St. $500,000.

Calif., Salinas—Schools—City plans to vote on $150,000 bonds for 2 or more grammer schools. A. Walter, supt. of schools.

Calif., Santa Barbara—Theatre, Office and Store—J. Y. Park, et al., c/o Soule, Murphy & Hastings, archts., 1206 State St., having plans prepared 4 story, fireproof, State St. $225,000.

Calif., Santa Clara—Gymnasium—University of Santa Clara having plans prepared by J. J. Donovan, archt., 1916 Bway., Oakland, 65 x 100 ft., gymnasium and 40 x 100 ft. swimming tank, probably concrete and tile. To exceed $150,000.

Calif., South Pasadena—School—March 30, to vote on $195,000 bonds for new school buildings.

Calif., Stockton — School — City having plans prepared by C. H. Young, archt., Commercial and Savings Bank Bldg., first unit, 24 classroom and auditorium, brick, Pilgrim St. $70,000. Ultimate cost, $150,000.

Calif., Taft—High School—Taft Union High School Dist., having revised plans prepared by W. H. Weeks, archt., 369 Pine St., San Francisco, group of buildings. Former bids rejected. Noted March 1.

Que., Montreal — Office — Credit-Canada Ltd., 145 St. James St., had plans prepared by U. J. Assellin, archt., 332 Bleury St., 10 story, 89x100 ft., St. Lawrence St. $500,000.

Ont., Hamilton—Collegiate—Bd. Educ. plans concrete, brick and steel. $250,000. S. H. Kent, city clk. Engineer and architect not selected.

Ont., Hamilton—Hospital—Hamilton General Hospital having plans prepared by Witton & Walsh, archt., Hamilton Provincial Loan Bldg., concrete, brick and steel addition. $150,000.

Ont., Hamilton—School—Bd. Educ. having plans prepared by Hutton & Souter, archts., Bank of Hamilton Bldg., 2 or 3 story and basement, 12 room, concrete, brick and steel, east end of city. $200,000. Noted Feb. 8.

Ont., Kingston—Library—Queens University soon takes bids new library. $370,000. R. B. Taylor, principal.

Ont., Oshawa—School—Bd. Educ. receiving competitive sketches for 2-story and basement, 12 room, concrete, brick and steel, Centre St. $200,000.

Ont., Ottawa—Fire Stations—Bd. Control takes bids in early spring, four new fire stations. $200,000. A. D. Macallum, city engr. Architect not selected.

Ont., Port Arthur—Collegiate—Bd. Educ. plans to construct new building or addition to present one, concrete, brick and steel. $200,000. Engineer and architect not selected.

Ont., St. Thomas—Hospital—City Council plans concrete, brick and steel memorial hospital. $150,000. W. B. Doherty, clk. Engineer and architect not selected.

Ont., Toronto—Apartment—C. C. Dunn, 335 Gerard St. E., plans 5 story and basement, brick, Gerard St. $150,000. Engineer and architect not appointed.

Ont., Toronto—Office—H. L. Bowles, 7 King St. E., having plans prepared by N. A. Armstrong, Ltd., archts., 7 King St. E. 7 story and basement, concrete, brick, steel tile and terra cotta. $750,000.

Ont., Toronto—Office—Geller Bros., 217 Richmond St. W., plans 6 story and basement, 50 x 100 ft. brick and steel. $200,000. Engineer and architect not selected.

Ont., Woodstock—School—Bd. Educ. plans 2 story and basement, 8 room concrete, brick and steel addition. $150,000. Engineer and architect not selected.

BIDS DESIRED

Mass., Taunton—School—March 22, by G. A. Burt, chn. Public Property Com., 2 story and basement, 85 x 160 ft., rein.-con. and brick, plain foundation, Middleboro Ave. $200,000. McLaughlin & Burr, 88 Tremont St., Boston, archts.

Conn., Bridgeport—School—Bd. Educ. receiving bids 2 story and basement, 20 room addition, brick and steel, plain foundation, Tesiny Ave. $150,000-$170,000. F. A. Cooper, 1024 Main St., archt. Noted July 13.

Conn., Fairfield—High School—March 17, by School Comrs., 2 story and basement, brick and steel, plain foundation, Post Rd. (first unit). $160,000. O. C. S. Ziroli, 211 State St., Bridgeport, archt. Noted June 22.

N. Y., Delanson—School—March 24, by Bd. Trustees Union School Dist. 1, Duanesburgh, at office of E. G. Atkinson, archt., 426 State St., Schenectady, new school, here. To exceed $150,000.

N. Y., New Rochelle—Apartment—April 15, by H. Tanenbaum, archt., 530 Main St., 4 story, brick, Main and Center Sts., for Dietch and Disesa, c/o architect. $300,000.

N. Y., New York—School—March 27, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, general construction P. S. 11, West 21st St., here, for Bd. Educ., 500 Park Ave.

N. J., Morris Plains—Dining Hall and Kitchen—April 2, by B. G. Lewis, comr. Institutions and Agencies, State House, Trenton, 4 story, 47 x 120 ft., rein.-con., brick and steel, at State Hospital for Insane, here. $216,000. A. B. Mills, State Office Bldg., Trenton, archt.

N. J., West Orange—High School—March 26, by Bd. Educ., 3 story, 105 x 230 ft., brick and steel, Gaston St. Guilbert & Bettelle, 540 Broad St., Newark, archts.

Pa., Phila.—School—March 20, by Bd. Educ., 3 story and basement, 148 x 171 ft. rein.-con., brick and steel, plain foundation, Cottage and Gillespie Sts. $500,000. Private plans.

Pa., Williamsport—Lodge and Store—Lodge of Eagles, Pine and North Sts., taking bids and opens same about April 1, 3 story and basement, 90 x 115 ft. brick, steel and rein.-con., Pine and North Sts. $150,000. F. A. Rianhard, Masonic Temple, archt.

O., Columbus—Medical Science—April 10, by C. E. Steele, secy. Bd. Trustees Ohio State University, 4 story and basement, 75 x 145 ft., brick, stone and concrete, on campus. J. N. Bradford, Ohio State University, archt. Noted March 8.

O., Dayton—Office and store—Schenck & Williams, archts., Winters Bank Bldg., taking bids and open same about March 20, 4 story, and basement, 75 x 100 ft., rein.-con., brick and terra cotta, North Main St., for Schwind Realty Co. $185,000. Noted June 29.

O., Marysville — Cottages — April 4, by Dept. Pub. Welfare, 9th and Oak Sts., Columbus, 2 story and basement, 28 x 150 ft. cottage $150,000, 2 story and basement, 22 x 44 ft. superintendents cottage $35,000, 1 story, 48 x 60 ft. power plant with 175 ft. brick chimney on approximately 200 cu.yd. concrete for base, $20,000, all foregoing rein.-con. and brick, at Reformatory for Women, here. R. S. Harsh, Ohio-Hartman Bldg., Columbus, archt.

O., New Osborn—School—March 19, by D. S. Lynn, clk. Bath Twp. Consolidated School Dist., Fairfield, 2 story and basement, rein.-con. and brick, Central Ave., here. $200,000. Walker & Norwick, 1301 Amer. Bldg., Dayton, archts.

Mich., Ann Arbor—Physical Science—March 26, by J. A. Shepherd, c/o University of Michigan, 4 story and basement, 60 ft. high above grade, 136 x 146 ft. rein.-con., brick and stone, plain foundation, East University Ave. A. Kahn, 1000 Marquette Bldg., Detroit, archt.

Mich., Kalamazoo — Library — H. H. Turner, archt., 923 Michigan Trust Bldg., and V. E. Theband, archt., (street address not available), both Grand Rapids, taking bids and open same about March 30, 2 story and basement, rein.-con., brick, steel and stone, plain foundation, for Western State Normal School. $230,000.

Ill., Chicago—Apartment—F. Becklanberg, 29 South La Salle St., taking bids 3 story, rein.-con., brick and steel, 5625-39 Kenmore Ave. $325,000. R. F. France, 155 North Clark St., archt.

Buildings (Continued)

Ill., Chicago—Apartment—P. F. Olsen, archt., 127 North Dearborn St., receiving bids 3 story, 108 x 153 ft., rein.-con., brick and steel, Cornelia and Pine Grove Aves., for W. Pickel, c/o architect. $250,000. Noted Feb. 15.

Ill., Evanston—Apartment—S. M. Seator, archt., 19 South La Salle St., Chicago, receiving bids 3 story and basement, 100 x 130 ft., rein.-con., brick and steel, Reba Pl. near Sherman Ave. $150,000. Owner's name withheld.

Wis., Milwaukee — Temple — March 29 (change of date), by R. Messmer & Bros., archts., 221 Grand Ave., 9 story and basement, 110 x 145 ft., brick and concrete, Mason and Marshall Sts., for Milwaukee Elks Lodge, 763 North Water St. $1,000,000. Noted March 8.

Ia., Fairfield—School—March 31, by Bd. Educ., high school addition and grade school, each 2 story and basement, rein.-con., brick, tile and stone. J. W. Dole, secy. W. Gordon, 319 Hubbell Bldg., Des Moines, archt. Noted Jan. 18.

Ia., West Union—Courthouse—March 23, by Fayette Co., 3 story and basement, 90 x 116 ft., rein.-con., brick, tile and stone. $250,000. J. Ralston, L & J Bldg., Waterloo, archt. Noted Dec. 14.

Minn., Duluth—Hospital—March 22, by F. A. Cokefair, chn. Building Com., Duluth Hospital Assn., 1st St. and 9th Ave. E., 6 story and basement 65 x 175 ft., 32 x 145 ft. and 35 x 162 ft. additions, rein.-con. and brick. $800,000. Schmidt, Garden & Martin, 104 South Michigan St., Chicago, archts. German & Jenssen, Exch. Bldg., associated archt. Noted Jan. 4.

Kan., Topeka—Hotel—Topeka Hotel Co. taking bids on structural steel for 10 story and basement, 100 x 150 ft., brick, stone and rein.-con., 7th and Jackson Sts. $600,000. T. W. Williamson & Co., archts., 312 Central Natl. Bank Bldg., completing plans.

Neb., Columbus—Hospital—St. Marys Hospital, receiving bids 4 story and basement, 45 x 150 ft. main building, 2 story and basement, 36 x 49 ft., dormitory and 1 story and basement, 50 x 90 ft., chapel, rein.-con., brick and stone. $250,000. C. Wurdeman Co., 313½ 13th St., archt.

Mo., Kansas City — Institute — Deaner Dental Institute, 3520 Bway., taking bids 4 story and basement, 52 x 126 ft., rein.-con., brick and steel, Hunter and Baltimore Aves. A. F. Adams, 600 Walsix Bldg., archt. Noted Feb. 8.

Mo., St. Louis—Theatre and Store—W. Goldman, 6343 Waterman Ave., taking bids and opens same about March 20, 126 x 198 ft. (equal to 4 story) rein.-con., brick and steel, concrete pile foundation, Grand Blvd. $500,000. P. J. Bradshaw, International Life Bldg., archt.

Calif., Alameda—Apartment—A. A. Cantin., archt., 68 Post St., San Francisco, receiving bids 3-story, rein.-con., Grand St. and Central Ave., for L. Kaliski, c/o architect. $150,000. Noted Dec. 21.

Calif., Fullerton—Science—March 27, by Trustees Fullerton Union High School Dist., 1 and 2 story, concrete and brick addition to exceed $150,000. C. M. Winslow, Van Nuys Bldg., Los Angeles, archt.

Calif., Los Angeles—Auditorium—J. C. Austin, et al. archts., Detwiler Bldg., receiving bids 302 x 588 ft., concrete, brick and steel, Jefferson and Royal Sts., for Al Malaikah Temple, A. A. O. N. M. S., 1210 South Hope St. To exceed $1,000,000.

Calif., Los Angeles—University—Southwest University, receiving bids 4 story, 50 x 150 ft., rein.-con., South Hill St. A. C. Martin, Higgins Bldg., archt.

Calif., San Francisco — Office — Purch. Dept. of Pacific Gas & Electric Co., 445 Sutter St., receiving bids for 2,800 tons steel for 17 story, brick, steel and concrete, Market and Beale Sts. $1,500,000. Hunter & Hudson, Rialto Bldg., consult. mechanical engrs. Bakewell & Brown, 251 Kearny St., archts. C. H. Snyder, 251 Kearny St., engr. Noted May 11.

BIDS RECEIVED

N. Y., Albany—Bank—M. T. Reynolds, archt., 100 State St., opened bids March 5, 10 story and court, 24 x 175 ft., with 200 ft. steel tower in center, brick, steel and terra cotta, for City Savings Bank, 100 State St., from Feeney & Sheehan Building Co., 165 Montgomery St., $899,979; J. J. Finn & Son, 9 Cuyler Ave., $911,000; Empire Contg. Organization Co., Inc., 132 West 42nd St., New York, $914,180. Noted Feb. 15.

Md., Baltimore—Club House, etc.—Park Comrs., c/o J. C. Boyd, pres., Druid Hill Park, opened bids 1 story, 42 x 230 ft. club house and entrance to stadium, rein.-con., 33rd St., from J. Hiltz & Son, 345 St. Paul Pl., $168,549; R. B. Mason, 308 West Madison St., $187,780; North-Eastern Constr. Co., Lexington Bldg., $198,000.

Ia., Mason City — Home — Independent Order Odd Fellows, c/o A. W. Stubbs, supt. Odd Fellows Home, 3 story and basement, 60 x 160 ft., rein.-con., brick, tile and stone, general contract from Sugarman Constr. Co., 8th and Tuttle Sts., Des Moines, $88,730; M. M. Moen Co., Mason City, $89,700; Spencer Constr. Co., Spencer, $90,500. Former bids rejected. Noted Feb. 22.

Ore., Portland—School—Bd. Educ. constructing Grant School, 2 story, 75 x 392 ft. rein.-con. and brick, plain foundation, from Quinn & Burton, Ry. Exchange Bldg., $222,537; Hauser Constr. Co., Henry Bldg., $245,313; Parker & Bamfield, 64 East 3rd St. N., $252,996. Total cost $332,000.

Calif., Alhambra—School—Trustees Alhambra High School Dist., 2 story and basement, brick, general contract from Pacific Constr. Co., Baker-Detwiler Bldg., Los Angeles, $240,564; heating and ventilating from F. J. Donnelly, 1066 North Wilton Place, Los Angeles, $29,254. Noted Jan. 18.

Calif., Chico — Bank and Office — First Nat'l. Bank, 4-story, rein.-con., 3rd and Main Sts., from Hannah Bros., 142 Sonsome St., San Francisco, $156,000; F. Betz, Ochsner Bldg., Sacramento, $168,000. Noted Feb. 8.

Calif., Long Beach — School — City, 10 classroom, brick, Pacific and 14th Sts., general contract from Beswick Constr. Co., 230 Newport St., $132,238.

Calif., Los Angeles—Office—Chamber of Commerce, Chamber of Commerce Bldg., 8 story and basement, rein.-con. and brick, 12th St., general contract from C. J. Lubach, Merchants Natl. Bank Bldg., $1,370,000, bid for all work except elevators $2,169,000; elevators from Burnett Mfg. Co., 719 East 1st St., $114,828; structural steel from Baker Iron Wks., 912 North Bway., $501,170; marble and tile, from J. Musto-Sons-Keenan Co., 1064 South Bway., $181,625; electrical work, from G. L. Patterson Co., 646 Maple Ave., $36,796; steam heating and ventilating from J. Hokom, 4312 Moneta Ave., $89,087; ornamental iron work, from Bayer-Rothgeb Co., Santa Fe and Slauson Aves., $36,796; plumbing and gas fittings, from Howe Bros., 1198 San Pedro St., $80,418. Noted Feb. 15.

Calif., Oakland—Hospital—Supervs. Alameda Co., completing 4 story, rein.-con., Highland Hospital, 14th st., from Globe Indemnity Co., 444 California St., San Francisco, $156,344. Noted Feb. 22.

Calif., San Jose—Economics—State Bd., Sacramento, constructing 2 story, rein.-con. economics and manual arts (alternate bid for completion of economics building and omitting interior finish of manual arts), general contract from Sampel & Cody, Call Bldg., San Francisco, $127,600 and $117,600, J. Morton, Balboa Bldg., San Francisco. $129,196—$124,207, Larsen & Siegrist, 180 Jessie St., San Francisco, $142,977—$129,628; mechanical equipment (alternate bid for completion of work in economics building and rough in manual arts), from Latourette-Fical Co., 907 Front St., Sacramento, $35,385 and $27,885, Scott Co., 243 Minna St., San Francisco. $40,982—$34,282, Butcher & Serpa, San Jose. $43,250—$37,355. Noted Nov. 9.

Calif., Sawtelle—Home—Soldiers Home, 2-story, rein.-con., from Los Angeles Bldg. Co., Marsh Strong Bldg., Los Angeles, $190,444; Clark Bros., 5117 Hollywood Blvd., Los Angeles, $211,699; W. Simpson Co., Marsh Strong Bldg., Los Angeles, $219,415.

CONTRACTS AWARDED

Me., Portland — Business — Independent Publishing Co., Press-Herald Bldg., 7-story, 60x100 ft., rein.-con., brick and steel, plain foundation, Exchange, Market and Federal Sts., to J. J. Maloney Co., Benoit Bldg. Archts. est. $250,000.

Me., Portland — Hotel—Hotel Brunswick, 21-23 Preble St., 5-story, 61 x 125 ft., brick and steel, plain foundation, Preble St., to F. A. Rumery Co., 21 Portland St. Archts. est. $150,000. Noted Jan. 11.

Mass., Medford — School — St. Clements Roman Catholic Church, 2 story and basement, 60 x 110 ft., brick and steel, plain foundation, Boston Ave., to J. B. Byrne, 71 Magazine St., Cambridge. Archts. est. $150,000.

Mass., North Attleboro — School — St. Marys Roman Catholic Church, c/o P. McGee, pastor, 2 story and basement, 60 x 140 ft., brick and steel, plain foundation, Main St., to J. F. Griffin Co., 15 Exchange St., Boston. Archts. est. $150,000.

Conn., Hartford—Business—Lewis, Wilcox & Stone, 327 Trumbull St., 3 story, (ultimately 6 story) 110 x 150 ft., brick and steel, plain foundation, Allyn St., to W. A. Wilcox, 327 Trumbull St. Archts. est. $175,000.

Conn., New Haven—Club and Gymnasium—St. Michaels Young Mens Club, Greene St., 2 story and basement, 50 x 150 ft., brick and steel, plain foundation, Greene St., to Sola & Bounpane, 209 Clay St. Archts. est. $150,000. Noted Feb. 1.

N. Y., Albany — Library — Bd. Trustees Young Mens Assn., constructing Harmanus Bleecker Library, 2 story, 56 x 122 ft., brick, 30 ft. high, Dove and Washington Aves., to J. P. Sewell, 378 Morris St., $150,000.

N. Y., Brooklyn—Apartment—Fourth Ave. Contg. Co., c/o A. J. Simberg, archt. and engr., 1133 B'way., New York City. 4 story, 85 x 90 ft., brick, steel and stone, plain foundation, 4th Ave. and 74th St., here, by day labor. $175,000.

N. Y., Brooklyn — Apartment — J. A. Mears, c/o A. J. Simberg, archt. and engr., 1133 B'way., New York, 4 story, brick, steel and stone, plain foundation, Lincoln Pl., here, by day labor. $200,000.

N. Y., Bath—High School—Bd. Educ., general contract new high school, to Corning Building Co., 77 Cedar St., Corning. $167,031.

N. Y., Marcy—Hospital—State Hospital Comn., Albany, general contract farm colony building for 125 patients, at Utica State Hospital, Marcy Div., here, to C. J. Burgess, Foster Bldg., Utica, $169,980. Noted Feb. 22.

N. Y., New York—Apartment—De Voe Park Building Co., c/o J. M. Felson, archt. and engr., 1133 B'way., 6 story, 100 x 200 ft., brick, steel and stone, plain foundation, 188th St. and Webb Ave., by day labor. $250,000.

N. Y., New York—Apartment—S. Winnek, c/o G. G. Miller, archt. and engr., 1482 Bway., brick, steel and stone, plain foundation, Burnside Ave., by day labor. $250,000.

N. Y., Owego — School — Bd. Educ., 2 story, 120 x 145 ft., brick, to Mitchell Constr. Co., 332 Water St., Binghamton. Noted Feb. 8.

N. Y., Thiells — Assembly Hall, etc. — M. B. Patterson, pres. Bd. Mgrs. Letchworth Village, 7 Wall St., New York, general contract attendants home, assembly hall and industrial building, at Letchworth Village, here, to Fitzpatrick & MacArthur, 55 South Bway., Yonkers, $147,000; heating, to E. W. Tompkins Co., 27 Grand St., Albany, $25,448. Noted Jan. 11.

Pa., Hastings—Church—St. Bernards Catholic Church, 1 story and basement, 95 x 110 ft. brick and limestone, Beaver St., to Berkebile Bros., Swank Bldg., Johnstown, $150,000.

Pa., Phila.—Office—B. Abrams, Bellevue Court Bldg., 5 story and basement, brick, steel and stone, plain foundation, 726 Sansom St., to Modern Constr. Co., 242 Norris St., $150,000.

Pa., Pittsburgh — Church — St. Rosalia Roman Catholic Congregation, 5151 Greenfield Ave., 1 story and basement, 74 x 150 ft., Greenfield Ave., to J. A. Bergman & Sons, 414 Dunwiddie St. Archts. est. $163,000.

N. C., Franklinton—High School—For 3 story, public high school (gift of S. C. Vann), general contract to C. V. York, Citizens Bank Bldg., Raleigh, $165,000.

Tenn., Johnson City—Hotel—Johnson City Hotel Co., 10 story, brick and stone, concrete foundation, to E. W. Minter, 115 Bway., New York City. Noted Feb. 15.

O., Cleveland—Bank and Office—Atlas Savings & Loan Co., 5454 B'way., 5 story 37 x 100 ft., brick, steel and concrete, 5644 B'way., to Alexander Bros., Williamson Bldg. Archts. est. $150,000. Noted Feb. 1.

O., Cleveland—Commercial and Apartment—Commodore Impvt. Co., c/o M. Marmorstein, 1032 Schofield Bldg., 12 story and basement, 122 x 160 ft., brick, steel and concrete, Euclid Ave. and Ford Dr., masonry contract to Kravitz & Yokelson, 991 Parkwood Dr.; concrete work to E. F. Gibbons Constr. Co., Prospect-4th Bldg. Archts. est. $1,500,000.

O., Cleveland Heights (Warrensville, P. O.)—City Hall, Police and Fire Station—For 2 story, brick, steel and concrete, 2945 Mayfield Rd., to C. A. Carson Co., 7016 Euclid Ave., Cleveland, $177,798. Noted March 1.

O., Cleveland Heights (Warrensville P. O.)—School—Bd. Educ., 1005 Lee Rd., 2 story, 100 x 211 ft., brick, steel and concrete, Euclid Heights Blvd., to C. Peterson Co., 4500 Euclid Ave., Cleveland. Archts. est. $250,000. Noted March 8.

Mich., Detroit — Mercantile — A. Schloss, 647 Griswold St., remodeling present 4 story, and constructing additional 4 story, 25 x 120 ft. rein.-con., brick and steel, Woodward Ave. and John R St., to M. Bartholomael Sons & Co., 1574 East Warren Ave. Archts. est. $200,000.

Buildings (Continued)

Mich., Owosso—Schools—Bd. Educ., two 2 story and basement, rein.-con., brick and steel schools, plain foundations, 3rd and 5th Wards, to G. A. Burley Co., Flint, $200,000. Noted Jan. 11.

Ill., Chicago—Apartment—May & Rapp, 1517 Jarvis St., 3 story, 38 x 129 ft., rein.-con., brick and steel, 901 George St., to J. Traff, 3948 North Robey St. Archts. est. $150,000.

Ill., Chicago—Apartment—A. B. Phillips, c/o E. E. Hall, archt., 123 West Madison St., 4 story, 50 x 200 ft., rein.-con., brick and steel, 3638-48 Sheridan Rd., to Nelson & Lind, 6404 South State St. Archts. est. $500,000.

Ill., Chicago—Apartment—B. Weinstein, 3837 Grenshaw St., 3 story, 95 x 190 ft., rein.-con., brick and steel, 3428-32 West Monroe St., to Douglas Constr. Co., 3939 West Adams St. Archts. est. $225,000.

Ill., Chicago—Store and Office—See-Moon & Co., 919 West Randolph St., 2 story, 101 x 150 ft., rein.-con., brick and steel, Randolph and Morgan Sts., to Waldman Constr. Co., 105 North Clark St. Archts. est. $150,000. Noted Jan. 25.

Ill., Oak Park—Hospital—Oak Park Hospital, 4 story, 42 x 92 ft., rein.-con., brick and steel addition, Wisconsin St. near Madison St., to Harper & Buttendorf, 1628 North Blvd. Archts. est. $200,000.

Wis., Green Bay—Hospital—Deaconess Hospital, 742 Webster St., 3 story and basement, 64 x 148 ft., brick and concrete addition, plain foundation, to L. F. Schroeder Constr. Co., 13 East 1st St., Fond du Lac. Archts. est. $150,000. Noted Feb. 8.

Wis., Milwaukee — Apartment — Ranco Corp. c/o Rosman & Wierdsma, archts., 424 Jefferson St., 3 story and basement, 40 x 55 x 110 ft., brick, tile and concrete, plain foundation, Cass St., to R. Reisinger & Co., 464 Oakland Ave. Archts. est. $150,000 Noted Feb. 15.

Wis., Milwaukee — Apartment — H. C. Schwartz, 482 Van Buren St., 3 story and basement, 50 x 110 ft., brick, tile and concrete, plain foundation, to R. Reisinger & Co., 464 Oakland Ave. Archts. est. $150,000. Noted Feb. 22.

Ia., Cedar Falls—School—Bd. Educ., 2 story and basement, 106 x 142 ft., rein.-con., brick, tile and stone, general contract to Tapager Constr. Co., Albert Lea, Minn., $108,924. Noted Feb. 15.

Ia., Cedar Rapids—School—Sacred Heart Academy, 3 story and basement, rein.-con., brick and tile addition, Elmhurst Dr. and Mound Farm, general contract to Lightner Bros., Cedar Rapids Bank Bldg., $200,000. Noted March 1.

Ia., State Center—School—Bd. Educ., 2 story and basement, 60 x 110 ft., rein.-con., brick, tile, and stone, general contract to I. A. Ashby & Son, Mankato, Minn., $80,583. Noted Feb. 15.

Minn., Minneapolis—Apartment—J. Dexner, 2101 Garfield Ave. S., 3 story and basement, 105 x 120 ft., brick and stone, 36th St. and Aldrich Ave. S., general contract to L. Fleisher Co., 504 Plymouth Bldg. Total to exceed $150,000.

Kan., Wichita—Business—Western Newspaper Union, 525 East William St., 5 story, 50 x 140 ft., brick, plain foundation, to G. H. Siedhoff Constr. Co., Hotel Broadview Bldg. Archts. est. $200,000.

N. D., Jamestown—School—Bd. Educ., 3 story and basement, 150 x 180 ft., rein.-con., brick, tile and stone, general contract, to E. A. Moline, Bottineau, $135,410. Noted Jan. 25.

Mo., Kansas City — Church — Central Presbyterian Church, 3727 Forest Ave., 2 story and basement, rein.-con., brick and stone, Armour Blvd. and Campbell St., to L. Breitag & Son, c/o Shephard & Wiser, archts., 302 R. A. Long Bldg., $170,000. Noted Nov. 30.

Mo., Kansas City—Hotel and Business—Tri-State Realty Co., 5 story and basement, rein.-con. and brick, to Pratt-Thompson Constr. Co., Republic Bldg., $700,000.

Mo., St. Louis—Apartment—C. Gray, Choteau Trust Bldg., 6 story, 138 x 140 ft., rein.-con., brick and steel, plain foundation, Pershing St., to W. S. Frank, Century Bldg. Archts. est. $500,000.

Tex., Denton—Church—First Methodist Church, 2 story, brick, plain foundation, to C. N. Davis, Denton, $150,000. Noted Dec. 21.

Ore., Portland—Apartment—Lawrence, Moore Co., 212 Corbett Bldg., 2 story and basement, 95 x 170 ft., brick and tile, plain foundation, 18th and 19th Sts. and Hawthorne Ave., to Thomas & Thomas, Henry Bldg., $150,000.

Ore., Portland—Hospital—Shrine Hospital Assn., 2 and 3 story, 105 x 190 ft., 84 x 108 ft. and 84 x 108 ft., rein.-con. and brick, plain foundation, 82nd St. and Sandy Blvd., to Stebinger Bros., 617 Sheffield Ave., $175,000.

Calif., Los Angeles—Club—Friday Morning Club, 6 story, rein.-con., general contract to Winter Constr. Co., Los Angeles Ry. Bldg., $303,500. Above contract does not include stone work, sheet metal, marble and tile, hardwood floors, electric, plumbing, heating and ventilating or painting.

Calif., Los Angeles—Office, Store and Hotel—M. Elasser, c/o Swasey & McAfee, archts., Hibernian Bldg., 3 story, brick, Central Ave., to Macdonald & Kahn, Loews State Bldg., $250,000.

Calif., Oakland — Store — Kahn Bros., Bway. between 16th St. and San Pablo Ave., 6 story, 174 x 230 ft. rein.-con. addition, with 100 x 130 ft. wing, brick exterior, Bway. near San Pablo Ave., to MacDonald & Kahn, 130 Montgomery St., San Francisco. Work will probably be done on cost plus percentage basis.

Calif., San Francisco—Apartment—L. Johnson, 2260 19th Ave., will build 6 story and basement, concrete, Bush St. near Leavenworth St., by day labor. $150,000. Noted Jan. 4.

Ont., Toronto — Exchange — Bell Telephone Co., 76 Adelaide St. W., 8 story and basement (ultimately 12 story), 100 x 100 ft., 135 ft. high, 4 story stone and balance brick, Sheppard and Temperance Sts., foundation to Jackson-Lewes Constr. Co., Ryrie Bldg., $170,000; steel frame to Dominion Bridge Co., Imperial Life Bldg. Total est. cost $1,000,000.

Federal Government Work

PROPOSED WORK

N. Y., New York—Dredging—U. S. Engineer, 2nd Dist., plans dredging and rock removal in New York and New Jersey Channel.

Del., Wilmington—Excavation—U. S. Engineer, Wilmington, plans dredging Chesapeake & Delaware Canal.

Tenn., Nashville—Lock Gates—U. S. Engineer plans steel lock gates for Lock 8, Cumberland River.

BIDS DESIRED

N. Y., Oswego—Stone-Work, etc.—March 30, by Treas. Dept. at office J. A. Wetmore, acting supervising archt., Wash., D. C., restoration of stone-work, new roof, gutters, etc., for U. S. Post Office and Custom House, here; adv. this issue.

N. Y., Shinnecock—Dwelling, etc.—April 3, by Treas. Dept. at U. S. Coast Guard Headquarters, Darby Bldg., Wash., D. C., constructing dwelling and accessories at Shinnecock Coast Guard Sta., Long Island; adv. this issue.

N. Y., Staten Island—Acetylene Cylinders—March 29, by Supt. of Lighthouses, furnishing 450 seamless drawn steel acetylene cylinders.

Pa., Phila.—Coal—March 22, by U. S. Engineer, 815 Witherspoon Bldg., furnishing 15,000 tons semi-bituminous coal, for floating plant. Noted March 1.

Pa., Phila. — Fuel Oil — March 26, by U. S. Engineer, 815 Witherspoon Bldg., furnishing 40,000 bbl. fuel oil for vessels in Phila. Noted March 1.

Va., Norfolk—Removing Fenders—April 11, at office U. S. Engineer, removing fenders and replacing new ones at Core Creek Bridge; adv. this issue.

Miss., Vicksburg—Metal, etc.—April 7, at office U. S. Engineer, Drawer 421, Vicksburg, furnishing and delivering about 467,000 lb. structural metal for locks and Dams 5 and 8, Ouachita River, La. and Ark., also erecting and modifying gates; adv. this issue. Noted March 1.

La., New Orleans—Dredging—April 9, by U. S. Engineer, dredging Intracoastal Waterway between Bayou Black and Bayou Terrebonne, La.; adv. this issue.

Tenn., Memphis—Coal—March 22, at office Mississippi River Comn., 1st and 2nd Dists., Customhouse, for coal in barges; adv. this issue.

Tenn., Memphis—Rope—April 3, at office Mississippi River Comn., 1st and 2nd Dists., Customhouse, furnishing and delivering manila rope; adv. this issue.

Tenn., Memphis—Wire, etc.—March 26, at office Mississippi River Comn., 1st and 2nd Dists., Customhouse, furnishing and delivering galvanized wire, wire strand, staples and wire rope clips; adv. this issue.

Ky., Louisville — Cement — April 9, at office U. S. Engineer, Louisville, furnishing and delivering cement for Dams 44 and 45, Ohio River; adv. this issue.

O., Cincinnati—Gates—March 28, at office U. S. Engineer, furnishing, delivering and erecting gates for Locks 36, 38 and 44, Ohio River; adv. this issue.

Tex., Galveston—Barges—April 16, at office U. S. Engineer, furnishing and delivering steel water barges; adv. this issue.

Calif., San Diego—Water Softening Plant—Spec. 4768—March 21 (change of date), by Bureau Yards & Docks, Navy Dept., Wash., D. C., water softening plant, here. Noted March 8.

Calif., San Francisco—Dredge Tender—April 6 at office U. S. Engineer, Custom House, constructing, testing, delivering, one 40 ft. motor dredge tender complete.

BIDS RECEIVED

La., Alexandria — Post Office — Treas. Dept. at office Supervising Architect, Wash., D. C., for extension to Post Office, here, from Devault & Deitrick, Canton, O., (street address not available) $59,000. (2) $1,180; Pearce Bros., Inc., 220 West 42nd St., New York City, $61,900, (2) $1,250; Algernon Blair, 11 South Lawrence St., Montgomery, Ala., $72,452, (2) $1,600.

Ariz., Nogales—Post Office—Treas. Dept., Wash., D. C., opened bids Feb. 19, for U. S. Post Office and Custom House, here, from Pearce Bros., 220 42nd St., New York City, $83,665, 12 months; Farmer & Son, P. O. Box 1083, Nogales, Ariz., $109,885, 12 months; C. Weitz Sons, 713 Mulbery St., Des Moines, Ia., $109,900, 12 months. Noted Jan. 25.

Calif., Eureka—Stone—U. S. Engineer, Custom House, San Francisco, furnishing 80,000 tons stone for jetty construction at entrance to Humboldt Bay, here, from A. D. Kern, Lumber Exch. Bldg., Portland, Ore., Proposition 3, Class 1 $3.81 per ton, Class 2 $3.67, Class 3 $3.45, Class 4 $2.25. Noted Feb. 1.

Calif., Mare Island—Extension to Shell House, etc.—Bureau Yards & Docks, Navy Dept., Wash., D. C., extension to shell house and magazine at Navy Yard, here (1) work complete from J. Pringle, 212 Anita, Rd., Burlingame (1) $88,500 (200 days) (2) $16.50 (3) $0.05 (4) $5,625; D. Zane Co., Inc., 233 Bway., New York City, (1) $95,192 (240 days) (2) add $24 deduct $7.30 (3) add $0.50 (4) add $6,794 (15 days) deduct $4,860; Tibbetts Pacific Co., 16 California St., San Francisco (1) $92,789 (200 days) (2) add $21 deduct $10 (3) add $0.52 deduct $0.02 (4) add $6,571 deduct $6,000 telegraphic modification (1) $91,389. Noted Feb. 1.

Calif., Mare Island—Riprapping—Spec. 4775—Bureau Yards & Docks, Navy Dept., Wash., D. C., furnishing and placing approximately 50,000 tons hard stone riprap to form embankment along longitudinal Dike at Navy Yard, here from Healy-Tibbits Constr. Co., 64 Pine St., San Francisco, $1.8375 (240 days); Blake Bros. Co., 204 Balboa Bldg., San Francisco, $2.94 (75 days). Noted Feb. 15.

CONTRACTS AWARDED

W. Va., Huntington—Barges—U. S. Engineer, Huntington, constructing and delivering 3 steel barges, to Riter-Conley Mfg. Co., Leetsdale St., Pittsburgh, Pa., $32,190. Noted Feb. 8.

Ala., Florence—Castings, etc.—U. S. Engineer, Florence, furnishing castings and other parts for regulating gates of Wilson Dam, to Charles Ward Eng. Co., Charleston, W. Va., $119,300. Noted Jan. 25.

Ala., Florence—Tanks—U. S. Engineer, Florence, furnishing displacement tanks for regulating gates of Wilson Dam, to J. S. Schofield, Hammond and Boundary Sts., Macon, Ga., $136,300. Noted Jan. 25.

Tex., Galveston—Dredging—U. S. Engineer, dredging channels at Brazos Island Harbor, to J. Jacobson, 2217 Ave. C, Galveston, $181,200. Noted March 8.

Miscellaneous

PROPOSED WORK

Motor Street Flusher—Jamestown, N. Y.—Plans to purchase new, double unit motor street flusher. $8,500. L. O. Bergman, city engr.

Park — Hightstown, N. J. — Plans memorial park, incl. retaining wall and dam at Peddie Lake. $25,000. E. A. MacMillan, Princeton, engr.

Well Drilling—Tidioute, Pa.—Harmony Oil & Gas Trust, c/o N. V. Osmer, Franklin, plans extensive oil and gas well drilling operations on 350 acre tract in Limestone Twp. $25,000.

Grain Elevator — Norfolk, Va. — Port Comn. having plans prepared gallery addition to grain elevator, Hampton Rds. $180,000. Folwell & Ahlskog, Sewells Point, archts.

Pier—Sheboygan, Wis.—Plans pier with docking facilities, hoisting and unloading machinery, etc., on Lake Michigan near South 8th St. J. Steimle, city clk. Engineer not selected.

Dock—Superior, Wis.—Great Northern Ry., Railway Bldg., St. Paul, Minn., plans to rebuild No. 1 ore dock at Allouez Bay, plans call for reconstruction of inner 188 pockets and increasing height of dock from 73 to 77 ft., timber construction. $1,500,000. R. Rudd, pres.

Miscellaneous (Continued)

Tunnel — Lansing, Kan. — State Prison Comn., Topeka, granted $40,000 for tunnel in state prison, here, also $40,000 for hospital equipment.

Fire Alarm System—Wichita, Kan.—City Manager soon takes bids for fire alarm system, present plan includes 82 alarm boxes, electric wiring. $60,000. P. M. Brockway, city engr.

Fire Alarm Equipment and Underground Cables, etc.—Kansas City, Mo.—See "Buildings."

Parks, etc.—University (St. Louis, P. O.), **Mo.**—April 4, to vote on $200,000 bonds for acquiring city parks, playgrounds and equipment.

Electrification—Dallas, Tex.—St. Louis & Southwestern R.R., better known as Cotton Belt R.R., Cotton Belt Bldg., Dallas, and Texas Electric R.R., Interurban Bldg., Dallas, plan to electrify railroad from Plano to Greenville. $600,000. J. G. Hailey, electrical engr. of Texas Electric R.R.

Parks—Dallas, Tex.—April 3, to vote on $325,000 bond issue for parks. G. D. Fairtrace, city engr.

Lighting Distribution System — Helena, Okla.—See "Waterworks."

Portland Cement—Oregon City, Ore.—A. J. Lewthwaite, mgr. Crown Willamette Paper Co., 736 Pittock Blk., receiving bids several thousand barrels cement.

Park Improvements—Eureka, Calif.—Defeated $100,000 bonds to purchase and improve park site. Noted Dec. 7.

Rails and Equipment—Eureka, Calif.—City voted $100,000 bonds to purchase rails, ties, cars and equipment for municipal railway system. J. Griffiths, city supt. pub. wks. Noted Dec. 7.

Gas Pipe Line—San Francisco, Calif.—Pacific Gas & Electric Co., 445 Sutter St., plans 4,192 ft. 12 in. c.i. gas mains in Folsom St. between The Embarcadero and 3rd Sts.; gas mains to points commencing at Army and De Haro Sts., 2,840 ft. 26 in., 5,409 ft. 24 in., 8,661 ft. 20 in. and 10,267 ft. 12 in. pipe.

Oil Storage Terminal—San Pedro, Calif.—Southwest Shipbuilding Co., San Pedro, plans 8 oil storage tanks, capacity of each to exceed 80,000 bbl., also 1,300 ft. pile wharf. To exceed $250,000. Private plans.

Canal and Harbor Improvements, etc.—Canada—Dominion Government, Ottawa, plans following work during 1923: construction on Welland Ship Canal, $12,200,000, improvements $100,000; new construction on Trent Canal $210,000, improvements $309,000; improving Chambly Canal $48,000, Lachine Canal $56,000, and Soulanges Canal $216,000; new steel gate lifter on Saulte Ste. Marie Canal $5,000; improving Port Arthur and Port William harbors $135,000, St. John Harbor $860,000, Toronto Harbor $433,000, Matane Harbor $100,000; repairs to Chicoutini Wharf $29,500, L'Islet Wharf $25,000, Point aux Trembles Wharf $30,400, St. Michel de Bellechasse Wharf $25,000; extending wharf at Grand River, $29,000; new wharves at Grondines $62,000, Haileyburg $26,400; breakwaters and piers at Cobourg $28,600, Port Colborne $200,000, Toronto Island $30,000, Whitby $27,500; new cable for Vancouver Island telegraph and telephone lines $5,500.

Subway—Mimico, Ont.—Plans subway under Grand Trunk Ry., concrete abutments, steel deck. $135,000. James, Proctor & Redfern, 36 Toronto St., Toronto, engrs. Noted Jan. 11.

Grain Elevator—Port Arthur, Ont.—Saskatchewan Co-operative Elevator Co., Regina, Sask., having plans prepared for rein.-con. addition to grain elevator, here. $500,000. C. D. Howe & Co., Whalen Bldg., engrs.

Transmission Line—Timmins, Ont.—See "Industrial Works."

Electric Light System—Woodstock, Ont.—Plans to extend electric light and power systems. $25,000. J. Morrison, city clk.

BIDS DESIRED

Heating and Ventilating Apparatus — Brooklyn, N. Y.—March 23, by W. H. Gompert, archt., Flatbush Ave. etxension and Concord St., installing heating, ventilating and temperature regulating apparatus in New Utrecht High School, 79th and 80th Sts., 16th to 17th Aves., for Bd. Educ., 500 Park Ave., New York.

Asphalt Binder—New York, N. Y.—March 20, by Bd. Purchase, Municipal Bldg., furnishing and delivering asphalt binder and binder oil ,to Dept. Parks-Bronx. G. A. Whalen chn.

Asphalt Wearing Surface Sand—New York, N. Y.—March 20, by H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., furnishing and delivering 4,000 cu.yd. asphalt wearing surface sand.

Tractor—Potsdam, N. Y.—Bd. Village Trustees taking bids tractor and snow plow. To exceed $1,000. I. H. Kendall, pres.

Coliseum—Syracuse, N. Y.—March 29, by G. R. Lunn, pres. State Fair Comn., Capitol, Albany, for coliseum at New York State Fair Grounds, here. S. W. Jones, State archt.; adv. this issue.

Trucks, etc.—Trenton, N. J.—March 20, by Bd. Freeholders Mercer Co., 2 auto trucks, 2 mechanical twin hoists, steel dump bodies, 5 ton capacity. $14,000. H. F. Harris, Court House, engr.

Retards—Clayton, Mo.—March 23, by E. R. Methudy, secy. St. Louis Co. River Impvt. Assn., c/o St. Louis Co. Bank, Clayton, constructing standard current retards in Missouri River between Franklin Co. line and St. Charles, to provide protection for 12,000 acres land. J. Jacoby, c/o St. Louis Co. Bank, engr.

Stadium — East Cleveland (Cleveland P. O.), O.—April 9, by Bd. Educ., new stadium for Shaw Field, 10,000 seating capacity. Osborn Eng. Co., 2848 Prospect Ave. S. E. Cleveland, archts. and engrs. Noted Feb. 15.

Concrete Aggregates—Michigan—March 29, by State Hy. Dept., Lansing, producing and stacking 59,500 cu.yd. concrete aggregates on Federal Aid Project 101, Van Buren Co. F. F. Rogers, comr.

Grader—Green Bay, Wis.—Bd. Pub. Wks. taking bids for power grader. W. L. Kerr, City Hall, secy. Private plans.

Lighting System — St. Paul, Minn. — March 19, by H. W. Austin, city purch. agt., installing single service lighting system in Selby Ave. from Summit Ave. to Lexington Ave. and in Western Ave. from Laurel to Marshall Aves. G. M. Shepard, city engr.

Road Oil—St. Paul, Minn.—March 19, by H. W. Austin, city purch. agt., 700,000 gal. road oil for 1923. G. M. Shepard, city engr.

Transmission Line — Kanorado, Kan. — March 27, by Rollins & Co., engrs., 521 Railway Exch. Bldg., Kansas City, Mo., 16½ mi. electrical transmission line from here to Goodland, also substations at Kanorado and Goodland. $25,000.

Electrolier System—Berkeley, Calif.—City receiving bids 75 electroliers in Telegraph Ave. from south city limits to Allston Way, incl. globes, lamps and tops together with underground cables and conduits. To exceed $25,000. C. L. Huggins, city engr.

Rock Crushing Plant Equipment, etc.—San Francisco, Calif.—Pratt Building Material Co., Hearst Bldg., in market for rock crushing machinery, steam shovel, belt conveyors and machine shop equipment, for rock crushing and gravel plant at Folsom. C. F. Pratt, pres.

Steel—San Francisco, Calif.—See "Buildings."

Coaling Plant—Ignace, Ont.—Canadian Pacific Ry., Windsor St., Montreal, Que., taking bids 280 ton coaling plant, here.

BIDS RECEIVED

Sand, etc.—Niagara Falls, N. Y.—Furnishing (1) 3,200-3,800 tons sand (2) 75,-100 tons limestone dust (3) 500-1,000 tons stone screenings (4) 2,000-3,000 bbl. cement (5) 10,000-20,000 vitr. red paving bricks, from E. F. Sandstrom, Attica, (1) $0.70 per ton (2) $5.90 (3) $0.93 (5) $51.50; Concrete Stone & Coal Co., Gillett Court, (1) $0.71 (4) $3.03; Hillcrest Sand Co., Stanford, Ont., (1) $1.75; Empire Builders Supply Co., North Tonawanda, (3) $1.25 (4) $3.03 (5) at warehouse $51.50, at cars $44.50; Consolidated Fuel & Supply Co., Niagara Falls (street address not available) (3) $2.10 (4) $3.60 (5) at site of work $56, at warehouse $50.

Trailers — San Jose, Calif. — Supervs. Santa Clara Co., furnishing one or more trailers, from Holt Mfg. Co., South Aurora St., Stockton, $945; Utility Sales Co., Phelan Bldg., San Francisco, $1,080; Benson & Weaver, 89 South Market St., $1,275-$1,475. Noted Feb. 22.

CONTRACTS AWARDED

Refined Asphalt, etc.—Brooklyn, N. Y.—E. Riegelmann, boro pres., Boro Hall, furnishing and delivering 400,000 gal. refined asphalt and 300,000 gal. asphalt road oil, to Standard Oil Co., 26 Bway., New York, $22,320 and $16,450 respectively; 4,500 cu.yd. binder stone, to Calvin Tompkins Co., 30 Church St., New York, $9,945; 2,000 net tons limestone dust, to New York Trap Rock Corp., 101 Park Ave., New York, $10,620; 10,000 cu.yd. asphalt sand, to J. Grielo, $13,800; 8,000 bbl. cement, to Burroughs Building Material Co., Johnson Ave. and Newtown Creek, $22,960; 50,000 asphalt paving blocks, to Hastings Pavement Co., 25 Broad St., New York, $4,711; 50,000 Grade 1 granite blocks, to J. Meehan & Son, 74 Cortlandt St., New York, $6,725; 50,000 wood paving blocks, to Amer. Creosoting Co., 17 Battery Pl., New York, $3,225; 5,000 cu.yd. steam cinders, to D. Negri & Sons, 792 Maple Ave., $3,600. Noted Feb. 8.

Swimming Pool, etc.—Cortland, N. Y.—Commissioner of Education, Albany, general contract swimming pool at Cortland Normal School, here, to A. E. Stephens Co., 143 State St., Springfield, Mass., $21,750; filters, to Bates Co., West Water St., Syracuse, $7,995. Noted Feb. 22.

Cement, etc.—New York, N. Y.—J. Miller, pres. Manhattan Boro, Municipal Bldg., furnishing and delivering 20,000 bags cement, to J. A. McCarthy, 551 Extension St., $14,500; 3,000 cu.yd. paving sand and 2,000 cu.yd. paving grits, to C. and C. Contg. Corp., 224 Jay St., Brooklyn, $4,710 and $4,380 respectively; 50,000 granite paving blocks, to J. Meehan & Son, 74 Cortlandt St., $6,588; 600 tons asphaltic paving cement, to Standard Oil Co., 26 Bway., $11,802; 3,000 cu.yd. coarse aggregate, to Calvin Tompkins Co., 30 Church St., $6,840; 3,000 tons inorganic dust, to New York Trap Rock Corp., 101 Park Ave., $19,950. Noted Feb. 1.

Underground Fire Alarm System — New York, N. Y.—T. J. Drennan, fire comr., Municipal Bldg., to Croker Electric Co., 20 West 30th St., Item 1 $3,429, J. Sudgen, 100 5th Ave., Item 2 $10,997, Crocker Electric Co., 20 West 30th St., Item 3 $4,260. Noted Feb. 8.

Coaling Station—Rochester, N. Y.—New York Central R.R., Grand Central Terminal, New York City, coaling station, concrete and steel, Atlantic Ave., here, by day labor. $70,000.

Concrete, Bituminous and Crushed Stone —Phila., Pa.—Furnishing mixed concrete to West Jersey Sand & Supply Co., Delaware Ave. and Marlboro St., $10,662; bituminous material to Atlantic Refining Co., 1225 Chestnut St., $21,450; crushed stone, to Birdsboro Stone Co., Land Tile Bldg., $55,120. Noted March 8.

Asphalt Plant—Cleveland, O.—Cleveland Trinidad Paving Co., The Arcade, 1 story asphalt plant, steel and concrete, Euclid and Bliss Rds., by day labor. $75,000. Private plans.

Street Lighting — Owen, Wis. — See "Streets and Roads."

Flushers—Mankato, Minn.—City, 1 motor flusher, combined power flusher and gravity sprinkler, to Tiffin Wagon Co., Tiffin, O., $6,497. Noted Jan. 18.

Grand Stand—Kansas City, Mo.—Kansas City Baseball Club, 18th and Walnut Sts., single deck, steel and concrete grand stand, 20,000 seating capacity, to D. Munro, 716 Adams Ave.; structural steel, to Kansas City Structural Co., 704 Orear-Leslie Bldg. Archts. est. $250,000. Noted Feb. 15.

Levee—Whitham, Mo.—See "Excavation, Drainage, Irrigation."

Gas Mains—Dallas, Tex.—See "Streets and Roads."

Electrolier System—Berkeley, Calif.—Installing electroliers in portions of University Ave., et al., to F. E. Newberry Co., 417 Webster St., Oakland, $37,518. Noted March 1.

Transmission Line—Redwood City, Calif.—Pacific Gas & Electric Co., 445 Sutter St., San Francisco, will construct 25 mi. transmission line, through San Mateo Co. from point south of Redwood City to Visitacion Valley, by day labor. To exceed $500,000.

Structural Steel—San Francisco, Calif.—City and San Francisco Co., furnishing, delivering and erecting structural steel for Moccasin Creek power plant of Hetch Hetchy Project, to Union Constr. Co., Balfour Bldg., $60,720. Noted March 8.

Lighting System—Santa Monica, Calif.—Constructing rein.-con. lighting system in Santa Monica Ave., to D. S. McEwan, Santa Monica, $33,487.

Hydraulic Machinery—Quebec, Que.—Quebec Development Co., 116 Cote de la Montayne, hydraulic machinery for use in development of 1,000,000 hp. at dam on Saguenay River, to Canadian Allis-Chalmers Co. Ltd., 162 St. Antoine St., Montreal, $1,500,000. Noted Dec. 14.

Generators — Peterboro, Ont. — Hydro Electric Power Comn., University Ave., Toronto, two 54,000 K.V.A., 12,000 volt, vertical, 3 phase, 25 cycle electrical generators, for Queenston-Niagara power plant, here, to Canadian General Electric Co., 212 King St. W., Toronto, $1,000,000.

Electric Light and Power System—Sutton, Ont.—Plans to install electric light and power system. $30,000. Work will be done under supervision of Hydro Electric Comn., University, St., Toronto.

Grain Elevator and Wharf—Vancouver, B. C.—E. A. Woodward, Grain Exch., Winnipeg, Man., new 700,000 bu. grain elevator, concrete storage house, timber work house and wharf on Burrard Inlet, to Dominion Constr. Co. Ltd., 509 Richards St., $500,000 on percentage basis. Noted Feb. 8.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ADVERTISEMENTS ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE.

OFFICIAL PROPOSALS

Bids: Mar. 20.

Narrows Siphon No. 2 Contract 198

New York, N. Y.

Sealed bids will be received by the Board of Water Supply, at its offices, twenty-second floor, Municipal Building, Park Row, Centre and Chambers Streets, New York City, until 11 a.m., Eastern Standard time, on Tuesday, March 20, 1923, for Contract 198, for the construction of Narrows Siphon No. 2, a 42-inch, flexible-jointed, cast-iron submarine pipe-line about 8,800 feet long, with shore connections of 42-inch and 48-inch bell-and-spigot cast-iron pipes about 560 feet in length. This siphon is a portion of the Catskill aqueduct and will extend across the Narrows of New York harbor from 86th Street and Shore Road, Bay Ridge, Brooklyn, to Vanderbilt Avenue and Bay Street, Clifton, Staten Island.

The work consists principally of furnishing approximately 4,650 tons of submarine pipes, dredging a trench in which the pipe-line will be laid across the Narrows, including the shore ends, and refilling over the pipe-line. The land work is to include furnishing and laying about 330 tons of cast-iron pipe and special castings of various sizes, furnishing and setting two large meters, building chambers and manholes and doing other incidental work.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders, forms of bid and contract, specifications, contract drawings, etc., can be obtained at the office of the Secretary at the above address, by depositing the sum of ten dollars ($10) in cash or its equivalent for each pamphlet. For further particulars apply to the office of the Chief Engineer at the above address.

GEORGE J. GILLESPIE,
President.
JAMES P. SINNOTT,
PHILIP F. DONOHUE,
Commissioners, Board of Water Supply.
BENJ. F. EINBIGLER, Secretary.

Bids: Mar. 29.

Levee Work

Beardstown, Ill.

Sealed bids will be received by the Commissioners of the South Beardstown Drainage and Levee District of Cass County, Illinois, at the First State Bank Building, at Beardstown, Illinois, up to the hour of 2:00 p.m., March 29, 1923.

The work for which bids are asked is as follows:

A—Enlarging old sand levee, Stations 0 to 18, by hauling sand. Approximately 14,000 yds. (Wheeler or wagon work.)

B—Enlarging old Sand Levee, Stations 18 to 67, approximately 32,000 yds. (Drag line or floater.)

C—Enlarging old dirt levee, Stations 67 to 329, approximately 120,000 cu.yds. (Floater with 90 ft. boom.)

D—Building of 5 dams across borrow pit.

Monthly payments in cash, to the extent of 80% of work performed, will be paid on estimates of the Engineer. Certified check for $500.00 must accompany each bid.

Plans and specifications on file and may be seen at the office of L. B. Kinsey, Engineer, Pekin, Illinois, and John McDorman, Secretary, Beardstown, Illinois.

Bids will be received on separate sections or on the whole work.

L. B. KINSEY,
Civil Engineer,
Pekin, Illinois.

OFFICIAL PROPOSALS

Bids: Mar. 27.

Bridge

Wilkes-Barre, Pa.

Sealed proposals will be received at the office of the City Clerk, City Hall, Wilkes-Barre, Pa., until twelve o'clock noon, Tuesday, March 27, 1923, for the construction of the South Street Bridge in the City of Wilkes-Barre, Pa., in accordance with the plans and specifications on file in the office of the City Engineer.

The bridge will cross the Pennsylvania, Lehigh Valley and Central Railroad of New Jersey's tracks, extend along the north side of South Street, from Washington Street to Park Avenue, be composed of steel trusses over the railroad tracks and reinforced concrete arches and retaining wall approaches thereto. The total length is about 1,735 feet.

Instructions to bidders, plans, specifications, proposal and contract forms may be seen in the office of J. E. Greiner & Company, Consulting Engineers, Lexington Building, Baltimore, Md., and Union Arcade Building, Pittsburgh, Pa., and can be obtained at the office of the City Engineer on and after Tuesday, Macrh 6, 1923, for a deposit of $10.00 for each set, which deposit will be refunded on the day of the letting to those submitting bids, provided the sets are returned complete and in good condition.

Each proposal must be accompanied by a certified check on a solvent bank or trust company in the sum of Five Thousand ($5,000.00) Dollars, made payable without reservations to the Treasurer of the City of Wilkes-Barre, Pa., as a guarantee that if the proposal be accepted a contract will be entered into.

Proposals must be made so as to conform with the instructions to bidders in every respect. Must be endorsed "Proposals for South Street Bridge" and addressed to Fred H. Gates, City Clerk. The City reserves the right to reject any or all bids and to award the contract as may be deemed to the best interests of the City.

MARTIN C. MURRAY,
Superintendent of Streets & Public Improvements.

Bids: Mar. 24.

Street Improvement

Charlottesville, Va.

Sealed proposals will be received by the City Manager of the City of Charlottesville, Va., until 12 o'clock, noon, on March 24, 1923, for Street Improvement; consisting of grading, curbing, paving and resurfacing.

Alternate proposals will be received for various types of surfaces. Estimated square yardage for this proposal 120,200. The City Manager reserves the right to increase or decrease this quantity.

Plans and specifications are on file in the office of the Engineer. Copies of the specifications and proposal blanks may be obtained from the City Manager.

Each proposal must be accompanied by a certified check for ten thousand dollars ($10,000) payable to the Treasurer of the City of Charlottesville, Va.; to be returned in case the proposal is rejected or to be forfeited in case the bidder should refuse to enter into a contract in accordance with his proposal and the specifications.

The right is reserved to reject any or all bids.

BOYD A. BENNETT,
City Manager.
Charlottesville, Va.

OFFICIAL PROPOSALS

Bids: March 20.

Park Slope and Fort Hamilton Conduits

CONTRACT 197

New York, N. Y.

Sealed Bids will be received by the Board of Water Supply, at its offices, twenty-second floor, Municipal Building, Park Row, Centre and Chambers Streets, New York City, until 11 a.m., Eastern Standard time, on Tuesday, March 20, 1923, for Contract 197, for the construction of the Park Slope and Fort Hamilton conduits, portions of the City conduits of the Catskill aqueduct, extending from Shaft 23 of the City tunnel at Schermerhorn street and Third avenue along Third avenue, Dean street, Fourth avenue, Douglass street, St. Johns place, Eighth, Prospect, Tenth and Gravesend Avenues, Fort Hamilton parkway and 86th street to Shore road and along Shore road to 79th street, in the Borough of Brooklyn, New York City.

The conduits will consist of about 39,290 linear feet of 72-inch and 2,140 linear feet of 66-inch steel pipe, about 310 tons of cast-iron pipe and special castings of various sizes, a Venturi meter, valves and other appurtenances, all of which will have to be maintained for one year.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders, forms of bid and contract, specifications, contract drawings, etc., can be obtained at the office of the Secretary at the above address, by depositing the sum of ten dollars ($10) in cash or its equivalent for each pamphlet. For further particulars apply to the office of the Chief Engineer at the above address.

GEORGE J. GILLESPIE,
President.
JAMES P. SINNOTT,
PHILIP F. DONOHUE,
Commissioners, Board of Water Supply.
BENJ. F. EINBIGLER,
Secretary.

Bids: March 20.

Sewers

Paducah, Ky.

Sealed proposals will be received until 10 o'clock a.m., Tuesday, March 20, 1923, at the office of the Commissioner of Public Works, City Hall, Paducah, Kentucky, for the construction of the following, 14,833 feet of sewers:

Diameter	Length	Average Depth
42"	407'	8.0'
36"	2,817'	11.7'
33"	307'	11.6'
21"	2,286'	10.3'
18"	1,725'	11.1'
15"	2,845'	13.3'
12"	3,506'	7.8'
10"	940'	11.0'

Borings and test pits indicate clay, sand and gravel.

Materials of construction: Concrete Pipe, Monolithic Concrete, Segment Block, Vitrified Clay, Cement Pipe or Brick.

Certified check for $2,000.00 to accompany bids. Money already available and payments will be cash, 85% monthly.

Right is reserved to reject any or all bids.

Plans and specifications will be furnished upon deposit of $3.00, which will be refunded upon return of same.

HENRY A. PULLIAM,
Commissioner of Public Works
and Chief Engineer.

CONSTRUCTION NEWS

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Mar. 26	Compton, Calif.	Mar. 15
Mar. 26	Milwaukee, Wis.	Mar. 22
Mar. 26	St. Paul, Minn.	Mar. 22
Mar. 27	Weatherford, Okla.	Mar. 8
Mar. 27	New Ulm, Minn.	Mar. 15
Mar. 27	New York, N. Y.	Mar. 22
Mar. 29	Waldwick, N. J.	Mar. 15
Mar. 29	Savannah, N. Y. Adv. Mar. 22.	Mar. 22
Mar. 29	Trenton, N. J.	Mar. 22
Mar. 30	Smith Center, Kan.	Mar. 22
Mar. 30	St. George, N. Y.	Mar. 23
Apr. 1	Cresson, Pa.	Mar. 8
Apr. 2	West Chester, Pa.	Mar. 15
Apr. 4	Wheeling, W. Va.	Mar. 8
Apr. 4	Fayetteville, Tenn.	Mar. 22
Apr. 5	Fayetteville, N. C.	Mar. 15
Apr. 10	Toronto, O. Adv. Mar. 15 and 22.	Mar. 15
Apr. 12	Astoria, Ill.	Mar. 15
Apr. 18	Richmond, Va. Adv. Mar. 22.	Mar. 22
Apr. 26	New Orleans, La. Adv. Mar. 8 to 22.	Mar. 8

SEWERS

Mar. 26	Akron, O.	Mar. 22
Mar. 28	Lennox, S. D.	Mar. 22
Mar. 29	Sugar Creek, Mo.	Mar. 22
Mar. 30	Wash., D. C. Adv. Mar. 22.	Mar. 22
Apr. 2	Glen Rock (Ridgewood P. O.), N. J.	Mar. 15
Apr. 2	Yuba City, Calif.	Mar. 22
Apr. 3	Youngstown, O.	Mar. 22
Apr. 6	Lyndonville, N. Y. Adv. Mar. 15 and 22.	Mar. 15
Apr. 7	Pottstown, Pa. Adv. Mar. 15 and 22.	Mar. 15
Apr. 10	Toronto, Ont.	Mar. 8
Apr. 10	Toledo, O. Adv. Mar. 15 and 22.	Mar. 15
Apr. 10	Hazard, Ky. Adv. Mar. 22	Mar. 22
Apr. 16	Urbana, Ill.	Mar. 15

WASTE DISPOSAL

Mar. 27	Tampa, Fla.	Mar. 8

BRIDGES

Mar. 26	Bowling Green, O.	Mar. 8
Mar. 27	Wilkes-Barre, Pa.	Mar. 1
Apr. 1	Wilkes-Barre, Pa.	Dec. 14
Apr. 2	Gurnee, Ill. Adv. Mar. 22.	Mar. 22
Apr. 3	Galesburg, Mich.	Mar. 22
Apr. 3	North Carolina	Mar. 15
Apr. 4	Matawan, N. J. Adv. Mar. 22.	Mar. 22
Apr. 4	Painesville, O.	Mar. 22
Apr. 6	Fresno, Calif.	Mar. 15
Apr. 10	Fonda, N. Y.	Mar. 15
Apr. 12	Louisiana	Mar. 22
Sept. 1	Sydney, New South Wales, Australia	Aug. 3

DAMS

Apr. 3	Newburgh, N. Y. Adv. Mar. 22.	Mar. 22
Apr. 12	Oroville, Calif.	Mar. 22

EXCAVATION, DRAINAGE, IRRIGATION

Mar. 26	Winchester, Ill.	Mar. 15
Mar. 26	Chinook, Mont.	Mar. 22
Mar. 28	Mason City, Ia.	Mar. 22
Mar. 29	Beardstown, Ill.	Mar. 8
Mar. 29	Savanna, Ill.	Mar. 22
Mar. 30	Albert Lea, Minn.	Mar. 22
Mar. 30	Carroll, Ia.	Mar. 22
Apr. 2	Webster City, Ia.	Mar. 15
Apr. 3	Sioux City, Ia.	Mar. 22
Apr. 9	Lamar, Colo. Adv. Mar. 22.	Mar. 22
Apr. 14	Savannah, Tenn.	Mar. 22

STREETS AND ROADS

Mar. 26	San Rafael, Calif.	Mar. 15
Mar. 26	West Allis, Wis.	Mar. 15
Mar. 26	Des Moines, Ia.	Mar. 15
Mar. 26	Aberdeen, S. D.	Mar. 15
Mar. 26	Barnsdall, Okla.	Mar. 22
Mar. 26	Elmira, N. Y.	Mar. 22
Mar. 26	Hutchinson, Minn.	Mar. 22
Mar. 26	Kitchener, Ont.	Mar. 22
Mar. 27	Grand Rapids, Mich.	Mar. 22
Mar. 27	St. Louis, Mo.	Mar. 8
Mar. 27	Washington	Mar. 15
Mar. 27	Peru, Ind.	Mar. 15
Mar. 27	Louisiana	Mar. 15
Mar. 27	Quebec	Mar. 15
Mar. 27	Michigan	Mar. 15
Mar. 27	Clinton, Ia.	Mar. 15
Mar. 27	Wisconsin	Mar. 22
Mar. 27	Tampa, Fla.	Mar. 22
Mar. 27	Prairie du Chien, Wis.	Mar. 15
Mar. 27	Albert Lea, Minn.	Mar. 15
Mar. 27	South Dakota	Mar. 15
Mar. 28	Kalamazoo, Mich.	Mar. 15
Mar. 28	Owatonna, Minn.	Mar. 15
Mar. 28	Michigan	Mar. 15
Mar. 28	Ashland, Wis.	Mar. 22
Mar. 28	Dodgeville, Wis.	Mar. 22
Mar. 28	Jamestown, N. Y.	Mar. 22
Mar. 28	Ann Arbor, Mich.	Mar. 22
Mar. 28	Lamar, Colo.	Mar. 22
Mar. 28	Newton (Boston P. O.), Mass.	Mar. 22
Mar. 28	Mayville, N. Y.	Mar. 22
Mar. 28	Altoona, Pa.	Mar. 22
Mar. 29	Guelph, Ont.	Mar. 22
Mar. 29	Akron, O.	Mar. 22
Mar. 29	Michigan	Mar. 15
Mar. 29	Rockwall, Tex.	Mar. 22
Mar. 30	Michigan	Mar. 15
Mar. 30	Sayre, Okla.	Mar. 22
Mar. 30	Ohio	Mar. 22
Mar. 30	Seattle, Wash.	Mar. 22
Mar. 30	Beloit, Wis.	Mar. 22
Mar. 30	Juneau, Wis.	Mar. 22
Mar. 30	Sabetha, Wis.	Mar. 22
Apr. 1	Huntingdon, Pa.	Feb. 8
Apr. 2	Stoneboro, Pa.	Mar. 15
Apr. 2	Hastings, Minn.	Mar. 15
Apr. 2	Hastings, Pa.	Mar. 15
Apr. 2	Lucerne, Minn.	Mar. 15
Apr. 2	White Plains, N. Y. Adv. Mar. 15 and 22.	Mar. 22
Apr. 2	Salem, Ind.	Mar. 22
Apr. 2	Elbow Lake, Minn.	Mar. 22
Apr. 3	Amsterdam, N. Y.	Feb. 1
Apr. 3	Rowland, N. C.	Mar. 15
Apr. 3	North Carolina Adv. Mar. 22.	Mar. 15
Apr. 3	Pennsylvania Adv. Mar. 15 and 22.	Mar. 15
Apr. 3	Geneva, N. Y. Adv. Mar. 22.	Mar. 22
Apr. 3	Maryland	Mar. 22
Apr. 3	Michigan	Mar. 22
Apr. 4	Michigan	Mar. 22
Apr. 4	Holton, Kan.	Mar. 8
Apr. 4	Kentucky	Mar. 15
Apr. 4	Maplewood (St. Louis P. O.), Mo.	Mar. 22
Apr. 4	South Dakota	Mar. 15
Apr. 4	Florida	Mar. 22
Apr. 5	Topeka, Kan.	Mar. 8
Apr. 5	South Dakota	Mar. 15
Apr. 5	Burlington, Vt. Adv. Mar. 22.	Mar. 22
Apr. 5	Virginia Adv. Mar. 22.	Mar. 22
Apr. 5	Michigan	Mar. 22
Apr. 6	Michigan	Mar. 22
Apr. 6	Holton, Kan.	Mar. 15
Apr. 6	South Dakota	Mar. 15
Apr. 7	South Dakota	Mar. 15
Apr. 7	Michigan	Mar. 22
Apr. 10	New Castle, Pa.	Mar. 22
Apr. 10	Washington	Mar. 15
Apr. 10	Louisiana Adv. Mar. 22.	Mar. 22
Apr. 14	Bessemer, Mich.	Mar. 22
Apr. 16	Canonsburg, Pa. Adv. Mar. 22.	Mar. 22
Apr. 17	Alabama	Mar. 22

INDUSTRIAL WORK

Mar. 24	Hartford, Conn.	Mar. 22
Mar. 24	Jeannette, Pa.	Mar. 22
Mar. 27	Oswego, N. Y. Adv. Mar. 1 to 22.	Mar. 1
Mar. 28	Blue Island, Ill.	Mar. 22
Mar. 30	Bridgeport, Conn.	Mar. 15
Apr. 1	Birmingham, Ala.	Mar. 15

BUILDINGS

Mar. 24	Beallesville, Pa.	Mar. 22
Mar. 26	Cincinnati, O.	Mar. 1
Mar. 26	Ann Arbor, Mich.	Mar. 15
Mar. 26	West Orange, N. J.	Mar. 15
Mar. 26	Toledo, O.	Mar. 22
Mar. 26	Tulsa, Okla.	Mar. 22
Mar. 27	New York, N. Y.	Mar. 15
Mar. 27	West Bend, Wis.	Mar. 8
Mar. 27	Fullerton, Calif.	Mar. 15
Mar. 27	Cleveland, O.	Mar. 22
Mar. 27	Phila., Pa.	Mar. 22
Mar. 28	Kimball, S. D.	Mar. 22
Mar. 28	Los Angeles, Calif.	Mar. 22
Mar. 28	West Union, Ia.	Mar. 22
Mar. 29	Milwaukee, Wis.	Mar. 15
Mar. 29	Kingston, Ont.	Mar. 22
Mar. 29	Beaverdale, Pa.	Mar. 22
Mar. 29	Kansas City, Mo.	Mar. 22
Mar. 30	Clearfield, Pa.	Mar. 8
Mar. 30	Sioux Falls, S. D.	Mar. 8
Mar. 30	Cayuga, Ont.	Mar. 22
Mar. 30	Hartford, Conn.	Mar. 22
Mar. 31	Fairfield, Ia.	Mar. 15
Mar. 31	Lakewood (Cleveland P. O.), O.	Mar. 22
Mar. 31	Pembroke, Ont.	Mar. 22
Apr. 1	Freeport, Pa.	Mar. 8
Apr. 2	Syracuse, N. Y.	Mar. 1
Apr. 2	Morris Plains, N. J.	Mar. 15
Apr. 2	Memphis, Tenn.	Mar. 22
Apr. 2	Springfield, Mass.	Mar. 22
Apr. 4	Marysville, O.	Mar. 15
Apr. 4	New Rochelle, N. Y.	Mar. 15
Apr. 4	Palmyra, N. Y.	Mar. 22
Apr. 5	Oxford, O.	Mar. 22
Apr. 7	Vancouver, Wash.	Mar. 22
Apr. 7	Kalamazoo, Mich.	Mar. 22
Apr. 10	Springfield, Mass.	Mar. 22
Apr. 10	Cedar Falls, Ia.	Mar. 22
Apr. 10	Columbus, O.	Mar. 15
Apr. 12	Savanna, Ill.	Mar. 22
Apr. 31	Capa, S. D.	Mar. 8
May 1	Mason City, Ia.	Mar. 22

FEDERAL GOVERNMENT WORK

Mar. 26	Machine Shop—Staten Island, N. Y.	Mar. 8
Mar. 26	Extension — Kansas City, Mo.	Mar. 1
Mar. 26	Fuel Oil—Phila., Pa.	Mar. 15
Mar. 26	Wire, etc.—Memphis, Tenn. Adv. Mar. 15 and 22.	Mar. 15
Mar. 28	Gates—Cincinnati, O. Adv. Mar. 15 and 22.	Mar. 15
Mar. 28	Mechanical Equipment — Annapolis, Md.	Mar. 22
Mar. 29	Dredging — New York, N. Y. Adv. Mar. 1 to 22.	Mar. 1
Mar. 29	Hospital — Livermore, Calif.	Mar. 1
Mar. 29	Acetylene Cylinders—Staten Island, N. Y.	Mar. 15
Mar. 30	Stone Work, etc. — Oswego, N. Y.	Mar. 15
Apr. 2	Head-Gate Track, etc. — Florence, Ala. Adv. Mar. 8 to 22.	Mar. 8
Apr. 2	Quarters — Hot Springs, Ark.	Mar. 22
Apr. 3	Dredging, etc. — Jacksonville, Fla. Adv. March 8 to 15.	Mar. 8
Apr. 3	Rope—Memphis, Tenn. Adv. Mar. 15 and 22.	Mar. 15
Apr. 3	Dwelling, etc. — Shinnecock, N. Y. Adv. Mar. 15 and 22.	Mar. 15
Apr. 3	Road—California	Mar. 22
Apr. 5	Piling—Louisville, Ky. Adv. Mar. 8 to 22.	Mar. 8
Apr. 6	Dredge Tender—San Francisco, Calif.	Mar. 15
Apr. 7	Metal—Vicksburg, Miss. Adv. Mar. 15 and 22.	Mar. 15
Apr. 9	Dredging — New Orleans, La. Adv. Mar. 15 and 22.	Mar. 15
Apr. 9	Cement—Louisville, Ky.	Mar. 15
Apr. 10	Lock—Newburg, Ind.	Mar. 1
Apr. 11	Removing Fenders — Norfolk, Va.	Mar. 15
Apr. 12	Machinery, etc. — Honolulu, H. T.	Mar. 1
Apr 12	Steel Hull—Rock Island, Ill. Adv. Mar. 22.	Mar. 22
Apr. 12	Wire—Fremont, Calif.	Mar. 23
Apr. 16	Tunnel, etc. — Mitchell, Neb.	Mar. 1
Apr. 16	Barges—Galveston, Tex. Adv. Mar. 15 and 22.	Mar. 15
Apr. 16	Ice-Making and Refrigerating Plant—Chelsea, N. Y.	Mar. 22
Apr. 18	Monument — Plattsburg, N. Y. Adv. Mar. 22.	Mar. 22
Apr. 20	Dredging Pump—Jacksonville, Fla. Adv. Mar. 22.	Mar. 22
Apr. 25	Reconstructing Dike — Mare Island, Calif.	Mar. 22
May 10	Post Office — Cordova, Alaska	Jan. 25

MISCELLANEOUS

Mar. 24	Tunnel—Montreal, Que.	Mar. 22
Mar. 26	Asphalt — Minneapolis, Minn.	Mar. 22
Mar. 27	Transmission Line — Kanoroda, Kan.	Mar. 15

Bids Close		See Eng. News-Record
Mar. 27	Aggregate, etc.—Long Island City, N. Y.	Mar. 22
Mar. 29	Coliseum—Syracuse, N. Y. Adv. Mar. 15 and 22.	Mar. 15
Mar. 29	Concrete Aggregates — Michigan	Mar. 15
Mar. 29	Steam Roller—West New Brighton, N. Y.	Mar. 22
Mar. 30	Cement—Juneau, Wis.	Mar. 22
Mar. 30	Foundations — New York, N. Y.	Mar. 22
Mar. 30	Ties and Timber—New York, N. Y.	Mar. 22
Apr. 2	Wharf—Norwalk, Conn. Adv. Mar. 22.	Mar. 22
Apr. 2	Steel—New York, N. Y.	Mar. 22
Apr. 3	Bituminous Material — Albany, N. Y. Adv. Mar. 22.	Mar. 22
Apr. 3	Road Dredge, Scrapers, etc. —Onida, S. D.	Mar. 22
Apr. 3	Road Grader — Chaska, Minn.	Mar. 22
Apr. 3	Grain Elevator—Baltimore, Md.	Mar. 22
Apr. 3	Grain Elevator — Montreal, Que.	Mar. 22
Apr. 5	Road Material — Newton, N. J. Adv. Mar. 22.	Mar. 22
Apr. 5	Wharf, Chain Walls, etc. — New Orleans, La. Adv. Mar. 22.	Mar. 22
Apr. 9	Stadium—East Cleveland (Cleveland P. O.), O.	Mar. 15
Apr. 9	Fire Alarm System—Wichita, Kan.	Mar. 22
Apr. 10	Electric Standards—St. Louis, Mo.	Mar. 22
Apr. 13	Transmission and Telephone Lines—Seattle, Wash. Adv. Mar. 22.	Mar. 22

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y., Albany—See "Streets and Roads."

N. Y., Cobleskill — Had plans prepared new filtration plant. $15,000-$18,000.

N. Y., Fairport—Bd. Village Trustees plans new water system. To exceed $25,000. H. T. Tinney, pres.

N. Y., West Carthage (Carthage P. O.)—Plans new water system. $50,000. H. J. Starkweather, village pres.

Pa., Sharon—See "Streets and Roads."

N. C., Marion—Bd. Aldermen will sell $100,000 bonds April 9, to enlarge, extend and improve waterworks and sewerage systems. L. A. Neal, city clk.

Fla., Gainesville — See "Streets and Roads."

Tenn., Greeneville—Plans to expend $85,000 for improvements and extensions to water plant. J. A. Switzer, Greeneville, engr.

O., Barberton—Plans new water system. $905,000.

O., Columbus—See "Streets and Roads."

O., Norwalk—Plans new filtration plant. To exceed $15,000. Engineer not announced.

O., Rocky River — Making preliminary plans water supply for villages of Rocky River, Dover and Bay (Dover, P. O.). $300,000. G. B. Gascoigne, Leader-News Bldg., Cleveland, engr.

Ill., Springfield—Soon takes bids 5,000,000 gal. rein.-con. settling basin and 10,000,000 gal. turbine centrifugal pump. Burns & McDonnell, Interstate Bldg., Kansas City, Mo., engrs.

Wis., Phillips — Will sell $40,000 bonds for pumping station for water supply, watermains and sewers. C. F. Scheel, clk. Engineer not selected.

Wis., Wisconsin Rapids—Water Comn. plans to install iron removal plant. $25,000. C. Gross, mgr.

Minn., St. Paul—Rejected bids opened March 19, rein.-con. reservoir, 18,000,000 gal. capacity, Snelling Ave. Work will be done by day labor.

N. D., Fargo — Having plans prepared for waterworks and sanitary sewerage systems for Northside addition. $75,000. R. T. Jacobson, city engr.

Ark., Helena—See "Excavation, Drainage, Irrigation."

Tex., Elgin—March 27, to vote on $40,000 bond issue for waterworks improvements and extensions. Address J. Keeble, mayor.

Tex., Royse City—April 24, to vote on $45,000 bond issue for main extensions. Address A. L. Price, Royse City. Engineer not announced.

Okla., Tonkawa—Having plans prepared waterworks improvements. $70,000 bonds voted. Ruckel Eng. Co., Interurban Bldg., Hutchinson, Kan., engrs.

Ariz., Tucson—Making plans 65 mi. 4-16 in. c.i. mains. $500,000. G. H. Atchley, city engr.

Calif., Bakersfield—Bakersfield Municipal Water Dist. retained Olmsted & Gillelen, engrs., Hollingsworth Bldg., Los Angeles, to appraise two water plants and submit report as to needed improvements, to provide increased fire protection, and to construct extensions for future growth. To exceed $15,000.

Calif., Turlock—City will purchase 1 carload of pipe and fittings for city water system. H. Hall, city engr.

Calif., Chico—Plans election to vote on $475,000 bonds to purchase and improve 3 privately owned water systems. Former election defeated. F. S. Robinson, city engr. Noted Dec. 7.

Calif., Petaluma—Petaluma Municipal Water Dist., plans to vote on $750,000 bonds constructing water supply system, incl. storage dam, 2 diversion dams, pipe lines, flumes, canals, filtration plant, distributing system, etc. Howe & Peters, 24 California St., San Francisco, and C. G. Hyde, 2575 Buena Vista Ave., Berkeley, engrs.

Calif., Santa Barbara — Montecito Co. Water Dist., had preliminary report made distributing system and tunnel through Toro Canyon. $500,000 and $350,000 respectively. Cook, Wyant and Moore, Santa Barbara, consult. engrs. Noted Feb. 15.

Calif., San Bernardino—Plans election to vote on $140,000 bonds for water system. J. H. Osborn, city clk.

BIDS DESIRED

N. Y., New York—March 27, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in Webster Ave., Bronx Boro.

N. Y., Savannah—March 29, by Bd. Village Trustees, c.i. mains, reservoir and building for pumping station. J. P. Lawyer, engr.; adv. this issue.

N. Y., St. George—March 30, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in Midland and Maple Aves., 2nd, 3rd, 4th, 5th, 6th, 7th, 8th and 9th Sts., here.

N. J., Trenton—March 29, furnishing to Water Dept., twelve 6 in. valve opening hydrants, 4 ft. 6 in. trench, 8 in. hub connections, 8 in. standpipe, three 2½ in. independent gate hose and steamer nozzles, twelve 5 in. 3 way hydrants, 4 ft. 6 in. trench to have 1 steamer and two 2½ in. connections, all Corry type manufactured. by Rensselaer Mfg. Co., also 328 tons 6-16 in. Class B c.i. pipe, 150 tons sulphuric acid known as 66 degree Be commercial acid, price based on strength, furnishing and installing sluice gates at intake and outlet openings of municipal Log Basin. A. C. Gregory, City Hall, engr.

Tenn., Faetteville—April 4, by H. Higgins, city clk., 1,000,000 gal. concrete reservoir, also concrete roof for present reservoir. B. H. Klyce, 4th and 1st Natl. Bank Bldg., Nashville, engr.

Va., Richmond—April 18, at office E. W. Tafford, dir. Pub. Utilities, mechanical filter plant; adv. this issue.

Kan., Smith Center—March 30, by C. S. Sargent, city clk., Sect. 1, 500,000 gal. daily capacity filtration plant with necessary settling basins, 200,000 gal. clear well connection to present city mains, low service pumping station and intake in Solomon River, force main from here to Solomon River; Sect. 2, filter equipment for two 9 x 10 ft. filter units. Black & Veatch, Mutual Bldg., Kansas City, Mo., engrs. Noted Feb. 22.

Wis., Milwaukee—March 26, at office of Central Bd. Purchases, furnishing to Riverside Pumping Station c.i. pipe and specials. D. W. Hoan, chn.

Minn., St. Paul—March 26, by H. W. Austin, city purch. agt., 18,000 bbl. cement, 10,000 cu.yd. gravel, 5,000 cu.yd. sand for Water Dept., to be used for new reservoir. G. M. Shepard, city engr.

Mo., Trenton—April 3, by Burns & McDonnell, engrs., Interstate Bldg., Kansas City, improving waterworks, filtration plant, rebuilding present plant, and 7 new motor driven pumps, for city. $175,000. Noted Jan. 11.

BIDS RECEIVED

N. Y., New York—Bd. Purch., Municipal Bldg., opened bids March 14, furnishing delivering, unloading, stacking and storing c.i. pipe special and valve box castings, valves and double nozzle fire hydrants, to Dept. Water Supply, Gas & Electricity, from Kennedy Valve Mfg. Co., 95 John St., $34,390; Chapman Valve Mfg. Co., 180 Lafayette St., $37,497; Flockhard Fdry. Co., $67,560; A. P. Smith Mfg. Co., $146,531; Warren Fdry. & Machine Co., 11 Bway., $165,600; J. Fox & Co., 233 Bway., $345,469; U. S. Cast Iron Pipe & Fdry. Co., 71 Bway., $560,097. Noted March 8.

N. Y., New York—Dept. Water Supply, Gas & Electricity, Municipal Bldg., opened bids March 13, mains in Bway., Amsterdam, 10th and 11th Aves., West 51st, 54th, 57th and Clarkson Sts., Manhattan Boro, from Beaver Eng. Co., 57 Chambers St., $94,419; C. De Blasio, $105,209; Paladino Contg. Co., 437 East 120th St., $105,695. Noted March 8.

N. Y., New York—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., March 16, hauling and setting valves and hydrants in various streets, Manhattan Boro, from Wataga Contg. Co., $39,000; Beaver Eng. & Contg. Co., 51 Chambers St., $53,797; C. De Blasio, $74,474. Noted March 8.

N. Y., St. George—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, March 16, mains and appurtenances in various streets, here, from G. V. Cornell, $67,800; Knight & Demicco, 448 East Tremont Ave., New York, $83,900; Paladino Contg. Co., 437 East 120th St., New York, $88,800.

Wis., Hartford—Opened bids March 1, 150,000 gal. rein.-con. reservoir, (1) square tank (2) circular tank, from Lakeside Constr. Co., 1803 Grand Ave., Milwaukee, (1) $6,393 (2) $5,736; Whitewater Bridge Co., Whitewater, (1) $7,419 (2) $7,113; F. Dogherty Co., 37th St. and Fond du Lac Ave., Milwaukee, (1) $9,489. Steel and rein.-con. not included in bids. Noted Feb. 22.

Mo., St. Louis—Bd. Pub. Serv. City Hall, March 13, from U. S. Cast Iron Pipe & Fdry. Co., 520 Security Bldg., 380 tons Class B 6 in., 50 tons Class B 8 in. and 660 tons Class C 12 in. Amer. Waterworks Standard coated c.i. pipe, $51.50 per ton, 110 tons Class C 20 in. $50.60. Noted March 1.

CONTRACTS AWARDED

Md., Baltimore—Pig lead to J. Robertson Lead Wks., 827 South Howard St., $26,550. Noted March 8.

Fla., Zephryhills—City Council, waterworks improvements, incl. 200 tons c.i. pipe, 10,000 ft. galvanized pipe, one 75,000 gal. tank, 110 ft. tower, 2 centrifugal pumps, engines, pumping station, buildings and well, to E. G. Ladd, 61st St., Jacksonville, $26,353. Noted Jan. 11.

O., Cleveland—Cuyahoga Co. 8,398 ft. 6 and 8 in. c.i. mains for Impvt. 23 of Co. Sewer Dist., to Hadded & Kariel, 314 Eagle Ave., $37,342. Noted March 8.

Wis., Madison—Air lift equipment and pump complete with Booster tanks, to Wisconsin Fdry. Co., 627 East Main St., $2,120; city will install by day labor. Noted Feb. 22 under Miscellaneous.

Ore., Vernonia—For 8,760 ft. of 8 in. c.i. and 16,420 ft. 2 in. galvanized iron mains to Veronia Constr. Co., Vernonia, $26,278. Noted Dec. 21.

Calif., Antioch—Furnishing G. W. Price centrifugal pumps and motors, to Antioch Electric Co., Antioch, $2,987; concrete tanks to G. H. Field Co., Antioch, $12,340. Noted March 15.

Sewers

PROPOSED WORK

N. Y., Albany—See "Streets and Roads."

N. Y., Ogdensburg—Common Council and Bd. Pub. Wks., plan new sanitary sewer in St. Lawrence Ave. and other streets. $35,000-$40,000. D. J. Crichton, clk.

N. Y., West Carthage (Carthage P. O.)—Plans new sewerage system. $25,000. H. J. Starkweather, village pres.

Pa., Erie—Will take bids on or about April 24, intercepting sewerage system, to exceed $600,000. J. N. Chester, Union Bldg., Pittsburgh, engr.

Pa., Sharon—See "Streets & Roads."

N. C., Marion—See "Waterworks."

Fla., Bartow—Having preliminary plans prepared sanitary sewers and disposal plant. To exceed $25,000. Burns & McDonnell, Interstate Bldg., Kansas City, Mo., engrs.

Fla., Gainesville — See "Streets and Roads."

Tenn., Greeneville — Voted $40,000 for sewers in various streets. C. E. Coile, Greeneville, engr.

Tenn., McMinnville — Plans complete sewerage system. $50,000. O. C. Jennings, mayor.

Tenn., Murfreesboro—Making plans 6,000 lin.ft. sanitary sewers in various streets. R. E. Lowe, city mgr.

O., Columbus—See "Streets and Roads."

O., Columbus—Making preliminary plans sewer from above Ohio State University along Olentangy River down through city. $200,000. R. E. Simpson, city engr. J. H. Gregory, consult. engr.

Sewers (Continued)

O., Euclid—Preparing plans sewage treatment works. $300,000. G. B. Gascoigne, Leader-News Bldg., Cleveland, engr.

O., Hiram—Preparing plans for improvements and additions to sewage treatment works. G. B. Gascoigne, Leader-News Bldg., Cleveland, engr.

O., North Lima—Mahoning Co. (Youngstown) plans modern sanitary sewerage system. $50,000. L. Fawcett, Court House, Youngstown, co. sanitary engr.

Wis., Phillips—See "Waterworks."

Ia., Dunlap — Soon takes bids storm sewers. $25,000. Henningson Eng. Co., National Bldg., Omaha, Neb., engrs.

Minn., St. Paul—Northern Pacific Ry., 5th and Jackson Sts., takes bids within 2 weeks, 1,150 ft. rein.-con. sewer, 16 ft. wide, 12 ft. high. $250,000. Engineering Dept. of Company, engrs.

N. D., Casselton—April 2, to vote on $60,000 bonds sanitary sewerage system, 27,924 lin.ft. 8 in., 1,980 lin.ft. 10 in., 526 ft. 12 in. pipe, one sewage disposal tank. Opening of bids postponed. Noted March 1.

N. D., Grafton—Plans septic tank. $29,000. H. J. Johnson, clk.

N. D., Fargo—See "Waterworks."

Mo., Maplewood (St. Louis P. O.)—J. D. Schuster, mayor, City Hall, received no bids March 7, sewers in Manchester Dist. 2, Laclede Sta. Rd. Sewer Dist. 1, Caroline Ave., Louise Ave. and Brent St. Sewer Dists. Will readvertise. Noted March 1.

Tex., Houston—April 9, to vote on $250,000 bond issue for storm sewers. J. C. McVey, city engr.

Tex., Royse City—April 24, to vote on $40,000 bond issue for mains and disposal plant. Address A. L. Price, Royse City. Engineer not announced.

Tex., Rosenberg—City Comn. opens bids about April 16, disposal plant and sewers. $50,000. H. E. Sands, Mason Bldg., Houston, engr.

Okla., Billings — Having plans prepared sewerage system and disposal plant. Black & Veatch, Mutual Bldg., Kansas City, Mo., engrs.

Colo., Colorado Springs — Plans storm sewers in Dist. 3, 19,600 ft. 12-45 in. clay, cement or segmental block. $91,000. F. O. Ray, City Hall, engr.

Calif., Paso Robles—City soon takes bids sewers in Dists. 10 and 11, 18,720 lin. ft. 6 in. vitr. pipe, etc. $30,000. W. W. Hughes, Paso Robles, engr.

Calif., Riverside—Had plans prepared sewers in various streets, 25,372 lin.ft. 6 in., 9,149 lin.ft. 8 in., 3,547 lin.ft. 10 in., 657 lin. ft. 12 in., 4,196 lin.ft. 15 in., 2,595 lin.ft. 18 in. and 2,636 lin.ft. 24-in. vitr. pipe, 3,965 lin.ft. 18-in. and 3,965 lin.ft. 22-in. rein.-con. pipe, 184 cu.yd. concrete, 18,702 lb. reinforcing, etc. L. Nolgar, city engr.

Calif., San Diego — See "Streets and Roads."

Que., Montreal—Plans 412 ft. 2 x 3 brick sewer in Dandurand St. from 16th to 17th Aves. $3,593, 2,256 ft. in Eadie St. from Church Ave. to Dubois St., $26,670. E. Fusey, supt. sewer dept.

Ont., Leamington—Plans to lay sewers and concrete pave Erie St. $40,000.

Ont., Mt. Forest — See "Streets and Roads."

BIDS DESIRED

D. C., Wash.—March 30 by Dist. Comrs., 509 Dist. Bldg., constructing sewer; adv. this issue.

Ky., Hazard—April 10, by A. G. Taylor, city clk., sanitary sewerage system. J. W. Craft, mayor; adv. this issue.

O., Akron—March 26, by W. F. Peters, dir. Pub. Serv., 4,545 ft. 8-60 in. brick and 2,235 ft. 15-27 in. vitr. sewers in Tallmadge Ave. and Carpenter Heights, 3,860 ft. 30-54 in. brick or segmental block in Brown St. $202,000. Former bids rejected. J. E. Root, Delaware Bldg., engr. Noted March 1.

O., Youngstown—April 3, by Comrs. Mahoning Co., Granberry Run sewerage system, Boardman Dist. $280,000. G. Jones, clk.

Minn., Hutchinson — See "Streets and Roads."

S. D., Lennox—March 28, sanitary outlet sewer, 2,835 lin.ft. 12 in. pipe, also sewage disposal plant. $25,000. Smith & Reeves, Mitchell, engrs.

Mo., Sugar Creek—March 29, by C. E. Deland, city clk., constructing 11,042 lin.ft. 10-15 in. vitr., 96 lin.ft. 10-14 in. c.i. and 280 lin.ft. 12-16 in. wrought steel sewers, etc. Black & Veatch, Mutual Bldg., Kansas City, engrs. Noted March 8.

Calif., Yuba City—April 2, by C. C. Kline, city clk., sewage pumping plant, incl. equipment, 10,500 lin.ft. concrete pipe, flushers, manholes, etc. $50,000 bonds voted. E. Von Geldern, Yuba City, engr.

BIDS RECEIVED

N. Y., New York—W. J. Flynn, acting pres. Bronx Boro, 3rd and Tremont Aves., March 15, sewers in (1) Strang Ave. (2) Mayflower Ave. (3) Pilgrim Ave. (4) Theriot Ave. (5) Cruger Ave. (6) Taylor Ave. (7) Roebling Ave. (8) Orloff Ave. (9) Burnet Pl. (10) Mace Ave., from Anita Constr. Co., 2975 Marion Ave., (1) $122,723; J. L. Sigretto, Woodhaven, (1) $134,943 (3) $17,518 (4) $11,163 (6) $9,630 (7) $8,751; Estates Contg. Co., (1) $153,317 (4) $11,763 (5) $13,172 (7) $8,963 (8) $11,890 (9) $4,691 (10) $1,899; C. W. McDonald, West 10th St., Brooklyn, (2) $56,492; J. V. Timoney Co., 220 East 201st St., (2) $60,228 (4) $11,782 (5) $12,991 (6) $12,179 (10) $1,672; F. Moe, (2) $67,692; Gregorio & Gabriele, 1129 8th Ave., (3) $21,134 (5) $14,598 (6) $12,182 (8) $10,490 (9) $4,340 (10) $1,874; Knight & Demicco, 448 East Tremont Ave., (7) $8,525. Noted March 8.

N. J., Matawan—W. H. Sutphin, mayor, and Boro Council, (1) 6½ mi. 6-12 in. sewers (2) sewage disposal works, from Seaman & Letzkus Co., Stone Harbor, (1) $84,423 (2) $16,998; Dianallo & Co., 66 Grant Ave., Nutley, (1) $145,547; Romano & Tozzi, Montclair, (1) $149,064; Kuchar Bros., Spring Valley, N. Y., (2) $19,000; Spencer, White & Prentis, Inc., 100 West 41st St., New York City (2) $20,895. Noted Feb. 15.

Mich., Detroit—Lateral sewer in blocks bounded by Audubon, Poupard, Mack and Waveney Aves., 11,200 ft. 10-24 in. vitr. crock pipe, from Liberty Constr. Co., 1026 Detroit Savings Bank Bldg., $29,790; W. Blanck & Co., 827 Ford Bldg., $32,616; Hammen & Co., 4612 Woodward Ave., $34,000.

CONTRACTS AWARDED

N. Y., Buffalo—To J. M. Fahning, 460 Leroy Ave., 10 in. tile sewer in Gratiot Ave. $4,941, 10-24 in. in Lenox Ave. $32,418, 10-15 in. in East Hertel Ave. $2,500 and Hertel Ave. Part 2 $1,783; to Dark & Co., 654 Main St., 36 in. in Hewitt Ave. $9,663, 27 in. in Hewitt Ave. $8,783; to L. DiPasquale, 126 Erie St., 10-20 in. sewer in Parkridge Ave. $5,315, 10 in. tile Eagles St. $1,355.

Mich., Springwells — Constructing 1,348 ft. 66 in. and 2,280 ft. 60 in. brick or monolithic concrete sewer in Greenfield Blvd. and Rome Ave., to Detroit Drainage Constr. Co., 5099 Lemay Ave., Detroit, $63,155.

Ill., Rockford—Sewers in 14th Ave., to P. O. Lary & Son, La Porte, Ind. Engrs. est. $25,000.

Ia., Walnut—To Welp & Zigrang, Bancroft, sanitary sewerage system, $21,638; Gjellefeld-Chapman Constr. Co., Forest City, sewage disposal plant, $9,438.

Mo., Neosho—H. A. F. Cloud, city clk., to Queal Constr. Co., Herington, Kan., sanitary sewers in Sect. 1 (Public Sewers) $53,087. Dist. Sewers (Dist. 1) $19,481. Dist. Sewers (Dist. 2) $2,671. Dist. Sewers (Dist. 3) $171,299. Noted Feb. 22.

Nev., Sparks—See "Streets and Roads."

Calif., Fresno—Concrete and vitr. sewers in Stanislaus and H Sts., to Merced Concrete Pipe Co., 16th and H Sts., Merced, $20,878. Noted March 15.

Bridges

PROPOSED WORK

N. Y., Ebenezer — Pennsylvania R.R., Broad St. Sta., Phila., plans eliminating grade crossing on Union Highway, here, incl. concrete abutments with span of 64 ft., covering 4 tracks, bridge approaches to be 28 ft. wide for highway and 10 ft. for electric railway line. $125,000. Engineer not announced.

N. Y., Waverly—Erie R.R., 50 Church St., New York City, plans overhead railroad crossing bridge, here. $150,000. R. C. Falconer, ch. engr.

Pa., Mercer—Mercer Co. plans several new bridges. Cost to exceed $50,000. F. P. Graham, co. engr.

N. C., Fayetteville — See "Streets and Roads."

Tenn., Clarksville—City, State Hy. Dept., Nashville, and Louisville & Nashville R.R. plan rein.-con. viaduct on Academy Ave. here, to connect with state highway. $35,000. J. Alexander, city engr.

O., Dayton — Plans 2 span steel truss bridge, 200 ft. long, 20 ft. wide, over Wolf Creek on Antioch St., 1 span will be part of old bridge. $50,000. I. E. Houk, city engr.

O., Fremont—Sandusky Co. had revised plans prepared 320 ft. concrete bridge, 44 ft. driveway, over Sandusky River. $150,000. Braun, Fleming, Knollman & Prior, 233 South High St., Columbus, engrs.

Minnesota—See table under "Streets and Roads."

Kan., Iola—See "Streets and Roads."

Kan., Wellington — See "Streets and Roads."

Wash., Colfax — Plans 120 ft. bridge, Main St. $50,000. Engineer not selected.

Ore., Portland — Multnomah Co. plans Ross Island and Morrison St. Bridges over Willamette River, $1,600,000 and $3,000,000 respectively. R. E. Kremers, 1370 East 32nd St., engr. in charge. I. J. Hedrick, 3614 Garfield Ave, Kansas City, Mo., consult. engr. Noted Nov. 16.

Calif., Sacramento—Sacramento Co. soon takes bids, steel for Paintersville Bridge 700 ft. long, and Steamboat Slough Bridge, 280 ft. long. Bids for erection will be asked when steel is delivered. C. W. Deterding, co. surv. Noted Nov. 16.

BIDS DESIRED

N. Y., Matawan—April 4, by Bd. Freeholders Monmouth Co. (Freehold), bridge on Church St., here. G. K. Allen, Jr., 60 Broad St., Red Bank, co. engr.; adv. this issue.

Virginia—See "Streets and Roads."

Louisiana—April 12, by State Hy. Comn., Reymond Bldg., Baton Rouge, one 8 ft. steel span with 20 ft. girder approaches, in Winn Parish, 152 ft. creosoted pile trestle approach, one 50 ft. plate girder, three 100 ft. and two 80 ft. steel truss spans, 481 ft. creosoted timber trestle, etc., in Madison Parish. J. M. Fourmy, state engr.

Ohio—See "Streets and Roads."

O., Painesville—April 4, Comrs. Lake Co. rein.-con. bridge and approaches, over Grand River, on St. Clair St. between here and Fairport. W. P. Brown, 750 Prospect Ave., Cleveland, consult. engr. and archt. Noted Nov. 30.

Mich., Galesburg—April 3, by State Hy. Dept., Lansing, Bridge 390304, one 90 ft. concrete girder and two 60 ft. concrete girder approach spans, near here, Kalamazoo Co. F. F. Rogers, state comr.

Ill., Gurnee—April 2 at office C. E. Russell, supt. highways Lake Co., (Waukegan) bridge over Des Plaines River, here; adv. this issue.

BIDS RECEIVED

O., Akron—W. F. Peters, dir. Pub. Serv., March 12, 30 x 200 ft. concrete trestle and 40 x 98 ft. steel encased concrete bridge, West Market St., from T. E. McShaffrey Constr. Co., 171 South Forge St., $38,320; H. T. French Constr. Co., 683 Noah Ave., $40,389; T. Sheahan, Youngstown (street address not available), $43,355. Engrs. est. $34,632. Noted March 1.

CONTRACTS AWARDED

Mass., Fisherville—Bd. Selectment Town of Grafton, 84 ft. concrete girder bridge, Depot St., here, to E. D. Ward Co., 82 Foster St., Worcester. Engrs. est. $25,000.

N. Y., Massena—F. A. Hough, town clk., substructure for bridge over Grasse River, to Sullivan Constr. Co., 921 Bergen Ave., Jersey City, N. J., $48,996; superstructure, to Phoenix Bridge Co., Phoenixville. $167,500. This corrects report in March 8 issue.

Pa., Beaver—Comrs. Beaver Co., 400 ft. steel and concrete abutment bridge at Walkers Mills, to W. S. Rae, 419 Oliver Bldg., Pittsburgh, $37,800.

Pa., Mayfield—Comrs. Lackawanna Co., Scranton, concrete bridge over Lackawanna River, here, to Anthracite Bridge Co., 300 Genet St., Scranton, $24,617.

Pa., Media—Delaware Co., Plush Mill Bridge 107, (a) lump sum bid, (b) quantity tabulation, from Seeds & Durham, 6314 Wissahickon Ave., Phila., (a) $197,475, (b) $203,380; H. Denburger Contg. Co., Bethlehem, (a) $240,000, (b) $246,040; Mundy Paving Co., 226 South Warnock St., Phila., (a) $245,720, (b) $253,630. Contract awarded to lowest bidder.

Illinois — Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, to Vincennes Bridge Co., Vincennes, Ind., 2 rein.-con. bridges and substructure for 1 steel bridge, Route 1, Sect. 16-B, Lawrence Co. and 1 superstructure for steel span, Route 1, Sect. 16-C, Lawrence Co., $118,626 and $31,094 respectively; R. F. Conway Co., 123 West Washington St., Chicago, 2 concrete bridges Route 26, Sect. 1-B, Stephenson Co., $16,635. Noted Jan. 11.

Minn., Brainerd—State, Crow Wing and Morrison Counties, Bridge 3721, near Crosby, two 60 ft. steel spans, one 140 ft steel center span, 2 concrete piers, 2 concrete abutments, to Minneapolis Bridge Co., 924 Metropolitan Life Bldg., Minneapolis, $25,872. Noted Feb. 15.

Minn., St. Paul—Chicago, St. Paul, Minneapolis & Omaha Rv., 275 East 4th St., rein.-con. bridge over White Bear Ave., to H. C. Struchen, 404 Dakota Bldg., $60,000.

Bridges (Continued)

Kan., Columbus—Comrs. Cherokee Co. 2 concrete arch bridges, one 80 ft., other 130 ft., on Federal Aid Project 142, to Maxwell Constr. Co., Columbus, $37,397. Noted Feb. 22.

Kan., Kansas City—For 100 ft. steel and rein.-con. bridge, 40 ft. roadway, two 10 ft. sidewalks, over Turkey Creek, to Halpin Boyle Constr. Co., 709 Railway Exch. Bldg., Kansas City, Mo., $32,000. Noted March 8.

Calif., Santa Ana—Orange Co., constructing bridge on Coast Highway, in 2nd Rd. Dist., eleven 30 ft. spans on concrete piles, 55 ft. steel girder, to W. Ledbetter Co., Pacific Electric Bldg., Los Angeles, $62,-500. Noted March 8.

Dams

PROPOSED WORK

Ark., Helena—See "Excavation, Drainage, Irrigation."

Calif., Petaluma—See "Waterworks."

CONTRACTS AWARDED

Oklahoma—See "Miscellaneous."

Calif., Napa — City, dam for Milliken Canyon water project, Proposition F, consisting of stripping, using concrete rock adjacent to dam site, with sand made from rock, grouting, gunite lining, etc., to Boardwell & Zimmerman, Calistoga, $117,980; cement to F. G. Noyes & Co. and Napa Lumber Co., Napa, $3.11 per bbl.; 48,000 lb. ¾ in. square reinforcing bars, to Badt-Falk Co., 74 New Montgomery St., San Francisco, $3.43 cwt.; gates valves to Waterworks Supply Co., Call Bldg., San Francisco, $845. Noted March 15.

Calif., Oroville—Oroville-Wyandotte Irrigation Dist., earth fill dam, (material to be furnished by Dist.), to C. A. Bayles, Biggs, $35,711. Noted March 15.

Que., Kemogami—Provincial Government, Quebec, 2 large dams on Chicoutimi and Sable Rivers, and smaller ones on nearby streams, to Nova Scotia Constr. Co., Halifax, $985,682.

Railways

PROPOSED WORK

North Dakota—Great Northern R.R., 534 Metropolitan Life Bldg., St. Paul, Minn., plans relaying 90 to 100 lb. steel between Reach and Stanley, double track between Springbrook and 1 mi. east of Wheelock. $1,000,000. A. H. Hogeland, ch. engr.

Ohio — See "Streets and Roads under Cleevland."

Idaho — Clearwater Timber Co., Clearwater, having surveys made for about 52 mi. standard gage railroad from Orofino, northeast. $3,000,000.

California—Southern Pacific Co., 65 Market St., San Francisco, plans 4 mi. spur track from Richgrove (Tulare Co.) to point new Delano (Kern Co.). G. W. Boschke, San Francisco, ch. engr.

Excavation, Drainage, Irrigation

PROPOSED WORK

Wis., Madison—Dane Co. Drainage Bd. having plans prepared 1½ mi. open ditch and 6 mi. 8-12 in. vitr. drain tile. E. R. Jones, Capitol Bldg., engr.

Kan., Ottawa—Drainage Bd. Dist. 2, surveys completed drainage of high water zone along Marais des Cygne River. $25,-000. Harrington, Howard & Ash, Orear Leslie Bldg., Kansas City, Mo., engrs.

Ark., Helena—White River D. D. 1, located in Phillips, Desha and Monroe Counties, had plans prepared system, 160,000 acres, levees, dams, ditches, also pumping units and pump. $4,500,000. Harrington, Howard & Ash, Orear Leslie Bldg., Kansas City, Mo., engrs.

Idaho—State Legislature, Boise, appropriated $98,000 to drain 10,000 acres state land in Gem Irrigation Dist.

Calif., Petaluma—See "Waterworks."

BIDS DESIRED

N. Y., Newburgh—April 3, by W. J. McKay, city mgr. 2 dams about 2 mi. south of here where southerly branch of Silver Stream crosses under New York City Aqueduct. Fuller & Harding, 170 Bway., New York, engrs.; adv. this issue. Former bids rejected. Noted Aug. 24.

Louisiana—See "Streets & Roads."

Tenn., Savannah—April 14, by Chairman Drainage Com. Hardin Co. excavating, clearing, etc., 2.3 mi. drainage canal Lower Lick Creek D. D. W. H. Stinson, Milan, engr.

Ill., Savanna—March 29 by Comrs. Carroll Co. Drainage and Levee Dist. 1, at office of H. P. Greison, secy., 16 mi. levees and ditches, 768,700 cu.yd. excav., etc. Elliott & Harman Eng. Co., Peoria, engrs.

Ia., Carroll—March 30, by Auditor Carroll Co., drainage work. $60,000. J. F. Maher, Carroll, engr.

Ia., Sioux City — April 3 by W. M. Pritchard, aud. Woodbury Co., for Wolf Creek D.D., near here, 60,000 cu. yd. excav., etc. C. Moriarty, United Bank Bldg., superv. engr. Noted Mar. 15.

Minn., Albert Lea—March 30, by Freeborn Co., Judicial Ditch 9, Sect. 0, 12,714 lin.ft. open ditch, 101,862 cu.yd. excav., leveling spoil banks, 25,428 lin.ft. flood water control structures; Sect. T-40, 619 lin.ft. 6-40 in. tile; Sect. L., laying and backfilling, 15,788 lin.ft. 8-34 in. pipe; Sect. L-2, 17,619 lin.ft. 6-22 in. pipe. $64,-394. J. H. Severson, Albert Lea, engr.

Mont., Chinook—March 26, by Zurich Irrigation Dist., Zurich, main canal in Ft. Belknap, Alfalfa and Zurich Irrigation Dists., 3,000 cu.yd. concrete, 150,000 lb. reinforcing, 16,000 lb. structural steel, 1,500 sq.yd. paving, 145,000 ft. lumber, 1,550 ft. steel flume, etc. A. G. Middleton, Chinook, engr.

Colo., Lamar—April 9 (change of date), at office of Granada D. D., Markham Bldg., constructing drainage system. E. H. Gerecke, secy.; adv. this issue. Noted March 8.

Calif., Oroville — April 12, by J. A. Wisner, secy. Oroville-Wyandotte Irrigation Dist., concrete dam (Lost Creek Storage Wks.), 1,000 cu.yd. earth, 1,000 cu.yd. loose rock and 500 cu.yd. solid rock excav., 10,000 cu.yd. masonry. L. Jorgensen, Hobart Bldg., consult. engr.

CONTRACTS AWARDED

Wis., Jefferson—Jefferson Co. Drainage Bd. 4,335 lin.ft. 6-8 in. and 11,415 lin.ft. 12-18 in. tile drainage, 26,000 cu.yd. excav. for shallow outlet ditch; labor to Wisconsin Drainage Co., Elkhorn (street address not available); tile to Waukesha Concrete Tile Co., Waukesha (street address not available). Engrs. est. $25,000. Noted Feb. 22.

Wis., Manawa—Waupaca Co. Drainage Bd. 4.2 mi. open ditch, 58,000 cu.yd, excav., to Rood Constr. Co., Wisconsin Rapids, $0.13 per yd. Noted Feb. 15.

Minn., Redwood Falls—Redwood Falls and Brown Counties, Judicial Ditch 24, 17,-490 cu.yd. excav., 36,709 lin.ft. 6-30 in. drain tile, 8 bulkheads, 64 inlets, 57 c.i. grates, to New Ulm Drainage and Constr. Co., New Ulm, $38,610. Noted Feb. 15.

Minn., Redwood Falls—Redwood Co., Ditch 52, (1) Sect. 2, 24,270 lin.ft. 6-18 in. tile, 500 lin.ft. 12 in. sewer pipe, 12 bulkheads, etc., (2) Sect. 3, 22,350 lin.ft. 6-14 in. drain tile, 20 surf water inlets, (3) Sect. 4, 35,700 lin.ft. 6-26 in. drain tile, (4) Sect. 5, 17,000 lin.ft. 6-18 in. drain tile, (5) Sect. 6, 8,500 lin.ft. 28-36 in. drain tile, (6) Sect. 7, 76,050 lin.ft. 6-22 in. drain tile, (a) tile, (b) labor, to National Sewer Pipe Co., Webster City, Ia. (1a) $5,315 (2a) $3,609 (3a) $14,315 (4a) $5,132; What Cheer Clay Products Co., What Cheer, Ia., (5a) $22,-693 (6a) $24,665; Trefry & Hendrickson, Redwood Falls, (2b) $2,995 (4b) $4,495; Sodergren & Lofquist, Morton, (3b) $8,969 (5b) $7,650; Peterson & Jorgensen, Wabasso, (1b) $3,330; L. Hansen, Walnut Grove, (6b) $14,244. Noted Feb. 15.

Wash., Prosser—Horse Heaven Irrigation Dist., diverting waters of Klickitat River at foot of Mt. Adams, Klickitat Co., and leading it through 80 mi. main canal to lands in Twps. 6, 7 and 8 N., Benton and Yakima Counties between Yakima and Columbia Rivers, to Warren Bros. Co., Parkman Bldg., Boston, Mass. Work includes 10 x 20 ft. main canal, concrete lined, 7.5 mi. steel siphons, 26,000 lin.ft. rock tunnel, grading includes 2,700,000 cu.yd. earth, 814,000 cu.yd. loose and 1,602,000 cu.yd. solid rock (Columbia basalt), distribution system includes 3,200,000 cu.yd. earth, 103,000 cu.yd. loose and 16,000 cu.yd solid rock excav., 3,000,000 ft. concrete pipe for general distribution to lands. Cost $90 per acre, incl. interest during construction period of 3 years. Authorized issue of $32,000,000 bonds; are issuing $28,000,000. Unit prices are as follows: common earth $0.43 per cu.yd., loose rock $1 per cu.yd., solid rock $1.86 per cu.yd., tunnel $62.50 per lin.ft., steel $0.08 per lb. concrete work $24.35 per cu.yd.

Streets and Roads

PROPOSED WORK

Conn., New Britain—Plans paving South Main St. from Ash to Brook Sts., 34 ft. probably 8 in. concrete, $15,000. Broad St. probably brick and concrete, $27,000. J. D. Williams, city engr.

N. Y., Albany—Bd. Contr. and Supply takes bids in spring grading, concrete curbing, 5 ft. concrete sidewalk, laying sewer and water mains and asphaltic concrete, willite or concrete paving carriageway of Ramsey Pl., Clermont St. from Western to Melrose Aves., Morris St. from South Lark Ave. to Robin St., Eileen St. and Hawthorne Ave. from Western to Melrose Aves. Melrose Ave. from Edgewood Ave. to Brevator St., Marion Ave. from Western Ave to Cortland St., Hansen and Woodlawn Aves. from Erie St. to Main Ave.; grading concrete curbing, 6 ft. concrete walks, sewers, and asphalt, asphaltic concrete, willite or concrete paving carriageway of Belvider Ave. from Western Ave. to Clermont St.; repaving South Lark St. from Clinton to Washington Aves.; redressed granite blocks on concrete; concrete sidewalks on north side of Western Ave.; sewer in Western Ave. from Fairlawn Ave. to Clermont St.

N. Y., Albany—Bd. Pub. Wks., plans paving portions of Ontario St., Homestead, Myrtle and Washington Aves. To exceed $25,000. J. G. Brennan, city engr.

N. Y., Cobleskill—Village Bd. had plans prepared new concrete paving. $45,000-$50,000.

N. Y., Lowville—April 3, to vote on $25,-000 bonds for rein.-con. road over "Beeches Bridge" dyke. C. H. Arthur, village pres.

N. Y., Manlius — Plans paving various streets. $26,930.

N. Y., Tonawanda—Bd. Pub. Wks. plans paving Main St., brick. $30,000. C. S. Warren, mayor. T. W. Barrally, city engr.

N. Y., Troy—Bd. Pub. Wks. plans grading, curbing and paving Cragin and Lake Aves. $35,989. A. E. Roche, city engr.

N. Y., Troy—Bd. Pub. Wks., plans paving 3rd St. $33,951. A. E. Roche, city engr.

N. Y., Watervliet—H. E. Gabriels, city mgr. and Bd. Pub. Wks. plan paving 19th St. To exceed $25,000.

Pa., Johnsonburg—Plans paving Cushing Ave., brick, concrete or similar material. Engineer not announced.

Pa., Scranton—Plans sheet asphalt and stone block pavements on Vine St. from Taylor to Arthur Aves. $45,010. W. Lafontaine director public works.

Pa., Sharon — Plans sidewalks, curbs, gutters, sewers and water mains in Baldwin Ave. $25,000. L. Burnside, city engr.

W. Va., Parkersburg—Harris Dist., Wood Co., election April 10, to vote on $85,000 bonds, building 13¼ mi. roads. C. E. Pahl, co. clk.

N. C., Fayetteville—Comrs. Cumberland Co., will sell $455,000 bonds April 12, road and bridge construction. D. Gaster, co. treasurer.

N. C., Granite Falls — Having surveys made several miles concrete sidewalks. C. C. Babb, Granite Falls, engr.

N. C., Lincolnton—Comrs. Lincoln Co. plan hard surfacing 5 mi. road from Lockmans Store to Macpelah. $150,000. R. C. Goode, chn.

N. C., Lincolnton—Comrs. Lincoln Co., plan hardsurfacing 10 mi. road from East Main St. to Alaxis. $25,000. R. C. Goode, Chn. Co. Comn.

N. C., Statesville—Iredell Co. (Statesville) and Catawba Co. (Newton) plans completion of highway from Statesville to Newton. $500,000. This road to be built with assistance and under supervision of State Hy. Comn., Raleigh. C. M. Upham, Raleigh, state highway engr.

N. C., Wadesboro—Having surveys made paving principal streets, probably sheet asphalt.

N. C., Winston-Salem—Forsyth Co. plans paving 4 mi. road from Winston-Salem to Davidson Co. line, concrete or asphaltic. $120,000. State Hy. Comn. will probably assist in construction. C. M. Upham, Raleigh, state highway engr.

Florida — State Hy. Dept., Tallahassee, sold $145,000 bonds for street paving. C. A. Browne, state highway engr.

Fla., Gainesville—Plans election to vote on $300,000 bonds for paving, waterworks, light and sewer improvements. J. E. Waugh, city clk.

Streets and Roads (Continued)

Fla., Starke—Bradford Co., rejected bids Rd. No. 12 to Clay Co.; 12.5 mi. road from Starke to New River and from Starke to Clay Co.; 13.3 mi. Lawten to Cross Rds., Lawtey to Clay Co., Starke to Cross Rds. E. R. Neff, Starke, engr. Noted Jan. 18.

Tenn., McMinnville—Plans to pave various streets. $100,000. O. C. Jennings, mayor. Engineer not selected.

Tenn., Murfreesboro—Making plans surfacing, curbing and guttering various streets, 20,000 sq.yd. asphalt, 6,000 lin.ft. concrete curb and gutter. R. E. Lowe, city mgr.

O., Akron—W. F. Peters, dir. Pub. Serv., takes bids in April or May, grading, curbing and paving, etc. 6,950 ft. Delia and Storer Aves., Elinor, Bates and Christie Sts., vitr. brick or asphalt. $159,000. E. A. Kemmler, Delaware Bldg., engr.

O., Canton—Stark Co. cancelled bids opened Feb. 14, grading and paving 5 mi. Canton-Navarre Rd. Noted Feb. 22.

O., Cleveland—Cleveland Ry. Co., c/o P. Wilson, secy., Hanna Bldg., plans laying new steel rails and paving 16 streets, granite block on concrete. $869,807. Private plans.

O., Columbus—Making plans grading, laying necessary water services and sewer connections and paving 480 ft. Bradley St., 50 ft., brick $7,159, asphalt $6,154; 727 ft. Charles St., 40 ft., brick $11,070, asphalt $9,522; 408 ft. alley west of Douglass St., 20 ft., brick $3,276, concrete $2,584; 491 ft. alley north of Mt. Vernon Ave., 16 ft., brick $3,036, concrete $2,371; 699 ft. 2nd alley north of Leonard Ave., 20 ft., brick $4,405, concrete $3,465; 740 ft. alley west of Summit St., 16 ft. ,brick $4,633, concrete $3,610; 517 ft. alley north of Gates St., 16 ft., brick $3,224, concrete $2,519; 655 ft. alley west of Miller Ave., 15 ft., brick $4,321, concrete $3,469; 2,275 ft. alley west of Oakwood Ave., 20 ft., brick $15,514, concrete $12,652. R. H. Simpson, city engr.

O., Marietta—Plans paving Greene St., 7 in. rein.-con., $100,000; regrading, widening 5 ft. on either side and resurfacing Second St., vitr. brick, $38,969. C. A. Stone, city engr.

O., Youngstown—Plans paving Hartford Ace. and Sillman St. To exceed $40,000. I. Turner, city engr.

Michigan — State Hy. Dept., Lansing, soon takes bids grading and surfacing 7½ mi. concrete highways, Wayne and Hillsdale Counties. F. F. Rogers, state comr.

Michigan—State Hy. Dept., Lansing, soon takes bids grading and concrete surfacing 8 mi. Huron and Monroe Counties. F. F. Rogers, comr.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, rejected bids concrete paving 0.89 mi. Project 9, Sect. C-1, Madison Co. Noted Jan. 4.

Ill., Rockford—Plans paving 29,140 sq. yd. 14th Ave. $99,900; Winnebago St. $29,700. B. C. Harvey, city engr.

Ill., Rockford—Soon receives bids paving 10th St., $50,600; 18,250 sq.yd. concrete North Main St., $62,500. B. C. Harvey, city engr.

Wis., Waukesha—Making plans concrete paving 10,000 sq.yd. Racine and Fairview Aves., integral curb and gutter. A. P. Kuranz, City Hall, engr.

Ia., Clinton—Plans paving, curbing and guttering 2,000 ft. various streets, 40 ft., brick, bitulithic or sheet asphalt. $28,000. B. R. Anderson, city engr.

Ia., Dunlap—Soon receives bids grading, curbing and 60,000 sq.yd. paving, vitr. brick, asphalt, concrete or asphaltic concrete. $200,000. Henningson Eng. Co., National Bldg., Omaha, Neb., engrs.

Minnesota—County Appropriations for Road and Bridge Construction During 1923:

County	Amount	County Engineer
Aitkin	$79,980	J. L. Tierney, Aitkin
Anoka	40,000	H. B. Childs, Anoka
Beltrami	75,000	S. D. Snyder, Bemidji
Benton	35,000	P. Zeeze, Foley
Big Stone	25,000	F. W. Engdahl, Ortonville
Brown	75,000	C. M. Robertson, New Ulm
Carlton	65,000	N. C. Nickerson, Carlton
Carver	100,000	L. A. Zeman, Chaska
Chippewa	49,736	R. G. Mitchie, Montevideo
Chisago	60,000	H. L. Colwell, Center City
Clay	100,301	E. Martinson, Moorhead
Crow Wing	110,000	W. M. Murphy, Brainerd
Cottonwood	50,000	D. E. Savage, Windom
Faribault	60,000	L. Quarve, Blue Earth
Fillmore	115,000	W. Dunbar, Preston
Goodhue	160,000	J. A. Prior, Red Wing
Grant	45,000	W. E. Burgess, Elbow Lake
Houston	50,000	C. H. Lund, Caledonia
Hubbard	25,000	H. A. Dahms, Park Rapids
Isanti	67,081	P. M. Jorell, Cambridge
Itasca	262,000	H. A. LeSueur, Grand Rapids
Jackson	50,000	W. M. Richmond, Jackson
Kandiyohi	89,868	H. L. Wadell, Willmar
Kittson	60,000	G. H. Nelson, Hallock
Lac Qui Parle	50,000	F. Roe, Madison
Le Sueur	150,000	R. F. Nichols, Le Sueur Center
Lincoln	40,000	J. C. West, Ivanhoe
Lyon	100,000	C. W. Anderson, Marshall
Meeker	90,000	G. H. Martz, Litchfield
Marshall	120,000	J. E. Dishington, Warren
Mille Lacs	45,000	A. Leonard, Milaca
Morrison	92,000	J. E. Viner, Little Falls
Murray	70,000	J. A. Myron, Slayton
Nicollet	50,000	H. W. Daniels, St. Peter
Nobles	135,000	N. S. Thayer, Worthington
Norman	50,000	J. A. Erickson, Ada.
Olmsted	130,000	E. R. Boyce, Rochester
Otter Tail	150,000	J. Dieseth, Fergus Falls
Pennington	30,000	B. E. Umland, Thief River Falls
Pine	70,000	H. Jurgensen, Pine City
Pipestone	45,000	E. Keeler, Pipestone
Polk	125,000	E. H. Harding, Crookston
Pope	50,000	F. M. Shepard, Glenwood
Redwood	175,000	J. F. O'Mara, Redwood Falls
Renville	60,000	D. H. Gilchrist, Olivia
Rock	45,000	J. Brown, Luverne
Stearns	90,000	M. J. Cleveland, St. Cloud
Swift	100,000	L. R. Johnson, Benson
Scott	70,000	D. Childs, Shakopee
Wadena	50,000	E. S. Ward, Wadena
Waseca	90,098	D. E. Davison, Waseca
Washington	85,000	J. G. Merton, Stillwater
Wilkin	65,000	M. Brataas, Breckenridge
Wright	90,000	C. E. Stahl, Buffalo

Kan., Atchison—Comrs. Atchison Co. soon take bids grading 3.335 mi. King of Trails Highway, Federal Aid Project 112, 29 ft. $25,000 R. D. Coleman, co. engr.

Kan., Iola—Comrs. Allen Co. plan concrete paving 5.187 mi. Ft. Scott Wichita Highway, Federal Aid Project 125 Sect. B, 18 ft., also two 35-ft. span deck girder bridge over Marmaton River. $150,000. A. Stroup, co. engr.

Kan., Wellington—Sumner Co. plans concrete slab and bridges on 8½ mi. Meridian Highway 35 D and E, 18 ft. $210,000. J. W. Mavity, co. engr.

Neb., Falls City—Plans paving 30 blocks. R. O. Castle, city clk.

Neb., Omaha—Douglas Co. having plans prepared paving with asphalt or concrete 4½ mi. West Dodge St. from Fair Acres to McArdless Mill, 18 ft. L. E. Adams, Court House, engr.

Wyo., Laramie—Plans grading, curbing, paving and incidental work on 3,240 ft. Capitol Ave., 50 ft. $75,000. C. D. Shawyer, city engr.

Tex., Angleton—Brazoria Co. plans grading and shell surfacing 13.82 mi. West Columbia-Anchor Line-Stratton Ridge Highway, 16 ft. $156,000. E. N. Gustafson, Angleton, engr. Rd. Dist. 20.

Tex., Angleton—Brazoria Co. making plans grading, bituminous topping, gravel and shell base on 17.24 mi. Houston-Angleton Highway, State Highway 19 in Rd. Dist. 16, 16 ft. $260,040. H. W. Munson, Angleton, engr. Rd Dist. 16.

Tex., Brady—Election in April to vote on $75,000 bond issue for hard surfacing business section. Baker & Van Zuben, Exch. State Bank Bldg., Ft. Worth, engrs.

Tex., Brenham—Washington Co. making plans grading and bridging 6.3 mi. Gay Hill-Brenham-Phillipsburg Highway, 24 ft., 70,000 cu.yd. earth excav., 500 cu.yd. concrete in structures. $40,000. G. A. Bracher, co. engr.

Tex., Cleburne — Johnson Co. election April 14 to vote on $40,000 bond issue hard surfacing roads. G. W. Courter, Cleburne, consult. engr.

Tex., Ennis—April 3 to vote on $60,000 bond issue for street paving improvements. R. A. McCulloch, city mgr.

Tex., Galveston—Galveston Co. election April 14 to vote on $1,000,000 bonds to improve lateral roads and build permanent pavement on Galveston-Houston Highway. C. C. Washington, co. engr.

Tex., Jasper—Comrs. Jasper Co. plan to surface 9.2 mi. State Highway 7 between here and Angelina Co. line. State Hy. Comn., Austin, granted $50,000. Federal Government will help finance. C. P. Hunter, co. engr.

Tex., Kaufman — Kaufman Co. plans scarifying, reshaping, gravel surfacing and 1½ in. asphalt topping 3.7 mi. State Highway 15 from Terrell east 16 ft., $43,765; bituminous surfacing, gravel base, (road already graded) 6.61 mi. State Highway 15 from Van Zandt Co. line west, 18 ft., $73,550; gravel surfacing and bituminous topping (road already graded) 9.4 mi. Dallas-Terrell Rd. from Terrell to Talty-Forney Rd., 18 ft., $138,075. S. J. Treadway, Cartwright Bldg., Terrell, engr.

Tex., Navasota—Attorney Generals Dept., Austin, approved $140,000 bond issue for street paving and improvements. Address Mayor.

Tex., Orange—Orange Co. plans grading and rein.-con. paving 5.25 mi. Orange-Beaumont Highway from Vidor to Jefferson Co. line, 18 ft. $278,000. J. E. Johnson, co. engr.

Tex., Sulpher Springs—April 5, to vote on $40,000 bonds waterworks improvements. Address Mayor.

Okla., Garber—Plans paving Main St. from Railroad Ave. to Choctaw St., 15,000 sq.yd. asphalt. $70,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Colo., Colorado Springs—Plans paving 102,600 sq.yd. in North Nevada Paving Dist., asphalt or concrete. $342,000. F. O. Ray, City Hall, engr.

Calif., Chico—Takes bids about April 15, paving, curbing and guttering portion Esplanade, 183,600 sq.ft. asphalt macadam, etc. F. S. Robinson, city engr.

Calif., Chico—Takes bids in April, paving, curbing and guttering various streets, 487,000 sq.ft. 1½ in. warrenite on 2½ in. black base, 208,000 sq.ft. 1½ in. warrenite on 3½ in. black base, 128,000 sq.ft. 1½ in. warrenite on 4 in. concrete, etc. F. S. Robinson, city engr.

Calif., Glendale—Had plans prepared improving portions of Chester, Pacific and Doran Sts., 3,867 lin.ft. grading, 3,219 lin.-ft. curb, 17,089 sq.ft. gutter, 15,770 sq.ft. walks, 139,120 sq.ft. 5-in. macadam pavement, etc.

Calif., Los Angeles—Los Angeles Co. had plans prepared 23 mi. road from Palmdale to Shoemakes Ranch, 37,000 cu.yd. rock excav., 118,000 cu.yd. earth excav. and borrow, 124,360 lin.ft. shaping roadbed, 168,254 sq.yd. 5 in. asphaltic concrete, 112,767 sq.yd. 6 in. asphaltic concrete, 32,100 sq.yd. 6 in. disintegrated granite pavement, 2,333 ft. 15 in., 2,114 ft. 18 in., 833 ft. 24 in., 259 ft. 30 in., 121 ft. 36 in. and 178 ft. 48 in. corrugated iron pipe, 2,167 lb. reinforcing, 750 bbls. cement, 335 tons sand, 620 tons gravel for concrete, 11,400 tons disintegrated granite. To exceed $500,000.

Calif., Merced—Receiving estimates from engineers for costs various types of pavement, 4 or 5 in. thick, streets in district north of Atchison, Topeka and Santa Fe Ry. To exceed $25,000.

Calif., Mountain View—Plans curbing and guttering 2 mi. streets, also constructing sidewalks in certain sections. To exceed $25,000.

Calif., San Diego — Had plans prepared paving, laying sidewalks, curbing and sewers in Goldfinch, Bush and Ibis Sts., 152,432 sq.ft. 1½ in. asphaltic concrete on 2½ in. bituminous, etc. F. A. Rhodes, city engr.

Calif., San Francisco — City and San Francisco Co. will provide $100,000 in 1923-1924 budget for additional units of Ocean Beach Esplanade project. M. M. O'Shaughnessy, city engr.

Calif., Woodland—Yolo Co. sold $100,000 bonds for constructing highways.

Ont., Fergus—Plans cement pavement on St. Andrew St. $30,000. J. Gregson, reeve.

Ont., Kingsville—Plans concrete pavements on Pearl, Queen and Park Sts. $50,000.

Ont., Leamington—See "Sewers."

Ont., Mt. Forest—Plans new pavements and sewers. $55,000. Prices wanted on materials.

Ont., St. Catherines—Lincoln Co. plans paving roads in Calstor Twp., also main street through Port Dalhousie. $35,000. Engineer not announced.

Ont., Simcoe—Norfolk Co. having plans prepared improving roads. $80,000. G. R. Marston, engr.

BIDS DESIRED

Vt., Burlington—April 5, improving portions Church, Pearl and Winooski Aves., Bank and Battery Sts. E. Corley, city clk.; adv. this issue.

Mass., Newton (Boston P. O.)—March 28, by G. E. Stuart, street comr., 1,500 ft. curbing, 75,000 sq.ft. sidewalk, 25,000 sq.ft. driveway, 50,000 cu.yd. excav.

N. Y., Elmira—March 26, by G. W. Jarchow, city clk., paving East Miller St. and College Ave.; repaving West 3rd St., Maple, Pennsylvania and Railroad Aves.; resurfacing South Main St., brick, rein.-con., warrenite bitulithic or sheet asphalt.

N. Y., Geneva—April 3, by Bd. Pub. Wks., 21,000 sq.yd. pavement, various types. H. K. Seybolt, supt.; adv. this issue.

N. Y., Mayville — March 28, by S. E. Fitch, supt. Chautauqua Co., Jamestown, constructing 3.786 mi. Chautauqua-Stedman and Gerry-Barmore Rds., 16 ft., dual type concrete. $108,281.

Streets and Roads (Continued)

N. Y., White Plains — April 2, by Bd. Supervs. Westchester Co., Court House, rein.-con. roads in towns of Mt. Pleasant, Bedford, North Castle and Yorktown. F. L. Merritt, clk.; adv. this issue.

Pa., Altoona—March 28, by City Council, 19,158 sq.yd. concrete on various alleys and avenues and 1,345 sq.yd. brick on Pine Ave. H. J. Baum, city engr.

Pa., Canonsburg — April 16, by Boro Council, asphaltic concrete surfacing and storm sewers. H. M. Day, 35 West Pike St., boro engr.; adv. this issue.

Pa., New Castle — April 10, by C. E. Brown, city clk., paving Liberty St., vitr. block, concrete, sheet asphalt, or bitulithic on concrete. $25,000.

Maryland—April 3, by State Rds. Comn., Baltimore, paving 19.54 mi. State Highways, Contrs. G-20A, F-53, BC-25A, B-53, CO-33, WI-22, in Garrett, Frederick, Baltimore, Caroline and Wicomico Counties, concrete and asphalt. J. N. Mackall, chn.

Virginia—April 5, by State Hy. Comn., Richmond, constructing 7.26 mi. Project F 246, 6.13 mi. Project F 178, also bridge over Clinch River, Project S 208, etc. H. G. Shirley, chn.; adv. this issue.

Florida—April 4, by State Hy. Dept., Tallahassee, rock base on 5 mi. Rd. 4, Project 546, Brevard Co.; 5 mi. Rd. 4, Project 554, Brevard Co.; 10 mi. Rd. 4, Project 507, Flagler Co. W. F. Cocke, state highway engr.

Fla., Tampa—March 27, grading and paving Palmetto and Melville Aves., 5,760 lin.ft. granite curbing, 8,435 sq.yd. 2½-in. asphalt blocks. $26,000. R. D. Martin, City Hall, engr.

Alabama — April 17, by W. S. Keller, Montgomery, state highway engr., grading and surfacing 11.797 mi. road from Barbour Co. line to Abbeville, Henry Co., 16,905 cu. yd. gravel surfacing, 29,000 cu.yd. sand-clay surfacing, etc.; 13,537 mi. road from Dale Co. line to Louisville, Barbour Co., 4,522 cu.yd. gravel surfacing, 38,460 cu.yd. sand-clay surfacing, etc.

Louisiana—April 10, by State Hy. Comn., Reymond Bldg., Baton Rouge, grading and building canal in Tangipahoa and Baptist Parishes. J. M. Fourmy, state highway engr.; adv. this issue.

Ohio—March 30, by Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving 18.7016 mi. roads in Darke, Erie, Gallia, Miami, Putnam, Richland, Warren and Delaware Counties, rein.-con., bituminous macadam, asphalt or tar, water-bound macadam and brick; also bridge in Fulton Co., concrete girder and bituminous macadam approaches. L. C. Herrick, dir.

O., Akron—March 29, by S. Porter, clk. Summit Co., grading and paving 5.02 mi. Granger-Ghent Rd. 79, A 2, 16 ft., Vaughn-Twinsburg Rd. 111, Sect. B2 and C, 17 ft., and South Main Rd. 50, 16 ft., concrete, bituminous macadam, asphaltic macadam or bituminous concrete. J. Weaver, Court House, engr.

Ind., Salem—April 2, by Comrs. Washington Co., grading and graveling 5.521 ft. Blue River and Pekin Rd., $5,892; grading and paving with broken and crushed stone 42,976 ft. Livonia, Fredericksburg, Salem, Hardinsburg, Salem and Lexington Rds., $58,792. E. E. Batt, co. aud.

Michigan—April 3, by State Hy. Dept., Lansing, grading and surfacing 4.145 mi. road, Charlevoix Co., 44,285 sq.yd. concrete. F. F. Rogers, state comr.

Michigan—April 4, by State Hy. Dept., Lansing, grading and surfacing 5.973 mi. road in Oceana Co., 12,819 cu.yd. excav., 64,105 sq.yd. concrete. F. F. Rogers, state comr.

Michigan—April 5, by State Hy. Dept., Lansing, grading and surfacing 3.028 mi. road, Huron Co., 10,354 cu.yd. excav., 32,204 sq.yd. concrete. F. F. Rogers, state comr.

Michigan—April 6, by State Hy. Dept., Lansing, grading and surfacing 5.3 mi. road, Monroe Co., 34,691 cu.yd. excav., 56,370 sq.yd. concrete. F. F. Rogers, state comr.

Michigan—April 7, by State Hy. Dept., Lansing, grading and surfacing 1.25 mi. road, Clinton Co., 13,200 sq.yd. concrete. F. F. Rogers, state comr.

Mich., Ann Arbor—March 28, by Bd. Pub. Wks., 19,000 sq.yd. pavements in Dists. 52, 53 and 54.

Mich., Bessemer—April 14, by Gogebic Co. Rd. Comn., grading and stone-gravel surfacing 3¾ mi. Ironwood-Van, Bushkirk Rd., 15,900 cu.yd. excav., 45,409 sq.yd. stone-gravel. C. F. Winkler,, co. engr.

Mich., Grand Rapids—March 27, by Kent Co. Rd. Comn., grading and gravel surfacing 7.36 mi. Assessment Dist. Rd. 42, 34,940 cu.yd. excav., 69,800 sq.yd. gravel. S. Hess, co. engr.

Wis., Ashland—March 28, by W. C. Morris, clk., paving 33,000 sq.yd. 2nd and 3rd Sts., 5th, 6th, Willis and Prentice Aves., concrete, brick, bitulithic or sheet asphalt. J. Phillips, City Hall, engr.

Wis., Beloit—March 30, by Pub. Wks. Comn., separate bids as follows (a) 1,000 to 9,999 sq.yd. (b) 10,000 to 24,999 sq.yd. (c) over 25,000 sq.yd. of 3 in. vertical fibre brick on 5 in. concrete, sheet asphalt on 5 in. concrete, asphaltic concrete on 5 in. concrete, one course rein.-con. or vibrolithic concrete on various streets and avenues, etc. G. E. Heebink, City Hall, engr. Noted Feb. 22.

Wis., Dodgeville—March 28, by State Road and Bridge Com. Iowa Co., 7,600 cu. yd. crushed rock or tailings on Darlington-Mineral Point Rd., Lewis, Mifflin, Boylan, Boyle and McDermitt Bridges on foregoing; 1,500 sq.yd. concrete paving Mineral Point-Belmont Rd. C. Wonn, comr.

Wis., Juneau—March 30, by A. C. Klug, city clk. concrete paving, etc., Oak, Miller, Fair, Center and Mill Sts., 18,230 sq.yd. concrete, etc. $40,000-$45,000. E. B. Parsons, Jefferson, engr.

Ia., Mason City—March 28 by R. E. Robertson, engr., Mason City, grading, etc. 8 mi. Rockwall-Dougherty Rd., 62,173 yd. earth excav., 11,600 ft. 8 in. and 18,400 ft. 6 in. tile, for Cerro Gordo Co.

Kan., Sabetha—March 30, by E. C. L. Wagoner, engr., 609 Kemper Bldg., Kansas City, Mo., paving 21,000 yd. various streets, concrete, brick or asphaltic concrete.

Minn., Elbow Lake—April 2, by Grant Co., 6.6 mi. Job 2301, State Rd. 2, 72,713 cu.yd. excav., 83,574 cu.yd. overhaul; Job 2302, State Rd. 1, 61,474 cu.yd. excav., 93,904 cu.yd. overhaul, 2,381 lin.ft. 12-48 in. portable culverts, 2 concrete culverts. $30,000. W. E. Burgess, Elbow Lake, engr.

Minn., Hutchinson — March 26, by city, 40,526 sq.yd. paving (bids on various types). 7,801 lin.ft. 10-20 in. storm sewer, 4,215 lin. ft. 8 in. storm water inlet pipe, etc. J. F. Mikulecky, clk. C. L. Pillsbury Co., 1200 2nd Ave. S., Minneapolis, engrs. Noted Dec. 7.

Mo., Maplewood (St. Louis P. O.) — April 4, by J. D. Schuster, mayor, City Hall, grading, curbing and paving 2,001 ft. Oxford Ave. from Big Bend Rd. to St. Elmo St., 1,716 ft. Commonwealth Ave. from tracks of Terminal R.R. to St. Elmo St., 1,680 ft. Cambridge Ave. from Big Bend to St. Elmo Sts., 1,687 ft. Manhattan Ave. from Sussex St. to city limits, all 26 ft. wide, 6½ in. rein.-con. A. H. Beard, 616 Title Guaranty Bldg., St. Louis, engr. Noted Feb. 1.

Tex., Rockwall — March 29, by Comrs. Rockwall Co., road from here to Chisholm, 57,000 sq.yd. concrete, etc. $85,000. J. A. Focht, co. engr.

Okla., Barnsdall—March 26, by J. C. Blankenship, city clk., grading, curbing, guttering and paving Main and 5th Sts., 8,600 sq.yd. vertical fibre brick, etc. $41,880. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs. Noted Feb. 22.

Okla., Sayre—March 30, by V. V. Long & Co., engrs., 1300 Colcord Bldg., Oklahoma City, concrete paving 9 blocks, Dist. 7. $65,000.

Colo., Lamar—March 28, by Welland Eng. Co., engrs., 717-35 Thatcher Bldg., Pubio, 32,300 yd. paving, 8,710 ft. concrete curb and gutter, etc., Paving Dist. 1.

Wash., Seattle—March 30, by Bd. Pub. Wks., (a) sluicing 1,496,000 cu.yd. earth from Beacon Hill; (b) paving 23,050 sq.yd. 9th Ave. S. $1,500,000. J. D. Blackwell, city engr. Noted March 1.

Ont., Guelph—March 29, by A. Jaffrey, chn. Bd. Pub. Wks., c/o City Clerk, 15,000 sq.yd. asphalt resurfacing. $30,000. H. S. Nicklin, city engr.

Ont., Kitchener—March 26, by S. Shupe, city engr., 2,000 sq.yd. concrete pavement, 24 ft. wide, 7 in. thick, 10,000 sq.yd. asphalt on concrete, 24-40 ft. wide. $60,000.

BIDS RECEIVED

N. Y., Brooklyn—E. Reigelmann, boro. pres., Boro Hall, opened bids March 14, grading, curbing and asphalt paving (1) Delamere Pl. (2) East 9th St. (3) Foster Ave. (4) Glenwood Rd. (5) 17th Ave. (6) 66th St. (7) 82nd St., from Borough Asphalt Co., 1301 Metropolitan Ave., (1) $8,689 (2) $16,487 (3) $8,946 (4) $15,657 (5) $3,940 (6) $7,933 (7) $6,990; Uvalde Asphalt Paving Co., 1 Bway., New York, (1) $9,756 (2) $16,348 (3) $8,855 (4) $15,537 (5) $3,796 (6) $7,966 (7) $7,017; Cranford Co., 52 9th St., (1) $10,827 (2) $18,417 (3) $10,037 (5) $4,196 (6) $8,834 (7) $7,799; Cleveland Trinidad Paving Co., Flushing, (4) $17,174. Noted March 8.

N. Y., New York—W. J. Flynn, acting pres. Bronx Boro. 3rd and Tremont Aves., March 15, grading, curbing, laying sidewalks, etc., in Yates Ave., from L. Di Minna, $62,294; P. J. Donovan, $64,304; Burnside Contg. Co., 270 Burnside Ave., $65,924. Noted March 8.

N. Y., Wanakah (Hamburg, P. O.)—Wanakah Land Corp., 577 Ellicott Sq., Buffalo, opened bids March 5, removing ¼ mi. brick pavement, 16 ft. wide, and building ¼ mi. rein.-con. pavement, 18 ft. wide, for Wanakah Curve elimination, from H. Meyer, Lancaster, $26,067; Staples Mumm & Beals, Orchard Park, $27,850; Peoples Paving Co., 85 Roma Ave., Buffalo, $32,940. Noted March 1.

Pa., Phila.—Dept. Pub. Wks. March 13, paving (1) Clearfield and Ella Sts. (2) Luzerne St. (3) Chestnut St. (4) 13th St. (5) furnishing 20,800 tons crushed stone, from Eastern Paving Co., Colonial Trust Bldg. (1) $27,607 (2) $35,019; Barber Asphalt Paving Co., Land Title Bldg., (1) $28,598 (2) $37,652; Acchiore & Canuso, 804 South 12th St., (3) $20,662; Centroni & Mezzola, Lincoln Bldg., (3) $18,876; Fish-Rutherford Co., Real Estate Trust Bldg., (3) $25,673 (4) $51,675; Municipal Paving Co., Phila., (street address not available) (4) $47,345; J. Mehan & Sons, 915 Dauphin St., (4) $50,227; Birdsboro Stone Co., Land Title Bldg., (5) $55,120; Richards-Kelly Co., Real Estate Trust Bldg., (5) $56,992. Noted March 8.

Ohio—Dept. Highways and Pub. Wks., Columbus, March 13, grading, bridging and paving roads with (a) brick (b) rein.-con. (c) state to furnish brick (d) waterbound macadam (e) asphalt macadam, oil (f) asphalt macadam, lake (g) tar macadam (h) bituminous concrete, oil (i) bituminous concrete, lake, in following counties: **Athens Co., Sect. "A" Pomeroy-Marietta Rd.**, 4.011 mi., from H. Renick, Williamsport, (a) $197,388 (b) $171,498; Winchell & Campbell, Columbus, (street address not available), (a) $203,537 (b) $182,007. **Fairfield Co., Sect. "O-1" Cincinnati-Zanesville Rd.**, 2.408 mi., from F. E. Milligan, Sidney, (a) $110,695 (b) $87,376 (c) $82,173; Bolen & Winchell, Columbus (street address not available), (a) $115,918 (c) $89,673; R. H. Shafer Co., Chamber of Commerce Bldg., Columbus, (c) $87,832; Radebaugh-Graham Co., Columbus, (street address not available), (b) $86,256; J. Wroe, 54 Davis St., Dayton, (b) $89,661. **Fairfield Co., Sect. "O-2" Cincinnati-Zanesville Rd.**, 2.767 mi., from F. E. Milligan, Sidney, (a) $121,176 (b) $96,524 (c) $96,259; Bolen & Winchell, Columbus, (street address not available), (a) $126,382 (c) $103,759; R. H. Shafer Co., Chamber of Commerce Bldg., Columbus, (c) $101,656; Radebaugh-Graham Co., Columbus, (street address not available), (b) $95,162; J. Wroe, 54 Davis St., Dayton, (b) $96,624. **Fairfield Co., Sect. "E-2" Cincinnati-Zanesville Rd.**, 2.274 mi., from F. E. Milligan, Sidney, (a) $76,714 (b) $73,644 (c) $56,942; J. T. Irwin & Son, Sunbury, (a) $82,332; W. H. Ringwold Co., Chillicothe, (a) $82,895; R. H. Shafer Co., Chamber of Commerce Bldg., Columbus, (c) $64,792; Bolen & Winchell, Columbus, (street address not available), (c) $66,442. **Greene Co. Sect. "J" Columbus-Cincinnati Rd.**, 2.62 mi., from J. W. Weeks, 300 Gibbons Arcade, Dayton, (d) $44,486; N. B. Putnam, Van Wert, (d) $44,610; C. V. Rector Centennial Rd., Muncie, Ind., (d) $46,368. **Huron Co., Sect. "S" Norwalk-Mansfield Rd.**, 2.504 mi., from Gluss Bros., Hamler, (b) $63,758; D. M. Roach, Defiance, (b) $64,225; C. L. Straw, Paulding, (b) $65,384. **Logan Co. Sects. "B" and "C-2" Bellefontaine-Marysville Rd.**, 8.832 mi., from Lewis & Copeland, Lima, (b) $271,454. **Mahoning Co., Sect. "Z" Canfield-Poland Rd.**, 2.531 mi., from Barber-Fortin Co., Warren, (e) $59,338 (f) $59,338; C. J. Bower, Farmdale, (e) $61,909 (f) $61,909 (g) $61,909; A. Colucci, 1109 Wilson Ave., Youngstown, (e) $63,702 (f) $63,702 (g) $61,909; Creager Bros., Liberty Center, (g) $63,253. **Mahoning Co., Sect. "A" Salem-Warren Rd.**, 3.1 mi., from Creager Bros., Liberty Center, (e) $52,082; W. McCormick, 361 Kendall Ave., Youngstown, (e) $53,116 (f) $53,116 (g) $52,823; G. B. Smith Co., Youngstown, (street address not available), (e) $54,410 (g) $53,530; J. A. Gialdini, Youngstown, (street address not available), (f) $55,299; W. G. Owen, Mineral Ridge, (f) $56,204; Barber-Fortin Co., Warren, (g) $52,878. **Pike Co., Sect. "Piketon" Columbus-Portsmouth Rd.**, 1.07 mi., from S. Monroe & Sons Co., Portsmouth, (a) $45,872; Anderson & Brown, Chillicothe, (a) $46,082; W. H. Ringwold Co. Chillicothe, (a) $46,585. **Richland Co., Sects. "B-C-D" Mansfield-Norwalk Rd.**, 8.94 mi., from N. B. Putnam, Van Wert, (b) $395,756 (h) $434,204 (i) $434,204; Eldorado Paving Co.,

Streets and Roads (Continued)

Eldorado, (b) $407,287; Radebaugh-Graham Co., Columbus, (street address not available), (b) $402,565; P. Drake & Sons, Marion, (h) $438,104; Smith Constr. Co., Youngstown, (street address not available), (h) $433,530; Dorsey Constr. Co., Findlay, (i) $454,864. **Sandusky Co., Sect. "O-1" Fremont-Castalia Rd.**, 0.15 mi., from Modern Constr. Co., Fremont, (d) $3,984. **Wood Co. Sect. "B" Perrysburg-Fostoria Rd.**, 1.549 mi., from W. Sausley Co., Ada, (e) $28,000 (f) $28,000 (g) $29,976; R. Stone Constr. Co., Lima, (street address not available), (e) $29,995 (g) $32,306; W. L. Johnson Co., Hicksville, (e) $31,147; Laudoon & Bergman, Genoa, (f) $32,933; Laubis Stone Co., Kenton, (f) $35,173; W. H. and H. A. Souder, Fostoria, (g) $31,322. **Huron Co., Sects. "K" and "L" Norwalk-Bellevue Rd.**, 6.204 mi., widening with concrete curb, from J. F. Stambaugh, Ada, $58,691; Putnam & Sunday, Van Wert, $59,346; A. J. Baltes, Norwalk, $59,856. **Huron Co., Sects. "M" and "N" Norwalk-Bellevue Rd.**, 0.476 mi., widening with concrete curb, from J. F. Stambaugh, Ada, $4,516; R. C. Roach, Waterville, $4,517; C. M. Gray, Waterville, $4,813. **Huron Co., Sect. "P" Norwalk-Oberlin Rd.**, 4.708 mi., widening with concrete curb, from A. N. Richards & Sons, Willard, $43,075; R. C. Roach, Waterville, $44,032; Putnam & Sunday, Van Wert, $44,511. **Sandusky Co., Sect. "K" Fremont-Perrysburg Rd.**, constructing culverts, from A. Shackelhoff, Fremont, $2,345; W. A. Ceagle, Clyde, $2,626; H. A. MacDonald, Norwalk, $2,808. Noted March 1.

O., Cincinnati—Hamilton Co., March 16, grading, bridging and paving (1) 8,126 ft. Sharon Ave., 20 ft., 10,000 cu.yd. earth excav., 18,500 sq. yd. concrete, 1,050 cu. yd. 1:2:4 concrete, 30,000 lb. reinforcing, etc., engrs. est. $84,414 (2) 14,780 ft. Ridge Rd., 16 ft., 26,300 sq.yd. bituminous macadam, engrs. est. $40,388, from J. L. Radabaugh, Montgomery, (1) $79,994 (2) $31,-425; A. P. Birnbaum, 2671 Cora Ave., (1) $80,080; Bigler Bros., Franklin (1) $81,-982; J. S. Slone, 2312 Mound Ave., Norwood, (2) $31,714; W. P. Flynn, 1252 Chase Ave., (2) $35,529.

Michigan — State Hy. Dept., Lansing, March 6, grading and surfacing 3.726 mi. Ionia and Clinton Counties, 23,090 cu.yd. excav., 34,757 sq.yd. gravel, from C. W. McCreery, Ovid, $35,377; Schneider & O'Harrow, Lowell, $35,524. Noted Feb. 22.

Calif., Fresno — City improving (1) Amador St. between H and Van Ness Sts., (a) 51,623 sq.ft. grading (b) 46,080 sq.ft. asphaltic pavement (c) 2,015 sq.ft. concrete pavement (d) 1,843 lin.ft. concrete curb (e) 3,387 sq.ft. gutter (2) Peralta Ave. between Wilson and Lucerne Lane, et al., (f) 77,162 sq.ft. grading (g) 54,859 sq.ft. asphaltic pavement (h) 4,269 ft. concrete gutter (i) 1,845 ft. concrete curb (j) 8,913 ft. cement walks, from California Road & Street Impvt. Co., Bank of Italy Bldg., (1a) $0.059 (1b) $0.219 (1c) $0.265 (1d) $0.65 (1e) $0.35 (2f) $0.059 (2g) $0.219 (2h) $0.35 (2i) $0.65 (2j) $0.235; Thompson Bros., G and Divisadero Sts., (1a) $0.055 (1b) $0.219 (1c) $0.23 (1d) $0.65 (1e) $0.35 (2f) $0.054 (2g) $0.219 (2h) $0.35 (2i) $0.65 (2j) $0.23. Noted Feb. 8.

Calif., San Diego — Common Council, March 12, improving Silverado St., Ivanhoe Ave. and Torrey Rd., (a) 192,016 sq.ft. 5 in. concrete (b) 1,140 lin.ft. cement curb (c) 5,746 sq.ft. cement sidewalk, etc., from G. W. Cushing, c/o Harvard Hotel, (a) $0.238 (b) $0.75 (c) $0.22; H. H. Peterson, Loma Portal, (a) $0.24625 (b) $0.62 (c) $0.20; L. Salcido, La Jolla (a) $0.245 (b) $0.65 (c) $0.22; G. R. Daley, 4430 Boundary St., (a) $0.238 (b) $0.70 (c) $0.22. Noted Feb. 22.

CONTRACTS AWARDED

Mass., Boston—Repairing about 30,000 sq.yd. various streets, bituminous macadam, to Central Constr. Co., 228 Southampton St., $66,600.

Conn., Easton—Bridgeport Hydraulic Co., Main and Gilbert Sts., Bridgeport, plans new layout of portion of North Park Ave. at Bucks Hill, and building new water-bound macadam roadway. $60,000. Work will be done by day labor. Private plans.

N. Y., Buffalo—Paving various streets, to Rock Asphalt & Constr. Co., Morgan Bldg., Morgan Bldg., $128,751; Wyoming Ave., to H. P. Burgard Co., 1968 Fillmore Ave., $12,175, all standard asphalt on concrete.

N. Y., Fonda—Montgomery Co. will construct 1½ mi. highway in town of Palatine, bituminous macadam, $9,274, ½ mi. in Canajoharie, top dressing, $2,000, ½ mi. in Glen, top dressing, $2,000, highway in Florida, asphaltic macadam, $25,470, 3 mi. in Root, asphaltic macadam, $25,000 and 2½ mi. in Amsterdam, asphaltic macadam, $27,000, by day labor.

N. Y., Johnstown—Fulton Co. will improve 3½ mi. Johnstown-West Galway Rd., 14 ft., bituminous macadam, $16,000 per mi.; resurface 3½ mi. Green Lake-Hamilton Co. Line Rd., 3,000 and 1½ mi. Phelps St., $2,000, both gravel and oil, by day labor under supervision of H. S. Gage, co. supt. highways.

N. Y., Mayville — Chautauqua Co. will pave 1.15 mi. Westfield-Barcelona Co. Aid Highway 50, bituminous macadam, $25,471; 3.18 mi. Busti-Sugar Grove Co. Aid Highway 51, $95,818, 3.09 mi. Stillwater-Kiantone Co. Aid Highway 52, $84,138, and 3.73 mi. Laona-Arkwright Co. Aid Highway 54, $123,623, all foregoing concrete, by day labor.

Md., Baltimore—Bd. Awards, grading, curbing and paving with cement concrete and old granite blocks, Contr. 229-OCNA, to Aiello Constr. Co., Knickerbocker Bldg., $29,673. Noted Feb. 22.

W. Va., Clarksburg—Harrison Co. concrete paving 6,200 ft. Laura Lee Rd., to P. S. Horner & Co., Clarksburg, $42,297; 1 mi. Boothville Rd., to N. M. Leigh, Clarksburg, $31,702. Noted Feb. 22.

Fla., Starke—Bradford Co., Rd. No. 3 to New River, to Bryson Livestock Co., Jacksonville, (street address not available), $18,310. Noted Jan. 18.

O., Akron—W. F. Peters, dir. Pub. Serv., grading and paving 1,500 ft. 5th Ave., 26 ft., brick, to McAlonan Bros., 197 West Buchtel Ave., $30,628, engrs. est. $30,529; 300 ft. Lee Dr., 16 ft., concrete, and 400 ft. Marion Pl., 24 ft., brick, to Hollinger & Davidson, 435 South Bway., $3,534 and $8,608 respectively, engrs. est. $3,029 and $8,740 respectively; 450 ft. Bank alley, 16 ft., concrete, also grading and laying sidewalks on 1,500 ft. Clifton and Birchwood Aves., to Schroeder & Caputa Constr. Co., 1950 West Federal St., Youngstown, $2,897 and $8,630 respectively, engrs. est. $3,529 and $8,663 respectively. Noted March 15.

O., Cincinnati—Hamilton Co. grading and paving 4,230 ft. Oak Rd., 16 ft., to Brenson & Van Horn, 2381 Kemper Lane, $12,474, engrs. est. $15,128; 8,980 ft. Van Zandt Rd., 16 ft., to J. Rubel Constr. Co., 1872 Hanfield St., $20,327, engrs. est. $25,595; 8,530 ft. Baughman Rd., 16 ft., to Nugent & Scull, R.R. 3, Harrison, $19,598, engrs. est. $23,-272, all bituminous macadam. Noted March 15.

O., Dayton—Montgomery Co. paving 1 mi. Brandt St., Kentucky rock asphalt on concrete, to E. Ryan, Clifton and Clark Sts., Springfield, $27,911. Engrs. est. $30,-000. Noted March 1.

O., Ravenna—Grading and asphaltic concrete paving Meridan St., to H. W. Cowles, Ravenna, $50,043. Noted Feb. 22.

Illinois—Dept. Pub. Wks. and Bldgs., Div. Highways, Springfield, concrete paving (1) 5.82 mi. Route 26, Sect. 1 Ogle-Stephenson Co. (2) 6.06 mi. Project 47, Sect. 64 St. Clair Co. (3) 2.99 mi. Project 47, Sect. 65 Monroe Co. (4) 3.24 mi. Project 49, Sect. 13, Kankakee Co. (5) 5.57 mi. Project 49, Sect. 14, Kankakee-Livingston Co. (6) 7.75 mi. Project 49, Sect. 15 Livingston Co. (7) 1.59 mi. grading Route 1, Sect. 16-A, Lawrence Co., to R. F. Conway Co., 133 West Washington St., Chicago, (1) $114,165 (4) $73,373 (5) $124,894 (6) $144,752; Keely Bros. Contg. Co., 2100 State St., East St. Louis, (2) $118,167 (3) $49,833; Dees Bros., Oblong, (7) $70,597. Noted Jan. 4.

Ill., Rockford—To A. E. Rutledge, 502 Mead Bldg., concrete paving 17,010 sq.yd. St. Clair, Prairie and Madison Sts., engrs. est. $64,100, 14,840 sq.yd. Elm and South Elm Sts., engrs. est. $48,500, and brick paving 18,000 sq.yd. Court and Green Sts., engrs. est. $38,900; Milburn Bros., 18th and Charles Sts., concrete paving 16,600 sq.yd. Paris, Rural, Chicago and Oak Lawn Aves., engrs. est. $51,160; Hart & Page, 110 North Court St., concrete paving 16,495 sq.yd. 16th Ave. and 13th St., engrs. est. $60,030.

Wis., Appleton—Outagamie State Road and Bridge Com. Appleton-Seymour Rd., to Parker-Wunderlich Co., Greenville, 13,322 cu.yd. earth excav. $0.65, 12,866 sq.yd. concrete surfacing $2.49, etc., total $47,058; Clintonville-New London Rd., to W. Tate, Bear Creek, 7,845 cu.yd. earth excav. $0.85, 8,315 sq.yd. concrete surfacing, $2.60, etc., total $30,690. Noted March 15.

Wis., Elkhorn—Walworth Co. Road and Bridge Comn., concrete surfacing, etc. 9 mi. Lake Geneva-Geneva Junction Rd., to R. R. Bridsall Constr. Co., 1025 12th St., Racine, $223,185. Noted March 8.

Wis., Monroe—Green Co. State Rd. and Bridge Com. improving Illinois State Line-Monroe Rd., to J. O. Legreid, Stoughton, 33,787 sq.yd. concrete surfacing $1.56, etc., total $66,968.

Wis., Waukesha—Waukesha Co. Road and Bridge Com., Oconomowoc-Monterey Rd., to Nickell & Grahl Constr. Co., Waukesha, 24,637 cu.yd. earth excav. $0.90, 57,-140 sq.yd. 18 ft. concrete surfacing, $1.27, etc., total $120,933. Noted March 8.

Wis., West Bend—Washington Co., Milwaukee-Germantown Rd., to Monad Constr. Co., Waukesha, 15,000 cu.yd. earth excav. $0.82, 32,200 sq.yd. concrete surfacing $1.42, etc., total $72,634. Noted March 8.

Wis., Wisconsin Rapids—Concrete paving 22,400 sq.yd. various streets, to F. Bossert Constr. Co., Wisconsin Rapids, $52,100. Noted March 8.

Ia., Boone—For 70,000 sq.yd. vibrolithic concrete, to Bryant Asphalt Paving Co., Waterloo, $2.62. Noted Dec. 14.

Ia., Chariton—For 42,000 sq.yd. vibrolithic concrete paving with 7 in. integral curb, to O'Rourke Eng. Co., 1215 Mulberry St., Des Moines, $2.96. Noted Feb. 22.

Ia., Fairfield—To J. C. Blunk, Ottumwa, 13,700 sq.yd. vibrolithic concrete $2.64 per sq.yd.; R. E. Shackelton, Perry, 47,000 ft. curb and gutter $1.03 per ft., 11,300 sq.yd. brick $3.50.

Ia., Le Mars—Paving, curbing and guttering about 78 blocks, vibrolithic concrete, to Moore-Young Constr. Co., Waterloo, $330,000.

Ia., Marshalltown—Marshall Co., grading 13.064 mi. road south of here, to Longerbone Bros., 15th and Market Sts., Des Moines, 171,709 cu.yd. excav. $0.26 per cu.yd.

Ia., Tipton—To W. Horrabin Constr. Co., 15 East College St., Iowa City, 31,776 sq.yd. bitulithic paving and 8,638 sq.yd. resurfacing, 19,508 ft. concrete curb and gutter, 15,934 cu.yd. excav., $113,216.

Minn., Willmar — Kandiyohi Co., gravel surfacing to K. Brown, Atwater, 7 mi. Job 2301, Rd. 2, load and haul 7,000 cu.yd., and 19 mi. Job 2305, Rd. 6, 19,000 cu.yd., $22,-000, to C. Byers, Jackson, 13 mi. Job 2302, Rd. 5, 13,000 cu.yd., 8½ mi. Job. 2303, Rd. 9, 8,500 cu.yd., 9 mi. Job. 2304, Rd. 20, 9,000 cu.yd., 10½ mi. Job 2306, Rd. 17, 5,250 cu.yd., $22,000.

S. D., Madison—Paving Dist. 15, 6,000 sq.yd. vibrolithic, to C. H. Atkinson Paving Co., Brookings, $2.99. Noted Feb. 8.

Wyo., Casper—To Scott & Curlee, Sterling, Colo., 577,500 sq.ft. 4 in. concrete and 8,000 sq.ft. 6 in. concrete sidewalks, 5 ft. wide, 5,000 sq.ft. 6 in. concrete, 12 ft. wide, all on 4 in. gravel cushion, 4,700 lin.ft. alley crosswalks and street crossings, 4,000 lin.ft. concrete curb, 20,000 cu.yd. earth excav. and 40,000 sta. yd. overhaul, $122,-817. Noted Feb. 15.

Tex., Beaumont — Paving Fannin St. from Park to Victoria Sts., Mariposa St. from Crockett to Liberty Sts., Pine St. from Mulberry to Ash Sts., Railroad Ave. from Sabine to College Sts., 1½ in. Uvalde rock asphalt, to Uvalde Rock Asphalt Co., Beaumont, $2.79 per sq.yd., total $209,902. Engrs. est. $200,000. Noted March 8.

Tex., Dallas—Paving Pacific St. from Lamar St. to Central Ave., 25,000 sq.yd. bithulithic, and Peabody St., 11,000 sq.yd. bitulithic, to Central Bitulithic Co., Praetorian Bldg., $106,838 and $43,603 respectively. Engrs. ests. $100,000 and $40,000 respectively. Noted March 15.

Tex., Kaufman—Kaufman Co. grading, gravel surfacing and pile trestle bridges on 10.74 mi. Highway 40, Big Bushy Creek to Dallas Co. line, 16 ft., to F. P. McElwrath, Corsicana, $87,490. Noted March 15.

Tex., Palestine—Paving various streets, incl. 24,000 sq.yd. warrenite bitulithic, 1,000 ft. curb and gutter, 400 cu.yd. excav., to Gulf Bitulithic Co., Kress Bldg., Houston, $55,925.

Tex., Seguin—Guadalupe Co. grading and gravel surfacing 9.5 mi. State Highway 3 between here and Gonzales Co. line, 18 ft., to P. Hansen, 2216 West Houston St., San Antonio, $33,482; rein.-con. drainage structures on above, to J. W. Goodrun, Seguin, $22,627. Noted March 15.

Nev., Sparks — Paving and sewers in portions of B St., to Clark & Henery Constr. Co., Ochsner Bldg., Sacramento, Calif., $29,794.

Calif., Los Angeles—Improving Kenmore St., 92,840 sq.ft. grading, 325 sq.ft. concrete pavement, 92,515 sq.ft. warrenite pavement, 3,226 ft. concrete gutter, etc., to Warren Constr. Co., 5444 Hollywood Blvd., $29,600; Canal Ave., 49,666 sq.ft. asphalt pavement, 21,594 sq.ft. walks, etc., to Griffith Co., Los Angeles Ry. Bldg., $25,545.

Streets and Roads (Continued)

Calif., Los Angeles — Concrete paving, curbing, guttering and laying sidewalks on Hillhurst Ave., to W. Liddington, 420 East 60th St., $86,466. Noted March 15.

Calif., Oroville—Butte Co. grading and gravel surfacing Butte City-Chico Rd., to Collins & Seppi, Stockton (street address not available), $39,856; Honcut-Palermo Rd., Route 27, to Heafey, Moore & McNair, 2030 High St., Oakland, $52,218. Noted March 15.

Calif., Salinas—Monterey Co. paving Salinas-Watsonville and Aromas Rds., 553,000 sq.ft. asphalt macadam, to Granite Constr. Co., Watsonville, $53,887.

Calif., San Bernardino—Bd. Supervs. San Bernardino Co., paving with 5-in. concrete, curbing, guttering and constructing concrete retaining wall on Hellman Ave., to J. F. Knapp, Turlock, $109,600.

Calif., Santa Barbara—Santa Barbara Co. grading and paving San Marcos Rd., to A. B. Cook, Santa Barbara, $27,000. Noted Feb. 15.

Calif., San Diego—Common Council paving Laurel, Kalmia, Brant and Curlew Sts., to G. R. Daley, 4430 Boundary St., $59,882; Maple, Nutmeg and Olive Sts., to California Constr. Co., Union Bldg., $29,793. Noted March 8.

Calif., Santa Barbara — Santa Barbara Co., improving Casa Loma sub-division, 8,900 cu.yd. grading, 11,200 lin.ft. combined concrete curbs and gutters, 56,000 sq.ft. cement walks, to C. T. Richardson, Santa Barbara, $28,295.

Calif., Tulare—Paving with 4 in. concrete, curbing, guttering and laying sidewalks on L St., to Frederickson & Shannon, Cory Bldg., Fresno, $51,732. Noted March 15.

Industrial Works

PROPOSED WORK

Mass., East Braintree (Boston P. O.)—East Braintree Bleachery soon awards contract 3 story, 53 x 55 ft. plant addition, and 1 story, 20 x 22 ft. power house, brick and timber, plain foundation, Adams St. $40,000. Private plans.

Mass., Uxbridge—Uxbridge Worsted Co. had plans prepared by G. P. Carver, engr., 261 Franklin St., Boston, 48 x 53 ft. power house. $40,000.

R. I., Providence—S. Bomes, 60 Dorrance St., having plans prepared by G. H. Wolf, archt., 308 Caesar Misch Bldg., 1 story, 100 x 100 ft. garage and service station, brick and steel, Warrenton St. and Elmwood Ave. $40,000.

N. Y., Buffalo — J. M. Navadel, 3205 Bailey Ave., plans 2 story, 35 x 102 ft., brick and tile garage and service station. To exceed $40,000. Engineer and architect not announced.

N. Y., Cascade Mills (Dresden, P. O.)—Yates Electric Light & Power Co., Penn Yan, had plans prepared new electric power plant here. $500,000. F. D. Berry, dir. Engineer not announced.

N. Y., East Pembroke—E. H. Miller & Son plan rebuilding feed and grain mill, recntly destroyed by fire. $60,000. Engineer and architect not announced.

N. Y., Fancher—A. H. Phillips, Holberton, is at head of syndicate which plans cold storage plant, here. $150,000-$200,000.

N. Y., Lowville—Acme Road Mchy. Co., Frankfort, had plans prepared 80 x 300 ft. steel and concrete factory, here. $50,000-$60,000.

N. Y., New Hartford—Campbell Refining Co., Kendrick Bldg., Utica, purchased plant of New Hartford Canning Co., and plans oil storage and warehousing plant, brick, concrete and steel. $50,000-$60,000.

N. Y., North Tonawanda—Creo-Dipt Co., Oliver St., plans rein.-con. brick and steel plant addition. $200,000. Engineer and architect not selected.

N. Y., Oxford—Oxford Basket Co. plans new concrete, brick and steel factory. $80,000-$100,000. Address E. S. Sharp, c/o owner.

N. Y., Orchard Park—A. J. Schreiber, Jr., Hamburg, plans concrete and steel garage, Buffalo and West Quaker Sts., here. $40,000-$50,000.

N. Y., Rochester—L. Holtz & Sons, Inc., had plans prepared 3 story, 82 x 170 ft., steel and concrete factory, Hudson Ave. $200,000.

N. Y., Schenectady—General Electric Co., River Rd., plans 1 story, 60 x 425 ft. addition to Bldg. 60, to be used for turbine shops and office. $75,000.

N. J., Trenton—New Jersey Porcelain Co. having plans prepared by Fowler-Seaman Co., archts., Broad St. Bank Bldg., 1 story, 200 x 200 ft., brick plant and 6 kilns, New York Ave. $80,000.

Pa., Altoona—M. S. Koller & Son, 1001 11th St., plan 4 story and basement, 72 x 150 ft., concrete, brick and steel warehouse, Green and 11th Aves. $150,000. Engineer and architect not selected.

Pa., Allentown—J. L. Lordan plans 5-story, concrete, brick and steel warehouse, 16th St. $400,000. Engineer and architect not announced.

Pa., Erie—Erie Co. Milk Assn. plans 2-story, 52 x 87 ft. concrete, brick and steel power house, Peach St.

Pa., Phila.—B. Bernheim & Sons, 3rd and Master Sts., soon take bids 4 story and basement, 80 x 80 ft. rein.-con. and brick factory, plain foundation, 1401 North 3rd St. $150,000. E. B. Rothchild, 1420 Chestnut St., archt.

Pa., Somerset—P. A. Schell & Co., 11 West Main St., plans 3-story and basement, 90 x 100 ft., concrete and brick warehouse and store, Main St., $150,000.

Md., Baltimore — F. A. Munsey Co., Munsey Bldg., soon lets contract 2 story, basement, and sub-basement, 96 x 200 ft. plant, Courtland and Centre Sts. $450,000. McKim, Meade & White, 101 Park Ave., New York City, archts. Noted Jan. 11.

N. C., Greensboro — Rucker Warehouse Co. plans 3 story, cotton storage warehouse, brick. $160,000. P. C. Rucker, pres.

N. C., Waco—P. Rhodes, Lincolnton, and citizens of Waco, plan 5,000 spindle (ultimately 10,000 spindle) cotton mill, here.

N. C., Worthville—Leward Cotton Mills, Inc., plans doubling plant, now 5,000 spindles, includes extensions, enlargement of village and electrification of present power plant. Lockwood, Greene & Co., Piedmont Bldg., Charlotte, engrs.

S. C., Pamplico—Wagoner Lumber Co. plans to rebuild lumber mill and plant, recently destroyed by fire. $50,000. Engineer and architect not announced.

Fla., Tampa—Bentley-Gray Dry Goods Co., Tampa and Twiggs Sts., having plans prepared 4 story, 100 x 105 ft., and 2 story, 40 x 100 ft., wholesale building, fireproof, Zack St. $150,000. Engineer and architect not named.

Miss., Poplarville—Love Lumber Co. plans to rebuild lumber and planing mill, recently destroyed by fire. $100,000. Engineer or architect not announced.

Miss., Wiggins—Finkbine Lumber Co. plans lumber mill, 125,000 ft. daily capacity. $300,000. Engineer and architect not announced.

Ky., Carter—Ashland Limestone Co. plans 1 story, power house, brick. $60,000.

Ky., Central City—J. Barnes Auto Co. having plans prepared by Marr & Holman, archts., Stahlman Bldg., Nashville, Tenn., 1 story and basement, 70 x 165 ft., garage, brick. $40,000.

O., Cleveland—Anders & Reimers, archts., Erie Bldg., soon let contract 3 story, brick, steel and concrete plant addition, West 65th St. along tracks of Cleveland, Cincinnati Chicago & St. Louis R.R., for Theuer Norton Co., 3136 West 63rd St. $100,000.

O., Cleveland—National Malleable Castings Co., c/o R. Ewing, constr. engr., Quincy Ave. and Woodhill Rd., had plans prepared 3-story and basement, 60 x 105 ft. pattern building, brick, steel and concrete. $75,000. Private plans.

Mich., Detroit — Aubin Terminal Corp., 707 Free Press Bldg., having plans prepared by G. M. Hopkinson, engr., 5716 Euclid Ave., Cleveland, O., 8 story, 195 x 389 ft. rein.-con., brick and steel warehouse terminal, dock and wharf, West Jefferson Ave. and West Grand Blvd. $3,000,000.

Ill., Chicago—Baers Express and Storage Co., 1927 Milwaukee Ave., having plans prepared by Whitney & Williams, archts., 122 South Michigan Ave., 5 story, 44 x 100 ft. warehouse, rein.-con., brick and steel, 1929 Milwaukee Ave. $150,000.

Ill., Chicago—Crocker, Kracow & Gerber, c/o D. S. Klafter, archt., 64 West Randolph St., having plans prepared 2 story garage and office, rein.-con., brick and steel, 4117-25 Bway. $275,000.

Ill., Chicago—Harrington & King Perforating Co., 614 North Union Ave., plans 1 story, rein.-con., brick and steel factory, 60,000 sq.ft. floor space, Fillmore and Waller Sts. $275,000. G. C. Nimmons Co., 122 South Michigan Ave., archts.

Ill., Chicago — Marquette Cement Mfg. Co., 140 South Dearborn St., having plans prepared by L. E. Ritter, engr., 140 South Dearborn St., 1 story, 175 x 500 ft. warehouse, rein.-con., brick and steel, Elston St. near Redfield St. $350,000.

Wis., La Crosse—J. A. Weisse, Caledonia and Gilett Sts., having plans prepared by O. J. and R. F. Sorenson, archts., 216 Main St., 1 story, 70 x 200 ft., millwork factory, boiler house, dry kiln, storage buildings and shaving vault, brick and steel, plain foundation. $100,000.

Wis., Madison—University of Wisconsin, Administration Bldg., plans 1 story, central heating plant, brick and rein.-con. $88,000. M. E. McCaffery, secy. Engineer and architect not selected.

Wis., Manitowoc—Globe Steam Laundry, 14th and Washington Sts., having plans prepared by Smith & Reynolds, archts., Dempsey Bldg., 2 story, 46 x 120 ft., brick, rein.-con. and steel laundry, plain foundation. $50,000. Noted March 1.

Wis., Phillips — G. J. Goetsch having plans prepared 2 story, 60 x 80 ft. garage and repair shop, brick, rein.-con. and steel, plain foundation. $40,000. Private plans.

Wis., Plymouth—E. A. Juul, archt., 211 Security Bldg., Sheboygan, preparing plans 1 story, 60 x 150 ft., garage and repair shop, brick, rein.-con. and steel. $50,000. Owners name withheld.

Wis., Port Washington—City plans installing central heating plant and system, new boilers in present water and light plant, extending pipes, building, etc., rein.-con., brick and steel, plain foundation. $125,000. J. Kaiser, Jr., mayor. Engineer not selected.

Wis., Sheboygan — Madewell Chair Co., South Water and Wisconsin Sts., having plans prepared rebuilding 2 story, 50 x 90 ft., factory, recently destroyed by fire, brick and timber, plain foundation. $40,000. Private plans.

Ia., Sioux City—International Milling Co., Grain Exch. Bldg., plans to enlarge present building. $100,000. F. A. Bean, New Prague, Minn., pres. Engineer and architect not selected.

Minn., Plainview—Wisconsin Pea Canners Co., c/o H. L. Wedertz, mgr., 6th and Franklin Sts., Manitowoc, Wis., having plans prepared by Smith & Reynolds, archts., Manitowoc, Wis., 4 story, 50 x 60 ft. factory, rein.-con. and brick, here. $40,000.

N. D., Fargo—Fargo Laundry Co. and Hegge Bros., having plans prepared by Keith & Kurke, archts., Equity Bldg., 2 story and basement, concrete and brick laundry. $75,000.

Mont., Missoula — Northern Pacific Ry. Co., 5th and Jackson Sts., St. Paul, Minn., plans roundhouse, here. $40,000. H. E. Stevens, ch. engr.

Tex., Corpus Christi — Voted $200,000 bonds to construct municipal gas plant also $150,000 for laying gas mains and conduits. P. G. Lovenskiold, mayor. Engineer not selected.

Tex., Dallas—Dallas Refining Co., Southwestern Life Bldg., plans cracking plant, minimum capacity to start, 1,000 bbl. daily, along tracks Texas & Pacific R.R. and West Dallas Pike. $150,000-$175,000. Engineer and architect not announced.

Tex., Denton—State appropriated $110,000 for heating plant at College of Industrial Arts, here.

Tex., Electra—Griswold Oil Co. making plans and takes bids in spring 2,500 gal. cracking plant and pipe lines, along tracks Ft. Worth and Denver City R.R. $100,000. Private plans.

Tex., Mexia—Mexia Textile Mills, c/o B. F. Stollenwerk, making plans and takes bids in summer 5,000 spindle cotton mill. $300,000. Engineer and architect not announced.

Okla., Ardmore — Colvert Ice Co. Inc., having plans prepared by J. White, archt., 101 West Main St., 2 story and basement, 60 x 110 ft. plant, brick. $50,000.

Okla., Muskogee — Midland Valley R.R. plans 2 story and basement, 40 x 150 ft., supply depot, rein.-con. and brick. $125,000. C. Kaighn, ch. engr.

Okla., Tonhawa—City having plans prepared 1 story, 50 x 70 ft., power plant, brick, 4th and Oteo Sts., $70,000. Ruckel Eng. Co., Interurban Bldg., Hutchinson, Kan., engrs.

Idaho, Ahsahka — Grangeville Electric Light and Power Co., Grangeville, having surveys made for 4,000 hp., hydro-electric plant, daming North Fork Clearwater River, and transmission lines to Orofino.

Calif., Long Beach—E. M. John, 1020 East 2nd St., et al., having plans prepared by W. H. Austin, archt., 1st Natl. Bank Bldg., 12 story, newspaper plant and office.

Industrial Works (Continued)

concrete and brick, Bway. To exceed $750,000.

Calif., Los Angeles—Quality Electric Co., 416 East 3rd St., had plans prepared by W. D. Lee archt., 610 Grosse Bldg., 1 story and mezzanine, 40 x 175 ft., factory, brick, 812 San Pedro St.

Calif., Richmond—Pacific Sanitary Mfg. Co., 67 New Montgomery St., San Francisco, had plans prepared rein.-con. extensions to factory, here. $150,000. Work will be done under supervision of W. Von Hoelfen, supt. of construction, c/o owner.

Calif., San Francisco — City and San Francisco Co. plan car repair shops, rein.-con., block bounded by Mariposa, 17th, York and Bryant Sts. M. M. O'Shaughnessy, city engr.

Calif., San Jose — San Jose Mercury-Herald, 20 West Santa Clara St., plans 3 story, newspaper plant and office, fireproof, San Fernanado and 3rd Sts. $150,000.

Calif., Santa Rosa—V. H. Fahrner (Fahrner Motor Co.), plans garage and autosales room, on 132 x 240 ft. site, Mendocino Ave. $150,000.

Que., Montreal—See "Buildings."

Ont., London — Teasdall Hosiery Mills, Ridout St., plans factory, Ridout St., $200,000.

Ont., Sarnia—Consolidated Stamping & Mfg. Co., 4848 Woodward St., Detroit, Mich., plans factory, Campbell St., here. $75,000.

BIDS DESIRED

Conn., Hartford—March 24, by Golden-Storrs & Co., archts. and engrs., 118 Asylum St., 4 story, 40 x 52 ft. factory, rein.-con. and brick, plain foundation, for Standard Mattress Co., 71 North St. $40,000. Noted Feb. 15.

Conn., South Norwalk—W. W. Dawson, archt., 12 Washington St., receiving bids 3 story, 50 x 80 ft. and 10 x 50 ft. factory additions, brick and timber, for G. S. Roth & Son Co., 42 Water St. $40,000.

Pa., Chestnut Hill (Phila. P. O.)—F. V. Nichels, archt., 15 South 21st St., Phila., taking bids 1 and 2 story, 189 x 285 ft. brick and steel plant, plain foundation, for Glenn Willow Ice Co., 4517 Main St., Manayunk, (Phila. P. O.) $250,000.

Pa., Creighton—Pittsburgh Plate Glass Co., Frick Bldg., Pittsburgh, will build 1 story, 60 x 1,000 ft., concrete, brick and steel plant, here. $3,000,000. Work will be done by separate contracts. Noted Jan. 18.

Pa., Jeannette — March 24, by Amer. Window Glass Co., Farmers Bank Bldg., Pittsburgh, 1 story, part basement, 42 x 160 ft., 42 x 102 ft. and 48 x 84 ft. plant, incl. gas producer, boiler house and power house, brick and steel. $250,000. Private plant. L. J. Pierce, c/o owner, engr.

Pa., Phila.—J. F. Vodges, Jr., archt., Lansdowne, taking bids 2 story and basement, 80 x 160 ft., brick and steel plant, plain foundation, Hermit Lane and Germantown Ave., for Woods & Logan, Lena and Erlham Sts. $50,000.

S. C., Greenwood — Grendel Cotton Mill Co., receiving bids 4 story addition, 12,000 spindles and 300 looms, to Mill No. 2. $500,000. J. P. Abney, pres.

Ill., Blue Island—March 28 by Federal Refrigerating Co. c/o City Ice and Fuel Co., Cadillac Bldg., Cleveland, O., 1 story, 101 x 123 ft., 62 ft. high, ice storage plant, brick, steel and concrete, here. $150,000. C. C. Coneby, Cadillac Bldg., Cleveland, O., archt. and engr.

Ill., Chicago—C. O. Liska, archt., 189 West Washington St., receiving bids 2 story, 201 x 454 ft. factory, rein.-con., brick and steel, 1801-74 North Lamon Ave., for W. F. Bleck & Co., 1846 Lamon Ave. $200,000.

Wis., Madison—E. Tough, archt., Conklin Bldg., taking bids 2 story, 36 x 70 ft., service station, brick, rein.-con. and stone, plain foundation, for J. E. Teckemeyer, 807 University Ave. Noted March 1.

Wis., Madison—P. M. Homer, archt., 1 East Main St., taking bids 3 story, 50 x 65 ft. shop, brick and rein.con., plain foundation, for C. Rieder, 615 University Ave. $50,000. Noted Feb. 1.

Wis., Milwaukee—Leenhouts & Guthrie, archts., 424 Jefferson St., taking bids 1 story, 106 x 118 ft., brick and timber warehouse, plain foundation, Virginia St., for National Lead Co., 52 2nd St. $45,000. Noted Jan. 18.

Wis., Milwaukee—Erich Schroeder Co., engrs. and archts., 405 Bway., taking bids 3 story and basement, 70 x 115 ft., brick and timber factory, plain foundation, for Fried-Ostermann Co., 623 Reed St. $60,000.

Tex., Waco—Waco Lime Products Co. taking bids for mill. $300,000. B. F. Litsinger, pres. Private plans.

Calif., Los Angeles—Morgan, Walls & Morgan, archts., Van Nuys Bldg., receiving bids 5 story, 60 x 270 ft. warehouse and office, rein.-con., 1st and Alameda Sts., for Los Angeles Soap Co., 633 East 1st St.

CONTRACTS AWARDED

Mass., Chelsea (Boston P. O.)—Forbes Lithograph Mfg. Co., P. O. Box 5130, Boston, 4 story, 100 x 210 ft. warehouse, rein.-con. and brick, Forbes St., here, to Aberthaw Constr. Co., 27 School St., Boston. Archts. est. $300,000.

Mass., Everett — Beaudry Co., Inc., 45 Bromfield St., Boston, 1 story, 70 x 142 ft. foundry, rein.-con. and brick, plain foundation, Parkway, here, to H. Shiels, 1079 Columbus Ave., Boston. $50,000.

R. I., Providence—M. F. Williams Co., 409 Pine St., 1 story, 50 x 160 ft. plant with 30 x 50 ft. ell, brick and steel, plain foundation, Maincentre, to C. I. Bigney Constr. Co., 357 Westminster St. Archts. est. $40,000.

Mass., Pittsfield — General Electric Co., Morningside, 2 story, 50 x 80 ft. factory addition, brick and rein.-con., plain foundation, to Austin Co., 217 Bway., New York City. Archts. est. $40,000.

Mass., Springfield — Mack Motor Truck Co., 278 Chestnut St., 2 story, 80 x 200 ft. garage with 35 x 80 ft. ell, rein.-con. and brick, plain foundation, State St., to E. Radding Constr. Co., 377 Main St. Archts. est. $60,000.

N. J., Camden — Warren Webster Co., Pearl St., 2 story, 180 x 340 ft. factory, rein.-con. and brick, plain foundation, to Austin Co., Bulletin Bldg., Phila. Archts. est. $75,000.

Pa., Hatboro—Roberts & Manders Stove Co., 11th and Washington Sts., Phila., 3 story, 60 x 200 ft. and 2 story, 40 x 150 ft. brick and steel plant, plain foundation, to Austin & Co., Bulletin Bldg., Phila., $175,000. Noted March 8.

Pa., Montgomery—Stokes Mfg. Co., Montgomery, 2 story and basement, 68 x 119 ft. concrete and stone factory, to Heller Bros., Montgomery. Archts. est. $50,000.

Pa., Phila.—D. and M. Markovitz, c/o Carson & Carson, archts., 22 South 15th St., 4 story and basement, 62 x 106 ft. rein.-con., brick and steel garage, plain foundation, 1214-1220 Filbert St., to Long & White, 44 Arnat St. Archts. est. $200,000.

Pa., Pittsburgh—R. G. Jackson, Keown Sta., 5 story and basement, 60 x 150 ft., rein.-con. and steel warehouse and office, 1st Ave. and West St., to J. A. McKay, Butler Pike, Allison Park. Archts. est. $150,000. Noted Feb. 1.

W. Va., Charleston—Libby Owens Co., Nicholas Bldg., Toledo, O., 2 story, 45 x 240 ft., factory additions, brick and steel, here, to H. J. Speiker, Elm and Utica Sts., Toledo, O. Engrs. est. $300,000. Noted Feb. 1.

Ga., Chickamauga — Crystal Springs Bleachery, 1 and 2 story, 135 x 400 ft. bleachery, adjoining present plant, brick, plain foundation, to Batson Cook Co., Columbus (street address not available). $180,000.

Ga., Rossville—Peerless Woolen Mills 60 x 450 ft. addition, to T. S. Moudy, 607 Oak St., Chattanooga, Tenn., $80,000.

O., Cleveland—Federal Brass Co., 1000 Champlain Ave., 1 and 2 story, 89 x 139 ft., brick and steel factory, East 27th St. near Payne Ave., to H. G. Slatmyer & Son Constr. Co., 203 Lakeside Ave. Archts. est. $60,000.

O., Cleveland—New Method Wet Wash Laundry Co., 6916 Wade Park Ave., general contract 1 story, 69 x 100 ft., brick, steel and concrete factory, East 70th St. and Wade Park Ave., to Austin Co., 16112 Euclid Ave. Archts. est. $40,000.

O., Cleveland—F. B. Stearns Co., Euclid Ave. and Lakeview Rd., 2 story, 220 x 300 ft. factory and enameling plant, brick and rein.-con. flat slab, Euclid Ave. along tracks of New York, Chicago & St. Louis R.R., to S. W. Emerson Co., 1836 Euclid Ave. Archts. est. $300,000.

O., Cleveland—M. H. Foote, 1571 Columbus Rd., 2 story, 42 x 110 ft., brick and steel factory, East 140th St. north of St. Clair Ave., to G. A. Rutherford Co., 2725 Prospect Ave. Archts. est. $50,000. Noted March 15.

O., Shelby—Shelby Spring Hinge Co., 2 story, 40 x 162 ft., brick, steel and concrete factory addition, to M. Crawford & Son and D. Weaver, Shelby. Archts. est. $75,000.

Mich., Detroit—Pennsylvania R.R., 1368 Penobscot Bldg., 2 story, 65 x 800 ft. rein.-con., brick and steel freight terminal and loading platform, West Congress St., to H. G. Christman & Co., 315 Stephens Bldg., $450,000.

Mich., Jackson—Amer. Gear & Mfg. Co. altering and building 75 x 125 ft. brick and steel heat treating plant, concrete loading docks and connecting bridge to machine shop, to Everett-Winters Co., 751-754 Book Bldg., Detroit.

Ill., Chicago — Washburn-Crosby Co., Chamber of Commerce Bldg., Minneapolis, Minn., 4 and 7 story, 75 x 149 ft. plant, rein.-con., brick and steel, 104th and Commercial Sts., here, to Foltz & Brand, 111 West Washington St., $185,000.

Ill., Chicago — Justrite Mfg. Co., 2061 Southport Ave., 4 story, 65 x 100 x 175 ft. factory, rein.-con., brick and steel, Southport Ave. near Clybourn Ave., to W. Adams Co., 209 South La Salle St. Archts. est. $80,000.

Wis., Chilton—Hingiss & Bessler, Kiel, 1 story, 60 x 150 ft., brick and concrete garage, plain foundation, here, to Franz Radloff Co., Plymouth. Archts. est. $40,000. Noted Feb. 8.

Wis., Green Bay—Western Lime & Cement Co., 68 Wisconsin St., Milwaukee, will build 2 story, 70 x 82 ft., lime plant, brick and steel, plain foundation, by day labor; 300-ft. dock, concrete and wood piling, piling to Greiling Bros., East Walnut St. Engrs. est. $100,000.

Wis., Kenosha—Frost Mfg. Co., Fremont Ave., will build 1 story, 60 x 100 ft. factory addition, brick and steel, plain foundation, by day labor; steel to Kenosha Boiler & Structural Co., Linden Ave. Archts. est. $45,000.

Wis., Milwaukee—Wisconsin Plumbing & Heating Supply Co., 296 Reed St., 1 story, 34 x 140 ft., brick and timber warehouse, plain foundation, to Starck Bros., 265 23rd Ave. Archts. est. $45,000.

Wis., Milwaukee—National Straw Wks., 449 18th Ave., 4 story and basement, 60 x 78 ft., addition to warehouse, brick and timber, plain foundation, to E. Steigerwald Co., 3603 Vliet St. Archts. est. $65,000. Noted Feb. 22.

Wis., Milwaukee—E. A. Swendson, 714 National Ave., 1 story and basement, 150 x 200 ft., brick and concrete garage, plain foundation, to Madson, Christenson & Ingbretson, 1289 National Ave. Archts. est. $75,000. Noted March 1.

Wis., Milwaukee—Pawling & Harnischfeger Co., 38th St. and National Ave., 1 story, 100 x 350 ft., machine shop, brick and steel, plain foundation, to W. W. Oefelein, 86 Michigan Ave. Archts. est. $150,000.

Wis., Oshkosh—Medberry-Findeisen Co., 58 Algoma St., 3 story and basement, 42 x 100 ft., brick and concrete warehouse, plain foundation, to C. R. Meyer & Sons, 50 State St. Archts. est. $40,000. Noted Feb. 15.

Wis., Plymouth—Phenix Cheese Co., 2 story, 45 x 50 ft., cheese factory and warehouse, brick and rein.-con., plain foundation, to P. Welling, Plymouth. Archts. est. $40,000.

Wis., Racine—Crescent Material Co., 468 College Ave., gravel plant and machinery, rein.-con. and brick, along Root River, to Racine Constr. Co., 468 College Ave. Archts. est. $40,000.

Wis., Stevens Point—R. E. Newby, 212 Strongs Ave., will build 2 story and basement, 70 x 124 ft., brick, tile and concrete garage, plain foundation, Church and Main Sts., by day labor. $50,000. Noted Feb. 22.

Ia., Sioux City—Sioux City Brick and Tile Co., 9 West 3rd St., general contract 5 story, 60 x 80 ft. machine shop, also 44 x 136 ft., 44 x 126 ft., 60 x 60 ft., 38 x 59 ft., 38 x 44 ft. and 24 x 52 ft., all foregoing 1 story, brick and frame, to W. Klinger, Warnock Bldg., $100,000.

Minn., St. Paul—St. Paul Gas Light Co., 6th and Cedar Sts., general contract 100 x 225 ft. generating plant and 60 x 150 ft. pulverizing plant, rein.-con., Island in Mississippi River, to G. J. Grant Constr. Co., 906 Exchange Bank Bldg. Noted Jan. 11.

Kan., Smith Center—S. C. Walker will build 3 story and basement, 40 x 100 ft., warehouse and cold storage plant, hollow tile, by day labor. $50,000. W. E. Grover, Stormont Bldg., Topeka, archt.

Mo., Kansas City—Amer. Ice Co., Agnes and Guinotte Aves., 1 to 2 story and basement, 80 x 127 ft., rein.-con. and brick plant, 4730 Tracy Ave., to Collins Bros., 1601 Grand Ave., $57,000. Noted Feb. 1.

Industrial Works (Continued)

Mo., St. Louis—Laclede Gas Light Co., Laclede Gas Light Bldg., 1 and 2 story, 100 x 175 ft., rein.-con., brick and steel garage and shop, Forest Park Blvd., to Gamble Constr. Co., 620 Chestnut St. Archts. est. $50,000. Noted March 1.

Mo., St. Louis—Von Hoffman Press, 9th and Walnut Sts., 7 story, 64 x 125 ft., rein.-con., brick and steel plant addition, plain foundation, 9th St., to Gamble Constr. Co., 620 Chestnut St. Archts. est. $175,000. Noted Jan. 11.

Mo., St. Louis—United Bakeries Corp., Grand Blvd. and Natural Bridge Rd., 1 and 2 story, 75 x 130 ft., rein.-con. and brick plant, plain foundation, Benton St., to W. C. Harting, Commercial Bldg. Archts. est. $100,000. Noted March 1.

Tex., Brownwood—Helious Gasoline Co. will build refinery, 6,600,000 cu.ft. gas daily capacity, or 10,000 gal. gasoline casing head plant, by day labor. $250,000. Private plans.

Oklahoma—See "Miscellaneous."

Calif., Oakland—State Dept. Pub. Wks., Sacramento, power house, recreation building, employees' cottage and women's shop building, at Industrial Home for Adult Blind, here, to F. W. Maurice, 1362 East 25th St., $45,760. Noted March 1.

Calif., San Francisco—Moody Estate Co., Kohl Bldg., three 2 story and basement, rein.-con. warehouses, Townsend and Bluxome Sts. near 6th St., to K. E. Parker Co., 519 California St., $213,000.

B. C., Waneta—Waneta Power Co., first unit, 4,000 hp. hydro-electric and nitrogen fixation plant (ultimately 400,000 hp.) on Pend D'Oreille (Clarks Fork) River, to Nettleton Bruce & Ashbaugh, Amer. Bank Bldg., Seattle, Wash., $300,000. Plant when completed will be able to furnish power for construction of main dam and plant. Total est. cost $4,000,000. Noted Nov. 9 under "Dams."

Buildings

PROPOSED WORK

Mass., Boston—Lodge—Boston Lodge of Elks, 10 Somerset St., having preliminary plans prepared 11 story, 100 x 150 ft., rein.-con., brick and stone, Tremont and Warrenton Sts. $2,000,000. Engineer and architect not selected.

R. I., Providence—Church—St. Badalberts Church having plans prepared by H. Ludorf, archt., Main St., New Britain, Conn., 140 x 160 ft., brick and terra cotta, plain foundation, Attwells Ave. $170,000.

Conn., Hartford—Apartment—J. Howard, Lancaster Rd., West Hartford, having plans prepared by Berenson & Moses, archts., 30 Allyn St., 4 story, 90 x 120 ft., rein.-con. and brick, plain foundation, here. $200,000.

Conn., Hartford—Apartment—J. O. Osterland, 637 Wethersfield Ave., having plans prepared by B. Sellew, archt., 721 Main St., three 3 story, 41 x 180 ft., brick, plain foundations, Washington St. $200,000.

Conn., New Britain—Apartment—G. A. Quigley, 297 Main St., plans 4 story, West Main St. $160,000. Engineer and architect not selected.

Conn., New Haven—Parish House—C. S. Palmer, archt., 114 Whitney Ave., soon lets contract 3 story and basement, 150 x 200 ft., brick and stone, plain foundation, Church and Wall Sts., for Trinity Church Parish. $300,000. Noted Jan. 18.

Conn., Norwalk — Church — St. Paul Protestant Episcopal Church having plans prepared by Fowler-Seaman & Co., archts., Broad St. Bank Bldg., Trenton, N. J., 1 story, 48 x 140 ft., brick and stone. $150,000. L. B. Howell, pastor.

N. Y., Brooklyn—School—Bd. Educ., 500 Park Ave., New York, having plans prepared by W. H. Compert, archt. and engr., Flatbush Ave. extension and Concord St., 5 story, 178 x 195 ft., brick, steel and stone, plain foundation, West 3rd St. near Sheepshead Bay Blvd., here.

N. Y., Buffalo—Science—City having preliminary plans prepared by Esenwein & Johnson, archts., Ellicott Sq. Bldg., 3 story, 220 x 260 ft., rein.-con., terra cotta and stone, Humbolt Parkway. $1,000,000.

N. Y., Elmira Heights—Lodge—Heights Masonic Lodge plans brick, concrete and steel lodge. $175,000-$200,000.

N. Y., Liverpool—School—Bd. Educ. plans modern school. $150,000-175,000. A. W. Hemingway, pres.

N. Y., Mayville — High School — Voted $160,000 bonds for new school, West Chautauqua St. N. Lincoln, village pres. Noted Feb. 15.

N. Y., New York—Exchange—New York Telephone Co., 15 Dey St., having plans prepared by McKenzie, Voorhies & Gmelin, archts. and engrs., 342 Madison Ave., 4 story top addition, brick, steel and stone, 121 West 73rd St. $800,000.

N. Y., New York—Hospital—St. Marks Hospital, c/o Hunt & Hunt, archts. and engrs., 28 East 21st St., plans brick, steel and stone, plain foundation, 233 East 11th St., $500,000.

N. Y., New York—Theatre—W. Hagedorn, c/o T. W. Lamb, archt. and engr., 644 8th Ave., having plans prepared 2 story, brick, steel and stone, plain foundation, Fordham Rd. $300,000.

N. Y., Ogdensburg — Church — Catholic Parish plans stone, concrete and steel. $150,000-$175,000. J. H. Conroy, bishop.

N. Y., Rochester—Church—Building Committee of Parsells Ave. Baptist Church plans new church. $150,000. Address F. H. Divine, c/o owner.

N. Y., Schuylerville—School—Bd. Educ. plans new school. $150,000-$160,000.

N. Y., Scotia—High School—Voted $270,000 bonds new high school, Sacandaga Rd. A. Gawson, village clk. Noted Feb. 1.

N. J., Newark—Apartment—J. Shacket, c/o F. Grad, archt. and engr., 245 Springfield Ave., having plans prepared 4 story, brick, steel and stone, plain foundation, Avon Pl. $150,000.

N. J., West Hoboken—Bank—National Bank of North Hudson having plans prepared by L. Feinen and G. F. Bial, archts., 3697 Hudson Blvd., Jersey City, brick, steel and stone addition, plain foundation, 141 Summit Ave. $200,000.

Pa., Altoona—Nurses Home—Altoona Hospital Bd., c/o H. Slutaker, having plans prepared by Crow, Lewis & Wick, archts., 200 5th Ave., New York City, 4 story, 40 x 105 ft., brick, limestone and terra cotta addition. $150,000.

Pa., Altoona—Store—M. Berman, 2621 Broad Ave., takes bids about May 1, 3 story and basement, 25 x 150 ft., brick and steel, 1313 11th Ave. $150,000. Engineer and architect not selected.

Pa., Bradford—High School—Bd. Educ. plans $280,000 bond issue for new school. Engineer and architect not selected.

Pa., Corry—Hotel—Hotel Corry Inc., plans 75 room hotel. $200,000-$250,000. C. B. Porter, secy. Engineer and architect not announced. Noted Aug. 24.

Pa., Indiana—Church—First Methodist Episcopal Church having plans prepared by J. T. Simpson, archt., 620 Essex Bldg., Newark, N. J., 1 story, 80 x 110 ft. and 40 x 40 ft. $250,000.

Pa., Johnstown — High School — School Dist. having plans prepared by J. E. Adams, archt., Nemo Bldg., 3 story and basement, 225 x 300 ft. concrete, brick and steel, Somerset Ave. $700,000.

Pa., Lebanon—School—Bd. Educ. having plans prepared by Ritcher & Eller, archts., Reading, for Henry Houch School, 5th Ave. and East Weidman St. $250,000.

Pa., Phila. — Apartment—Acme Realty Co., 1332 Lombard St., soon takes bids 3 story, 50 x 132 ft. brick and stone, 1732 Christian St. $150,000. C. H. Wilson, 2038 Berks St., archt.

Pa., Phila. — Apartment — Home Realty Co., 1332 Lombard St., soon takes bids 3 story and basement, 50 x 130 ft. brick and steel, plain foundation, 1732-36 Christian St. $150,000. C. H. Wilson, 2038 Berks St., archt.

Pa., Phila.—Apartment—A. H. Muller, archt., 901 Walnut St., soon takes bids 4 story and basement, 45 x 60 ft. with 2 wings, each 37 x 90 ft., brick, steel and stone, plain foundations, Overbrook Sect. $1,000,000. Owner's name withheld.

Pa., Phila.—Church—North West Memorial Church, c/o H. R. Stackhouse, archt., 1120 Locust St., soon takes bids 1 story and basement, 85 x 180 ft. brick, steel and stone, plain foundation, 28th St. and Lehigh Ave. $150,000.

Pa., Phila.—Clubhouse—Girard Craftsmen Club, 20th and Chestnut Sts., soon takes bids 7 story and basement, 60 x 161 ft. rein.-con., brick and steel, 20th and Chestnut Sts., $600,000. C. S. Adams, 2038 Spruce St., archt.

Pa., Phila.—Office—C. Kahn, Morris Bldg., soon takes bids 15 story and basement, 150 x 225 ft. rein.-con., brick and steel, Broad and Catherine Sts. $1,500,000. L. B. Rothchild, 215 South Broad St., archt.

Pa., Pittsburgh — Y. M. C. A., Magee Bldg., having plans prepared by Y. M. C. A. Building Bureau, 347 Madison Ave., New York City, 4½ story and basement, 60 x 170 ft. brick and stone, North Ave. and Monterey St. $250,000.

Pa., Scranton—Sanitorium—Comrs. Lackawanna Co. having plans prepared by D. H. Morgan, archt., Connell Bldg., brick addition to sanitorium on West Mountain.

Pa., Warren—School—Election in April to vote on $600,000 bonds for new Junior High School and additions to old ones.

Pa., Watsontown—High School and Hall—Bd. School Directors, takes bids in summer 3 story and basement, 90 x 115 ft. brick, Canal St. $150,000.

Pa., Wilkes-Barre—Apartment—H. Mallander, 167 Barney St., having plans prepared by R. M. Herr, archt., Simon Long Bldg., 3 story, brick, West Ross and West River Sts., to exceed $150,000.

Pa., Wilkes-Barre—Hotel—Mallow Hotel Corp. having plans prepared by Warren & Wetmore, archts., 16 East 47th St., New York City, 14 story, 50 x 130 ft., South Franklin St. $1,000,000. Former plans for hotel and theatre abandoned. Noted March 15.

D. C., Wash.—Store—Hecht & Co., 7th and F Sts., having plans prepared by J. Hunt, archt., 30 North Michigan Ave., Chicago, store addition. $2,000,000.

W. Va., Charleston—Bank and Office—Kanawha Valley Bank having plans prepared by A. C. Bossom, archt., 680 5th Ave., New York City, 100 x 120 ft., probably 19 story, brick, steel and stone, Kanawha St. $1,500,000. S. L. Dickensen, pres.

N. C., Chapel Hill—College—State Bd. Educ., Raleigh, plans constructing and equipping various buildings and dormitories, on campus, here. $1,650,000. H. W. Chase, pres. T. C. Atwood, Chapel Hill, archt.

N. C., Charlotte—Office—Textile Office Bldg., c/o W. L. Stoddart, archt. and engr., 9 East 40th St., New York City, having plans prepared 15 story, brick, stone and steel.

N. C., Charlotte—Theatre—J. H. Cutter, Commercial Bank Bldg., having plans prepared by W. L. Stoddard, archt., 9 East 40th St., New York City, 3 story. $200,000. Noted March 1.

N. C., Raleigh—College—State College of Agriculture and Engineering plans physics and chemistry building, brick, on campus. $200,000. W. C. Riddick, pres. Engineer and architect not selected.

N. C., Raleigh—Dormitories—North Carolina State College of Agriculture & Engineering, plans 2 dormitories, on campus. $300,000. W. C. Riddick, pres. Engineer and architect not selected.

N. C., Raleigh—Institutional—State Hospital plans constructing and improving buildings, Dix Hill. $394,000. A. Anderson, supt.

Fla., Clearwater — School — Pinellas Co. School Bd. plans election to vote on $150,000 bonds for school. R. S. Blauton, secy.

Fla., Tampa — Auditorium — American Legion having plans prepared by F. J. Kennard, Krause Bldg., and F. O. Adams, Grand Theatre Bldg., for auditorium. $300,000.

Tenn., Chattanooga — Schools — Plans schools in First Dist., Jefferson St. and Orange Grove. $675,000. Plan $1,000,000 bond issue to meet demands. F. Frazier, comr. schools.

Ky., Bardstown—Hotel—W. O. Stiles is at head of syndicate being formed, which plans 6 or 7 story. $300,000. Engineer and architect not announced.

Ky., Louisville—Home—Masonic Widows & Orphans Home, 2nd St. between C and D Sts., plans group of buildings on 124 acre site, on Shelbyville Rd., near here. $1,200,000. J. Garnett, Starks Bldg., chn. building com.

O., Cincinnati—Sales—Bauer Auto Sales Co., 6th St. between Bway. and Sycamore St., having plans prepared by C. J. Kiefer, archt. and engr., 4th National Bank Bldg., 4 story, rein.-con. and terra cotta, plain foundation. $150,000.

O., Cleveland—Commercial—A. D. Taylor and C. W. Brainard, 4614 Prospect Ave., plan 3 story and basement, 33 x 135 ft. brick, steel and concrete, 4319 Carnegie Ave. $150,000. Engineer and architect not selected.

O., Cleveland—Exchange—Ohio Bell Telephone Co., 4300 Euclid Ave., plans 74 x 198 ft., probably 8 story, brick, steel and concrete, Huron Rd. and East 8th St. $1,000,000. A. N. Symes, 4300 Euclid Ave., engr. Architect not selected.

Buildings (Continued)

O., Dayton—Hospital—Miami Valley Hospital, constructing campaign to raise $500,000 for 4 story, rein.-con. and brick addition, plain foundation, Apple St. Engineer and architect not selected.

O., Lakewood (Cleveland P. O.)—City Hall and Fire House—Plans 2 story, brick, steel and concrete. $150,000. E. A. Hill, City Hall, mayor. Engineer and architect not selected.

O., Mansfield—City Hall, Police and Fire Stations—Having sketches made by V. Redding, archt., Mansfield, 3 story and basement, brick, steel and concrete. $175,000. C. Stander, dir. Pub. Serv.

O., Marietta—Bank and Office—Weary & Alford, archts., 1923 Calumet St., Chicago, rejected bids 10 story and basement, 50 x 114 ft., brick, stone, steel and terra cotta, 2nd and Putnam Sts., here, for Peoples Banking & Trust Co. $400,000. Will readvertise. Noted March 8.

O., Massillon—Club—Local Lodge Masons plan clubhouse. $200,000. Engineer and architect not selected.

O., Rocky River—Commercial, Apartment and Theatre—Four Way Impvt. Co., c/o J. H. MacDowell, archt., 510 Bulkley Bldg., Cleveland, having plans prepared 1 and 3 story and basement, brick and steel, Detroit Rd., here. $200,000.

Mich., Detroit—Apartment—Calomeni & Sons, 2901 St. Jean Ave., having plans prepared by P. R. Rossello, archt., 406 Congress Bldg., 3 story, basement and central court, 80 x 100 ft. brick, steel and stone, plain foundation, St. Jean Ave. $250,000.

Mich., Detroit — Apartment — C. E. E. Stansell, 1522 Sycamore St., having plans prepared by Van Leyen, Schilling, Keough & Reynolds, archts., 3440 Cass Ave., 4 story and basement, 60 x 90 ft. rein.-con., brick and steel, plain foundation, 2nd Blvd. and Henry St. $200,000.

Mich., Detroit—Nurses Home—Childrens Hospital, Farnsworth Ave., having plans prepared by A. Kahn, archt., 1000 Marquette Bldg., 5 story, 54 ft. high, 150 x 225 ft., rein.-con., brick, steel and stone, plain foundation, Farnsworth Ave.

Mich., Detroit—Office—B. C. Wetzel & Co., archts., 2317 Dime Bank Bldg., preparing plans 11 story and basement, 90 x 94 ft. rein.-con., brick and steel, plain foundation, Library Ave. $550,000. Owner's name withheld.

Mich., Detroit—Theatre—B. F. Keith Theatre Co., 720 Euclid Ave., Cleveland, O., plans 3 or more stories, rein.-con., brick and steel, plain foundation. $3,000,000. Engineer and architect not selected.

Mich., Lansing—School—Bd. Educ., City Hall, having plans prepared by J. N. Churchill, archt., Lansing, 2 story and basement, 20 room, rein.-con., brick and steel, plain foundation, Kalamazoo St. $250,000.

Mich., Saginaw—Office—Byers & Waler (archts. and owners), Saginaw, preparing plans 4 story and basement, brick and steel, plain foundation. $200,000.

Ill., Chicago—Apartment—Ainlake Building Corp., c/o L. B. Steif, archt., 64 West Randolph St., having plans prepared 6 story, 110 x 295 ft., rein.-con., brick and steel, Ainslee and Lake Sts. $750,000.

Ill., Chicago—Apartment—C. W. Christensen, archt., 1818 Greenleaf St., preparing plans 3 story, 50 x 125 ft., rein.-con., brick and steel, Lakewood and Farwell Aves. $175,000. Owner's name withheld.

Ill., Chicago—Apartment—P. F. Reynolds, c/o S. N. Crowen, archt., 10 South La Salle St., having plans prepared 3 story, 130 x 165 ft., rein.-con., brick and steel, Aldine Ave. near Sheridan Rd. $300,000.

Ill., Chicago—Apartment—A. Sommers c/o T. A. Herr and S. N. Crowen, archts., 10 South La Salle St., plans 11 story, 30 x 88 ft., rein.-con., brick and steel, 211 East Delaware Ave., $500,000.

Ill., Chicago—Apartment and Store—J. Hanfman c/o D. S. Klafter, archt., 64 West Randolph St., plans 3 story and basement, 175 x 300 ft., rein.-con., brick and steel, Morse and Hillsdale Sts. $700,000.

Ill., Chicago—Hotel, Theatre and Office—Chicago Auditorium Assn., c/o R. F. Clinch, 209 South La Salle St., plans 25 story, Michigan Ave. and Congress St. $15,000,000. Architect not selected.

Ill., Chicago — Office — See "Industrial Works."

Ill., Chicago—Store and Office—J. Horwitz, 10 South La Salle St., having plans prepared by Denson & Oman, archts., 5 North La Salle St., 2 story, rein.-con., brick and steel, Lincoln and Robey Sts. $175,000.

Ill., Evanston—Apartment—W. H. Bell, c/o H. A. Mulder, archt., 140 South Dearborn St., Chicago, having plans prepared 3 story and basement, 175 x 175 ft., rein.-con., brick and steel, Ridge Ave. $275,000.

Ill., Evanston — Apartment — A. H. Quitsow, archt., 11 South La Salle St., Chicago, preparing plans 3 story and basement, 94 x 156 ft., rein.-con., brick and steel, Hinman Ave. near Kedzie St. $150,000. Owner's name withheld.

Wis., Janesville — Theatre — D. Jeffris Theatre Co., 14 West Milwaukee St., had revised plans prepared by M. Tullgren & Sons, archts., 425 East Water St., Milwaukee, 1 story and basement, 60 x 200 ft., brick, steel and concrete, plain foundation, West Milwaukee St., $150,000.

Wis., Madison—Church—Bethel Lutheran Congregation, c/o O. J. Siljan, pastor, 729 East Forham St., having plans prepared by Balch & Lippert, archts., Gay Bldg., 2 story, 60 x 150 ft., brick, rein.-con. and stone, plain foundation, Gorham St. $150,000.

Wis., Madison—High School—Bd. Educ. plans 3 story addition to east side high school, incl. gymnasium and auditorium, brick, rein.-con. and steel, plain foundation. $200,000. T. W. Gosling, 22 West Dayton St., supt. schools.

Wis., Madison—Office—Washington Bldg. Corp., 357 Washington Bldg., plans 5 story, brick and steel addition, plain foundation. $150,000. C. J. Ellis, mgr. Engineer and architect not selected.

Wis., Milwaukee—Apartment—O. Brachman, 425 East Water St., having plans prepared by M. Tullgren & Sons, archts., 425 East Water St., 6 story, 50 x 92 ft., brick and concrete, plain foundation, Hathaway St. $160,000.

Wis., Milwaukee—Hotel—A. L. Richards, 90 Mason St., plans 11 and 2 story and basement, each 100 x 100 ft., L shaped, brick and concrete, plain foundations, 2nd St. $400,000. Architect not selected.

Minn., Duluth—City Hall—F. S. Snively, mayor, takes bids about April 30, 4 story and basement, 126 x 200 ft., rein.-con., granite faced, 1st St. and 4th Ave. $800,000. German & Jenssen, Exchange Bldg., archts. and engrs. Noted Jan. 25.

Ia., Boone—School—Voted $225,000 bonds for school. Noted March 1.

Ia., Des Moines—Schools—Voted $2,630,000 bonds for new schools and addition to old ones. G. L. Garton, 629 3rd St., secy. Bd. Educ. Noted Jan. 25.

Ia., Le Mars—High School—Voted $150,000 bonds for high school addition. R. J. Koehler, secy. School Bd. Noted March 1.

Ia., Sioux City—Schools—Voted $850,000 bonds for schools. Architect not selected. Noted Feb. 1.

Minn., Minneapolis—Office—H. C. Vogel, Millers and Traders Bank Bldg., having plans prepared by Croft & Boerner, archts., 1006 Marquette Ave., remodeling Iron Exchange Bldg., and constructing 2 additions, one 4 story, 75 x 127 ft. above present structure, other 12 story and basement, 80 x 150 ft., rein.-con., brick and tile, 4th Ave. S. and 4th St. $600,000.

Minn., St. Paul—Hospital—St. Lukes Hospital, Smith and Sherman Aves., having plans prepared by L. Bassindale, archt., 321 Capitol Bank Bldg., 4 story and basement, 40 x 100 ft., rein.-con., brick, tile and stone addition, Smith and Sherman Sts. $150,000. A. Cathcart, 402 Merchants Natl. Bank Bldg., pres.

Kan., Emporia—High School—Election April 3, to vote on $400,000 bonds. A. Woods, secy. Bd. Educ.

Kan., Lawrence—Club—B. P. O. E. having preliminary plans prepared by R. E. Scamell, archt., 614 New England Bldg., Topeka, 3 story and basement, 100 x 117 ft., brick, rein.-con. and steel. $150,000.

Neb., Falls City—Courthouse—Richardson Co. soon takes bids 2 story and basement, 66 x 100 ft., rein.-con., brick, steel and terra cotta. $200,000. W. F. Gernandt, 701 Omaha Bank Bldg., Omaha, archt. Noted Jan. 11.

Neb., Omaha—Bank—Federal Reserve Bank, c/o A. Byrne, dir., having plans prepared by Graham, Anderson, Probst & White, archts., 80 East Jackson Blvd., Chicago, 4 story, 48 x 130 ft., probably stone faced, 17th and Dodge Sts. $700,000.

Neb., Wymore—School—Election soon to vote on $190,000 bonds for school. Engineer and architect not selected.

N. D., Fargo—Store—Herbst Dept. Store, 16 Bway., having plans prepared by Keith & Kurke, archts., Equity Bldg., remodeling present building and 4 story and basement, 36 x 100 ft. rein.-con., brick and tile addition. $250,000.

Mo., Boonville—Armory—Kemper Military School having plans prepared by L. Abt, archt., Moberly, 1 story and basement, 102 x 288 ft., rein.-con., brick, steel and stone. $150,000.

Mo., Kansas City—Lodge—Greenbaum, Hardy & Schumacher, archts., 216 Scarritt Bldg., takes bids about April 15, 3 story and basement, 105 x 145 ft., rein.-con., brick and terra cotta, Linwood Ave. and Wynne St., for Y.M.H.A., 3117 Troost Ave. $250,000. Noted Feb. 1.

Mo., St. Louis—Hotel—J. Feldman, 116 North 8th St., plans 16 story, 60 x 130 ft., rein.-con., brick and steel, concrete pile foundation, Pine St. $1,000,000. Engineer and architect not announced.

Mo., St. Louis—Morgue—City had plans prepared by L. E. Bowen, archt., 301 City Hall, and soon takes bids 2 story, 90 x 130 ft., rein.-con. and brick, plain foundation, Clark Ave. $200,000.

Mo., Trenton—High School—April 3, to vote on $200,000 bonds for high school.

Mo., Wellston (St. Louis P. O.)—High School—Wellston School Bd. had plans prepared by E. J. Gieseler, archt., 4396 Gibson Ave., St. Louis, 2 story and basement, 75 x 135 ft., rein.-con. and brick, plain foundation, Ella Ave. $150,000 bonds voted.

Tex., Corpus Christi—Hospital—J. T. Renfro, conducting campaign to raise funds for Fred Roberts Memorial Hospital. $250,000. Engineer and architect not selected.

Tex., Dallas—Office—C. S. Mitchell, c/o City National Bank, having plans prepared 8 story and basement, 75 x 98 ft. Live Oak and Olive Sts. $150,000-$200,000. Engineer and architect not announced.

Tex., Dallas—Office—Chain Stores Co., 386 Bway., New York City, plans 12 story and basement, 108 x 200 ft., Elm and St. Paul Sts., here. $1,000,000. McNeny & McNeny, Praetorian Bldg., local agents. Engineer and architect not announced.

Tex., Denton—Administration—State appropriated $300,000 for administration building at North Texas Normal College, here.

Tex., Ft. Worth—Hotel—J. H. Johnson and associates, 1215 Penn Ave., plan 10 story, 100 x 264 ft. $700,000. Engineer and architect not announced.

Okla., Guthrie — High School — Election this spring to vote on $300,000 bonds for 3 story and basement, rein.-con., brick and stone.

Okla., Paul Valley—Hotel—W. Littington Hotel, c/o J. C. Moody, Ardmore, plans 5 story and basement, 75 rooms, rein.-con., brick and stone. $125,000-$150,000. Engineer and architect not selected.

Okla., Tulsa—Medical Art—C. W. Day, Temple Apartments, having plans prepared by Rush, Endacott & Rush, archts., 101 Lorton Bldg., and takes bids about April 1, 8 story and basement, 50 x 140 ft., rein.-con., brick, stone and terra cotta, 6th and Boulder Sts. $400,000.

Idaho — Hospital — State Legislature, Boise, appropriated $160,000 for tuberculosis hospital, and appointed commission to take charge. Secretary of State heads commission.

Ore., Portland—High School—School Bd. Dist. 1, Administration Bldg., takes bids about April 23, Gregory Heights School, 2 story, 65 x 264 ft., rein.-con., Siskiyou St., 73rd to 74th Sts. $200,000. R. Martin, Jr., Railway Exch. Bldg., archt.

Calif., Berkeley—College—W. R. Hearst, Hearst Bldg., San Francisco, having preliminary plans prepared by B. Maybeck, archt., Lick Bldg., San Francisco, rein.-con. building, to be known as Hearst Hall, on campus of University of California. $350,000.

Calif., Huntington Park—Lodge, Store and Office—Masonic Temple Assn., c/o J. C. Barr, archt., 120 North Pacific Blvd., had plans prepared 3 story, brick, $175,000.

Calif., Long Beach—Office—See "Industrial Works."

Calif., Los Angeles—Convent—Home of Good Shepherd, having plans prepared by A. C. Martin, archt., Higgins Bldg., group of convent buildings, rein.-con. and brick, Pico St. To exceed $150,000.

Calif., Los Angeles—Fire Station—City having plans prepared by R. Meier, archt., San Fernando Bldg., 4 story, rein.-con., 2nd and Hill Sts. $175,000.

Calif., Pasadena — School — City soon takes bids Washington School, brick. To exceed $150,000. Allison & Allison, Hibernia Bldg., Los Angeles, archts.

Calif., San Diego—Hospital—J. J. Cantwell, Roman Catholic Archbishop, Higgins Bldg., Los Angeles, having plans prepared

Buildings (Continued)

fireproof hospital, probably rein.-con. To exceed $250,000. Engineer and architect not available.

Calif., San Francisco—Office—Medico-Dental Bldg. Corp., c/o G. W. Kelham, archt., Sharon Bldg., having plans prepared 12 or 15 story, fireproof, Mason and Post Sts. $1,250,000. Noted Dec. 21.

Calif., San Francisco—Store—Radkin & Kamp, Fresno, having plans prepared by R. F. Felchlin Co., archts., Bank of Italy Bldg., Fresno, 5 or 6 story and basement, 150 x 165 ft., fireproof, Tulare and J Sts. To exceed $150,000.

Que., Montreal—Apartment—P. DuTremblay, Drummond Apts., had plans prepared and takes bids about April 15, 10 story, 250 x 375 ft. rein.-con., Drummond St. $5,000,000.

Que., Montreal—Store, etc.—H. Morgan & Co., Phillips Sq., plan 9 story, 168 x 285 ft. rear addition, St. Catherine St., $1,500,000, also 75 x 160 ft. power house, Aylmer and Mayor Sts., $200,000. both rein.-con. Barrett & Blackard, Canada Cement Bldg., archts.

BIDS DESIRED

Mass., Springfield—High School—April 10, by Com. on City Property, 2 story, 95 x 100 ft., brick addition, Elliot St. $750,000. E. C. and G. C. Gardner, 33 Lyman St., archts. Noted Dec. 7.

Mass., Springfield—School—April 2, by Com. on City Property, 2 story, 85 x 150 ft. brick and limestone, plain foundation, Indian Orchard Dist. $200,000. M. W. Maloney, 145 Chestnut St., archt.

R. I., Providence — Orphanage — W. R. Walker & Son, archts., 49 Weybossett St., taking bids and open same about April 2, 3 story, brick and concrete, plain foundation, Summitt St., for Jewish Orphanage, W. S. Lederer, chn. $150,000. Noted Feb. 23.

Conn., Hartford—School—March 30, by H. N. Tuttle, Chn., 134 Edgewood St., Northwest School Dist., 2 story and basement, rein.-con. and brick, Holcomb St., $150,000. W. D. Johnson Co., 174 Bond St., archt. Noted Feb. 8.

N. Y., New York—Apartment—H. J. Senkel, c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., 5 story, 80 x 125 ft., brick, steel and stone, plain foundation, Davidson Ave. $150,000. Work will be done by separate contracts under supervision of architect.

N. Y., Palmyra—School—April 4, by Bd. Educ. at office of G. S. Tinklepaugh, Griffith Bldg., new school. $250,000. Tooker & Marsh, 101 Park Ave., New York, archts. Noted March 15.

Pa., Beallsville—Clubhouse—March 24, by W. L. Stoddart, archt. and engr., 9 East 40th St., New York City, 2 story, brick, steel and stone, plain foundation, here, for Nemacolin County Club. $150,000.

Pa., Beaverdale—Lodge—March 29, by Building Com. Loyal Order Moose 365, Miners Hall, 2 story and basement, 80 x 100 ft. brick, tile and steel, Main St. $150,000. H. Wacker, Jr., Johnstown, archt. and engr.

Pa., Merion — Art Museum — P. Cret, archt., Otis Bldg., Phila., taking bids 1 and 2 story, 50 x 156 ft., 48 x 68 ft., 21 x 24 ft. and 52 x 92 ft. rein.-con., brick and steel, plain foundation, for A. Barnes, Merion. $1,000,000. Noted Jan. 18.

Pa., Phila.—Apartment—A. S. Shaffer, 4029 Walnut St., taking bids 3 story, 80 x 90 ft. brick and steel, plain foundation, 4029-31 Walnut St. $200,000. Private plans.

Pa., Phila.—Loft—March 27, by C. Wunder, archt., 1425 Locust St., 5 story and basement, 101 x 127 ft., rein.-con. and brick, plain foundation, 5th and Upland Sts., for W. E. Headley, c/o architect. $250,000.

Pa., Phila.—Store and Office—E. Schoppee, archt., 315 South 15th St., taking bids 3 story, 120 x 123 ft. brick and steel, plain foundation, Orthodox St. and Frankford Ave., for W. Thompson, c/o architect. $150,000.

Tenn., Memphis—Administration—April 2, by H. C. Hibbs, archt., 4th and 1st National Bank Bldg., Nashville, 2 story, concrete and brick, stone foundation, for Southwestern Presbyterian University, here. $250,000.

O., Cleveland—Apartment—H. B. Shifren, 2229 East 78th St., taking bids 4 story and basement, 138 x 212 ft., brick and steel, Overlook Rd. near Mayfield Rd. $200,000. Braverman & Havermaet, Ulmer Bldg., archts.

O., Cleveland—Apartments—J. Winer and M. Rapport, 11522 Tembletts Ave., taking bids four 2 story and basement, 33 x 102 ft. and 33 x 122 ft., brick and timber, 13505 Woodworth Rd. $200,000. M. Altschuld, 5116 Woodland Ave., archt.

O., Cleveland—Store—Osborn Eng. Co., archts. and engrs., 2848 Prospect Ave., taking bids and opens same about March 30, altering 6 story, brick and steel, 620 Euclid Ave., for W. Taylor Sons & Co., 630 Euclid Ave. $200,000.

O., Cleveland — School and Chapel — March 27, by W. C. Jansen, archt., 402 Electric Bldg., 2 story and basement, 103 x 150 ft., brick, steel and concrete, Libby Rd., for St. Wenceslaus Roman Catholic Church, 2666 East 35th Pl. $150,000. J. Koudelka, pastor.

O., Lakewood (Cleveland P. O.)—School —March 31, by Bd. Educ., Warren Rd., 2 story and basement, brick, steel and concrete additions to Roosevelt and Harrison Schools. $150,000. C. W. Hopkinson, Rose Bldg., Cleveland, archt.

O., Oxford—Dormitory—April 5, by Bd. Trustees Miami University, 3 story and basement, brick and concrete, on campus. $165,000. L. G. Dittoe, Edwards Bldg., Cincinnati, archt.

O., Toledo—Bank and Office—March 26, by Home Savings Bank Co., 9 story and basement, 59 x 119 ft., brick, steel and concrete, Madison and Huron Sts., $1,000,000. M. Miller, Pres., Walker & Weeks, 1900 Euclid Ave., Cleveland, archts. Noted Dec. 7.

Mich., Kalamazoo—Library—April 7, by H. H. Turner, archt., 923 Michigan Trust Bldg., Grand Rapids, 3 story and basement, 93 x 153 ft. rein.-con., and steel, plain foundation, for Western State Normal School, here. $250,000. Noted March 15.

Ill., Chicago — Apartment-Hotel — H. F. Bloomfield, 118 North La Salle St., receiving bids 7 story and basement, 125 x 360 ft., rein.-con., brick and steel, 1225-45 Albion Ave. $1,250,000. A. Anis, 127 North Dearborn St., archt.

Ill., Chicago—Apartment—C. W. Westerlind, archt., 179 West Washington St., receiving bids 3 story and basement, 100 x 105 ft., rein.-con., brick and steel, Leland St. and North Central Park, for A. Melnick, 4720 Virginia Ave. $150,000.

Ill., Evanston—Apartment—A. H. Quitsow, archt., 11 South La Salle St., Chicago, receiving bids 3 story, rein.-con., brick and steel, Sheridan and Kinney Sts., here, for S. Johnson, c/o architect $200,000.

Ill., Evanston—Apartment—H. A. Mulder, archt., 140 South Dearborn St., Chicago, receiving bids 3 story and basement, 128 x 175 ft., rein.-con., brick and steel, 526 Ridge Ave., here. $200,000. Owner's name withheld.

Ill., Oak Park — Apartment — C. W. Lampe, archt., 155 North Clark St., Chicago, receiving bids 3 story and basement, 100 x 174 ft., rein.-con., brick and steel, Randolph and Maple Sts., here. $150,000. Owner's name withheld.

Ill., Savanna—School—April 12 by W. F. Van Der Meer, archt., 215 Mead Bldg., Rockford, 3 story and basement, 46 x 85 ft., rein.-con., brick and steel, here, for St. Johns Congregation. $150,000.

Wis., Sheboygan—Hospital—Foeller & Schober, archts., Nicolet Bldg., Green Bay, taking bids 2 story and basement, brick, rein.-con. and steel addition, plain foundation, 9th St. here, for Sisters of St. Francis, c/o J. C. Straub, dir., Springfield, Ill. $150,000.

Wis., Sheboygan—Office—W. C. Weeks, archt., 720 Ontario Ave., taking bids 3 story, 150 x 150 ft., brick, rein.-con. and steel addition, plain foundation, 8th St., for J. and W. Jung Co., 721 North 8th St. $200,000.

Ia., Cedar Falls—Dormitory—April 10, by Proudfoot, Bird & Rawson, archts., 810 Hubbell Bldg., Des Moines, 4 story and basement, 40 x 240 ft., rein.-con., brick and stone, for State Teachers College c/o W. H. Gemmell, secy. State Bd. Educ., Des Moines. $175,000.

Ia., Ida Grove—School—April 6 by Bd. Educ., 2 story and basement, rein.-con., brick, tile and stone, $150,000. J. T. Peterson, clk. Keffer & Jones, 204 Masonic Temple, Des Moines, archts. Noted Jan. 11.

Ia., Mason City—Hospital—May 1 by E. O. Broaten, archt., 604 B.M.A. Bldg., 3 story and basement, 40 x 206 ft. with 40 x 120 ft. wing, rein.-con., brick, stone and terra cotta, for St. Lukes Lutheran Hospital. $250,000. Noted Feb. 22.

Ia., West Union—Court House—March 28 (change of date), by Fayette Co., 3 story and basement, 90 x 116 ft., rein.-con., brick, tile and stone. $250,000. J. G. Ralston, L and J Bldg., Waterloo, archt. Noted March 15.

S. D., Kimball—School—March 28, by Bd. Educ., 2 story and basement, 132 x 134 ft. rein.-con., brick, stone and tile. $150,000. King & Dixon, Mitchell, archts. Noted Jan. 18.

Mo., Kansas City—Memorial—March 29, by Liberty Memorial Assn., R. A. Long Bldg., rein.-con., brick and steel, Station Rd. $2,000,000. H. Van Buren Magonigle, 101 Park Ave., New York City, archt. and engr. Noted Jan. 4.

Okla., Tulsa—Church—March 26, by G. Winkler, archt., 414 Palace Bldg., 2 story and basement, rein.-con., brick and stone, 504 Cincinnati St., for Trinity Episcopal Church, c/o R. P. Crum, pastor. $300,000.

Wash., Vancouver—Home—April 7, by Knighton & Howell, archts., U. S. National Bank Bldg., Portland, Ore., 3 story and basement, rein.-con., plain foundation, City Limits and Pacific Highway, for Knights of Pythias. $150,000. Noted Nov. 16.

Calif., Los Angeles—School—March 28, by Bd. Educ., auditorium, shop building and addition to present school, brick and concrete, Torrence School site. To exceed $150,000. Farrell & Miller, Western Mutual Bldg., archts.

Ont., Cayuga—Court House and Gaol—March 30, by R. S. Colter, Cayuga, additions to new court house and gaol. F. Barber and Associates Ltd., 45 Jarvis St., Toronto, and Union Bank Bldg., Dunnville, engrs. Noted Jan. 4.

Ont., Kingston—Library—March 29, by W. E. McNeill, registrar, Queens University, new library. Shephard & Calvin, 36 Toronto St., Toronto, archts. Noted March 15.

Ont., Pembroke—School—March 31, by W. C. Keighley, archt., Grand Trunk Ry. Offices, 2 story and basement, 8 room, concrete, brick and steel, for Bd. Educ. $150,000. Noted Feb. 8.

BIDS RECEIVED

N. Y., Buffalo—High School—Bd. Educ., 1401 Telephone Bldg., March 14, for Lewis J. Bennett High School, 2885 Main St. general contract, from C. H. Everett, 295 Auburn Ave., $1,406,000; plumbing, from Batt Co., 955 Michigan Ave., $79,995; heating and ventilating, from Power Efficiency Corp., White Bldg., $197,785; electrical work, from Sanborn Electric Co., 309 North Illinois St., Indianapolis, Ind., $48,960. Noted Feb. 22.

Pa., Pottstown—High School—School Bd., c/o C. H. Kem, high school, Penn and Chestnut Sts., from W. L. Hampton, Pottstown, $250,622; C. W. Slayer, Harrisburg, (street address not available), $282,997.

D. C., Wash.—School—Dist. Comrs., 509 Dist. Bldg., addition to Garrison School, 12th and R Sts., N. W., from G. E. Wyne, Home Life Bldg., $142,600; H. B. Davis, 1311 G St., N. W., $171,947; King Lumber Co., Charlottesville, Va., $175,000.

Wis., Lancaster—High School—School Bd., March 14, 2 story and basement, 100 x 200 ft., brick, tile and concrete, plain foundation, from Schafer & Olson, 222 Bay St., Chippewa Falls, $193,000; Hoeppner-Bartlett Co., 414 Grand Ave., Eau Claire, $198,860; Grahn & Bathurst, 638 Plum Bldg., Minneapolis, Minn., $205,000. Noted March 1.

Ariz., Tucson—High School—Bd. Educ., 2 story, rein.-con. and steel, rein.-con. foundation, from E. C. English, Citizens National Bank Bldg., Los Angeles, Calif., $630,000; W. L. Tophoy, Tucson, $642,850; Windsor & Lund, Denver, Colo. (street address not available), $668,000. Noted Feb. 22.

Calif., Crockett — School — Carquinez Grammar School Dist., 2 story, brick and concrete, structure complete from K. Koller, Crockett, $245,398; excavation, concrete work and carpentry from Trobock & Cress, 180 Jessie St., San Francisco, $99,700, K. Koller, Crockett, $115,842; F. W. Maurice, 1362 East 25th St., Oakland, $117,670; brick, hollow tile and terra cotta, from Hock & Hoffmeyer, 180 Jessie St., San Francisco, $22,475, J. Walker, c/o Builders Exch., Richmond, $24,553, White & Gloor, 180 Jessie St., San Francisco, $24,800. Noted March 1.

CONTRACTS AWARDED

Mass., Andover — Recitation — Phillips Andover Academy, 2 story and basement, 38 x 210 ft., brick, steel, stone and granite, plain foundation, Campus, to E. W. Pitman Co., Bay State Bldg., Lawrence. Archts. est. $200,000.

Mass., Cambridge — Band and Office—Cambridge Savings Bank, Dunster St., 5 story, 66 x 85 ft., brick, stone and steel, plain foundation, Dunster St., to W. A. Wentworth Co., 107 Pacific St. Archts. est. $200,000. Noted Sept. 7.

Mass., Malden—Apartment—E. L. Snider, 18 Fremont St., Boston, will build 5 story,

Buildings (Continued)

90 x 200 ft., rein.-con. and brick, Washington St., here, by day labor. $400,000-$500,000. F. A. Norcross, 46 Cornhill, Boston, archt.

N. Y., Albany — Bank — City Savings Bank, 100 State St., 10 story and court, 24 x 175 ft., with 200 ft. steel tower in center, brick, steel and terra cotta, 102 State St., to Feeney & Sheehan Building Co., 164 Montgomery St., $899,979. Noted March 15.

N. Y., Brooklyn — Apartment — Neilk Constr. Co., Inc., c/o Shampan & Shampan, archts. and engrs., 188 Montague St., brick, steel and stone, plain foundation, Crown St., by day labor. $200,000.

N. Y., New York—Apartment—J. Amron, c/o G. F. Pelham, archt. and engr., 200 West 72nd St., 9 story, 50 x 100 ft., brick, steel and stone, plain foundation, West 64th St., by day labor. $300,000.

N. Y., New York—Apartment—Banner & Mitler, c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 5 story, 100 x 100 ft., brick, steel and stone, plain foundation, Audubon Ave. near 192nd St., by day labor. $165,000.

N. Y., New York—Apartment—B. L. W. Constr. Co., c/o Gronenberg & Leuchtag, archts. and engrs., 450 4th Ave., 6 story, 110 x 130 ft., brick, steel and stone, plain foundation, 655 West 174th St., by day labor.

N. Y., New York—Apartment—Elmwood Building Corp., c/o Goldner & Goldner, archts. and engrs., 47 West 42nd St., 6 story, 100 x 135 ft., brick, steel and stone, Ryer Ave. and 178th St., by day labor. $300,000.

N. Y., New York—Apartment—S. Gettenberg, c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 5 story, 100 x 115 ft., brick, steel and stone, plain foundation, Valentine Ave., by day labor. $150,000.

N. Y., New York—Apartment—Hepburn Realty Co., c/o Springsteen & Goldhammer, archts. and engrs., 32 Union Sq., 5 100 x 115 ft., brick, steel and stone, plain plain foundation, Seaman Ave., by day labor. $175,000.

N. Y., New York — Apartment — Jona Realty Co., c/o Goldner & Goldner, archts. and engrs., 47 West 42nd St., 5 story, brick, steel and stone, plain foundation, West 148th St., by day labor. $275,000.

N. Y., New York—Apartment—B. Klosk, Inc., c/o Springsteen & Goldhammer, archts. and engrs., 31 Union Sq., 5 story, brick, steel and stone, plain foundation, Grand Ave., by day labor. $200,000.

N. Y., New York—Apartment—One Hundred Eightieth St. and Audubon Ave. Corp., c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., 6 story, brick, steel and stone, plain foundation, St. Nicholas Ave. and 162nd St., by day labor. $175,000.

N. Y., New York—Apartment—Pearlbro Building Corp., c/o M. W. Del Gaudio, archt. and engr., 160 West 45th St., 6 story, brick, steel and stone, plain foundation, West 175th St., by day labor. $220,000.

N. Y., New York—Apartment—Phelan-Billingsley Corp., c/o Moore & Landseidel, archts. and engrs., 148th St. and 3rd Ave., 5 story, 70 x 200 ft., brick, steel and stone, plain foundation, Burnside Ave. and Osborn Pl., by day labor. $175,000.

N. Y., New York — Apartment — Seeby Realty Co., c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 5 story, 100 x 100 ft., brick, steel and stone, plain foundation, Grant Ave., by day labor.

N. J., Camden—Lockey & Hettle, archts., 5 Hudson St., 4 story and basement, 69 x 103 ft., Bway. and Stevens St., to J. M. Yardley, 1716 Sansom St., Phila., for Y. W. C. A. Archts. est. $350,000. Noted Jan. 25.

N. J., Ocean City—High School—Bd. Educ., 3 story and basement, 191 x 194 ft., to J. S. Rodgers & Co., Drexel Bldg., Phila., $500,000.

Pa., Phila.—Schools—Bd. Educ., 3 story and basement, 148 x 171 ft. rein.-con., brick and steel, 54th and Berks Sts., and 3 story and basement, 148 x 171 ft., brick and steel, 17th St. and Lindley Ave., to Sinclair & Greigs, Medical Arts Bldg., $445,800 and $478,800, respectively.

Pa., Phila.—Theatre—Shubert Theatre Co., 225 West 45th St., New York City, 1 story and basement, 108 x 114 ft., stone, caisson foundation, Juniper and Cherry Sts., here, to H. J. Knopp, 116 East 16th St., New York City, $230,000.

Pa., Reading — Hotel — Berkshire Hotel Co., 8 story, 65 x 91 ft. brick and steel annex, to H. L. Stevens Constr. Co., 30 North Michigan Ave., Chicago. Archts. est. $250,000.

Pa., Troy—School—Bd. Educ., general contract 2 story and basement, 110 x 140 ft. brick and steel, to L. F. Swinter, Ebensburg, $125,314. Noted Feb. 8.

Pa., Williamsport—Church—First Evangelical Church, Bennett and Packer Sts., 2 story and basement, 90 x 110 ft. brick, steel and stone, Bennett and Packer Sts., to Vallamont Building & Planing Mill Co., 1009 Market St. Archts. est. $150,000.

Va., Lexington—Barracks—Virginia Military Institute, Richmond, 4 story, stucco and brick, here, to J. L. Krouse, Greensboro, N. C. Archts. est. $150,000.

Va., Richmond—Office—Imperial Tobacco Co., Ltd., 106 South 6th St., 3 story rein-con. and brick, 5th and Franklin Sts., to J. T. Wilson Co., Inc., Mutual Bldg., $300,000.

O., Cleveland—Apartments—A. and S. Realty Constr. Co., 342 Society for Savings Bldg., two 3 story and basement, 86 x 96 ft., brick and timber, 2639 Euclid Blvd., to M. Gold, 9106 Parkgate Ave. Archts. est. $150,000. Noted Jan. 25.

O., Elyria—High School—Bd. Educ., general contract 2 story and basement, 100 x 100 ft., brick, steel and concrete addition to Washington Junior High School, to J. Kaiser & Bros., Elyria (street address not available), $140,000. Noted Nov. 30.

O., Massillon—High School—Bd. Educ. constructing Longfellow School, 2 story and basement, brick, steel and concrete, to N. Miller, 1918 Remont St., $172,577. Noted March 8.

O., Rocky River—Apartment—Riverview Impvt. Co., National City Bldg., Cleveland, 6 story, brick, steel and concrete, Detroit and Blount Rds., here, to Fleischer Constr. Co., Builders Exch., Minneapolis, Minn. Archts. est. $1,000,000.

Mich., Detroit—School—Bd. Educ., 1354 Bway. Ave., 2 story and basement, 94 x 179 ft. rein.-con., brick, steel and stone, plain foundation, Kercheval Ave., to Brayton Eng. Co., 907 Kresge Bldg. $150,000.

Ill., Chicago—Apartment—O. E. Gallup, c/o McNally & Quinn, archts., 10 South La Salle St., 4 story, 173 x 180 ft., rein.-con., brick and steel, 1347 Estes Ave., to Thogersen & Erickson, 4804 North Kedzie Ave. Archts. est. $800,000. Noted Feb. 22.

Ill., Chicago—Apartment—J. Swanson, 2030 Greenleaf Ave., will build 3 story and basement, 100 x 170 ft., rein.-con., brick and steel, 1654-56 Farwell Ave., by day labor. $200,000. P. F. Olsen, 720 Cass St., archt.

Ill., Chicago—Apartment—W. Wightman, 6202 Talman Ave., 3 story, 106 x 118 ft., rein.-con., brick and steel, Peoria and 70th St., to V. Schaftein, 6204 Aberdeen St. Archts. est. $150,000.

Ill., Chicago—Office—Lumber Exchange Building Co., 11 South La Salle St., 5 story, rein.-con., brick and steel addition, to Dahl-Stedman, 11 South La Salle St. Archts. est. $800,000.

Wis., Milwaukee—Church—Salem Evangelical Assn., 405 6th Ave., 1 and 2 story, 64 x 100 ft., brick and tile, plain foundation, Mitchell St. and 25th Ave., to Bennett Constr. Co., 808 South Pierce St., Archts. est. $150,000. Noted Jan. 4.

Ia., Burlington — Stone — Chittenden & Eastman Co., 123 South 3rd St., general contract 6 story and basement, rein.-con., brick and tile, to W. M. Allen & Sons Co., 929 Jefferson Bldg., Peoria, Ill., $106,000. Noted Feb. 22.

Ia., Davenport — Business — Democrat Publishing Co., 216 Main St., general contract 2 story, 48 x 150 ft., rein.-con., brick, steel, granite and stone, to J. S. Soller & Sons, Masonic Temple Bldg. Archts. es' $150,000.

Kan., Wichita—Jail—Sedgwick Co., 3 story and basement, 45 x 121 ft., brick and steel, plain foundation, general contract to Siedhoff Constr. Co., Broadview Hotel, $77,370; steel, to Pauly Jail Bldg. Co., 2215 De Kalb Ave., St. Louis, Mo., $93,723. Noted Feb. 15.

Mo., St. Joseph—Hospital—W. Boschen, archt., Tootle Lacey Bldg., general contract 4 story, concrete, brick and steel, for Methodist Hospital Assn., to Lehr Constr. Co., 17th St. and Frederick Ave., $257,000; heating and power to Turner & Cook Plumbing & Heating Co., 702 Edmond St., $112,000; electric wiring ,to Amer. Electric Co., 214 South 8th St., $25,000. Noted Jan. 25.

Mo., Kansas City—Store—Rothschilds & Sons Clothing Co., 11th and Main Sts., general contract 4 story and basement, 40 x 124 ft., rein.-con., brick and steel, 1104-6 Main St., to Swanson Constr. Co., Shubert Bldg., $150,000.

Mo., Warensburg—College—State Bd. Educ., Jefferson City, Central State Teachers College, 3 story and basement, 75 x 118 ft., rein.-con. and stone, here, to E. Marxer & Co., 514 3rd St., Des Moines, Ia., $150,000.

Tex., Houston—Club, etc.—Gray Lodge 329 A F & A M, 4 story and basement, steel, brick and tile, plain foundation, Clay St., to T. Tellepsen, Prince Theatre Bldg., $250,000.

Tex., San Antonia—Schools—For 1 story junior high school, cafeteria partly overhead, San Pedro St., also 1 story, 80 x 120 ft. high school, cafeteria partly overhead, Josephine St., both brick and rein.-con., to J. De Puy, 616 Bedell Bldg., $156,498 and $155,373 respectively. Noted March 1.

Okla., Oklahoma City—Club—Elks Club, 16½ West Main St., 5 story, 140 x 140 ft., brick, 3rd and Harvey Sts. to C. M. Dunning Constr. Co., 420½ North Hudson St., $350,000. Noted Dec. 14.

Colo., Boulder — High School — School Dist. general contract junior high school, to A. Danielson & Son, 314 McMann Bldg., Denver, $151,000. Archt. est. $200,000.

Ariz., Phoenix—Office—G. and A. Luhrs, Commercial Hotel, 10 story, rein.-con., plain foundation, Jefferson St. and South Central Ave., to J. Garfield, Tucson. Noted Jan. 18.

Ore., Portland—School—Bd. Educ., general contract Holladay School, 2 story, 128 x 360 ft., rein.-con. and brick, concrete foundation, East 7th, 9th, Wasco and Halsey Sts., to H. J. Stettgren, Worcester Bldg., $147,140. Noted Jan. 25.

Calif., Chico—Bank and Office—First Natl.-Bank, 4 story, rein.-con., 3rd and Main Sts., to Hannah Bros., 142 Sansome St., San Francisco, $156,000. Noted Mar. 15.

Calif., Long Beach—School—Long Beach School Dist., 3 story, brick, Pacific Ave., general contract to J. C. Bannister, 903 North Mariposa St., Los Angeles, $146,000. Noted March 15.

Calif., Los Angeles—Apartment—S. G. Kaufmann, 822 Wall St., 4 story and basement, brick, Orange St., to Williams & Neville, Marsh-Strong Bldg., $150,000.

Calif., Los Angeles—Schools—City, three 12 room schools, rein.-con., at Woodcrest, Brooklyn and Atwater School sites, general contract to H. H. Hinds, 251 South Hoover St., $188,500.

Calif., Pomona—Bank and Office—First Natl. Bank, 5 story, rein.-con. and brick, to J. McNeil Co., H. W. Hellman Bldg., Los Angeles. $195,000. Noted Feb. 8.

Calif., Sacramento—High School—City, eight 1 and 2 story, rein.-con. and terra cotta, general contract to Mathews Constr. Co., Forum Bldg., $370,000; plumbing and sewers, also heating and ventilating to Hateley & Hateley, Mitau Bldg., $32,598 and $56,518 respectively; electric work to Latourette-Fical Co., 907 Front St., $34,800; steel work to Palm Iron Wks., 1814 15th St., $53,640.

Calif., Santa Ana—Club—Y. M. C. A., 3 story and basement, brick and concrete, Sycamore St., to F. Hudson, Higgins Bldg., Los Angeles, $165,000. Noted Jan. 4.

Calif., Sawtelle — Home — Sawtelle Soldiers Home, 2 story, rein.-con., administration and hospital, to Los Angeles Building & Contg. Co., Marsh-Strong Bldg., Los Angeles, $190,544. Noted March 15.

Que., Montmagny—Church—Les Syndics de St. Thomas de Montmagny, will build 78 x 108 ft. granite stone, by day labor; plumbing and heating to Proulx & Mathurin, Montmagny; electrical work to The Electric Co. of Montmagny; stone to Naud & Darnwau, St. Mark.

Federal Government Work

PROPOSED WORK

N. Y., Dunkirk—Superstructure—U. S. Engineer plans stone superstructure on breakwater, here.

N. Y., New York—Dredging—U. S. Engineer, 616 Army Bldg., rejected bids opened March 2, dredging in Shrewsbury River, N. J. Noted Feb. 8.

Pa., Phila. — Underpinning Chimney — Spec. 4818—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans underpinning power house chimney, here.

D. C., Wash.—Dredging—U. S. Engineer, 250 Old Land Office Bldg., plans dredging in Potomac River.

D. C., Wash.—Filtration Plant—U. S. Engineer, 250 Old Land Office Bldg., takes bids about July 1, filtration plant. Major Tyler, engr. in charge.

Federal Government Work (Continued)

Fla., Jacksonville—Barges—U. S. Engineer plans to purchase 3 steel barges for Dredge Mallery, Ohio River.

Ky., Louisville—Bear Trap Leaves—U. S. Engineer plans bear trap leaves for Dam 44, Ohio River.

Tex., Galveston—Dredging—U. S. Engineer plans dredging Houston Ship Channel at Vinces Bayou and Basin.

Tex., Galveston—Repairing Jetty—U. S. Engineer plans to repair building and extend jetty at Sabine.

H. T., Pearl Harbor—Dredging—Spec. 4798—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans dredging, wharfs and piers at submarine base, here. Bids will be opened at local yard.

BIDS DESIRED

N. Y., Chelsea—Ice-Making and Refrigerating Plant—April 16, by Treas. Dept., Wash., D. C., ice-making and refrigerating plant at U. S. Veterans' Hospital, here. J. A. Wetmore, acting superv. archt.

N. Y., Plattsburg—Monument—April 18, at office U. S. Engineer, Army Bldg., 39 Whitehall St., New York, monument, here; adv. this issue.

Md., Annapolis—Mechanical Equipment—Spec. 4796—March 28, by Bureau Yards & Docks, Navy Dept., Wash., D. C., mechanical equipment for natatorium, here. Noted March 8.

Fla., Jacksonville — Dredging Pump — April 20, at office U. S. Engineer, dredging pump; adv. this issue.

Ill., Rock Island—Steel Hull—April 12, at office U. S. Engineer, Rock Island, steel hull; adv. this issue.

Ark., Hot Springs—Quarters—April 2, at office Constructing Quartermaster Army and Navy General Hospital, National Park, here, 1 double set officers' quarters.

California — Road — April 3 by C. H. Sweetser, dist. engr., U. S. Bureau Pub. Rds., Mills Bldg., San Francisco, grading approximately 12 mi. road Mineral Sect. Red Bluff-Susanville lateral in Lassen National Forest, 134,224 cu.yd. excav., etc.

Calif., Fremont—Weir—April 12, at office U. S. Engineer, 85 2nd St., San Francisco, concrete weir, 30,000 cu.yd. concrete, 47,000 tons riprap, 15,000 cu.yd. gravel and 260,000 cu.yd. excav., near here.

Calif., Mare Island—Reconstructing Dike—Spec. 4776—April 25, by Bureau Yards & Docks, Navy Dept., Wash., D. C., reconstructing dike 14, here. Noted Jan. 11.

BIDS RECEIVED

R. I., Providence—Dredging—U. S. Engineer, Providence, maintenance dredging in Connecticut River, 70,000 cu.yd. scow measurement, from Hartford & New York Transportation Co., New Haven, Conn. (street address not available) $0.195 per cu.yd.; J. S. Packard Dredging Co., 1004 Turk's Head Bldg., $0.295. Noted Feb. 15.

Va., Quantico—Hangars—Spec. 4693—Bureau Yards & Docks, Navy Dept., Wash., D. C., hangars at Marine Flying Field, here, (1) work complete, from D. Zone, 233 Bway., New York City, (1) $52,523 (185 days) (2) $58,998 (185 days) (3) $60,915 (185 days); Newport Contg. and Eng. Co., Law Bldg., Newport News, (1) $46,945 (2) $50,865 (3) $54,873; A. Stang, Real Estate Trust Bldg., Phila., Pa., (1) $53,550 (2) $57,850 (3) $59,400. Noted March 1.

Wash., Keyport—Extension—Spec. 4744—Bureau Yards & Docks, Navy Dept., Wash., D. C., extension to torpedo storehouse at Naval Torpedo Station, here, from C. F. Martens, 204 Seaboard Bldg., Seattle, $41,752, (119 days); W. T. Butler, 527 Central Bldg., Seattle $42,000 (120 days), Miller Bros., 221 Burwell Ave., Bremerton, $43,722 (120 days). Noted March 1.

Wash., Puget Sound—Cranes—Spec. 4755—Bureau Yards & Docks, Navy Dept., Wash., D. C., crane equipment for Ordnance Building 368 Extension, (1) work complete, from Westinghouse Electric & Mfg. Co., Hibbs Bldg., Wash., D. C., (1) $5,595 (2) $6,580; Chesapeake Iron Wks., Clear and Cloman Sts., Westport, Baltimore, Md., (1) $10,000 (150 days) (2) $14,250 (150 days); Kimball Bros. Co., 9th St. and 11th Ave., Council Bluffs, Ia., (1) $10,781 (100 days). Noted Feb. 22.

Calif., San Diego—Storehouse—Spec. 4770—Bureau Yards & Docks, Navy Dept., Wash., D. C., storehouse for paints and oils, at Naval Base, here, (1) work complete, from W. E. Keir Constr. Co., 813 1st Natl. Bank Bldg., (1) $25,860 (120 days) (2) $592 (3) $390; Gutlebeb & Bros., Hotel Clark, Los Angeles, (1) $24,000 (90 days) (2) $480 (3) $400; F. Doran, 345 Spreckles Bldg., (1) $28,000 (2) deduct $571 (3) deduct $390, telegraphic modifications (1) $29,000. Noted Feb. 22.

Cuba, Guantanamo — Distilling Apparatus, etc.—Spec. 4769—Bureau Yards & Docks, Navy Dept., Wash., D. C., distilling apparatus and heater at Naval Station, here (1) work complete, from Wheeler Condenser and Eng. Co., Woodbridge Rd. Carteret, N. J., (1) $25,262 (2) $1,275; Sugar Apparatus Mfg. Co., 1006 Land Title Bldg., Phila., Pa., (1) $37,320 alternate (1) $35,600 (2) $33,500; A. Pope, 4722 15th St., N.W., Wash., D. C., (1) $38,200. Noted March 8.

CONTRACTS AWARDED

Pa., Phila.—Barge—U. S. Engineer, 815 Witherspoon Bldg., one 87 ft. steel oil barge at Ft. Mifflin, to Noank Shipyard, Inc., Noank, Conn., $21,900. Noted March 1.

Miss., Gulfport—Refrigerating Equipment—Spec. 4780—Bureau Yards & Docks, Navy Dept., Wash., D. C., refrigerating and ice-making equipment at U. S. Veterans Hospital, here, to Clothel Refrigerating Co., 61 Bway., New York City, $19,480 (120 days). Noted March 1.

California—Roads—C. H. Sweetser, dist. engr., U. S. Bureau Pub. Rds., Dept. Agriculture, 881 Mills Bldg., San Francisco, 4.1 mi. road, Salmon River Project, Siskiyou Co., 103,581 cu.yd. excav., etc., to Warren Constr. Co., Bacon Bldg., Oakland, $89,659. Noted Feb. 1.

Calif., Mare Island—Extension to Shell House, etc.—Bureau Yards & Docks, Navy Dept., Wash., D. C., extension to shell house and magazine at Navy Yard, here, to J. Pringle, 212 Anita Rd., Burlingame, $99,750 (200 days). Noted March 15.

Calif., Mare Island—Riprapping—Spec. 4775—Bureau Yards & Docks, Navy Dept., Wash., D. C., furnishing and placing 55,000 tons hard stone riprap along longitudinal dike, here, to Healy-Tibbetts Constr. Co., 64 Pine St., San Francisco, $1.8375 (240 days). Noted March 15.

H. T., Pearl Harbor—Mains, etc.—Spec. 4792-B—Bureau Yards & Docks, Navy Dept., Wash., D. C., mains and accessories at Naval Station, here, to Hawaiian Dredging Co., 854 Kuhuhuana St., Honolulu, $139,661 (180 days).

H. T., Pearl Harbor—Piping Plant, etc.—Spec. 4792-A—Bureau Yards & Docks, Navy Dept., Wash., D. C., piping plant and equipment at Naval Station, here, to E. J. Lord, 309 McCandless Bldg., Honolulu, $28,584 (180 days).

Miscellaneous

PROPOSED WORK

Subway—Boston, Mass.—Boston Elevated Ry. Co., 108 Massachusetts Ave., having preliminary plans prepared continuing subway from Kenmore station, two branches. $3,000,000. Private plans.

Tract Development—Buffalo, N. Y.—G. B. Ricaby Co., 200 Pearl St., purchased 36 acres land at Delaware and Amhert Sts. and plans cement sidewalks, sewers, water mains, lighting system, 60-85 ft. streets, etc. To exceed $50,000. Engineer not announced.

Transmission Line—New York—St. Lawrence Transmission Co., Potsdam, plans extending 3 phase high tension system in towns of Fowler, Rossie and Macomb. $100,000.

Power Development—Watertown, N. Y.—City appointed W. H. Cushman, hydraulic engr., Northern New York Trust Co. Bldg., to prepare plans power development at Delano Falls. Noted March 1.

Stadium—Erie, Pa.—Bd. Educ., Chamber of Commerce, and Civic Organizations, having plans prepared for stadium in connection with Academy High School, 19,000 seating capacity. Osborn Eng. Co., 2848 Prospect Ave., S. E., Cleveland, O., engrs.

Elimination of Grade Crossings—Scranton, Pa.—Delaware & Hudson R.R. Co., State St., Albany, N. Y., having preliminary plans prepared for eliminating 16 grade crossings along main line through Scranton. Work includes elevation of tracks at all streets except one, J. MacMartin, ch. engr.

Road Oil—Beaver Dam, Wis.—Preparing specifications for 5 car loads of road oil for city streets. W. Gergen, clk.

Stadium—Madison, Wis.—University of Wisconsin plans rein.-con. and steel addition to athletic stadium at Randall Athletic Field. $50,000. M. E. McCaffery, secy.

Road Machinery—Minnesota—Following counties plans to purchase road machinery: Kittson Co., twenty 6 ft. blade graders, G. H. Nelson, Hallock, engr.; Nicollet Co., several graders, H. W. Daniels, St. Peter, engr.; Meeker Co., 1 power road maintainer, G. H. Martz, Litchfield, engr.; Benton Co., 1 elevating road grader, P. Zeeze, Foley, engr.; Carlton Co., one 10 ton tractor, N. C. Nickerson, Carlton, engr.; Swift Co., 1 caterpillar tractor, L. [illegible] Johnson, Benson, engr.

Swimming Pool—Newton, Kan.—Having plans prepared 100 x 150 ft. rein.-con. swimming pool, bath house, lockers, etc. Thomas & Fullerton, 323 Wheeler-Kelly Bldg., Wichita, archts.

Levees—Helena, Ark.—See "Excavation, Drainage, Irrigation."

Gas Mains, etc.—Corpus Christi, Tex.—See "Industrial Works."

Pipe Line—Electra, Tex.—See "Industrial Works."

Pumps—Clarksburg, Calif.—S. C. Davidson, engr., Box 925, Sacramento, soon takes bids 8 or 10 in. pumps and motors to be used in connection with small irrigation project of 1,250 acres, here, for C. C. Morse Seed Co., 729 Front St., San Francisco.

Rock Crushers, Equipment, etc.—Oakdale, Calif.—Atlas Rock Co. will purchase rock crushers and equipment for manufacture of cement pipe. $20,000. A. C. McMillan, pres.

Pedestrian Tunnel—Sacramento, Calif.—City had preliminary plans prepared 170 ft. pedestrian tunnel, at 12th St. subway. $27,500. A. Givan, city engr.

Steel—Sacramento, Calif.—See "Bridges."

Trailers — San Jose, Calif. — Supervs. Santa Clara Co. rejected bids opened March 5, furnishing one or more trailers. New bids. Noted March 15.

Tunnel — Santa Barbara, Calif. — See "Waterworks."

Conduits—Montreal, Que.—Electric Comn. plans conduits in Dist. 10, bounded by Craig, Bleury, St. Catherine and St. Lawrence Sts. $150,000. A. Lariviere, ch. engr.

BIDS DESIRED

Wharf—Norwalk, Conn.—April 2, by D. B. Eula, engr., Room 7, City Hall, concrete and creosoted lumber wharf, etc. J. H. McMahon, chn.; adv. this issue.

Bituminous Material—Albany, N. Y.—April 3, by F. S. Greene, comr. State Hy. Dept., furnishing and delivering bituminous material "A." W. A. Patton, secy.; adv. this issue.

Steel—Flushing, N. Y.—April 2, by Transit Comn., 49 Lafayette St., New York, furnishing and erecting structural steel for part of Rapid Transit R.R., Flushing Route. Former contract rescinded. Noted Dec. 28.

Aggregate, etc.—Long Island City, N. Y.—March 27, M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., furnishing and delivering 22,500 cu.yd. mineral aggregate, 11,500 cu.yd. highway sand, 1,000 cu.yd. sand grit, 55,000 gal. road oil for cold application, 150,000 gal. road oil for hot application, 100,000 gal. bituminous macadam binder, 40,000 wood paving blocks, 50,000 asphalt paving blocks, 900 tons asphaltic cement, 25,000 gal. fuel oil, 25,000 gal. asphalt cold patch.

Foundations—New York, N. Y.—March 30, by E. S. O'Malley, comr. Pub. Markets, Municipal Bldg., foundations for Bronx Terminal market.

Ties and Timber—New York, N. Y.—March 30, by Transit Comn., 49 Lafayette St., supply of ties and timber for use in construction of Rapid Transit R.R. G. McAneny, chn.

Steam Roller—West New Brighton, N. Y.—March 29, by J. A. Lynch, pres. Richmond Boro, Boro Hall, Staten Island, one 8 ton steam roller, tandem type, at storeyard of Bureau of highways, Dubois Ave., here.

Road Material—Newton, N. J.—April 5, by Sussex Co. furnishing road material. H. Snook, co. engr.; adv. this issue.

Grain Elevator—Baltimore, Md.—April 3, by Baltimore & Ohio R.R., Baltimore and Charles Sts., grain loading pier, merchandise pier, storage bins, steel and rein.-con., 3,000,000 to 4,000,000 bu. capacity, Locust Point. $3,500,000. J. S. Metcalfe, 108 South LaSalle St., Chicago, archts. L. P. Kimball, Engineering Bldgs., of Baltimore & Ohio R.R., engr. Noted Nov. 9.

Wharf, Chain Walls, etc.—New Orleans, La.—April 5, by Bd. Port Comnrs., concrete wharf, chain walls, etc., at Claiborne Ave. landing; adv. this issue.

Cement—Juneau, Wis.—March 30, by A. C. Klug, city clk., 6,000 bbl. cement.

Transmission Line—Three Lakes, Wis.—H. M. Olkowski, town clk., taking bids 10 mi. high voltage transmission line and street lighting system. Private plans.

Minn., Chaska—April 3, by W. Schimmelpfennig, and Carver Co., pony or maintenance road graders, also all sizes of portable galvanized culverts. L. A. Zeman, Chaska, engr.

Miscellaneous (Continued)

Asphalt—Minneapolis, Minn.—March 26, by F. S. Gram, city purch. agt., 1,200 tons asphalt for street work. $24,000. N. W. Elsberg, city engr.

Cement, etc.—St. Paul, Minn. — See "Waterworks."

Road Drags, Scrapers, etc.—Onida, S. D.—April 3, by Sully Co., road drags, fresnoes, slip scrapers and one carload corrugated iron culverts, 15-24 in. sizes. G. L. Glessner, aud.

Lumber, etc.—Minot, N. D.—Feb. 7, by R. W. Kennard, aud. Ward Co., 2 carloads bridge lumber and corrugated metal culverts, to Rogers Lumber Co., Minot, $1,675. Noted Feb. 1.

Fire Alarm System—Wichita, Kan.—April 9, by City Comn., purchasing and installing fire alarm system. $60,000. P. L. Brockway, City Bldg., engr. Noted March 15.

Electric Standards—St. Louis, Mo.—April 10, by Bd. Pub. Serv., City Hall, 500 concrete electric standards, each 17 ft. 5 in. high over all, with 18 in. sq. octagon sides tapering off to 4½ in. top, $15,000. Will purchase at later date glassware for same, $17,500. Noted Dec. 7.

Transmission and Telephone Lines — Seattle, Wash.—April 13, by city, 100 mi. transmission and telephone lines. G. F. Unden, 1400 Alaska Bldg., ch. engr. of Skagit River Development; adv. this issue.

Grain Elevator—Montreal, Que.—April 3, by M. P. Fennell, genl. mgr. and secy. Montreal Harbor Comn., rein.-con. grain elevator on waterfront. $1,500,000. Private plans.

Tunnel—Montreal, Que.—March 24, by Chairman Executive Com., City Hall, widening Ontario St. Tunnel. $300,000. H. A. Tetreault, dir. pub. wks.

BIDS RECEIVED

Special Work—New York, N. Y.—Transit Comn., 49 Lafayette St., March 16, supply of special work and track fittings for use in construction of various parts of dual system of Rapid Transit R.R., from Railroad Switch & Crossing Corp., 25 Bway., $28,500; W. Wharton Jr. & Co., Inc., 30 Church St., $43,623; Bethlehem Steel Co., 25 Bway., $45,010. Noted March 8.

Paving Blocks—New York, N. Y.—Bd. Purch., Municipal Bldg., opened bids March 13, furnishing and delivering creosoted wood paving blocks, to Dept. Plant & Structures, from Amer. Creosoting Co., 17 Battery Pl., $22,415. Noted March 8.

Asphaltic Cement, etc.—St. George, N. Y.—J. A. Lynch, pres. Richmond Boro, Boro Hall, opened bids March 15, furnishing and delivering (1) 170 tons asphaltic cement (2) 100,000 gal. bituminous road surfacing material tar for cold application (3) 170,000 gal. tar macadam binder (4) 170,000 gal. asphaltic binder (5) 1,300 cu.yd. broken stone (6) 4,100 cu.yd. broken stone, from J. Johnson Sons, 455 Bway., West New Brighton, (1) $3,528 (4) $22,100 (5) $7,810 (6) $16,328; Standard Oil Co., 26 Bway., New York, (1) $3,599; Warner Quinlan Co., 79 Wall St., New York, (1) $3,805; Barrett Co., 17 Battery Pl., New York, (2) $10,250 (3) $24,310; F. J. Lewis Mfg. Co., Eastern Blvd. and East 177th St., New York, (2) $13,000 (3) $24,000; J. E. Donovan, 2205 Richmond Terrace, Port Richmond, (4) $19,975 (5) $8,550 (6) $17,430. Noted March 8.

Brick Chimney—Milwaukee, Wis.—Sewerage Comn. opened bids March 9, for 175 ft. brick chimney, from Alphons Custodis Chimney Constr. Co., 140 South Dearborn St., Chicago, $10,900; Heine Chimney Co., 123 West Randolph St., Chicago, $12,325; B. Wilke, 1011 Island Ave., $13,800. Noted March 1.

Road Oil—Minneapolis, Minn.—For 1,500,000 gal. Mexican road oil for city streets, from Pure Oil Co., 1300 South 1st St., $0.063 per gal.; White Eagle Oil & Refining Co., Federal Reserve Bank Bldg., Kansas City, Mo., $0.065; Minnesota Road Equipment Co., Plymouth Bldg., $0.067. Noted Jan. 25.

Sewer Bricks—St. Louis, Mo.—Commissioner Oetting, opened bids March 7, 95,000 hard sewer bricks, from Progress Press Brick & Machine Co., Kingshighway near Arsenal St., $18.75 per M; Hydraulic Press Brick Co., Central National Bank Bldg., $19.

Electrolier Systems—Los Angeles, Calif.—Electrolier systems in portions Pacific Ave., 2 units, and in 7th St., from Osborn Electric Co., Turlock, $15,816, $14,369 and $7,250 respectively; portion Western Ave., from H. H. Walker, 1800 West 12th St., $31,864, Southern California Electric Co., 625 South Main St., $31,999, Paulson Electric Co., 1812 North Harvard Blvd., $32,234.

SEWERS—MATAWAN, N. J.

Following are lowest three bids opened by Borough, Mar. 13, for constructing sewerage system, Schedule No. 1, (A) Seaman & Letzkus, Stone Harbor, N. J.; (B) Dinallo & Co., 66 Grant Ave., Nutley; (C) Romano & Tozzie, Montclair; sewage disposal works, Schedule No. 2, (A) Seaman & Letzkus; (B) Kuchar Bros., Spring Valley, N. Y.; (C) Spencer, White & Prentis, Inc., 100 West 41st St., New York City. The unit bids were as follows:

Schedule No. 1	A	B	C
4,000 cu.yd. earth excavation	$0.10	$1.95	$2.00
3,000 cu.yd. earth fill	.15	.85	2.00
5 cu.yd. rock excavation	10.00	12.00	5.00
60 cu.yd. concrete	9.00	16.00	20.00
360 bags portland cement	1.25	1.00	.90
5,500 lb. reinforcing steel	.08	.25	.06
600 lin.ft. 5-in. vitrified pipe risers	.32	.80	1.00
11,000 lin.ft. 5-in. vitrified pipe house connections	.65	.94	1.50
100 lin.ft. 6-in. vitrified pipe sewer, 6-ft. cut	.66	1.10	1.00
100 lin.ft. 6-in. vitrified pipe sewer, 6-ft.-8-ft. cut	.76	1.15	1.25
4,450 lin.ft. 8-in. vitrified pipe sewer, 6-ft. cut	.85	1.31	1.30
14,650 lin.ft. 8-in. vitrified pipe sewer, 6-ft.-8-ft. cut	1.02	1.96	1.97
5,200 lin.ft. 8-in. vitrified pipe sewer, 8-ft.-10-ft. cut	1.32	2.40	2.20
4,000 lin.ft. 8-in. vitrified pipe sewer, 10-ft.-12-ft. cut	1.82	3.75	2.45
350 lin.ft. 8-in. vitrified pipe sewer, 12-ft.-14-ft. cut	2.50	4.10	3.00
200 lin.ft. 8-in. vitrified pipe sewer, 14-ft.-16-ft. cut	2.75	4.35	4.00
1,200 lin.ft. 10-in. vitrified pipe sewer, 6-ft. cut	1.03	1.60	1.67
600 lin.ft. 10-in. vitrified pipe sewer, 6-ft.-8-ft. cut	1.17	2.25	2.47
800 lin.ft. 10-in. vitrified pipe sewer, 8-ft.-10-ft. cut	1.48	2.90	2.97
800 lin.ft. 10-in. vitrified pipe sewer, 10-ft.-12-ft. cut	2.27	4.18	3.27
600 lin.ft. 10-in. vitrified pipe sewer, 12-ft.-14-ft. cut	3.86	4.34	4.00
200 lin.ft. 10-in. vitrified pipe sewer, 14-ft.-16-ft. cut	5.25	7.00	6.00
200 lin.ft. 10-in. vitrified pipe sewer, 16-ft.-18-ft. cut	5.50	8.25	6.00
250 lin.ft. 12-in. vitrified pipe sewer, 6-ft. cut	1.27	2.00	1.77
200 lin.ft. 12-in. vitrified pipe sewer, 6-ft.-8-ft. cut	1.43	2.05	2.00
250 lin.ft. 12-in. vitrified pipe sewer, 8-ft.-10-ft. cut	1.84	3.25	2.47
350 lin.ft. 12-in. vitrified pipe sewer, 10-ft.-12-ft. cut	2.40	4.40	3.27
550 lin.ft. 12-in. vitrified pipe sewer, 12-ft.-14-ft. cut	3.98	4.80	3.97
400 lin.ft. 12-in. vitrified pipe sewer, 14-ft.-16-ft. cut	4.25	6.00	5.00
250 lin.ft. 12-in. vitrified pipe sewer, 16-ft.-18-ft. cut	5.00	10.00	6.00
150 lin.ft. 12-in. vitrified pipe sewer, 18-ft.-20-ft. cut	5.50	13.00	7.00
6 manholes, less than 6 ft. deep	63.00	50.00	60.00
62 manholes, 6 ft. to 8 ft. deep	75.00	76.00	64.00
30 manholes, 8 ft. to 10 ft. deep	85.00	100.00	87.00
22 manholes, 10 ft. to 12 ft. deep	100.00	125.00	100.00
6 manholes, 12 ft. to 14 ft. deep	160.00	155.00	150.00
5 manholes, 14 ft. to 16 ft. deep	200.00	196.00	170.00
2 manholes, 16 ft. to 18 ft. deep	240.00	200.00	200.00
1 manhole, 18 ft. to 20 ft. deep	260.00	225.00	250.00
1 5-in. bituminous joint	1.00	.45	.10
1 6-in. bituminous joint	1.50	.55	.10
1 8-in. bituminous joint	3.25	.65	.15
1 10-in. bituminous joint	3.50	.75	.22
1 12-in. bituminous joint	4.00	1.25	.30
2,000 lin.ft. 4-in. t.c. pipe under-drains	.10	.50	1.75
3,000 lin.ft. 6-in. t.c. pipe under-drains	.12	.75	1.75
2,000 lin.ft. concrete cradles for sewer pipe	.22	1.00	1.00
1,000 lin.ft. timbercradles for sewer pipe	.25	.10	1.00
100 lin.ft. sawed timber used as ditch piles	1.25	.15	2.00
1 M.ft.B.M. plank foundations for sewers	150.00	150.00	100.00
2 M.ft.B.M. lumber	100.00	80.00	90.00
420 lin.ft. 6-in. c.i. pipe, above ground	1.82	1.00	1.85
170-lin.ft. 8-in. c.i. pipe, above ground	2.27	1.25	2.30
400 lin.ft. 10-in. c.i. pipe, above ground	2.82	2.00	3.20
160 lin.ft. 8-ft. c.i. pipe, under tracks	6.00	1.75	4.00
Trestle No. 1 (lump sum)	900.00	1,200.00	1,400.00
Trestle No. 2 (lump sum)	611.00	1,000.00	1,080.00
Trestle No. 3 (lump sum)	435.00	950.00	800.00
Trestle No. 4 (lump sum)	452.00	1,500.00	928.00
Bridge crossing on Main St.	174.20	500.00	250.00
Bridge crossing on Little St.	1,287.85	800.00	2,125.00
10,000 lin ft. gravel pavement	.10	.25	.13
100 lin.ft. bituminous pavement	.75	.50	1.00
415 lin.ft. frost protection on 6-in. c.i. pipe	1.25	1.00	1.25
100 lin.ft. frost protection on 8-in. c.i. pipe	1.35	1.25	1.50
Extended totals	$84,423	$145,547	$149,064
Schedule No. 2			
Sewage disposal works (lump sum)	$16,998	$19,000	$20,895

CONTRACTS AWARDED

Paving Materials—Minneapolis, Minn.—To Barrett Co., 1 19th Ave. S., 600 tons paving pitch at $21.02 per ton, 600 tons refined tar, at average of $0.1025 per gal., tank cars; to Purington Paving Brick Co., Galesburg, Ill., 2,500,000 vitr. paving brick $38.52 per M.

Asphalt — Detroit, Mich. — Dept. Pub. Wks., City Hall, 4,000 tons asphalt either in tank cars or packages to Atlantic Refining Co., 3144 Passyunk Ave., Phila., $18.20 per ton in tank cars, $22.40 in packages; 2,000 tons in pakages to U. S. Asphalt Refining Co., 90 West St., New York City, $22.47 per ton.

Special Track Work — Detroit, Mich.—Dept. Street Rys., Shoemaker and St. Jean Sts., 560 pieces special track work for electric railway lines, to Lorain Steel Co., Johnstown, Pa., $123,884.

Dock—Green Bay, Wis.—See "Industrial Works."

Steel—Milwaukee, Wis.—Sewerage Comn. 508 Market St., 200 tons structural steel for fine screen house, to Worden-Allen Co., Port Washington Ave., $22,900.

Tractor and Grader — Burke, S. D. — Gregory Co., one 5 ton Holt tractor, f.o.b. Peoria, Ill., to Holt Mfg. Co., 417 Washington Ave. N., Minneapolis, Minn., $3,975; one elevator grader, f.o.b. Burke, to Russell Grader Mfg. Co., 2005 University Ave. S. E., Minneapolis, $1,795; one 12 ft. blade grader, f.o.b. Burke, to J. D. Adams & Co., 310 North 1st St., Minneapolis, Minn., $1,688. Noted Jan. 25.

Tractor—Onida, S. D.—C. L. Glessner, aud. Sully Co., one Aultman & Taylor 30-60 tractor to Aultman, Taylor & Co., Watertown, $2,800 (and old tractor). Noted Feb. 1.

Grain Elevator—Ft. Worth, Tex.—Ft. Worth Elevators Co., N. P. Anderson Bldg., one 750,000 bu. elevator and storage tank, 54 x 72 x 192 ft. head house with thirty-six 23 x 100 ft. storage tanks, all concrete, four 2,500 bu. strait hopper scales, 6 main elevator legs with 30 in. lift belts, 2 receiving legs, 2 shipping legs, 1 serving leg and 1 transfer leg, 2 large Carter disc separators, one 1,500 bu. hour capacity clipper and scourer, 2 Richardson auto sacking machines and scales, to Western Eng. Co., Dallas County State Bank Bldg., Dallas, $1,000,000. Noted Jan. 4.

Power Development — Oklahoma—Grand River Power & Development Co., Chicago, (street address not available), dam across Grand River in Mayes Co. near Morgans Inn, 40 ft. high, forming reservoir covering 5,000 acres, also power house generating 12,000 hp. (ultimately 30,000 hp.), to Taylor-Dewey Contg. Co., Allentown, Pa. (street address not available), $1,500,000.

Retaining Wall—San Bernardino, Calif.—See "Streets and Roads."

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0163

CONSTRUCTION NEWS

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Apr. 2	West Chester, Pa.	Mar. 15
Apr. 4	Wheeling, W. Va.	Mar. 8
Apr. 4	Fayetteville, Tenn.	Mar. 22
Apr. 5	Fayetteville, N. C.	Mar. 15
Apr. 6	Mt. Greenwood, Ill. Adv. Mar. 29.	Mar. 29
Apr. 9	Buffalo, N. Y.	Mar. 29
Apr. 10	Toronto, O.	Mar. 15
Apr. 10	Franklin, Tenn.	Mar. 29
Apr. 11	Franklin, Tenn.	Mar. 29
Apr. 12	Astoria, Ill.	Mar. 15
Apr. 12	Poughkeepsie, N. Y. Adv. Mar. 29.	Mar. 29
Apr. 16	Totowa (Paterson P. O.), N. J. Adv. Mar. 29.	Mar. 29
Apr. 18	Richmond, Va. Adv. Mar. 22 and 29.	Mar. 22
Apr. 26	New Orleans, La. Adv. Mar. 8 to 29.	Mar. 8

SEWERS

Apr. 2	Glen Rock (Ridgewood P. O.), N. J.	Mar. 15
Apr. 2	Yuba City, Calif.	Mar. 22
Apr. 3	New York, N. Y.	Mar. 29
Apr. 3	Youngstown, O.	Mar. 22
Apr. 3	St. George, N. Y.	Mar. 29
Apr. 4	Brooklyn, N. Y.	Mar. 29
Apr. 6	Little Falls, N. Y.	Mar. 29
Apr. 6	Lyndonville, N. Y. Adv. Mar. 15 to 29.	Mar. 15
Apr. 6	Old Orchard, Me.	Mar. 29
Apr. 7	Pottstown, Pa.	Mar. 15
Apr. 9	Merced, Calif.	Mar. 29
Apr. 9	Nelson, B. C.	Mar. 29
Apr. 10	Toronto, Ont.	Mar. 8
Apr. 10	Toledo, O. Adv. Mar. 15 to 29.	Mar. 15
Apr. 10	Hazard, Ky. Adv. Mar. 22 and 29.	Mar. 22
Apr. 11	Dunlap, Ia.	Mar. 29
Apr. 16	Urbana, Ill.	Mar. 15
Apr. 16	Johnstown, Pa. Adv. Mar. 29.	Mar. 29
Apr. 17	Paterson, N. J.	Mar. 29
Apr. 24	Buffalo, N. Y. Adv. Mar. 29.	Mar. 29

BRIDGES

Apr. 2	Gurnee, Ill.	Mar. 22
Apr. 3	Galesburg, Mich.	Mar. 22
Apr. 3	North Carolina	Mar. 15
Apr. 3	Georgia	Mar. 29
Apr. 3	Primghar, Ia.	Mar. 29
Apr. 4	Matawan, N. J. Adv. Mar. 22 and 29.	Mar. 22
Apr. 4	Painesville, O.	Mar. 22
Apr. 6	Fresno, Calif.	Mar. 15
Apr. 10	Fonda, N. Y.	Mar. 15
Apr. 10	Quay, Fla.	Mar. 29
Apr. 12	Mermentau, La.	Mar. 29
Apr. 12	Louisiana	Mar. 22
Apr. 13	Illinois	Mar. 29
Apr. 14	Eden, N. Y.	Mar. 29
Apr. 16	Johnstown, Pa. Adv. Mar. 29.	Mar. 29
Sept. 1	Sydney, New South Wales, Australia	Aug. 3

DAMS

Apr. 3	Newburgh, N. Y. Adv. Mar. 22 and 29.	Mar. 22
Apr. 12	Oroville, Calif.	Mar. 22

EXCAVATION, DRAINAGE, IRRIGATION

Apr. 2	Webster City, Ia.	Mar. 15
Apr. 2	Carroll, Ia.	Mar. 29
Apr. 3	Sioux City, Ia.	Mar. 22
Apr. 3	Penticton, B. C.	Mar. 29
Apr. 6	Nevada, Ia.	Mar. 29
Apr. 9	Lamar, Colo.	Mar. 22
Apr. 9	Vancouver, B. C.	Mar. 29
Apr. 14	Savannah, Tenn.	Mar. 22

STREETS AND ROADS

Apr. 2	Stoneboro, Pa.	Mar. 15
Apr. 2	Hastings, Minn.	Mar. 15
Apr. 2	Hastings, Pa.	Mar. 15
Apr. 2	Lucerne, Minn.	Mar. 15
Apr. 2	White Plains, N. Y.	Mar. 22
Apr. 2	Salem, Ind.	Mar. 22
Apr. 2	Elbow Lake, Minn.	Mar. 22
Apr. 2	Tavares, Fla.	Mar. 29
Apr. 2	Morgantown, W. Va.	Mar. 29
Apr. 2	Harlan, Ky.	Mar. 29
Apr. 2	Martins Ferry, O.	Mar. 29
Apr. 2	Cumberland, Md.	Mar. 29
Apr. 2	Long Island City, N. Y.	Mar. 29
Apr. 3	Amsterdam, N. Y.	Feb. 1
Apr. 3	Rowland, N. C.	Mar. 15
Apr. 3	North Carolina Adv. Mar. 22 and 29.	Mar. 15
Apr. 3	Pennsylvania Adv. Mar. 15 to 29.	Mar. 15
Apr. 3	Geneva, N. Y. Adv. Mar. 22 and 29.	Mar. 22
Apr. 3	Maryland	Mar. 22
Apr. 3	Michigan	Mar. 22
Apr. 3	Columbus, O.	Mar. 29
Apr. 3	New York, N. Y.	Mar. 29
Apr. 3	Wilkes-Barre, Pa.	Mar. 29
Apr. 3	Georgia	Mar. 29
Apr. 3	Mankato, Minn.	Mar. 29
Apr. 3	Connecticut Adv. Mar. 29.	Mar. 29
Apr. 3	Denver, Colo.	Mar. 29
Apr. 4	Michigan	Mar. 22
Apr. 4	Holton, Kan.	Mar. 8
Apr. 4	Kentucky	Mar. 15
Apr. 4	Maplewood (St. Louis P. O.), Mo.	Mar. 22
Apr. 4	South Dakota	Mar. 15
Apr. 4	Florida	Mar. 22
Apr. 4	Wisconsin	Mar. 29
Apr. 4	San Francisco Calif.	Mar. 29
Apr. 4	Bad Axe, Mich.	Mar. 29
Apr. 4	Brooklyn, N. Y.	Mar. 29
Apr. 5	Topeka, Kan.	Mar. 8
Apr. 5	South Dakota	Mar. 15
Apr. 5	Burlington, Vt. Adv. Mar. 22 and 29.	Mar. 22
Apr. 5	Virginia	Mar. 22
Apr. 5	Michigan	Mar. 22
Apr. 5	Newark, N. J.	Mar. 29
Apr. 5	Dyersburg, Tenn.	Mar. 29
Apr. 5	Corsicana, Tex.	Mar. 29
Apr. 5	Denver, Colo.	Mar. 29
Apr. 5	Toronto, Ont.	Mar. 29
Apr. 6	Michigan	Mar. 22
Apr. 6	Holton, Kan.	Mar. 15
Apr. 6	South Dakota	Mar. 15
Apr. 6	Rhode Island Adv. Mar. 29.	Mar. 29
Apr. 6	North Dakota	Mar. 29
Apr. 6	Troy, N. C.	Mar. 29
Apr. 7	South Dakota	Mar. 15
Apr. 7	Michigan	Mar. 22
Apr. 7	Denver, Colo.	Mar. 29
Apr. 9	Cleveland, O.	Mar. 29
Apr. 9	Mineola, N. Y. Adv. Mar. 29.	Mar. 29
Apr. 9	Michigan	Mar. 29
Apr. 9	San Diego, Calif.	Mar. 29
Apr. 9	Council Bluffs, Ia.	Mar. 29
Apr. 9	Reno, Nev.	Mar. 29
Apr. 10	New Castle, Pa.	Mar. 22
Apr. 10	Washington	Mar. 15
Apr. 10	Louisiana	Mar. 22
Apr. 10	Maryland Adv. Mar. 29.	Mar. 29
Apr. 10	Buffalo, Minn.	Mar. 29
Apr. 10	Moorhead, Minn.	Mar. 29
Apr. 10	Easley, S. C. Adv. Mar. 29.	Mar. 29
Apr. 10	Michigan	Mar. 29
Apr. 10	Pierre, S. D.	Mar. 29
Apr. 10	Ripon, Wis.	Mar. 29
Apr. 10	Fond du Lac, Wis.	Mar. 29
Apr. 10	Indiana	Mar. 29
Apr. 11	Freehold, N. J. Adv. Mar. 29.	Mar. 29
Apr. 11	Delaware Adv. Mar. 29.	Mar. 29
Apr. 11	Dunlap, Ia.	Mar. 29
Apr. 12	Jacksonville, Fla.	Mar. 29
Apr. 13	Illinois	Mar. 29
Apr. 14	Bessemer, Mich.	Mar. 22
Apr. 14	St. Johns, Mich.	Mar. 29
Apr. 16	Canonsburg, Pa.	Mar. 22
Apr. 16	Kingston (Wilkes-Barre P. O.), Pa.	Mar. 29
Apr. 16	Shenandoah, Pa. Adv. Mar. 29.	Mar. 29
Apr. 16	Mitchell, S. D.	Mar. 29
Apr. 16	Glendive, Mont.	Mar. 29
Apr. 17	Alabama	Mar. 22
Apr. 17	St. Louis, Mo.	Mar. 29
Apr. 20	Sioux Falls, S. D.	Mar. 29

INDUSTRIAL WORK

Apr. 7	Galeton, Pa.	Mar. 29
Apr. 10	Crugar, Miss.	Mar. 29
Apr. 18	Muscatine, Ia. Adv. Mar. 29.	Mar. 29

BUILDINGS

Mar. 31	Medina, O.	Mar. 29
Apr. 1	Madison, Wis.	Mar. 29
Apr. 2	Syracuse, N. Y.	Mar. 1
Apr. 2	Morris Plains, N. J.	Mar. 15
Apr. 2	Memphis, Tenn.	Mar. 22
Apr. 2	Woodlawn, Pa.	Mar. 29
Apr. 2	Springfield, Mass.	Mar. 22
Apr. 2	Pittsburgh, Pa.	Mar. 29
Apr. 2	West Pullman, Ill.	Mar. 29
Apr. 3	New York, N. Y.	Mar. 29
Apr. 3	Battle Creek, Mich.	Mar. 29
Apr. 3	Duquesne, Pa.	Mar. 29
Apr. 4	Marysville, O.	Mar. 15
Apr. 4	New Rochelle, N. Y.	Mar. 15
Apr. 4	Palmyra, N. Y.	Mar. 22
Apr. 4	Baltimore, Md.	Mar. 29
Apr. 4	Swannanoa, N. C.	Mar. 29
Apr. 4	Barnesboro, Pa.	Mar. 29
Apr. 4	Greenville, N. C.	Mar. 29
Apr. 5	Oxford, O.	Mar. 22
Apr. 5	Erie, Pa.	Mar. 29
Apr. 5	University (St. Louis P. O.), Mo.	Mar. 29
Apr. 6	Cleveland, O.	Mar. 29
Apr. 7	Hartford, Conn.	Mar. 29
Apr. 7	Vancouver, Wash.	Mar. 22
Apr. 7	Kalamazoo, Mich.	Mar. 22
Apr. 10	Springfield, Mass.	Mar. 22
Apr. 10	Cedar Falls, Ia.	Mar. 22
Apr. 10	Columbus, O.	Mar. 15
Apr. 10	St. Louis, Mo.	Mar. 29
Apr. 10	Tucson, Ariz.	Mar. 29
Apr. 10	Hartford, Conn.	Mar. 29
Apr. 12	Savannah, Ill.	Mar. 22
Apr. 12	Hartford, Conn.	Mar. 29
Apr. 18	Marion, N. Y.	Mar. 29
Apr. 19	Seward, Neb.	Mar. 29
Apr. 20	New Haven, Conn.	Mar. 29
Apr. 31	Capa, S. D.	Mar. 8
May 1	Mason City, Ia.	Mar. 22

FEDERAL GOVERNMENT WORK

Apr. 2	Quarters — Hot Springs, Ark.	Mar. 22
Apr. 2	Levee Work — Greenville, Miss.	Mar. 29
Apr. 3	Dredging, etc. — Jacksonville, Fla. Adv. Mar. 8 to 29.	Mar. 8
Apr. 3	Rope—Memphis, Tenn. Adv. Mar. 15 to 29.	Mar. 15
Apr. 3	Dwelling, etc. — Shinnecock, N. Y.	Mar. 15
Apr. 3	Road—California	Mar. 22
Apr. 3	Head-Gate Track, etc.—Florence, Ala. Adv. Mar. 22 and 29.	Mar. 29
Apr. 5	Piling—Louisville, Ky. Adv. Mar. 8 to 29.	Mar. 8
Apr. 6	Dredge Tender—San Francisco, Calif.	Mar. 15
Apr. 7	Metal—Vicksburg, Miss.	Mar. 15
Apr. 9	Dredging — New Orleans, La. Adv. Mar. 15 to 29.	Mar. 15
Apr. 9	Cement—Louisville, Ky.	Mar. 15
Apr. 10	Lock—Newburg, Ind.	Mar. 1
Apr. 11	Removing Fenders — Norfolk, Va.	Mar. 15
Apr. 12	Machinery, etc. — Honolulu, H. I.	Mar. 1
Apr. 12	Steel Hull—Rock Island, Ill. Adv. Mar. 22 and 29.	Mar. 22
Apr. 12	Wire—Fremont, Calif.	Mar. 23
Apr. 13	Lock Gates—Chattanooga, Tenn.	Mar. 29
Apr. 16	Tunnel, etc. — Mitchell, Neb.	Mar. 1
Apr. 16	Barges—Galveston, Tex.	Mar. 15
Apr. 16	Ice-Making and Refrigerating Plant—Chelsea, N. Y.	Mar. 22
Apr. 17	Disposal Plant, etc.—Tobyhanna, Pa. Adv. Mar. 29.	Mar. 29
Apr. 18	Monument — Plattsburg, N. Y. Adv. Mar. 22 and 29.	Mar. 22
Apr. 20	Dredging Pump—Jacksonville, Fla. Adv. Mar. 22 and 29.	Mar. 22
Apr. 20	Valves, etc.—Florence, Ala. Adv. Mar. 29.	Mar. 29
Apr. 25	Reconstructing Dike — Mare Island, Calif.	Mar. 22
May 10	Post Office — Cordova, Alaska	Jan. 25

MISCELLANEOUS

Apr. 2	Wharf—Norwalk, Conn.	Mar. 22
Apr. 2	Steel—Flushing, N. Y.	Mar. 22
Apr 2	Cement Tile — St. Paul, Minn.	Mar. 29

Bids Close		See Eng. News-Record
Apr. 3	Bituminous Material — Albany, N. Y. Adv. Mar. 22 and 29.	Mar. 22
Apr. 3	Road Dredge, Scrapers, etc. —Onida, S. D.	Mar. 22
Apr. 3	Road Grader — Chaska, Minn.	Mar. 22
Apr. 3	Grain Elevator—Baltimore, Md.	Mar. 22
Apr. 3	Grain Elevator — Montreal, Que.	Mar. 22
Apr. 3	Dump Truck and Tractor — Erie, Pa.	Mar. 29
Apr. 3	Lumber, Piling, etc. — Primghar, Ia.	Mar. 29
Apr. 3	Culverts, Plows, etc. — Webster, S. D.	Mar. 29
Apr. 4	Riveted Pipe — Oroville, Calif.	Mar. 29
Apr. 4	Road Graders—Aberdeen, S. D.	Mar. 29
Apr. 4	Lumber—Brooklyn, N. Y.	Mar. 29
Apr. 5	Road Material — Newton, N. J.	Mar. 22
Apr. 5	Wharf, Chain Walls, etc. — New Orleans, La.	Mar. 22
Apr. 5	Graders, etc. — Lakota, N. D.	Mar. 29
Apr. 5	Steam Shovel and Boiler—Key West, Fla.	Mar. 29
Apr. 5	Metals and Castings — New York, N. Y.	Mar. 29
Apr. 6	Tar—Cincinnati, O.	Mar. 29
Apr. 6	Road Machinery — Minnewaukon, N. D.	Mar. 29
Apr. 6	Bituminous Road Binder, etc. —Milwaukee, Wis.	Mar. 29
Apr. 7	Dump Truck—Sharon, Pa.	Mar. 29
Apr. 9	Stadium—East Cleveland (Cleveland P. O.), O.	Mar. 15
Apr. 9	Fire Alarm System—Wichita, Kan.	Mar. 22
Apr. 10	Electric Standards—St. Louis, Mo.	Mar. 22
Apr. 10	Culverts—Buffalo, Minn.	Mar. 29
Apr. 10	Heating and Ventilating System—Allentown, Pa.	Mar. 29
Apr. 10	Pier—Buffalo, N. Y.	Mar. 29
Apr. 11	Culverts—St. Cloud, Minn.	Mar. 29
Apr. 13	Transmission and Telephone Lines—Seattle, Wash.	Mar. 22

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Mass., Springfield—Plans doubling capacity of slow sand filtration system. $60,000. Hazen & Whipple, 30 East 42nd St., New York City, consult engrs.

N. Y., Champlain—Plans water supply system. To exceed $25,000.

N. Y, Liverpool—Election soon to vote on $90,000 bonds water supply system.

N. Y., Dolgeville—Plans increasing water supply system and storage facilities. $50,000. C. N. Cramer, village pres.

N. Y., Mohawk — Mohawk Municipal Comn. plans to extend water system and increase storage capacity. To exceed $15,000.

N. Y., Rensselaer—Rensselaer Water Co. plans extending mains in Forbes Ave. and other streets. To exceed $15,000.

N. Y., Webster—Plans addition to water supply. $20,000.

D. C., Wash. — Congress appropriated $20,000 to purchase site for Fort Reno Reservoir.

N. C., Mt. Gilead—Had surveys made, 25,500 ft. 6-10 in. c.i. and 3,800 ft. 2 in. w.i. mains, filter plant, 2 pumping stations, supply lines, reservoir, clearwell, dam, pumping machinery and elevated tank. $84,324. H. Beebe, Spartanburg, S. C., consult. engr.

N. C., Saluda—Having plans and estimates prepared 1 mi. pipe line, 200,000 gal. reservoir and pumping equipment. H. Beebe, Spartanburg, S. C., consult. engr.

S. C., Cowpens—Had surveys made for c.i. mains, pump house, reservoir, elevated tank, pumping equipment and deep wells. $60,000. H. Beebe, Spartanburg, consult. engr.

Florida—See "Railways."

Fla., Miami Beach—Plans election to vote on $100,000 bonds for waterworks extensions, incl. 6 and 8 in. mains, etc. R. M. Davidson, Miami Beach, engr.

Fla., Tampa—Voted $1,272,278 bonds to purchase water works plant and extend same. R. D. Martin, City Hall, engr. Noted Jan. 4.

O., Columbus—See "Streets and Roads."

Mich., Detroit—Water Bd. having plans prepared 3,855 ft. 6 in. and 2,161 ft. 8 in. c.i. mains in Wisconsin, Kentucky, Phillips, Wheeler, Indiana and Ohio Aves. $20,000. T. A. Leisen, Waterworks Park, engr.

Mich., Jackson — Having preliminary plans prepared for waterworks extensions, incl. 3 m.g. storage reservoir, high pressure pumping station with boilers and equipment, high pressure mains, 6 drilled wells, 350 ft. deep, low pressure equipment includes 15 in. motor driven centrifugal pump. $400,000. Hoad, Decker, Shoecraft & Drury, Ann Arbor, engrs.

Wis., Appleton—Plans 2 mi. mains in various streets. $25,000. O. F. Weissgerber, City Hall, engr.

Ia., Dubuque—Making plans waterworks improvements, incl. pumping station, equipment, etc. $325,000 bonds voted. Mead & Seastone, State Journal Bldg., Madison, Wis., engrs.

N. D., Fargo—Making plans enlarging sedimentation basin, etc., $25,000, 18 in. mains. $75,000. R. T. Jacobsen, city engr.

S. D., Conde—Plans waterworks system. $35,000.

Mo., King City—Apr. 17, to vote on $70,000 bonds water works system. A. T. Archer & Co., 609 New England Bank Bldg., Kansas City, engrs.

Mo., Lathrop—Voted $60,000 bonds water improvements and $22,000 bonds for sewers. A. T. Archer & Co., 609 New England Bank Bldg., Kansas City, engrs. Noted Feb. 22.

Tex., Greenville — Voted $65,000 bonds 6 mi. 6-8 in. pipe line, also $20,000 bonds for sewerage extensions. A. D. Duck, city engr.

Idaho, Lewiston — Had plans prepared rebuilding and extending waterworks, incl. 4 m.g. storage capacity, filtration system, 2 reservoirs and replacing wood mains with c.i. pipe. $400,000. Burns & McDonnell, 402 Interstate Bldg., Kansas City, Mo., engrs. Noted Nov. 16.

Calif., Mayfield—Plans election to vote on $42,500 bonds for improvements and extensions to waterworks system.

Calif., Strathmore — Plans to vote on $27,000 bonds waterworks system.

Ont., Cobalt—Plans auxiliary pumping plant incl. gasoline engine and centrifugal pump. $20,000. A. W. Harrington, clk. Engineer not selected.

Ont., Toronto—Plans 14,000 ft. 6 in. c.i. mains in Rosedale Heights, Cleveland, Forman, Dawesville, and Lambert Aves., Forsyth, McCord, Le May, Martin and Whitewood Rds., Martin and Forsyth Crescents, $26,343. R. C. Harris, city engr.

Ont., Windsor — Essex Border Utilities Comn. having plans prepared filtration plant, slow sand or mechanical filters. $300,000. Gore, Nasmith & Storrie, Confederation Life Bldg., Toronto, engrs. Noted Oct. 12.

BIDS DESIRED

N. Y., Antwerp—Village Bd. taking bids steel standpipe. $10,000. W. A. Kinney, village pres.

N. Y., Buffalo—Apr. 9, by Commissioner Pub. Wks., Municipal Bldg., 33,000 lb. c.i. and 12,000 lb. steel manhole frames and covers, etc. G. W. Andrews, Col. Ward Pumping Sta., engr.

N. Y., Poughkeepsie — Apr. 12, by Bd. Pub. Wks., Eastman Park Mansion, reconstructing pumping station. Hazen & Whipple, 30 East 42nd St., New York City, consult. engrs.; adv. this issue.

N. Y., St. George—Apr. 3, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Midland and Maple Aves., 2nd, 3rd, 4th, 5th, 6th, 7th, 8th and 9th Sts., here.

N. J., Totowa (Paterson P. O.)—Apr. 16, by Boro Council, 6 in. c.i. pipe, hydrants, gates and fittings. G. Ferguson, Court House, Paterson, boro engr.; adv. this issue.

Tenn., Franklin—Apr. 10, 8,280 lin.ft. Class A 6 in., (12 ft. lengths), bell and spigot c.i. pipe, 2,200 lin.ft. Class A 2 in. c.i. pipe and 2,200 lin.ft. 2 in. galvanized pipe. P. Marshall, mayor.

Tenn., Franklin—Apr. 11, by P. Marshall, mayor, taking up 5,372 ft. 4 in. pipe, haul and relay 6 in. pipe to replace same, 8,050 ft. 2-6 in. additional pipe.

O., Columbus—See "Streets and Roads."

Ill., Mt. Greenwood—Apr. 6, by Bd. Local Impvts., 37,236.6 ft. 6-12 in. c.i. pipe, etc. M. L. Cusack, pres.; adv. this issue.

Que., Coaticook — Coaticook Water Co. taking bids 1 mi. mains in Compton St., other mains to be replaced. P. E. Durocher, mgr.

BIDS RECEIVED

Wis., Wauwatosa—A. V. Brigham, secy. Bd. Pub. Wks., deep well turbine or centrifugal pump, from Aurora Pump & Mfg. Co., Aurora, Ill., $5,976 and $6,681; Layne & Bowler Co., Chelsea Ave., Memphis, Tenn., $7,522. Noted March 8.

O., Cleveland—Cuyahoga Co., March 10, 7,840 ft. 6 and 8 in. c.i. mains in Impvt. 26, from Kassouf & Co., 3182 West 25th St., $22,160; J. B. Lynn, Euclid, $22,398.

Que., Montreal—Furnishing 6,000 tons 48 in. c.i. pipe, Class C, to Canada Iron Foundries Co. Ltd., Three Rivers, $52.50 per ton, total $31,500. Noted March 15.

CONTRACTS AWARDED

N. Y., Brooklyn — Bd. Water Supply, Municipal Bldg., New York, Mar. 20, Narrow Siphon 2, portion of Catskill Aqueduct extending across New York Harbor from 86th St. and Shore Rd., Bay Ridge, here, to Vanderbilt Ave. and Bay St., Clifton, Staten Island, from Merritt-Chapman & Scott Corp., 17 Battery Pl., New York, $1,523,136, Frederick Snare Corp., 8 West 40th St., New York, $1,684,660; Park Slope and Ft. Hamilton conduits, portion of city conduits of Catskill Aqueduct, extending from Shaft 23 of city tunnel at Schermerhorn St. and 3rd Ave., etc., here, from T. A. Gillespie Co., 7 Dey St., New York, $2,338,805, Patrick McGovern, Inc., 50 East 42nd St., New York, $2,388,426; A. Palno, 32 Court St., $2,445,435. Noted Mar. 1 and Feb. 22.

O., Cleveland—For 1 story, 180 x 193 ft. pumping station, 67 ft. high, for Fairmount Pumping Sta., from Schirmer-O'Hara Co., 2031 Euclid Ave., $519,918; Camp Constr. Co., Newman-Stern Bldg., $559,000; P. Kirschner Co., 1104 Prospect Ave., $567,000. Noted Mar. 1.

O., Delaware—W. H. Duffy, dir. Pub. Serv., Columbus, two 200 hp. boilers, at Girls' Industrial Home, Concord, Delaware Co., near here, to Heine Safety Boiler Co., 1432 Union Trust Bldg., Cincinnati, $14,230; filtered water pump, to Factory Engineers & Sales Co., Commerce Bldg., Columbus, $2,119., Noted Mar. 1.

Ill., Bellewood—See "Sewers."

Mo., St. Louis—Bd. Pub. Serv., City Hall, to U. S. Cast Iron Pipe & Fdry. Co., 520 Security Bldg., 380 tons Class B 6 in., 50 tons Class C 8 in. and 660 tons Class C 12 in. c.i. pipe $51.60 per ton also 110 tons Class C 20 in. $50.60. Noted Mar. 22.

Tex., Beaumont—For 4-24 in. c.i. pipe, to U. S. Cast Iron Pipe Co., Amer. Trust Bldg., Birmingham, Ala., $52 per ton, total $50,000.

Calif., Niles—Spring Valley Water Co., 375 Sutter St., San Francisco, will build 12,000 ft. concrete flume, 5 x 6 ft. square, by day labor. G. A. Elliott, ch. engr. Private plans.

Sewers

PROPOSED WORK

Mass., Springfield—Plans pumping stations, dikes and new sewer lines in Lowell, Orchard and Washburn Sts., to remedy flood conditions. $200,000. Metcalk & Eddy, 14 Beach St., Boston, consult. engrs.

Mass., Springfield—Plans 1.25 mi. trunk line sewer in Eastern Ave. $85,000. R. S. Marsh, city engr.

N. Y., Canton—Plans additional storm water and sanitary sewers. $25,000-$30,000. W. A. McPhee, village pres.

N. Y., Ogdensburg—Common Council and Bd. Pub. Wks. plan addition storm water and sanitary sewers in 2nd Ward. To exceed $25,000. G. Tate, city engr.

Pa., Dayton—See "Streets and Roads."

Pa., Elizabethtown—Town voted $60,000 bonds to pay its share toward trunk sewers and sewage disposal plant at Masonic Homes. Total est. $145,000. F. H. Shaw, Breneman Bldg., Lancaster, engr.

D. C., Wash.—Dist. Comrs., 509 Dist. Bldg., plan sewers in various streets $150,000, also in suburbs $300,000.

D. C., Wash.—Dist. Comrs., 509 Dist. Bldg., plan Upper Potomac main interceptor, $20,000.

N. C., Mt. Gilead—Had plans prepared sewerage system, 3 septic tanks, 44,000 lin. ft. 6-15 in. vitr. clay pipe, etc. $69,000. H. Beebe, Spartanburg, S. C., consult. engr.

Sewers (Continued)

S. C., Cowpens — Had plans prepared 29,000 ft. 6-15 in. vitr. clay sewers, flush tanks, outfalls and septic tanks. $39,000. H. Beebe, Spartanburg, consult. engr.

Fla., Miami Beach—Apr. 9, to vote on $22,774 bonds for 18 in., $6,330 for 27 in., $42,472 for 8 in. and $24,775 for 24 in. concrete sewers. R. M. Davidson, Miami Beach, engr.

Ky., Paducah—Dept. Pub. Wks. plans lateral sewers. $450,000. H. A. Pulliam, comr. pub. wks. and ch. engr.

O., Cleveland—Cuyahoga Co. plans 17,613 ft. 18-30 in. vitr. clay sewer in Impvt. 9, Sect. A, Ridge Rd. To exceed $100,000. R. F. MacDowell, Court House, engr.

O., Columbus—See "Streets and Roads."

O., Marion—Making preliminary plans for storm drainage. $525,000. G. B. Gascoigne, Leader-News Bldg., Cleveland, engr.

Wis., Marshfield—Making plans sanitary sewerage system. $60,000. J. H. A. Brahtz, 409 Metropolitan Opera House Blk., St. Paul, Minn., engr.

Mo., Lathrop—See "Waterworks."

Tex., Greenville—See "Waterworks."

Tex., Merkel—Apr. 17, to vote on $60,000 bond issue for sanitary sewerage system. H. C. West, mayor.

Wash., Hoquiam—Plans 5 mi. vitr. sewers, Emerson Ave. Dist. $75,000. W. L. Lovejoy, Hoquiam, engr.

Calif., Santa Clara—To vote on $70,000 bonds outfall sewers.

Ont., Hamilton—Plans sanitary sewers in Cumberland Ave. $35,000. E. R. Gray, city engr.

BIDS DESIRED

Me., Old Orchard—Apr. 6, by Bd. Selectmen, Town Hall, 5,645 ft. 8-12 in. sewer mains, submerged outlet of 3,000 ft. 12 in. mains, 6 septic tanks 35 ft. long, ejector station 12 x 22 x 25 ft. Baker & Wheeler, 36 State St., Albany, N. Y., engrs.

N. Y., Brooklyn—Apr. 4, by E. Riegelmann, boro pres., Boro Hall, sewers in Empire Blvd., 84th and Maple Sts., Schenectady, Highlawn, Troy and Lott Aves.

N. Y., Buffalo—Apr. 24, by Commissioner Pub. Wks., rein.-con. storm water drain; adv. this issue.

N. Y., Little Falls—Apr. 6, by Bd. Pub. Wks., sanitary sewers in Monroe and West Monroe Sts., et. al. $25,000. R. Feeter, city engr.

N. Y., New York—Apr. 3, by H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., sewer in Crosby Ave. between La Salle and Waterbury Aves., also in Waterbury Ave., etc.

N. J., Paterson — Apr. 17, by Passaic Valley Sewerage Comrs., 128 Market St., Newark, local sewer connections in Montgomery St., sewage controlling apparatus in Mulberry St. connection chamber, here. J. R. Van Duyne, ch. engr.

D. C., Wash.—Dist. Comrs., 509 Dist. Bldg., receiving bids 2 main pipe sewers and receiving basin. $125,000.

B. C., Nelson—Apr. 9, by W. E. Wasson, city clk., 22,445 ft. 6-18 in. concrete or tile sewers in Fairview Dist. $56,000. Green Bros., Nelson, engrs.

Pa., Johnstown—Apr. 16, at office M. L. Masterton, supt. streets and pub. improvements, City Hall, sanitary sewers; adv. this issue.

Pa., Kingston (Wilkes-Barre P. O.) **Pa.**—See "Streets & Roads."

Pa., Williamsport — Taking bids and opens same about Apr. 10, 8,000 ft. 24 in. rein.-con. and tile storm and sanitary sewers in various streets, avenues, etc. L. Mussina, city engr.

Ia., Dunlap—Apr. 11 by M. Rawlings, clk., 13,000 lin.ft. 12-18 in. storm sewers, etc. $25,000. Henningson Eng. Co., National Bldg., Omaha, Neb., engrs. Noted Mar. 22.

Calif., Merced—Apr. 9, sanitary sewer, 18,600 lin.ft. 24 in. vitr., bell and cement tongue and groove cement or rein.-con. pipe; storm sewer 9,710 lin.ft. 12-36 in. pipe, etc. To exceed $50,000. J. C. McSwain, Merced, engr. Noted Jan. 11.

BIDS RECEIVED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, Mar. 21, sewers in (1) Ocean Ave. engrs. est. $39,925 (2) 41st St., engrs. est. $4,669 (3) Crown St., engrs. est. $3,695 (4) Rutherford Pl., engrs. est. $2,370 (5) Barrett St., engrs. est. $400 (6) Flushing Ave., engrs. est. $450 (7) 81st St., engrs. est. $350 (8) 86th St., engrs. est. $350 (9) 19th Ave., engrs. est. $350, from Necaro Co., Inc., 97 Court St., (1) 94.45% engineers estimate; C. F. Vacharius, 643 40th St., (1) 98%; M. Paino Co., 32 Court St., (1) 102.49% (2) 105% (3) 95% (6) 109% (7) 107% (9) 105%; Tozzi Bros. (2) 112%; B. Peconi & Sons (2) 115% (3) 104%; G. L. Schrade, 693 Flatbush Ave., (3) 97.39% (4) 95.74% (5) 107%; S. Ambrosio, 1016 60th St., (4) 92% (8) 115%; Manmm Constr. Co., (4) 96% (5) 104% (6) 128% (9) 106%; Roslyn Constr. Co., 915 New York Ave., (5) 97% (6) 97% (7) 97% (8) 97% (9) 97%; Tomasetti & Co., 1133 60th St., (7) 109.5% (8) 109.5%. Noted Mar. 15.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., Mar. 20, sewers in (1) Winslow Pl. (2) Madison St. (3) Pulaski St. (4) Tiemann Ave. (5) Vandeventer Ave. (6) Grand St. (7) Rockaway Blvd., from Kennedy & Smith, Inc., 93 Amity St., Flushing, (1) $1,612 (3) Type A $32,497 (5) $2,389; Peace Bros., Inc., 57 North Laurence St., Flushing, (1) $1,842 (2) $2,180 (4) $1,176 (5) $2,891 (7) $1,242; J. Gallo, 203 Division St., Brooklyn, (1) $1,848 (2) $2,350 (3) Type B $29,377 (4) $1,155 (5) $3,398 (6) $5,882 (7) $1,226; Seaside Contg. Co., 193 Beach 108th St., Rockaway Beach, (2) $2,207 (3) Type A $30,641, Type B $31,595; Spinella & Muccini, 6102 18th Ave., Brooklyn, (3) Type A $29,240, Type B $28,800; E. J. Kelly, Jr., (4) $1,217 (6) $6,032; D. A. Gross, 895 Fulton St., Woodhaven (6) $5,639. Noted Mar. 15.

N. J., Newark—Passaic Valley Sewerage Comrs., 128 Market St., Mar. 20, Union Outlet Sewer Connection, from H. L. Harrison, Newark (street address not available) $35,600; O'Gara Constr. Co., 242 Market St., $37,850; Arnolt-More, Inc., 45 Clinton St., $38,500. Noted Mar. 8.

Mich., Detroit—Building vitr. rock, concrete and brick sewers (1) Lateral 3820, 5,000 ft. 12-24 in. (2) Blaine Ave. Arm West, 1,842 ft. 4 ft. 3 in. cylinder (3) Blaine Ave. Arm East, 4,669 ft. 2 ft. 6 in. to 5 ft. cylinder (4) McGraw Ave. Arm, 6,603 ft. 3 ft. to 6 ft. 6 in. cylinder, from Hammen & Co., 4612 Woodward Ave., (1) $24,613 (4) $128,384; Western Constr. Co., 1208 Ford Bldg., (1) $24,500; W. Blanck & Co., 827 Ford Bldg., (1) $21,512; J. Porath, 745 Griswold St., (2) $29,922 (3) $83,013; J. Wagner, 859 West Boston Blvd., (2) $28,530 (3) $80,730 (4) $129,470; R. D. Baker, 1631 Elmhurst Ave., (2) $28,851 (3) $78,370 (4) $127,846. Noted Mar. 15.

Mich., Detroit—Building following lateral sewers (1) 3805 (2) 3808 (3) 3813 (4) 3814 (5) 3815 (6) 3818 (7) 3819 (8) 3821 (9) 3823 (10) 3824 (11) 3825 (12) 3827 (13) 3828 (14) 3836 (15) 3837 (16) 3838 (17) 3839 (18) 3840 (19) 3841 (20) 3842 (21) 3843 (22) 3844, from T. D. Nolan, 22 Highland Ave., (1) $8,600 (16) $3,433 (18) $2,974; Western Constr. Co., 1208 Ford Bldg., (1) $8,864 (2) $3,135 (6) $4,491 (10) $16,415 (11) $10,821; C. R. Lennane Co., 2631 Woodward Ave., (1) $8,842; Liberty Constr. Co., 1026 Detroit Savings Bank Bldg., (2) $3,477 (4) $10,775 (6) $3,100 (10) $15,630 (11) $10,290; Hammen & Co., 4612 Woodward Ave., (2) $5,414 (4) $14,418 (6) $5,579 (8) $18,814 (9) $15,254 (14) $9,457 (15) $7,857 (17) $7,747 (19) $7,582 (20) $6,586 (22) $3,056; A. Rossi, 1984 Erskine St., (3) $2,278 (5) $1,599 (7) $799 (12) $1,250 (13) $2,500 (16) $4,500 (18) $3,499 (20) $3,999 (21) $3,616 (22) $1,999; A. Arcari, 425 Puritan Ave., Highland Park, (3) $2,766 (15) $3,836 (16) $3,836 (17) $5,683 (18) $4,153 (19) $5,610 (20) $4,682 (21) $4,079 (22) $1,705; C. Tiseo Co., Detroit, (street address not available), (3) $2,750 (5) $1,600; H. Ponterelli, South Bend, Ind., (5) $4,800 (17) $6,000 (21) $5,161; R. D. Baker, 1631 Elmhurst Ave., (8) $17,500; W. Blanck & Co., 823 Ford Bldg., (8) $15,273 (9) $12,722 (10) $16,000 (11) $10,610; O. Schultz, (9) $13,500; Halpin & Reilly, 818 Hammond Bldg., (12) $1,697 (15) $7,202. Noted Mar. 15.

Mich., Pleasant Ridge—O. C. Keil, village clk., 24,341 ft. 12-66 in. sewers, from G. Ponterilli, Wolverine Hotel, Detroit, $156,446; Hammen & Co., 4612 Woodward Ave., Detroit, $187,114; Scott, Cochran & Scott, Lansing, $206,000. Noted Mar. 1.

Utah, Ogden — For 8-24 in. sanitary sewers, Dist. 149, from W. E. Roche, Ogden, (street address not available), concrete $74,235; Security Bridge Co., Ogden, (street address not available), vitr. tile $77,950; Wheelwright Constr. Co., 2476 Washington Ave., vitr. tile $80,000.

Calif., Los Angeles — Temporary outfall sewer between Higuera St. and Overland Ave., (1) brick concrete (2) pre-cast concrete, with complete vitr. clay lining, lock bars and tie bands (3) pre-cast concrete, omitting invert clay lining, lock bars and tie bands (4) pre-cast concrete, no clay lining (5) Ferguson segment block (6) wood stave (7) pre-cast concrete, without liners (8) pre-cast concrete, omitting clay lining, lock bars and tie bands, pipe same quality as No. 2 and 3, from C. E. Green, Grosse Bldg., (1) $84,000 (2) $109,350 (3) $101,250 (4) $90,450 (5) $99,900 (6) $84,000; W. D. McCray, American Bank Bldg., (1) $103,000 (2) $108,800 (3) $99,800 (5) $97,400 (6) $87,800; Croatian-American Investment Co., 20° West 2nd St., (1) $113,126 (2) $121,028 (3) $130,530 (5) $121,128 (6) $113,126; C. Thompson and C. E. Heuser, Loew State Bldg., (1) $125,000 (2) $125,000 (3) $118,000 (5) $120,000 (6) $96,600 (7) $109,000.

CONTRACTS AWARDED

N. Y., New York—W. J. Flynn, acting pres. Bronx Boro, 3rd and Tremont Aves., sewers in Strang, Pilgrim, Theriot and Taylor Aves., to J. L. Sigretto, Woodhaven, $134,943, $17,518, $11,163 and $9,630 respectively; Mayflower Ave., to W. McDonald, West 10th St., Brooklyn, $56,492; Cruger and Mace Aves., to J. V. Timoney Co., 220 West 201st St., $12,991 and $1,672 respectively; Roebling Ave., to Knight & Demicco, 448 East Tremont Ave., $8,525; Orloff Ave. and Burnett Pl., to Gregorio & Gabriele, 1129 8th Ave., $10,490 and $4,340 respectively. Noted Mar. 22.

W. Va., Clarksburg—See "Streets and Roads."

O., Ashtabula — For East Side Sewer, 8,000 ft. 15-27 in. vitr. clay and 2,000 ft. 42 in. segmental block, to C. Hukari, Ashtabula, $116,744. Noted Mar. 15.

O., Columbus—See "Streets and Roads."

Mich., Royal Oak — For 3rd section of main trunk sanitary sewer, 13,430 ft. 10-30 in. vitr. pipe, to R. D. Baker & Co., 1631 Elmhurst Ave., Detroit, $92,000. Noted Feb. 22.

Ill., Bellewood—Sewers and water mains, to Kruse Constr. Co., Marion City, Ia., $59,000.

Ill., Chicago — Bd. Local Impvts., 207 City Hall, Mar. 23, sewers in various streets, to J. Tiritilli, 910 Laflin St., M. Pontarelli, 4838 Dakin St., and O. Scully, 1654 West 69th St., $138,096. Noted Mar. 15.

Wis., Beloit—Concrete sanitary sewers in State St. from Race to Broad Sts., to Mierswa Constr. Co., 508 West Milwaukee St., Janesville. Engrs. est. $25,000. Noted Feb. 22.

Wis., Milwaukee—Metropolitan Sewerage Comn., 508 Market St., 10,425 ft. sewers (Sect. 1) 1st, Austin, Cora and Clement Aves., to Knowles & Fehr, Inc., 314 North Dearborn St., Chicago, $330,728.

Neb., York—See "Streets and Roads."

Mo., Neosho—H. A. F. Cloud, city clk., to Queal Constr. Co., Herington, Kan., sanitary sewers in Sect. 1 (Public Sewers), $53,087, Dist. Sewers (Dist. 1) $19,481, Dist. Sewers (Dist. 2) $2,671, Dist. Sewers (Dist. 3) $96,060. This corrects report in Mar. 22 issue.

Tex., Denton—Disposal plant, 1,600 cu. yd. excav., 6200 cu.yd. concrete, 2,000 cu.yd. filter material, to W. M. Jagoe & Co., Denton, $29,459. Engrs. est. $40,000.

Ont., Ottawa—Furnishing 10,000 ft. concrete sewer pipe, 18 in. up, to Dominion Lock Joint Pipe Co., Harbor Bldg., Toronto, $36,000.

Ont., Toronto—For 10,000 ft. brick and tile relief sewer in Roncesvalles Ave., to J. O. Jerou, 90 Curzon St., $130,807.

Bridges

PROPOSED WORK

North Carolina—See "Miscellaneous."

Florida—See "Railways."

Neb., Blair—Chicago & North Western R.R., West Jackson Blvd. and Franklin St., Chicago, soon lets contract replacing 1,000 ft. steel and concrete bridge over Missouri River, near here. Will use old foundations. $1,000,000. W. J. Towne, Chicago, ch. engr.

Calif., Long Beach—Los Angeles Co. (Los Angeles), had plans prepared 520 ft. steel girder bridge over Los Angeles River on American Ave., here, 5 full spans each 80 ft. long, etc. To exceed $75,000. W. D. Armstrong, co. bridge engr.

Ont., Preston — Plans bridge, probably steel truss, concrete abutments, over Speed River. $50,000-$100,000. G. Wurster, town clk. Engineer not selected.

Ont., Toronto—Sketches and plans being made concrete and steel bridge on Huntley St., $127,000. R. C. Harris, city engr.

Bridges (Continued)

BIDS DESIRED

Pa., Johnstown—April 16, at office M. L. Masterson, supt. streets and pub. improvements, City Hall, building Coopersdale and Woodvale Bridges. J. E. Greiner & Co., Baltimore, Md., and Pittsburgh, consult. engrs.; adv. this issue.

N. C., Troy—See "Streets and Roads."

Georgia—Apr. 3, by State Hy. Dept., Atlanta, bridge and 5 x 5 ft. rein.-con. box culvert on Jackson Griffin Rd., Federal Aid Project 260, Butts Co., 727.07 cu.yd. concrete, 81,249 lb. steel, 556 sq.yd. 4 in. concrete pavement. Cement to be furnished by contractor. E. H. Davis, Griffin, engr.

Fla., Quay—Apr. 10, by R. D. Carter, engr., Vero, 5,000 ft. timber trestle, 2,500 ft. approaches, sand fill, over Indian River, here, for St. Lucie Co. (Ft. Pierce). $35,000. Noted June 15.

La., Mermentau—Apr. 12, by Louisiana Hy. Comn., Reymond Bldg., Baton Rouge, bridge over Mermentau River. Alternate A vertical lift layout, Alternate B center bearing swing layout. J. M. Fourmy, state engr.

Wis., Madison—Plans 33 ft. rein.-con. deck girder single span bridge over Starkeweather River, 44 ft. roadway, two 10 ft. walks, on Fair Oaks Ave. $25,000. H. C. Buser, clk. Engineer not selected.

Illinois — Apr. 13, by Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, 8 concrete bridges in various counties. C. H. Older, ch. highway engr.

Ia., Primghar—Apr. 3, by Auditor O'Brien Co., 20 box culverts, 6 I-Beam and 4 pony truss bridges. W. L. Anderson, Primghar, engr.

Ore., Astoria—State Hy. Comn., Salem, opens bids about Apr. 15, single leaf bascule bridge, 100 ft. clear span, concrete piers and about 700 ft. pile trestle approach, over Lewis & Clarke River, near here. H. Nunn, state highway engr. Noted Mar. 1.

BIDS RECEIVED

Alabama—See "Streets and Roads."

La., New Orleans—Dept. Pub. Finances, City Hall, Scherzer rolling lift bridge over Navigation Canal, Broad St., to Pensacola Shipbuilding Co., Little Bayou, Pensacola, Fla., $53,000. Noted Mar. 8.

Mich., Detroit—Two 120 ft. steel pony truss bridges, Five Mile Rd. and Warren Ave., from Amer. Bridge Co., 2273 Beecher Ave., $43,092; Flint Structural Steel Co., Flint, $44,546; Wisconsin Bridge & Iron Co., 1352 Penobscot Bldg., $47,687.

CONTRACTS AWARDED

Ia., Clinton—Clinton Co., 8 rein.-con., box culverts, 3 I-beam spans and 2 pony truss spans, to J. R. Kane, Charlotte, $28,800. Concrete figures $22.50 per cu.yd., structural steel $0.07 per lb. elected.

Ia., Washington — Washington Co., 42 concrete box culverts, 2 concrete deck girders and encasing 1 pier, to Iowa Bridge Co., 1901 Easton Blvd., Des Moines, $46,425. Concrete figures $23.79 to $25.47 per cu.yd. Noted Mar. 1.

Minn., Mantorville — See "Streets and Roads."

Minn., Minneapolis — Northern Pacific R.R., 5th and Jackson Sts., St. Paul, grade separation, incl. 140 ft. concrete bridge, 30 ft. wide, to carry double tracks, at Central Ave. near 15th Ave. N. E., here, and change in railroad grade covering ½ mi., to Grant Smith & Co., 1505 Pioneer Bldg., St. Paul. Owner furnishes materials. Total cost $130,000. Noted Dec. 22, 1921, under "Miscellaneous."

S. D., Aberdeen—Brown Co., one 140 ft., one 40 ft., one 50 ft., two 24 ft., and one 20 ft. spans, to H. Pickus Constr. Co., 2316 3rd Ave., Sioux City, Ia., $29,000.

Kan., Oskaloosa—Jefferson Co. 130 ft. concrete arch bridge on Golden Belt Highway, to F. Luttjohann, 2101 Kansas Ave., Topeka, $28,977. Noted Feb. 22.

Wash., Colfax — Inland Empire, R.R., Terminal Bldg., Spokane, will take down two 100 ft. spans of wooden through Howe truss, replace one span by trestle, erect 1 new 100 ft. Howe truss, repair foundations, remove old pier, near here. Work will be done by day labor. $25,000. H. Powell, Terminal Bldg., Spokane, engr.

Wash., Spokane—Spokane Co., 3 bridges over Latah, Spangle and California Creeks, on Valley Chapel Mount Hope Rd., to C. L. Graves, 2124 Montgomery St., $27,275. Engrs. est. $30,000.

Dams

PROPOSED WORK

N. C., Mt. Gilead—See "Waterworks."

Mo., Leeper—Land owners headed by W. H. Meredith, Poplar Bluff, making preliminary surveys dam and flood water reservoir, on Black River. $2,000,000. Engineer not announced.

Calif., Willits — Central Mendocino County Power Co., takes bids about Apr. 10, materials in connection with concrete dam, incl. 3,000 lin.ft. 12 in. wood stave or iron pipe and 17,000 lin.ft. 12 in. concrete pipe line, cost $20,000. Total cost $25,000. E. Morris, Willits, ch. engr.

BIDS DESIRED

N. Y., Newburgh and Calif., Oroville, noted on Feb. 15 summary, will be found listed under "Excavation, Drainage and Irrigation," page 164.

Railways

PROPOSED WORK

Florida—Muscle Shoals, Birmingham and Pensacola Ry., Pensacola, plans rehabilitation of existing railway and line, from Pensacola to Muscle Shoals, placing large number ties, renewing rail, building bridges, ballasting, new coaling stations, water stations and other general improvements. Will sell $600,000 bonds. A. S. Butterworth, Pensacola, ch. engr.

Texas—R. C. Duff, 802 Carter Bldg., Houston, purchased Beaumont & Great Northern and Trinity & Sabine Rys., plans to expend $4,000,000 extending consolidated lines, incl. line from Waco to the Gulf, shops, equipment, etc.

Texas — Northern Texas Traction Co., 2nd and Main Sts., Ft. Worth, plans line improvement and extensions to following suburbs, Riverside, Sycamore Heights, Seminary Hill and Texas Christian University, 10-15 mi. track. $500,000. C. H. Clifford, vice pres. and genl. mgr.

Idaho — Oregon-Washington R.R. and Navigation Co., 15th and Dodge Sts., Omaha, Neb., having surveys made road from Pine Creek Station, Wallace, to point above forks of Pine Creek on West Fork, incl. 2 mi. rebuilding and 3 mi. extension. $50,000. R. L. Huntley, ch. engr.

California — San Francisco — Oakland Terminal Rys., 22nd and Grove Sts., Oakland, plans reconstructing tracks in Grove St. between Berkeley Way and The Alameda, Berkeley. $100,000. E. M. Boggs, c/o owner, consult. engr.

Ontario—Hydro Electric Comn., London, plans to expend $800,000 on street railway extensions, incl. double tracks, new cars, etc. A. Beck, chn.

BIDS RECEIVED

California—Southern Pacific Co., 65 Market St., San Francisco, 6.7 mi. double tracking over Sierra Nevada Mountains, in vicinity of Truckee, Nevada Co., 100,000 cu.yd. excav., from Erickson & Petterson, Monadnock Bldg., San Francisco; 5 mi. double tracking, over Sierra Nevada Mountains, near Truckee, Nevada Co., 70,000 cu. yd. excav., from Utah Constr. Co., Phelan Bldg., San Francisco.

CONTRACTS AWARDED

Minnesota —See "Bridges" under Minneapolis.

Wyoming — Middle States Oil Co., 347 Madison Ave., New York City, 330 mi. railroad and telegraph system, also 660 mi. fencing, between Casper, Wyo., and Miles City, Montana, to Peterson-Shirley & Gunther, 1411 Woodmen of World Bldg., Omaha, Neb., $12,000,000.

Nevada—Southern Pacific Co., 65 Market St., San Francisco, Calif., 21 mi. road between Wells and Moore, and 32 mi. road from Valley Pass to Montella, to Utah Constr. Co., Phelan Bldg., San Francisco, Calif.

Excavation, Drainage, Irrigation

BIDS DESIRED

Ia., Carroll—April. 2 by Aud. Carroll Co., D.D. 90, 4,000 lin.ft. open ditch, 73,450 cu.yd. excav., 49,900 lin.ft. 6-12 in. clay or cement tile, 16,750 lin.ft. 14-24 in. cement or vitr clay tile, 6,200 lin.ft. 40-46 in. cement tile, etc. $55,000. I. W. Hoffman, Carroll, engr. Noted Mar. 15.

Ia., Nevada—Apr. 6 by Auditor Story Co., Marshall-Story D.D. 3, 53,830 lin.ft. 6-39 in. tile, etc. in Story and Marshall Counties. $35,000. W. A. Olson, Nevada, engr.

B. C., Penticton—Apr. 3, by Minister of Lands, Victoria, excavating 31,210 lin.ft. main irrigation canal in Oliver near here, incl. 35,631 cu.yd. excav. $30,000. F. H. Latimer, Oliver, engr.

B. C., Vancouver—Apr. 9, by City Council, dredging, excavating and laying 18 in. flexible steel pipe (pipe supplied by city) across False Creek near Connaught Bridge. $80,000. F. L. Fellowes, city engr.

CONTRACTS AWARDED

Mo., Carrollton — Wakenda Twp. Dist., c/o R. C. Martin, secy., approximately 250,000 yd. earth excav. for drainage district, to J. D. Jones Constr. Co., Chillicothe, $0.1112 per cu.yd.

Calif., Corcoran — Corcoran Irrigation Dist., will excavate 3,850 ft. canal, 17,700 cu.yd. excav., by day labor. Former bids rejected. Noted Mar. 1.

Streets and Roads

PROPOSED WORK

Conn., Hartford—Plans paving 5,000 sq. yd. Ann St. $25,000; 20,000 sq.yd. Park St. from City Line east $90,000; 14,000 sq.yd. Park St. from Zion to Chadwick Sts. $66,000; 8,445 sq.yd. Washington St. $40,000; 4,330 sq.yd. Webster St. $17,000; 6,485 sq. yd. Broad St. $25,000, all foregoing asphalt on 6 in. concrete; 7,000 sq.yd. Preston St. concrete, $25,000. M. Skilton, city engr.

N. Y., Alexandria Bay—Plans paving several streets, bituminous macadam. $30,000. J. B. Lee, village pres.

N. Y., Buffalo—Erie Co. plans paving 9.25 mi. concrete roads, 6.5 mi. asphalt road and 12.5 mi macadam roads. $200,000. G. C. Diehl, co. engr.

N. Y., Carmel—Putnam Co. plans improving 2.04 mi. Federal Aid Project 203, rein.-con. in town of Southeast, 10 mi. road from here to Kent and Putnam Valley, bituminous material. Latter project will be done by force account under supervision of respective town superintendents. R. Mitchell, co. supt.

N. Y., Eastwood—Voted $60,000 bonds paving Midler Ave. and Sunnycrest Rd. J. J. Schaefer, village pres.

N. Y., Frankford—Voted $75,000 bonds paving Pleasant and 3rd Aves., Frankfort, Litchfield, Mann, Railroad and Palmer Sts. S. S. McGowan, village pres.

N. Y., Lockport — Niagara Co. plans constructing roads. $700,000. T. Brennan, supt. highways.

N. Y., Syracuse—Bd. Pub. Wks. and T. H. Mather, city engr., soon take bids paving Baker, Barnes and Warner Aves. To exceed $25,000.

N. Y., Watertown—Jefferson Co. making plans about 50 mi. bituminous macadam highways. $250,000-$300,000. D. G. Scott, co. supt.

N. J., Cedargrove—Essex Co. (Newark) plans grading and paving 2,830 ft. Stevens Ave. from Pompton Turnpike to Passaic Co. line, 20 ft., 6,400 sq.yd. 8 in. concrete, etc. $29,199. W. A. Stickel, Court House, Newark, engr.

N. J., East Orange—Soon takes bids resetting curb on both sides and asphalt paving Main St. between Arlington Ave. and Sterling St. $75,000.

Pa., Corry—Plans paving Concord, North 2nd and East Sts., brick, $25,000.

Pa., Dayton — Plans grading, curbing, rein.-con. or brick pavements and sewers in Main St. $80,000. W. G. Aye, Kittanning, boro. engr.

Pa., Greenville—Plans paving, repaving, concrete curbing and guttering 3,700 ft. North High, South Mercer and West Main Sts. $25,000. F. P. Clarke, boro. engr.

D. C., Wash. — Dist. Comrs., 509 Dist. Bldg., plan roads and streets in suburbs. $275,000.

D. C., Wash.—Dist. Comrs., 509 Dist. Bldg., plan to improve Connecticut Ave. $75,000, also various streets and roads $885,000.

W. Va., Fairmont—Winfield Dist., Marion Co., voted $200,000 bonds for road work. F. J. Wilfong, Fairmont, engr.

N. C., Mt. Gilead—Had plans prepared grading, curbing, guttering, paving, laying sewers and sidewalks on 18,500 sq.yd. Main, Depot, Ingram, Burton and Haywood Sts., Allington and Wadesboro Rds. $69,000. H. Beebe, Spartanburg, S. C., consult. engr.

N. C., Norwood—Plans grading, curbing, guttering and paving East Main, Whitley and Anson Sts.; grading, curbing, guttering

Streets and Roads (Continued)

and topsoiling Allenton and Church Sts. Sidewalks will be laid on practically all streets. $83,000. H. Beebe, Spartanburg, S. C.; consult. engr.

N. C., Waynesville—Plans paving Haywood, Church, Walnut and Boundary Sts., et al. $100,000.

S. C., Greer—Plans grading, curbing, guttering and paving 9,400 ft. Pelham Rd., Main, Hill, Trade, Mostella, Randall and Victoria Sts., $100,000 bonds voted. H. Beebe, Spartanburg, consult. engr.

Fla., Cocoanut Grove—Plan election to vote on $200,000 bonds constructing streets and sidewalks. H. M. Matherson, mayor.

Fla., Inverness—Citrus Co. voted $750,000 bonds, State Road 5, Tamiami Trail, and lateral roads.

Fla., Madison — Madison Co. rejected bids Feb. 7, sand clay surfacing 28 mi. Rd. 1, 12.94 mi. Rd. 3-11, 19.38 mi. Rds. 4 and 6. Will readvertise. C. S. Wadsworth, Madison, engr. Noted Feb. 1.

Fla., Miami Beach—Apr. 9, to vote on $96,000 bonds penetration macadam paving Collins Ave. between 24th and 26th Sts. and between 5th and 23rd Sts., surfacing with sand and oil Collins Ave. between 25th St. and Indian Creek; $27,206 curbing, guttering and penetration macadam paving Sheridan Ave., Dade Blvd. and 11th St.; $29,942 curbing, guttering and penetration macadam paving Indian Creek Dr. and 1st St. R. M. Davidson, Miami Beach, engr.

Alabama—State Hy. Dept., Montgomery, having plans prepared grading and surfacing with gravel or sand clay 6.178 mi. road from Sunny South to Thomasville, Clarke Co. $85,000. W. S. Keller, state highway engr.

Ohio—Dept. Highways and Pub. Wks., Columbus, rejected bids opened Mar. 13, grading and paving 2.531 mi. Sect. "Z" Canfield-Poland Rd., Mahoning Co. Noted Mar. 22.

O., Cincinnati — Plans repaving Gilbert Ave. viaduct, 6,500 sq.yd. granite block. $59,285. F. Krug, City Hall, engr.

O., Columbus — Making plans grading, water services, sewer connections and paving 43,095 ft. Kinnear alley, alley north of Blake Ave., Rich St. and Midgard Rd., brick, concrete, asphalt or asphaltic concrete. R. H. Simpson, city engr.

O., Niles—Plans paving Vienna Ave., repaving Robbins Ave. $25,000. Engineer not announced.

O., St. Clairsville—Belmont Co. making plans curbing and paving 5 mi. Warnock Pike and 4 mi. St. Clairsville-Glencoe Rd., brick, 7 in. concrete, waterbound macadam or tar bound macadam. $200,000. L. A. Darrah, Court House, co. engr.

O., Warren — Plans paving Forest St. and Highland Ave., $42,320; South Homewood, Roosevelt and East Summit Sts., asphalt or brick, $25,000. Engineer not announced.

Wis., Marshfield — Making plans paving 75,000 sq.yd. various streets. $300,000. J. H. A. Bratz, 309 Metropolitan Opera House Blk., St. Paul, Minn., engr.

Wis., Port Washington — Making plans concrete paving, curbing and guttering Grand and Spring Sts., 18 ft. $25,000. J. Donohue & Co., 608 North 8th St., Sheboygan, engrs.

Wis., Shawano—Making plans concrete Main St. and re-surfacing various other streets. $25,000. J. Donohue & Co., 608 North 8th St., Sheboygan, engrs.

Minn., Hibbing — Rejected bids opened Mar. 17, paving 40 blocks, various types, concrete curbs and gutters. Will probably readvertise. $170,000. Noted Feb. 15.

Kan., Larned — Pownee Co. soon takes bids sand clay surfacing 11.214 mi. Fort Larned-Burdett Rd., 18 ft. V. Stuart, co. engr.

Kan., Oswego—Labette Co. soon take bids bituminous macadam or gravel surfacing 7.901 mi. Federal Aid Project 126, Sect. A, 16 ft. H. K. Schideler, co. engr.

Neb., Loup City—Soon takes bids curbing, guttering and 30,000 sq.yd. vitr. brick, asphalt or concrete paving on various streets. $75,000. Henningson Eng. Co., Natl. Bldg., Omaha, engrs.

S. D., Bison—Perkins Co. plans to expend $65,042 for road and bridge construction in 1923. E. N. Robinson, aud.

Mo., St. Louis—Soon takes bids improving 14,516 ft. Enright, Wise and Dewey Aves., 12th, Magnolia, Pearl, North Magnolia, South Magnolia, Walderman, Leamington, Ray, Marmaduke, Alsace, Keokuk and Tennesee Sts., asphalt, bitulithic or asphaltic concrete. $189,775. W. W. Horner, 300 City Hall, engr.

Tex., Corsicana—Apr. 3, to vote on $75,000 bond issue for street paving and improvements. H. A. Halbert, mayor.

Tex., Dallas—Plans 12,000 sq.yd. bitulithic pavement, etc., on Richmond St. $38,090. G. D. Fairtrace, city engr.

Tex., Dallas—Dallas Co. making plans grading, surfacing with 2 in. asphalt on macadam 3.1 mi. East Pike, east from Mesquite, 20 ft. $135,000. Nagle-Witt-Rollins Eng. Co., Courthouse, engrs.

Tex., Falfurrias — Brooks Co. making plans grading, gravel and caliche surfacing 10 mi. State Highway 12, 16 ft. $90,000. H. S. Bedell, co. engr.

Tex., Henrietta—Clay Co. voted $575,000 bonds improving roads. J. F. Vaden, co. judge. Engineer not selected.

Tex., Hondo—Medina Co. making plans grading, gravel surfacing and 1 in. asphalt topping 7.58 mi. San Antonio-Del Rio Highway, 18 ft. $118,000. Walton & Arneson, Gunter Bldg., San Antonio, engrs.

Tex., Johnson City—Blanco Co. making plans grading and adobe surfacing 8.7 mi. Austin-Fredericksburg Highway, 16 ft. J. W. Puckett, co. engr.

Colo., Denver — Making plans grading, concrete curbing and surfacing 4 mi. South Denver Impvt. Dist. 16, 30 ft., $108,104, 5 mi. North Denver Impvt. Dist. 31, 30 ft., $107,346. A. K. Vickery, City Hall, engr.

Utah, Ogden—Takes bids in May or June, hardsurfacing 7 blocks Wall St., $85,000; 29th, 31st, Adams and Jefferson Sts., $100,000. W. S. Craven, city engr.

Calif., Mayfield — Plans paving various streets, probably oil macadam. To exceed $100,000.

Calif., Bakersfield—Takes bids about April 15, grading, curbing, guttering and paving with 1½ in. warrenite bitulithic on 3½ in. asphaltic concrete, portions R, 20th and 21st Sts., 28,[illegible] sq.ft. paving, etc. W. D. Clarke, city engr. Noted Feb. 7.

Calif., Hanford — Had plans prepared grading, curbing, guttering and paving with 1½ in. warrenite bithulithic on 4 in. bituminous portions of West 6th and Phillips Sts., etc., 155,400 sq.ft. paving, etc. B. Duffield, city engr.

Calif., Orange — Paving plans prepared paving with 7 in. concrete, curbing and laying sidewalks on 58 blocks. C. Bonebreak, city engr.

Calif., Santa Maria — Had plans prepared concrete paving and curbing West Main St., 157,000 sq.ft. pavement, 3,500 lin.ft. curb. H. Neel, city engr.

Calif., San Rafael—Had plans prepared grading, curbing, guttering and waterbound macadam paving portions 6th St., 26,000 ft. paving, etc. H. K. Brainerd, city engr.

Calif., Stockton—Had plans prepared grading, curbing, guttering, laying sidewalks and paving with 2 in. asphalt macadam on 4 in. cement gravel, portions Harrison, Lincoln, Worth and Anderson St., etc., 194,928 sq.ft. paving, etc. W. B. Hogan, city engr.

Ont., Toronto—Plans 5,600 sq.yd. asphalt pavement $28,431, 700 lin.ft. concrete curbs $676, concrete sidewalks $9,497. R. C. Harris, city engr.

BIDS DESIRED

Rhode Island—Apr. 6, by State Bd. Pub. Roads, Providence, 1.67 mi. Contr. 2301, Federal Aid Project 15, bituminous macadam; 5.7 mi. Contr. 2302, Federal Aid Project 16, bituminous concrete; adv. this issue.

Connecticut—Apr. 3, by C. J. Bennett, state highway comr., Hartford, paving 23,517 lin.ft. road in towns of Bristol, New Britain, Plainville and West Haven, concrete; 15,850 lin.ft. in East Hartford and Manchester, bituminous macadam; 4,750 lin.ft. in Stafford, waterbound macadam; 6,865 lin.ft. in Stratford, sheet asphalt; adv. this issue.

N. Y., Batavia—Common Council taking bids paving Bank and State Sts., concrete, brick or asphalt. Takes bids at later date paving Walnut, Hutchins and Liberty Sts. To exceed $25,000.

N. Y., Brooklyn—Apr. 4, by E. Riegelmann, boro pres., Boro Hall, curbing and asphalt paving Bedford Ave., East 7th, East 19th and East 22nd Sts.; asphalt paving Louisiana, Hegeman and 8th Aves., 56th, 58th, 82nd and 85th Sts.; grading, curbing and flagging 13th Ave., 40th, East 15th and West 12th Sts.; grading sidewalk space and laying cement sidewalks on Utica Ave.

N. Y., Long Island City—Apr. 2, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., grading, curbing and laying sidewalks, etc. on Alburtis, Lent and Trimble Aves., 41st and 88th Sts., sheet asphalt paving Alburtis Ave. from Polk to Corona Aves., Alburtis Ave. from Fillmore to Polk Aves., Crescent St. from 13th St. to Hunter Ave., Hunter Ave. from Harris to Nott Aves., 13th St. from Crescent St. to Hunter Ave., in roadway connecting Hunter and Nott Aves., 41st St. from Jackson to Fillmore Aves., 88th St. from Jamaica to Atlantic Aves.; repaving within railroad area of State St. from Prince St. to Linden Ave., Prince St. from Bway to State St., Flushing; recurbing and asphalt paving Centre St.; curbing, laying sidewalks and asphalt paving Hull Ave.; grading, curbing, laying sidewalks and asphalt paving 108th St.; grading that portion of Beach Channel Dr. and inshore and outshore areas; grading for width of 24 ft. and bituminous macadam paving for width of 20 ft., both centrally located 100th (Chichester) Ave.

N. Y., Mineola—Apr. 9, by Bd. Supervs. Nassau Co., Court House, improving Park St. W. F. Starks, co. engr.; adv. this issue. Former bids rejected. Noted Mar. 8.

N. Y., New York—Apr. 3, by H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., paving White Plains Rd. and Fulton Ave., granite blocks, Rae St., sheet asphalt, Ryer Ave., asphalt blocks, West 179th and West 170th Sts., bituminous concrete; grading, etc., Taylor and Liebig Aves.; grading and setting curb, etc., on Knox Pl. and Bryant Ave.

N. J., Freehold—Apr. 11, by Monmouth Co. reconstructing Sea Bright-Highlands Rd. 54, Freehold-Eatontown Rd. 42, Sect. 1, and Farmingdale-Manasquan Rd. 34, Sect. 1; adv. this issue.

N. J., Newark — Apr. 5, by Purchasing Agent Essex Co., grading and paving 4,650 ft. Chancellor Ave., 48 ft., 3 in. sheet asphalt on 6 in. concrete. $110,213. W. A. Stickel, Newark, engr.

Pa., Kingston—(Wilkes-Barre) Apr. 16, by Boro. Council, 14,000 sq.yd. paving on concrete, curbing, 18,000 cu.yd. filling, 1 mi. sanitary sewers Young & Wintermute, 404 2nd National Bank Bldg., engrs.

Pa., Shenandoah—Apr. 16, paving West Coal St. G. Feist, chn. street comn.; adv. this issue.

Pa., Wilkes-Barre—Apr. 3, by F. Gates, city clk., asphalt pavements on 5 streets. Cost to exceed $75,000.

Delaware—Apr. 11, by State Hy. Dept., Dover, 9.92 mi. roads, Contrs. 25, 32 and 37, 0.25 mi. fill, Contr. 37 A, etc.; adv. this issue.

Maryland—April 10, by State Rds. Comn., Baltimore, concrete paving 9.84 mi. Contrs. F-63, HO-23, P-44, CO-32, D-31, S-17 and Q-25, Frederick, Howard, Prince George, Caroline, Dorchester, Somerset and Queen Annes Counties. J. N. Mackall, chn.; adv. this issue.

Md., Cumberland—Apr. 2, by Mayor and City Council, at office of City Clerk, improving streets, involving 18,130 sq.yd. brick paving, 950 sq.yd. concrete paving and 9,968 lin.ft. concrete curb. R. L. Rizer, city engr.

W. Va., Morgantown—Apr. 2, by A. A. Hall, city mgr., 5,000 sq.yd. brick and 15,000 sq.yd. bituminous concrete on concrete, 10,000 lin.ft. curbing. C. W. McDowell, city engr.

N. C., Troy—Apr. 6, by Montgomery Co. Road Trustees, topsoiling 8.8 mi. road from Fether to Saunders Store, also two 12 x 70 ft., steel bridges, rein.-con. abutments over Little River. $50,000. L. V. Edwards, Masonic Temple, Winston-Salem, engr.

S. C., Easley—Apr. 10, by Paving Com. and Town Council, paving and laying sidewalks on various streets. H. Beebe, Spartanburg, engr.; adv. this issue.

Georgia—Apr. 3, by State Hy. Dept., Atlanta, grading and gravel surfacing 5.82 mi. Federal Aid Project 294, Thomas Co., on State Route 38, 11,941 cu.yd. 7 in. compacted gravel, etc. E. J. Smith, Thomasville, engr.

Fla., Jacksonville — Apr. 12, by E. P. Owen, secy. City Comn., 2,150 sq.yd. concrete sidewalks, 20,763 sq.yd. tile sidewalks and driveways, also grading, filling, curbing, etc. $30,000. W. E. Sheddan, city engr.

Fla., Tavares—Apr. 2, by Lake Co., grading and sand clay surfacing 14.1 mi. Rd. 1, Southern Lake Co. Special Road and Bridge Dist., via Howey and Yalaka. $87,629. Former bids rejected. G. E. Heller, Tavares, engr.

Tenn., Dyersburg—Apr. 5, by Dyer Co. Pike Comn., 60 mi. roads, concrete or gravel. L. O. Brayton, engr.

Ky., Harlan—Apr. 2, grading, curbing, guttering and paving 7,100 ft. Main St.,

Streets and Roads (Continued)

3,600 ft. Bailey, Oak, Jones, 1st, Central and 2nd Sts., Harlan Ave. and Courthouse Alley, 26,375 sq.yd. 6 in. rein.-con., 6,885 sq.yd. Kentucky rock asphalt, 3,225 sq.yd. bituminous macadam, etc. $100,000. Glazier & Morlidge, 20-23 Miller Bldg., Cincinnati, O., engrs.

O., Cleveland—Apr. 9, by Bd. Educ., East 6th St. and Rockwell Ave., grading, sidewalks, etc., for playgrounds at Audubon, Lafayette, Mt. Auburn, Rickoff and Warner Rd. Schools. To exceed $25,000. W. R. McCornack, East 6th St. and Rockwell, archt.

O., Columbus—Apr. 3, by W. H. Duffy, dir. Pub. Serv., State St. and Grant Ave., grading, curbing, water and sewer connections and paving 3,824 ft. Grubb St. and 5th Ave., brick $158,355, asphalt, $142,584. R. H. Simpson, City Hall, engr.

O., Martins Ferry—Apr. 2, by Dept. Pub. Serv., paving 1 mi. various streets and alleys, brick or concrete. $45,000. T. K. Rothermund, City Bldg., city engr.

Indiana—Apr. 10, by J. D. Williams, dir. State Hy. Comn., Indianapolis, paving 33.457 mi. highways, in Steuben, Putnam, Scott, Jackson, Marion, Vigo and Sullivan Counties, bids on brick, bituminous concrete and concrete; gravel base on 6.813 mi. also grading and structures under 20 ft. span only on 5.571 mi., Perry Co.

Michigan—Apr. 9, by State Hy. Dept., Lansing, grading and surfacing 2.367 mi. road in Hillsdale Co., 9,704 cu.yd. excav., 27,774 sq.yd. concrete. F. F. Rogers, state comr.

Michigan—Apr. 10, by State Hy. Dept., Lansing, grading and surfacing 5.17 mi. State Trunk Line Rd. 16-21, Wayne Co., 161,690 cu.yd. excav., 140,256 sq.yd. concrete, 54,400 lin.ft. concrete curb and gutter. F. F. Rogers, state comr.

Mich., Bad Axe—Apr. 4, by Huron Co., grading and gravel surfacing 16.25 mi. roads in various townships. W. W. Lavers, co. engr.

Mich., St. Johns—Apr. 14, by Clinton Co., grading and gravel surfacing 4 mi. Assessment Dist. Rd. 19. L. E. Belknap, co. engr.

Illinois—Apr. 13, by Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, paving 308.79 mi. roads in various counties. Alternate bids on concrete, 4 in. monolithic and 4 in. bituminous filled brick, and bituminous concrete with and without binder course. C. Older, ch. highway engr.

Wisconsin — April 4, by State Hy. Comn. at div. office 4, Citizens Natl. Bank Bldg., Wisconsin Rapids, grading and surfacing 1.78 mi. Caloma-Wautoma Rd., Waushara Co., 5.75 mi. Friendship-Kilbourn Rd., Adams Co. A. R. Hirst, state highway engr.

Wis., Fond du Lac—Apr. 10, by A. M. Hunter, city clk., 57,640 sq.yd. paving, 7 types, 44,000 lin.ft. concrete curb and gutter. G. H. Stanchfield, City Hall, engr.

Wis., Ripon—Apr. 10, by F. A. Preston, city clk., 10,000 sq.yd. concrete, 3,000 lin. ft. combined concrete curb and gutter. $25,000. Private plans.

Ia., Council Bluffs—Apr. 9, by A. Hochman, clk., approximately 60,000 sq.yd. warrenite-bitulithic, asphalt or plain concrete paving. $160,000. E. E. Spetman, city engr. Noted Mar. 15.

Ia., Dunlap—Apr. 11, by M. M. Rawlings, clk., grading, paving, curbing, various streets, 21,000 cu.yd. excav., 60,000 yd. concrete, sheet asphalt or brick, etc., 31,000 lin.ft. curb and gutter. $200,000. Henningson Eng. Co., National Bldg., Omaha, Neb., engrs. Noted Mar. 22.

Minn., Buffalo—Apr. 10, by Wright Co., grading 3.8 mi. State Aid Rd. 5, 4.8 mi. State Aid Rd. 1, and 6 mi. State Aid Rd. 6; graveling 3 mi. State Aid Rd. 3, $26,000. C. E. Stahl, Buffalo, engr.

Minn., Mankato—Apr. 3, by C. L. Kennedy, aud. Blue Earth Co., Job 2301, State Rd. 10, 51,474 cu.yd. excav., 76,544 cu.yd. overhaul; Job 2302, State Rd. 11, 28,812 cu.yd. excav., 30,550 cu.yd. overhaul. $25,000. J. W. Hruska, Mankato, engr.

Minn., Moorhead — Apr. 10, by A. O. Houglum, aud. Clay Co., improving 6 mi. State Rd. 15, Egan twp., 45,355 cu.yd. excav., 11,260 cu.yd. overhaul; 8 mi. State Rd. 16, Goose Prairie and Comwell Twps., 41,654 cu.yd. excav., 24,550 cu.yd. overhaul, etc. E. Martinson, Moorhead, engr.

S. D., Mitchell—Apr. 16, by City Auditor, 51,000 sq.yd. asphalt or concrete paving.

S. D., Pierre—Apr. 10, 25,000 sq.yd. paving, etc. $100,000. T. H. Johnson, 319 Iowa Bldg., Sioux City, engr.

S. D., Sioux Falls — Apr. 20, by City Auditor, 51,000 sq.yd. concrete or asphalt pavements.

North Dakota — Apr. 6, by State Hy. Comn., Bismarck, 24.563 mi. road, Walsh Co., 150,597 cu.yd. excav., 779 cu.yd. concrete, 85,551 lb. reinforcing. W. H. Robinson, ch. engr.

Mont., Glendive—Apr. 16, grading and paving 0.97 mi. Merrill Ave., Federal Aid Project 199, 18 ft., 10,000 sq.yd. concrete or bituminous concrete, on concrete, 4,000 cu. yd. excav. $43,000. J. N. Edy, ch. engr. State Hy. Comn.

Mo., St. Louis — Apr. 17, by Bd. Pub. Serv., City Hall, paving 15 alleys, 18,925 sq.yd. 6 in concrete. $58,300. W. W. Horner, City Hall, engr.

Tex., Corsicana—Apr. 5, by A. P. Mays, judge Navarro Co., surfacing with rein.-con. 6.4 mi. State Highway 31, 12 ft. $92,000. McClendon & Purnell, co. engrs.

Colo., Denver—Apr. 3, by Dept. Impvts. and Parks, concrete curbing and grading 10 mi. in North Denver Impvt. Dist. 30. $81,000. A. K. Vickery, City Hall, engr.

Colo., Denver—Apr. 5, by Dept. Impvts. and Parks, concrete paving 10,000 sq.yd. Alley Paving Dist. 87, $25,000; 12 blocks Alley Paving Dist. 88, $25,000. A. K. Vickery, City Hall, engr.

Colo., Denver—Apr. 7, by Dept. Impvts. and Parks, concrete paving 10,000 sq.yd. Alley Paving Dist. 89, $25,000; 12 blocks Alley Paving Dist. 90, $25,000. A. K. Vickery, City Hall, engr.

Nev., Reno—Apr. 9 for 573,340 sq.ft. 5 in. and 15,954 sq.ft. 2 in. asphaltic concrete pavement. H. Chism, city engr. Noted Feb. 15.

Calif., San Diego — Apr. 9, by A. H. Wright, city clk., paving, guttering and laying sewer in 18th St. between Bway. and Imperial Ave., 169,759 sq.ft. 1½ in. asphaltic concrete on 2½ in. bituminous base, etc. F. A. Rhodes, city engr.

Calif., San Francisco — Apr. 4, by Bd. Pub. Wks., grading, curbing, laying sewers and paving 27th, 28th and 29th Aves. between Ulloa and Vicente Sts., 10,000 sq.ft. concrete and 86,000 sq.ft. asphaltic concrete pavement, etc., for city and San Francisco Co. To exceed $35,000. Noted Sept. 14.

Ont., Toronto—Apr. 6, by E. A. James engr., 57 Adelaide St. E., 10 mi. road, waterbound macadam, bituminous macadam, hot mixed paving, stone or tar and oil, for Toronto & York Good Rds. Comn., 57 Adelaide St. E. $200,000.

BIDS RECEIVED

N. Y., Albany — Bd. Contr. & Supply, paving (1) Madison Ave., dressed granite block (2) Albion Ave., macadam, from M. F. Dollard, 36 State St., (1) $349,822 (2) $17,587; J. P. Dugan Co., Cedar Hill, (1) $412,706; P. Mulderry, 5 St. Joseph Terrace, (1) $415,466; H. Domery, (2) $17,274; E. B. Stevenson, 376 Western Ave., (2) $18,158.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., Mar. 20, curbing and laying sidewalks, etc., on (1) Crescent St. (2) Hallett St., grading, sidewalk, crosswalk, cinder crosswalk, etc., on (3) Sackett St., grading, curbing and laying sidewalks on (4) Sherwood St. (5) 44th St. (6) 80th St. (7) 156th St., paving (8) 80th St., sheet asphalt on concrete, from E. Block, Woodhaven, (1) $6,859 (2) $9,347 (3) $1,851 (4) $4,386 (5) $9,493 (6) $8,635 (7) $5,192; F. J. Clancy, Corona, (1) $7,135 (2) $10,840 (3) $2,221 (5) $9,175; Peace Bros., Inc., 57 North Laurence St., Flushing, (1) $8,107 (2) $11,691 (3) $2,715 (4) $5,479 (5) $11,470; J. J. O'Brien, Jr., William St., Jamaica, (6) $7,848; Kennedy & Smith, Inc., 93 Amity St., Flushing, (6) $9,220; Welsh Bros. Contg. Co., 32 Queens St., Astoria, (7) $5,221; Tuohey & Upton, Inc., 98 Main St., Flushing, (7) $5,524; Borough Asphalt Co., 1201 Metropolitan Ave., Brooklyn, (8) $17,058; W. P. McDonald Constr. Co., 17 West 42nd St., New York (8) $18,230. Noted Mar. 15.

N. Y., St. George — J. A. Lynch, pres. Richmond Boro, Mar. 22, grading and bituminous concrete paving (1) Saterlee St., grading and bituminous macadam paving (2) Livermore Ave., etc., from Cornelius Vanderbilt, 24 Elizabeth St., West New Brighton, (1) $51,122 (2) $6,570; W. P. McDonald Constr. Co., 342 Madison Ave., New York, (1) $52,108; J. Johnson Sons, 455 Bway., West New Brighton, (1) $53,327 (2) $4,681; J. E. Donovan, 2205 Richmond Terrace, Port Richmond, (2) $5,257. Noted Mar. 15.

Virginia — State Hy. Comn., Richmond, improving (1) 4.3 mi. concrete road, 18 ft., James City Co. (2) 9.4 mi. concrete, 18 ft., Nansemond Co. (3) 6.5 mi. top soil road, 22 ft., Fluvana and Goochland Counties (4) 6.6 mi. topsoil road, 22 ft., Fluvana Co. (5) 5.5 mi. bituminous macadam road, 16 ft., Buchanon Co. (6) 4.9 mi. bituminous macadam road, 16 ft., Wise Co. (7) 5.8 mi. surface treated macadam road, 16 ft., Tazewell and Russell Counties (8) 1.5 mi. road, 22 ft., Fluvana Co. (9) rein.-con. bridge over Kingsale Swamp near Carrsville, Nansemond Co. (10) bridge over Bird Creek, Goochland Co. (11) 122 ft. rein.-con. bridge over Grassy Creek near Soudan, Mecklenberg Co. (a) regular bid, (b) alternate bid, from H. H. George & Co., Richmond, (street address not available), (1a) $162,827 (2b) $161,507; Allport Constr. Co., Mutual Bldg., Richmond, (1a) $168,154 (1b) $167,807; Overstreet & Nance, Bedford, (1a) $173,816 (1b) $173,221; Ferguson Co., High Point, N. C., (2a) $312,068 (2b) $313,162; Harrison Eng. Constr. Co., Ellicott Sq., Buffalo, N. Y., (2a) $314,356 (2b) $313,162; C. B. Luck & Son, 1212 Brooks Ave., Richmond, (2a) $321,970 (2b) $321,644; Burgess & Atkinson, Scottsville, (3a) $64,783 (3b) $64,163 (8) $15,350 (10) $15,129; Ford & Tuck, Virgilina, (3a) $68,198 (3b) $67,776; Van Doren & Bass, 811 East Franklin St., Richmond, (3a) $74,373 (3b) $73,385 (4a) $30,392 (4b) $30,688; C. H. Oliver, Doswell, (4a) $27,320 (4b) $28,197; Perkins & Barnco, Blackstone, (4a) $30,243 (4b) $28,197 (8) $14,138; Starkweather Constr. Co., Crozet, (5a) $197,391 (5b) $194,497; R. Martin Co., Salem (5a) $224,397 (5b) $233,663; Clintwood Constr. Co., Clintwood, (5a) $242,759 (5b) $253,417; Scott & Trinkle, Norton, (6) $265,655 (7a) $211,314 (7b) $216,360; R. H. Bolling, Norton, (6) $275,525; Warden Constr. Co., Pulaski, (6) $282,957; W. P. Midkiff, Vanhoe, (7a) $198,736 (7b) $200,504; J. S. Lawson, Wythville, (7a) $213,440 (7b) $214,669; F. F. White & Co., Cohasset, (8) $15,283; R. S. Royer, 819 North Elm St., Greensboro, N. C., (9) $6,099; Carpenter & Sanderson, Chester, (9) $6,599; Atlantic Bridge Co., Roanoke, (10) $17,588 (11) $10,614; Pittsburg & Des Moines Bridge Co., Curry Bldg., Pittsburgh, Pa., (10) $18,249; Roanoke Iron & Bridge Co., Roanoke, (11) $10,266. Noted March 1.

Alabama—State Hy. Dept., Montgomery, grading and gravel surfacing 23.649 mi. road from Tuscaloosa Co. line to Carrolton via Reform, Pickens Co., from W. M. Thompson & Co., Tuscaloosa, $313,922. Newell Contg. Co., 3828 Ave. A, Birmingham, $320,577, Phillips & Co., Birmingham (street address not available), $329,621; 14 wooden bridges on above road, from E. Pettus, Montgomery, (street address not available), $59,675, Newell Contg. Co., 3828 Ave. A, Birmingham, $60,304. E. L. Batson, Birmingham (street address not available), $63,529. Noted Feb. 22.

O., Cleveland — Grading, curbing and paving (1) Corlett Ave., 5,690 lin.ft. stone curb and 4 in. tile drain gutter, 5,100 cu.yd. earth excav., 10,190 sq.yd. asphalt, 10,700 sq.yd. vitr. brick on concrete (2) Central Ave., 13,200 lin.ft. stone curb and 4 in. tile drain gutter, 8,400 sq.yd. vitr. brick, 21,900 sq.yd. stone block, 20,260 sq.yd. asphalt and 20,500 sq.yd. concrete base (3) Lamont, Curtis and Carnegie Aves., 16,200 cu.yd. earth excav., 37,000 sq.yd. asphalt on concrete (4) West 48th St. (5) Maryland Ave. (6) Schade Ave. (7) Beverle Pl. (8) Tyler Court (4 to 8 inclusive) involve 6,560 lin.ft. stone curb and 4 in. tile drain gutter, 4,330 cu.yd. earth excav., 9,336 sq.yd. vitr. brick on concrete (9) West 47th St. (10) Stardale Court (11) Henritze Ave. (9 to 11 inclusive) involve 16,030 sq.yd. vitr. brick, etc., from Enterprise Paving & Constr. Co., 8444 Bway., (1) brick $69,183, asphalt $62,014 (5) $6,806; A. M. Pejsa, Euclid Heights Blvd., (1) asphalt $70,638, brick $73,848; Rieley Bros., The Arcade, (2) asphalt $134,367, stone $188,594 (7) $3,524 (8) $8,730; Bentley Bros., 1836 The Arcade, (2) asphalt $140,504, stone $195,065; Cleveland Trinidad Paving Co., The Arcade, (3) $95,670 (5) $6,980 (11) $7,368; Roehl Bros., West 25th St. and Clark Ave., (4) $28,561 (8) $8,023 (9) $28,553 (10) $2,947 (11) $6,738; Garland Bros., Pavers Exch., Society for Savings Bldg., (4) $31,578; H. G. Herring, Pavers Exch., Society for Savings Bldg., (6) $4,913; Gould & Maybach, 823 East 150th St., (6) $4,917; M. P. Platten, Engineers Bldg., (7) $3,018 (9) $27,756 (10) $2,826. Noted Mar. 8.

Wis., Mayville—Paving Horicon, School, Allen and William Sts., (1) 2 course concrete (2) 1 course concrete (3) sheet asphalt (4) asphaltic concrete, from F. Doherty Co., 4419 North Ave., Milwaukee, (1) $67,520 (2) $66,120; R. Rasmussen & Sons Co., foot 7th St., Oshkosh, (3) $70,613 (4) $66,763; Widell Co., Mankato, (1) $71,713 (2) $72,588. Engrs. est. $60,000. Noted Feb. 15.

Ore., Portland—Paving Flanders St. from 1st to 12th Sts., from A. D. Kern Railway Exch. Bldg., $54,471; C. G. Randles, 964 Rodney St., $55,627; Municipal Paving Plant, City Hall, $59,184.

Wash., Seattle—Grading, concrete walks, etc., 26th Ave. N. E., 18,000 cu.yd. earth excav., 85,000 lin.ft. curb and gutter, 6,850 sq.yd. concrete sidewalk, from D. H. Trap

Streets and Roads (Continued)

hagen, Watker Bldg., $29,527; Paduano & Co., 646 West 51st St., $30,118, Odman Constr. Co., 2534 33rd St., $30,558. Engrs. est. $32,061.

Calif., Fresno—Improving (1) Home Ave. (a) 62,728 sq.ft. grading (b) 48,035 sq.ft. asphalt pavement (c) 5,396 sq.ft. concrete gutter (d) 2,895 ft. concrete curb (e) 11,-083 ft. concrete sidewalk (2) Woodward Ave. (f) 16,838 ft. grading (g) 14,400 ft. asphalt pavement (h) 1,131 ft. concrete pavement (i) 1,129 ft. concrete gutter (j) 487 ft. concrete curb (k) 2,700 ft. concrete walks (3) Mono and 5th Sts. (l) 13,680 sq. ft. concrete walks (m) 2,826 lin.ft. concrete curb (4) alley in Block 128, (n) 7,600 sq. ft. grading (o) 7,600 sq.ft. concrete pavement, from W. F. Hanrahan, 1361 P St., (1a) $0.058 (1b) $0.222 (1c) $0.33 (1d) $0.65 (1e) $0.23 (2f) $0.088 (2g) $0.227 (2h) $0.28 (2i) $0.33 (2j) $0.65 (2k) $0.23; California Road and Street Impvt. Co., Bank of Italy Bldg., (1a) $0.063 (1b) $0.219 (1c) $0.34 (1d) $0.65 (1e) $0.23 (2f) $0.065 (2g) $0.219 (2h) $0.265 (2i) $0.34 (2j) $0.65 (2k) $0.235; Thompson Bros., G and Divisadero Sts., (1a) $0.055 (1b) $0.219 (1c) $0.35 (1d) $0.65 (1e) $0.23 (2f) $0.055 (2g) $0.219 (2h) $0.25 (2i) $0.35 (2j) $0.65 (2k) $0.23 (3l) $0.205 (3m) $0.53 (4n) $0.06 (4o) $0.23. Noted Feb. 22.

Calif., Napa—Grading and concrete paving 3rd St. between School and Jefferson Sts., from R. Errington, Napa, $21,051; L. J. Cohn, 110 Sutter St., San Francisco, $22,-457; Lisher & Carillo, Napa, $22,652. Noted Mar. 1.

CONTRACTS AWARDED

N. Y., Albion—Orleans Co. will construct 1¾ mi. road in Yates, 1½ mi. Shelby, 1½ mi. Carleton, 1½ mi. Clarendon, 2½ Barre, 2½ mi. Ridgeway, all bituminous macadam, by day labor under supervision of H. D. Waldo, co. Supt. $143,250.

N. Y., Auburn—Cayuga Co. will build 20 mi. bituminous macadam highway, by force account under supervision of J. C. Dayton, 213 North St., co. supt. $135,000.

N. Y., Ballston Spa.—Saratoga Co. will construct bituminous macadam highways in towns of Ballston, Charlton, Corinth, Galway, Greenfield, Halfmoon, Milton; graveling highways in towns of Ballston, Clifton Park, Day, Edinburgh, Hadley, Malta, Moreau, Northumberland, Providence, Saratoga, Saratoga Springs, Stillwater and Wilton, by force account under supervision of J. E. Hodgman. $109,277.

N. Y., Buffalo—Paving Amsterdam Ave., to Erie Contg. Co., Morgan Bldg., $11,891; Roanoke Ave., to H. P. Burgard Co., 1968 Fillmore Ave., $17,645; Brewster St., to Rock Asphalt Constr. Co., Morgan Bldg., $9,769. All Spec. B asphalt on concrete.

N. Y., Canton—St. Lawrence Co. will construct Macomb-Rossie, Black Lake, Madrid-Potsdam, Hammond-Chippewa Bay, Brusher Falls-Helena, Depeyster-Kokomo Corners and Pierpont Rds., bituminous macadam, by day labor. $246,748. N. A. Winson, co. supt.

N. Y., Carmel—See "Proposed Work."

N. Y., Hudson Falls—Washington Co. will build 15½ mi. gravel on South Argyle-Cassayuna, Centre Cambridge-South Cambridge, Middle Granville-Hampton, Thompson-North Umberland, Hartford-West Granville, Hebron, Centre Jackson, Salem-West Eebron and White Creek-Waits Church Rds., $103,000; 6½ mi. macadam on Easton, Fort Ann, Adamsville-Smith Basin, Putnam Sta. and Whitehall-Sciota Rds., $59,-000, by day labor under supervision of O. C. Richards, co. supt. highways.

N. Y., Ithaca—Tompkins Co. will construct 13.76 mi. macadam highways in towns of Groton, Dryden, Caroline, Danby, Newfield, Enfield, Ulysses and Ithaca, by day labor under supervision of F. C. Evans, co. supt. $123,840.

N. Y., New York—W. J. Flynn, acting pres. Bronx Boro, 3rd and Tremont Aves., grading, curbing, laying sidewalks, etc., on Yates Ave., to L. Di Minna, $62,294. Noted Mar. 22.

N. Y., Rochester—Bd. Contr. & Supply, pavement repairs for 1923, to Whitmore, Rauber & Vicinus, Rochester, (street address not available), $53,000.

N. Y., Schenectady—Schenectady Co. will build 5 mi. bituminous macadam highways in towns of Niskayuna, Rotterdam, Glenville, Princeton and Duanesburg, also 1½ mi. waterbound macadam highway in Mariaville, by day labor under supervision of H. W. Cregier, co. supt. $45,000.

N. Y., Watkins—Bd. Supervs. Schuyler Co. will build 18½ mi. bituminous macadam highway, by force account, under supervision of L. E. Kenyon, co. supt. $110,000.

N. Y., Wampsville—Madison Co. will improve roads in towns of Brookfield, Cazenovia, De Ruyter, Eaton, Fenner, Georgetown, Hamilton, Lebanon, Lenox, Lincoln, Madison, Nelson, Oneida, Smithfield, Stockbridge and Sullivan, concrete, waterbound macadam and bituminous macadam, by day labor under supervision of F. J. Wagner, co. supt. $148,000.

Pa., Ambridge—Grading, paving and curbing Glenwood Ave. from 8th to Duss Aves., to G. B. Patterson Co., Wellsville, O. Engrs. est. $25,000.

Pa., McKeesport—Paving 25,450 sq.yd. Cleveland and Woodland Sts., brick on concrete, to S. M. Bowman, 9 Bowman Ave. Ext. $53,000.

Pa., Phila.—Paving Clearfield and Luzerne Sts., asphalt, to Eastern Paving Co., Colonial Trust Bldg., $27,607 and $35,010 respectively; Chestnut St., granite block, to Centroni & Mezzola, Lincoln Bldg., $18,-876; furnishing crushed stone, to Birdsboro Stone Co., Land Title Bldg., $55,120. Noted Mar. 22.

Md., Baltimore — Grading, curbing and paving with sheet asphalt 22,805 sq.yd., Contr. 231-OANA, to Baltimore Asphalt Block & Tile Co., 1320 North Monroe St., $86,692; 22,365 sq.yd. street asphalt on various streets, to American Paving Co., Montebello Ave., $78,559. Noted Mar. 15.

W. Va., Clarksburg—Paving with vitr. brick on concrete, and 400 ft. sanitary sewers, in Main St. from 5th to Pike Sts., to T. Pietro, Morgantown, $53,107.

W. Va., Clarksburg—Harrison Co., constructing Barnett Rd. and Jacobs Run Rd., to W. F. Allen & Co., Clarksburg, $29,966 and $27,985 respectively; Gusman Rd., to P. S. Hornor Co., Clarksburg, $47,249; Tenmile-Marshville Rd., to Salem Bridge & Constr. Co., Salem, $30,945.

W. Va., Wayne—Wayne Co., 6½ mi. Tug River Highway, Lincoln Dist., to White & Rich Contg. Co., Williamson, $143,124.

N. C., Greensboro—Paving 12 mi. various streets, concrete, sheet asphalt and bituminous concrete, to Murray Constr. Co., Holston Bank Bldg., Knoxville, Tenn., $591,720. Noted Mar. 15.

N. C., Rockingham—Grading and paving various streets, to Hedrick Constr. Co., Rockingham, $100,000. Noted March 15.

S. C., Aiken—Aiken Co., sand clay surfacing 6.2 mi. State Route 39, to C. E. Teague, Augusta, Ga. (street address not available), $17,914. Noted March 8.

S. C., Bishopville—Lee Co., sand clay surfacing 4.2 mi. State Route 34, to Hendrich & Kennedy, Charlotte, N. C. (street address not available), $13,618. Noted March 8.

Fla., West Palm Beach—To Keystone Constr. Co., West Palm Beach, paving with waterbound macadam and part penetration surface, Dist. 3, Sects. 1 and 2, $72,543; to Greynolds & Monroe, 120 North Olive St., paving with waterbound macadam and part pentration surface, Dist. 3, Sect. 1, $40,714, grading, oiling, wood curbing and rock paving Bway. in Northwood Addition to West Palm Beach, $20,233, Dist. 3, $20,871.

Ohio — Dept. Highways and Pub. Wks., Columbus, grading and paving roads in following counties: **Greene Co., Sect. "J" Columbus-Cincinnati Rd.**, 2.62 mi., waterbound macadam, to J. W. Weeks, 300 Gibbons Arcade, Dayton, $44,486; **Huron Co., Sect. "S" Norwalk-Mansfield Rd.**, 2.504 mi., rein.-con., to Gluss Bros. Hamler, $63,758; **Logan Co., Sects. "B and C-2" Bellefontaine-Marysville Rd.**, 8.832 mi., rein.-con., to Lewis & Copeland, Lima, $271,454; **Mahoning Co., Sect. "A" Salem-Warren Rd.**, 3.1 mi., asphalt macadam, oil, to Creager Bros., Liberty Center, $52,082; **Pike Co., Sect. "Piketon" Columbus-Portsmouth Rd.**, 1.07 mi., brick, to S. Monroe & Sons Co., Portsmouth, $45,872; **Richland Co., Sects. "B-C-D" Mansfield Norwalk Rd.**, 8.94 mi., rein.-con., to Eldorado Paving Co., Eldorado, $407,287; **Fremont Co., Sect. "O-1" Fremont-Castalia Rd.**, 0.15 mi., waterbound macadam, to Modern Constr. Co., Fremont, $3,984; **Wood Co., Sect. "B" Perrysburg-Fostoria Rd.**, 1.549 mi., asphalt macadam, oil, to W. Sausley Co., Ada, $28,000; **Huron Co., Sects. "K & L" Norwalk-Bellevue Rd.**, 6.204 mi., concrete curb and widening, to J. F. Stambaugh, Ada, $58,691; **Huron Co., Sect. "M & N" miles, Norwalk-Bellevue Rd.**, .476 mi., concrete curb and widening, to J. F. Stambaugh, Ada, $4,516; **Huron Co., Sect. "P" Norwalk-Oberlin Rd.**, 4.708 mi., concrete curb and widening, to A. N. Richards & Sons, Willard, $43,075; **Sandusky Co., Sect. "K" Fremont-Perrysburg Rd.**, constructing culverts, to a Shackelhoof, Fremont, $2,345. Noted Mar. 22.

O., Cincinnati—Hamilton Co., grading, bridging and paving 8,126 ft. Sharon Ave., 20 ft., 10 in. 1 coarse concrete, also grading bituminous macadam paving 14,780 ft. Ridge Rd., 16 ft., to J. L. Radabaugh, Montgomery, $79,994 and $31,425 respectively. Noted Mar. 22.

O., Cleveland—Grading, curbing and paving 15,655 sq.yd. West 48th and West 49th Sts., asphalt, to Cleveland Trinidad Paving Co., The Arcade, $75,516; East 117th St., vitr. brick, to A. M. Pejsa Paving Co., Euclid Heights Blvd., $26,044; West 33rd and West 44th Sts., vitr. brick, to Roehl Bros., West 35th St. and Clark Ave., $14,-657; 14,265 sq.yd. Scoville Ave., asphalt, to Bentley Bros., 1836 Euclid Ave., $87,435. Noted Mar. 15.

O., Columbus—W. H. Duffy, dir. Pub. Wks., Grant and State Sts., grading, water mains, sewer connections and asphalt paving 1,902 ft. Mt. Vernon Ave., 66 ft., to Knight & Wells, 483 Oak St., $37,939. Noted Mar. 15.

O., Dayton — Montgomery Co. paving Philadelphia Rd. from Salem to Dayton Corporation line, 13,500 sq.yd. Kentucky rock asphalt, to W. I. Anderson, R.R. 5 Troy Pike, $66,074.

Mich., Ann Arbor—Washtenaw Co. Rd. Comn., grading and gravel surfacing 3.761 mi. road, 9 ft., to A. Folks, Hanover $40,472.

Mich., Saginaw—Saginaw Co. Rd. Comn., grading and surfacing 3.021 mi. Dist. Rd. 55, waterbound macadam, to Bennett & Crane, St. Charles, $58,554; 4.308 mi. Dist. Rd. 56, waterbound macadam, bituminous surface, treatment, to A. Jeffrey, Saginaw, $71,397.

Wis.—Juneau-Dodge Co. State Road and Bridge Com., Horicon-Juneau-Watertown Rd., Sect. A, to Cast Stone Constr. Co., 318½ South Barstow St., Eau Claire, 34,316 cu.yd. earth excav. $0.80, 1,530 cu.yd. borrow $0.90, $6,306 sq.yd. concrete surfacing $1.26 etc., total $167,029; Watertown-Lebanon Rd., to J. E. Gillespie, 197 Cherry Ave., Oshkosh, 1,500 cu.yd. earth excav. $0.90, 40,780 sq.yd. concrete surfacing $1.78, etc., total $116,606; Columbus-Beaver Dam Rd., to P. C. Kroeck, 1,000 Humbolt Ave., Milwaukee, 3,356 cu.yd. earth excav. $1, 14,956 sq.yd. concrete surfacing $1.55, etc., total $29,577; Fox Lake-Markesan Rd., to P. W. Ryan & Sons, Janesville, 11,816 cu.yd. earth excav. $0.65, 5,512 cu.yd. gravel surfacing $2.05, etc., total $29,174; Le Roy-Oakfield Rd., to J. Gunnison & Sons, 803 East Gorham St., Madison, 9,953 cu.yd. earth excav. $0.68, 2,595 cu.yd. borrow $0.68, 6,387 cu.yd. gravel surfacing $2.10, etc., total $26,276; Reeseville-Hubbleton Rd., to L. Young, Clyman, 18,043 cu.yd. earth excav. $0.62, 1,687 cu. yd. borrow $0.62, 8,554 cu.yd. gravel surfacing $1.85, etc., total $34,509; Theresa-Huilsburg Rd., to A. Mews, Auburndale, 28,700 cu.yd. earth excav. $0.45, 9,191 cu.yd. gravel surfacing $1.92, etc., total $39,030. Noted March 8.

Ia., Charles City — Floyd Co., grading 6.223 mi. Primary Rd. Project 268, from Rockford north, 26 ft., to L. O. Kimball, Clear Lake, 83,169 cu.yd. excav. $0.24; H. Williams, Mason City, 40,015 ft. 6 in. tile $0.109, 1,200 ft. 8 in. $0.159, 2,950 ft. 10 in. $0.249, and 4,640 ft. 12 in., $0.292.

Ia., Avoca—Grading, curbing and paving streets with vitr. brick, alleys with concrete, to E. A. Wickham & Co., 19 Scott St., Council Bluffs, $75,000. Engrs. est. $80,000.

Ia., Gowrie — For 20,500 cu.yd. gravel surfacing and 8,000 lin.ft. curb and gutter, to W. Dutton Co., Boone, $24,619. Noted Mar. 8.

Ia., Orange City—Sioux Co. gravel surfacing 40.525 mi. Primary Rd. Projects 198, 337 and 336, 55,528 cu.yd. gravel, etc., to Lemars Sand and Gravel Co., Hawarden, furnishing gravel $22,469; C. J. West, Oelwein, hauling and spreading gravel $43,073.

Ia., Williamsburg—Brick paving 57,000 sq.yd., to Wright Constr. Co., 211 Flynn Blk., Des Moines, $218,390.

Minn., Fairmont—Martin Co. 106,000 cu. yd. excav., Jobs 2302, State Rd. 8 and Job 2304 State Rd. 6, to W. H. Duffey, Fairmont, $37,463; 103 cu.yd. concrete culverts on above, to F. M. Clifford, Guckeen, $2,-840. Noted Mar. 8.

Minn., Faribault — Rice Co., Job 2301, State Rd. 3, 42,171 cu.yd. earth excav., etc., grading to Nolan Bros., 18 North 2nd St., Minneapolis, $15,597, concrete culverts to Rofdal & Curtis, Medford, $2,198, corrugated metal culverts to Northfield Iron Co., Northfield, $1,388; Job 2302, State Rd. 6, 62,791 cu.yd. earth excav., etc., grading to S. Forsberg, 781 East Magnolia St., St. Paul, $21,167, monolithic culverts to Pederson Bros., Montevideo, $8,645, corrugated metal culverts to Northfield Iron Co., Northfield, $1,928; Job 2303, State

Streets and Roads (Continued)

Rd. 27, 56,720 cu.yd. earth excav., etc., grading to J. Brown, Madison Lake, $19,-232, monolithic culverts to Pederson Bros., Montevideo, $7,985, corrugated metal culverts to Northfield Iron Co., Northfield, $2,456; Job 2304, State Rd. 24, 79,938 cu. yd. earth excav., etc., grading to R. B. Fraser, Faribault, $27,567, monolithic culverts to Rofdal & Curtis, Medford, $2,729, corrugated metal culverts to Northfield Iron Co., Northfield, $2,490. Noted Mar. 1.

Minn., Mantorville—Dodge Co., (a) Job 2301, State Rd. 4, 26,992 cu.yd. earth and 91 cu.yd. loose rock excav., 153,820 cu.yd. overhaul, 480 lin.ft. culverts, gravel surfacing, load and haul 4,207 cu.yd., 700 cu. yd. ½ to 1 mi. haul, 3,507 cu.yd. over 1 mi., 2,500 cu.yd. miles, one 30 ft. I beam concrete span, 3 monolithic culverts; (b) Job 2302, State Rd. 7, 99,642 cu.yd. excav., 444,-310 cu.yd. overhaul, 1,610 lin.ft. culverts, one 18 ft. and one 20 ft. concrete slab, 8 monolithic culverts, grading on (a) and (b) to Roach Co. Inc., Mantorville, $52,913; graveling on (a) to G. Espe, Hayfield, $3,937; bridges and monolithic culverts on (a) and (b) to H. F. Garbisch, Austin, $14,-273; portable culverts to Concrete Culvert Co., Winona. Noted Mar. 1.

Minn., Marshall—Lyon Co. (1) 26 mi. Job 2301, State Rd. 5 (2) 13 mi. Job 2205, State Rd. 6 (3) 2 mi. Job 2206, State Rd. 3, (a) grading (b) portable and (c) monolithic culverts, to B. C. Johnson, Redwood Falls, (1a) $67,492; D. Ryan, Marshall, (2a) $35,824 (3a) $8,177; Marshall Tile Co., Marshall, (1c) $8,312 (2b) and (3b) $4,078; (2c) $2,214; Bladholm Bros., Marshall, (2b) $7,673. Noted Jan. 25.

Kan., Columbus—Cherokee Co. concrete paving 4.585 mi. Baxter Spring Rd., Federal Aid Project 142, 18 ft., 48,417 sq.yd. concrete, to Koss Constr. Co., 2818 5th St., Des Moines, Ia. $164,187. Noted Nov. 2.

Neb., York—Paving various types, and small sewers in Dist. 21, to Roberts Constr. Co., 404-5 1st Natl. Bldg., Lincoln, vitr. brick on 4 in. base $3.06 per sq.yd., sheet asphalt $2.48, rein.-con. $2.08, asphaltic concrete $2.24, dam concrete $1.90. Engrs. est. $100,000. Noted Jan. 25.

S. D., Aberdeen — Grading Warner-Stratford Rd., 100,000 cu.yd. excav. to B. O'Rourke, Roscoe, $0.25 per cu.yd.; grading from Columbia gravel pit to Columbia Rd., 94,000 cu.yd. excav., to Pickus Constr. Co., 2316 East 3rd St., Sioux City, Ia., $0.26 per cu.yd.; grading Sand Hill-Columbia Rd., 94,000 cu.yd. excav., to H. Hanson, Stratford, Ia., $0.28 per cu.yd.

Mo., Mound City—To Hawller & Davis, Boonville, paving Railroad, 6th, 5th and 8th Sts., 9,813 sq.yd. 6½ in. concrete $2.75 per sq.yd., excav. $0.70, 6 in. concrete curb $0.75, etc., total $40,411.

Mo., Tarkio—To Cook O'Brien Constr. Co., 305 Ry. Exch. Bldg., Kansas City, 13,279 sq.yd. 2 coarse rein.-con. paving, $2.75 per sq.yd., 5 in. curb and gutter, $1.35, etc., total $54,347.

Okla., Sayre—Grading and paving 7 blocks 3rd and 4th Sts., 8,600 sq.yd. 6 in. concrete, etc., to Pearce Constr. Co., Edmond, $39,742.

Washington—State Hy. Comn., Olympia, paving 4.4 mi. Pacific Highway from Kalama to Carrolls, concrete, to F. X. McLellan, Lyon Bldg., Seattle, $155,865; 6.37 mi. from Carrolls to Kelso, concrete, to S. A. Moceri, Thompson Bldg., Seattle, $221,417. Noted Mar. 1.

Wash., Hoquiam — Concrete paving 42 blocks Lincoln St. et al., to C. R. Wright, Hoquiam.

Wash., Wenatchee—Paving Bridge St. from Kittias to South Wenatchee Ave., 66 ft. 8 in. concrete, to Olympic Constr. Co., 326 Northlake Ave., $80,254.

Calif., Fresno—To Thompson Bros., G and Divisadero Sts., improving Peralta Ave. between Lucerne and Wilson and McKinley to University Sts., $21,134; Amador St. between H and Van Ness Sts., $15,777. Noted Mar. 22.

Calif., Redwood City—San Mateo Co., improving Santa Cruz-Pescadero Rd., to W. W. Thompson, Redwood City, $39,149. Noted March 15.

Calif., San Mateo—Paving various streets 322,500 ft. asphaltic concrete, to Fay Impvt. Co., Phelan Bldg., San Francisco, $122,817. Noted Dec. 28.

Calif., Watts—Grading and paving with 5 in. willite portion Main St., to G. R. Curtis, 2440 East 26th St., Los Angeles, $51,295.

Industrial Works

PROPOSED WORK

Mass., Boston—Suburban Realty Corp., c/o B. S. Brown, engr., 88 Broad St., having plans prepared 3 story, 62 x 122 ft. manufacturing building, rein.-con., 120 Brookline Ave. $100,000.

Mass., Cambridge—Ginn & Co., 15 Ashburton Pl., Boston, soon takes bids 5 story, 55 x 317 ft. publishing building, rein.-con. and brick, plain foundation, Munroe and 2nd Sts., here. To exceed $200,000. J. R. Worcester Co., 79 Mills St., Boston, engrs. and archts.

Mass., Fall River — Fall River Electric Light Co., 85 North Main St., Fall River, Edison Illuminating Co., 42 Main St., Brockton, and Blackstone Valley Gas & Electric Light Co., 231 Main St., Pawtucket, R. I., had preliminary plans prepared by Stone & Webster, Inc., engrs., Milk St., Boston, power house, on Mt. Hope Bay, and high tension lines between Fall River and Pawtucket, and between Fall River and Brockton. Probable cost $5,500,000.

Mass., Foxboro—Foxboro Co., Inc., having plans prepared 4 story, 65 x 160 ft. and 55 x 60 ft. factory addition, brick and steel. $135,000. Engineer and architect not announced.

Mass., Ware—Ware Woolen Co. having plans prepared by E. C. Brown, 220 Devonshire St., Boston, 1 and 2 story, 100 x 103 ft. dye house, brick. $75,000.

Mass., Worcester—See "Buildings."

N. Y., Binghamton—Bailey Rubber Heel Co., Inc., purchased 150 x 180 ft. site, Main and Emma Sts., and plans factory. $80,000,-$100,000. D. F. Rice, Beverly, Mass., mgr.

N. Y., Conover (Ithaca, P. O.)—Wayne Lumber Co., 110 West 40th St., New York City, plans saw mill, here. $40,000-$45,000.

N. Y., Lyons—Bashford Cider & Vinegar Co. plans concrete and brick plant and storage building incl. several tanks 50,000 to 150,000 gal. capacity. $50,000-$60,000. J. E. Jennings, mgr.

N. Y., New York—City, Municipal Bldg., soon takes bids 1 story, 50 x 90 ft., brick, steel and concrete garage addition, plain foundation, 90th St. and East River. $50,-000. Private plans.

N. Y., South Edwards—Power Corp., of New York, Watertown, plans development of hydro-electric generating station, 10,000 hp.—10 hour day, Oswegatchie River, here. To exceed $500,000. Address, W. P. Creager, Northern New York Trust Co. Bldg., Watertown, ch. engr.

N. Y., Syracuse—Onandaga Pottery Co., Court St., plans addition to plant, incl. 4 kilns. $500,000. B. E. Salisbury, pres.

N. Y., Utica — Utica Steam & Mohawk Valley Cotton Mills, 801 State St., plans new concrete, steel and brick factory and storage building. $150,000-$175,000.

Pa., Johnstown — Trabold Motors Co., Swank Bldg., plans 1 story, 100 x 250 ft. concrete, brick and steel factory. $150,000. Engineer and architect not selected.

D. C., Wash.—Washington Times-Herald, Munsey Bldg., soon lets contract newspaper and office building. $200,000. G. M. McCabe, 96 5th Ave., New York City, archt.

W. Va., Follansbee—Sheet Metal Specialty Co. soon takes bids 2 story, 82 x 161 ft. and 42 x 79 ft. warehouse and galvanizing building, brick and concrete. $150,000. R. M. Trimble, Ferguson Bldg., Pittsburgh, Pa., archt.

N. C., Concord—Hobarton Mfg. Co. plans cotton weave mill, 100 looms. $400,000. C. A. Cannon, Concord, interested.

N. C., Greensboro—P. C. Rucker, pres. Rucker Warehouse Co., takes bids in May, 3 story addition to cotton warehouse, brick. $160,000. Noted March 22.

N. C., Raleigh — North Carolina State College of Agriculture and Engineering plans to build and equip addition to textile building. $110,000. W. C. Riddick, Hillsboro Rd., pres.

N. C., Statesville—Church—First Presbyterian Church plans church. $200,000. Architect and engineer not selected.

La., Alexandria — Texas & Pacific Ry., Texas & Pacific Bldg., Dallas, Tex., plans new shops and terminals here, incl. round house, distribution yards, storage tracks, repair shops, supply house, etc., all fireproof. Facilities will be used jointly by owner and Missouri Pacific R.R. $1,000,000.

Tenn., Hales Bar—Tennessee Power Co., Hamilton National Bank Bldg., Chattanooga, plans 30,000 hp. steam plant adjoining hydro-electric station, here, modern construction and design. $1,500,000. B. C. Edgar, vice-pres. and genl. mgr.

O., Galion—E. M. Freeze & Co. plans 1 story, brick, steel and concrete foundry and pattern shop. Lockwood, Green & Co., Hanna Bldg., Cleveland, archts. and engrs.

Mich., Big Rapids—Turner Crimmins & Waters, Big Rapids, having plans prepared by Lane, Davenport & Peterson, 2320 Dime Bank Bldg., Detroit, 1 story, 180 x 240 ft. brick and steel garage, plain foundation. $100,000.

Mich., Detroit—Pere Marquette Ry. Co., Fort St., having plans prepared 1 story engine terminal and round house, brick and steel, plain foundation, 21st St. $1,-200,000. Private plans.

Mich., Flat Rock—Ford Motor Co., Highland Park, (Detroit P. O.), having plans prepared by A. Kahn, archt., 1000 Marquette Bldg., Detroit, 1 story, 28 ft. high, 60 x 360 ft. rein.-con., brick and steel factory, plain foundation.

Ill., East St. Louis—Murphysboro Brick Co., Murphysboro, purchased 85 acre tract outside city for complete plant. $250,000. Engineer not announced.

Wis., Janesville — Southern Wisconsin Cocoa Cola Co., 617 East Washington Ave., Madison, plans 2 story and basement, 60 x 150 ft., bottling plant, rein.-con., brick and steel, plain foundation. Engineer and architect not selected.

Wis., Madison—C. B. Fritz, 138 North Frances St., having plans prepared by Claude & Starck, Badger Annex, 1 story, 50 x 110 ft., woodworking shop and planing mill, brick, rein.-con. and steel, plain foundation. $50,000. Noted Feb. 1.

Wis., Marshfield—Madison Cement Stave Silo Co., 14 South Carroll St., Madison, plans rein.-con., brick and steel factory, plain foundation. $40,000. Architect and engineer not selected.

Wis., Milwaukee—Shabolt & Boyd Iron Co., 129 West Water St., having preliminary plans prepared by H. J. Esser, 82 Wisconsin St., 1 story, 150 x 225 ft., brick and timber warehouse, plain foundation, Dousman St. $45,000.

Wis., Rhinelander—Rhinelander Electric Power Co., having plans prepared by Mead & Seastone, engrs., Journal Bldg., Madison, 1 story, 32 x 50 ft. addition to power house, brick, rein.-con. and steel. $40,000.

Ia., Marshalltown—Northwestern Sand & Gravel Co. plans gravel washing plant, brick and concrete. E. H. Lowerbaugh, mgr.

Ia., Oskaloosa—Plans 2 story and basement, light and power plant, brick and concrete, also dam in Des Moines River to develop 4,000 hp. $370,000 bonds voted. T. H. Carlin, city clk.

Minn., Jackson—Plans municipal heating plant and mains. $79,000. B. H. Strom, clk.

Minn., Virginia—Plans to enlarge central heating station and extend mains. $150,000. A. E. Bickford, clk.

Mo., Sikeston — International Shoe Co., 1505 Washington St., St. Louis, plans 5 story, 50 x 200 ft., rein.-con. and brick factory, plain foundation, here. $150,000. Engineer and architect not announced.

Tex., Breckenridge—Gulf Production Co., Bedell Bldg., San Antonio, had plans prepared 2 refineries here, one 5,000 gal., other 10,000 gal. daily. $75,000 and $250,000 respectively. Private plans.

Tex., Breckenridge — B. Blair, Mexia, had plans prepared 10 or 12 buildings, here. $200,000. Private plans.

Tex., Eastland — Arab Gasoline Corp. had plans prepared gasoline absorption plant, 15,000 gal. daily. $250,000. Private plans.

Tex., Eastland—Arkansas Natural Gas Co. had plans prepared gasoline absorption plant, 15,000 gal. daily, along tracks Texas & Pacific R.R. $200,000. Private plans.

Tex., Eastland—Trinity Products Co. had plans prepared gasoline absorption plant, 5,000 gal. daily. $150,000. Private plans.

Tex., Houston—See "Railways."

Okla., Ponca City—Apr. 3, to vote on $80,000 bonds 1 story brick addition to municipal light plant. A. M. Stalnaher, city engr.

Wash., Hoquiam—Grays Harbor Veneer Co. plans plant, here. $50,000. Address A. A. Bator, Aberdeen.

Calif., Alhambra—Los Angeles Cotton Mills, c/o E. M. Fowler, pres., Metropolitan Bldg., Los Angeles, having plans prepared by M. H. Merrill & Co., archts. and engrs., 50 State St., Boston, Mass., rein.-con. mill buildings, to be constructed in 4 units, first unit includes bleaching, storage and shipping building, boiler house, weaver shed, yard mill, etc., here. To exceed $3,000,000.

Calif., Los Angeles—Los Angeles Cotton Mills Co., having plans prepared first unit of cotton factory, incl. 40 x 40 ft. boiler

Industrial Works (Continued)

house, 80 x 80 ft. bleaching building, 40 x 80 ft. cloth building, 45 x 55 ft. storage, 30 x 45 ft. concrete platform, 125 x 175 ft. weaving shed, 75 x 125 ft. yarn mill. Total cost $4,000,000. E. M. Fowler, Pacific Electric Bldg., pres. M. H. Merrill & Co., 50 State St., Boston, Mass., engrs.

Calif., Oakland — J. Breuner Co., 15th and Clay Sts., having plans prepared by Reed & Corlett, Oakland Bank of Savings Bldg., 3 story, 160 x 240 ft., rein.-con. or brick warehouse, Adeline and 22nd Sts. $150,000.

Calif., Oakland — W. Knowles, archt., Central Bank Bldg., preparing plans 2 story and basement, 30 x 90 ft., rein.-con. warehouse, Bway. and 19th St. $70,000. Owner's name withheld.

Calif., San Pedro — Walsh Automatic Coupling Co., c/o Miller & Farrell, archts., Western Mutual Life Bldg., Los Angeles, had plans prepared 1 story, 150 x 180 ft., foundry, wood, steel and corrugated iron, also 1½ ton traveling crane.

Calif., San Jose—Guadalupe Lime & Cement Co., 16 California St., San Francisco, having plans prepared cement plant and 2,700 ft. tunnel, here. $250,000. Private plans.

Calif., San Mateo—McClenahan Products Co., 112 Kearny St., San Francisco, plans plant. To exceed $40,000.

Ont., Toronto—Canadian General Electric Co., 212 King St. W., plans concrete, brick and steel factory to replace one recently damaged by fire. Loss incl. equipment. $250,000. Private plans.

BIDS DESIRED

Conn., Bridgeport—H. J. Platt, 388 Fairfield Ave., taking bids 1 story, 16 ft. high, 107 x 176 ft. garage and service station, brick and steel, plain foundation, Fairfield Ave. $50,000. Private plans.

N. J., Camden—H. Boettcher, archt., Neffsville St., Lancaster, Pa., taking bids 3 and 6 story and basement, 65 x 135 ft., rein.-con., brick and steel factory, concrete pile foundation, here, for Armstrong Cork Co., Liberty and Mary Sts., Lancaster, Pa. $500,000.

N. J., Elizabeth—Day & Zimmerman, engrs., 6th and Chestnut Sts., Phila., taking bids 1 and 2 story, 165 x 600 ft., brick and steel factory, plain foundation, here, for Amer. Type & Fdry. Co., Communipaw Ave., Jersey City. Noted Dec. 28.

Pa., Brackenridge — Atlantic Bottle Co. will build 1 story, 50 x 180 ft. brick factory, here. $300,000. Work will be done by separate contract. Noted Oct. 5.

Pa., Chester—C. Wunder, archt., 1415 Locust St., Phila., taking bids 5 story and basement, 101 x 126 ft. storage plant, rein.-con., brick and steel, concrete pile foundation, 5th and Upland Sts., here, for S. Headley Co. $150,000.

Pa., Duquesne—Royal Mfg. Co., taking bids 2 and 3 story and basement, 75 x 125 ft., brick and steel factory, 16 North 1st St. $150,000. Private plans.

Pa., Galeton — Apr. 7, by Keystone Garage Co., 1 story and basement, 75 x 126 ft. garage, to replace one recently destroyed by fire. $40,000. H. Haskell, Hulett Bldg., Elmira, N. Y., archt.

Pa., Phila.—A. B. C. Porch Enclosure Co., 4th and Berks Sts., taking bids 3 story and basement, 60 x 100 ft. brick and steel factory, plain foundation, 4th and Berks St. $150,000. A. E. Dunlap, 7203 Oak Ave., archt.

Pa., Pittsburgh—W. E. Snaman, archt., Empire Bldg., will build 3 story and basement, 88 x 200 ft. warehouse, Bluff St., for Frank & Seder Co., 5th and Smithfield Aves. $200,000. Work will be done by separate contracts. Noted Mar. 8.

S. C., Duncan—Lockwood, Greene & Co., engrs., Piedmont Bldg., Charlotte, N. C., receiving bids 4 story, 135 x 300 ft. cotton mill, 5 story, 75 x 100 ft. storehouse, 1 and 2 story, 200 x 650 ft. bleachery, power house, pump room building and 300 houses for employees, also 2,000 tons structural steel, machinery and building equipment for above, for Pacific Mills.

Miss., Cruger—Apr. 10, by city, electric lighting plant and equipment. W. J. Smith, mayor. Kramer Eng. Co., Magnolia, engrs.

Ill., Chicago — Dawson & Eisenberg, archts., 5 North La Salle St., receiving bids 1 story, 82 x 192 ft. garage, rein.-con., brick and steel, Madison St. near Homan Ave. $75,000. Owners name withheld.

Wis., La Crosse—O. J. and R. E. Sorenson, archts., 216 Main St., taking bids, opens same about Apr. 3, 1 story, 72 x 200 ft. main building, 1 story, 28 x 40 ft. boiler house, 1 story, 26 x 60 ft. glazing building, 34 x 36 x 52 ft. shaving bin, brick and timber, plain foundations, also 1 story, 60 x 64 ft. frame shed, for Weisse Mfg. Co., Caledonia and Gilleth Sts. $60,000. Noted Mar. 22.

Ia., Muscatine—Apr. 18, by Bd. Electric Light Trustees, complete municipal electric light plant and system. B. C. Benham, secy. A. L. Mullergren, 555 Gates Bldg., Kansas City, Mo., engr.; adv. this issue. Noted Nov. 2.

Neb., Seward—See "Buildings."

CONTRACTS AWARDED

R. I., Newport — Amer. Cigar Co., 111 5th Ave., New York City, 2 and 3 story, 60 x 140 ft. factory, brick and hollow tile block, Commercial Wharf, here, to Braley & Ohman, Newport. Archts. est. $50,000.

R. I., Providence — B. D. Aldrich, 144 Westminster St., 5 story, 70 x 200 ft. garage, service station and sales building, brick and concrete, plain foundation, Orange St., to E. Radding Constr. Co., 144 Westminster St. Archts. est. $200,000.

Conn., Winsted — Winsted Hardware Mfg. Co., Lake St., 1 story, 46 x 146 ft. factory addition, brick and timber, plain foundation, to Tracy Bros. Co., 52 Benedict St., Waterbury. Archts. est. $40,000.

N. Y., Syracuse—Bendixen Tobacco Co., 1103 Lodi St., 3 story, brick factory, West Belden Ave., to Fellows & McGrath, 415 Fellows Ave., $50,000. Noted Mar. 15.

N. J., Trenton—Phila. & Reading R.R., North Warren St., 1 story, 30 x 75 ft., brick freight house, 40 x 218 ft. platforms and concrete driveways, to F. A. Havens Co., 845 North 19th St., Phila., $50,000.

Pa., Grapeville—Westmoreland Specialty Co., 1 story, 80 x 100 ft. brick and steel addition to plant, near Jeanette, to H. L. Dixon Co., Rosslyn St., Carnegie. Archts. est. $150,000.

Pa., Juniata—Pennsylvania R.R., Broad St. Sta., Phila., 3 story and basement, 64 x 400 ft. rein.-con. and brick store house near Altoona, to West Bros., 635 Trenton Ave., Wilkinsburg. Archts. est. $150,000. Noted Mar. 8.

Pa., Phila.—S. F. Whitman & Sons, 415 Race St., 9 story and basement, 80 x 107 ft. rein.-con. and brick plant, concrete pile foundation, 4th and Race Sts., to W. Steele & Sons, 219 North Broad St., $1,000,000.

Pa., Pittsburgh—Webster Ave. Garage Co., c/o J. S. Long, archt., Citizens Savings Bank Bldg., 3 story and basement, 54 x 110 ft. garage, Webster Ave., to D. T. Riffle, 1006 Forbes St. Archts. est. $40,000.

Pa., Primos—Pennsylvania Lawn Mower Co., 1615 North 23rd St., Phila., 1 story, 110 x 220 ft. rein.-con., brick and steel foundry, plain foundation, to A. R. Roff Constr. Co., 1635 Thompson St., $190,000.

W. Va., Clarksburg—Carmichael Motor Co., 2 story and basement, 85 x 126 ft., garage, South 6th St., to Foreman & Putman, Marietta, O. Engrs. est. $65,000.

W. Va., Huntington—H. T. Simms and G. Keller, Robson-Prichard Bldg., will build 3 story, 60 x 150 ft. garage, brick, tile, steel and terra cotta, 4th Ave., by day labor. $50,000. L. J. Dean, Foster Bldg., archt.

W. Va., Newell—Homer Laughlin China Co., East Liverpool, O., 1 story and part basement, 230 x 800 ft. pottery plant, brick and steel, to H. K. Ferguson Co., 6523 Euclid Ave., Cleveland, O. Engrs. est. $250,000.

Ala., Albany—Cooper-Wells Hosiery Mfg. Co., St. Joseph, Mich., 2 story, 110 x 160 ft., hosiery mill, semi-mill construction, here, to Baxter Bros., Huntsville, $43,000.

Tenn., Nashville — Methodist Publishing Bd., Broad St., Mar. 14, general contract publishing plant, brick, concrete and steel, from T. S. Moudy Constr. Co., Chamberlain Bldg., Chattanooga, $180,000. Archts. est. $200,000.

O., Cincinnati—A. M. Allen & Co., archts. and engrs., 7016 Euclid Ave., Cleveland, 7 story and basement, 175 x 600 ft., brick and rein.-con. warehouse, Front and Central Aves., here, to Ferro Concrete Constr. Co., 3rd and Elm Sts., for Cincinnati Terminal Warehouse Co. Archts. est. $1,500,000. Noted Feb. 15.

O., Cleveland—Forest City Fdry. & Mfg. Co., 1220 Main St., 1 story, 120 x 300 ft. and 40 x 40 ft. brick and steel foundry and cupalo, West 90th St. along tracks of Cleveland, Cincinnati, Chicago & St. Louis R.R., to S. W. Emerson Co., 1900 Euclid Ave. Archts. est. $200,000. Noted Feb. 8.

O., Cleveland—National Lamp Wks. of General Electric Co., Nela Park, altering and 3 story, 96 x 325 ft., steel and concrete factory addition, East 152nd St., to Heller-Murray Co., 1153 East 152nd St. Archts. est. $190,000.

Mich., Jackson—Amer. Gear & Mfg. Co., Jackson, 2 story, 75 x 125 ft. rein.-con., brick and steel machine shop and heat treat building, to E. Winters, 752 Book Bldg., Detroit. Engrs. est. $50,000.

Mich., Jackson—H. Mead, archt., Michigan Trust Bldg., Grand Rapids, 5 story and basement, 88 x 133 ft. and 72 x 133 ft. brick addition to factory, to North Griffin Co., Cottland St. for Michigan Seating Co., Jackson. $110,000. Noted Feb. 15.

Ill., Chicago — Broderick Teaming Co., 3221 Shields Ave., 1 story, 100 x 125 ft. garage, rein.-con., brick and steel, 3226 Shields Ave., to Carpenter & Hayes, 109 North Dearborn St. $40,000.

Ill., Chicago—E. Neylon, 1637 East 79th St., 1 story, 50 x 200 ft. garage, rein.-con., brick and steel, 78th St. and Stony Island Ave., to J. R. O'Connor, 1637 East 79th St. Archts. est. $40,000.

Ill., Chicago—S. Isaacson, 707 Brompton Pl., 2 story, 190 x 280 ft. garage and store, rein.-con., brick and steel, 316-38 Bway., to E. Edlund, 6520 North Artesian Ave. Archts. est. $300,000.

Ill., Plaines (Joliet P. O.) — Public Service Co. of Northern Illinois, 72 West Adams St., Chicago, addition to power plant, here, to Bowie, Lydon & Co., Inc., 340 West Harrison St. $200,000.

Ill., Rockford—Rockford National Furniture Co., Kishwaukee and 23rd Sts., 2 and 4 story and basement, 60 x 194 ft. warehouse, rein.-con., brick and steel, to R. P. Beckstrom, 516 Mead Bldg. Archts. est. $250,000.

Wis., Biron (Wisconsin Rapids, P. O.)—Consolidated Water Power & Paper Co., c/o J. Schnabel, will build 1 story, 67 x 300 ft., rein.-con. and steel factory, plain foundation, by day labor. L. A. DeGuere, Wisconsin Rapids, archt.

Wis., Frankville—Frank Pure Food Co., 288 East Water St., Milwaukee, 1 story, 48 x 82 ft. addition to main building, 1 story, 90 x 192 ft. vat house, 1 story, 30 x 40 ft., boiler house, 100 ft. brick stack, 1 story, 28 x 30 ft. pump house, brick and concrete, plain foundations, here, to H. Danischefsky, 1484 Humboldt Ave., Milwaukee. Archts. est. $110,000.

Wis., La Crosse — Cameron Motor Car Co., 127 South 6th St., 1 story, 60 x 147 ft., brick and concrete garage, plain foundation, to F. R. Schwalbe & Sons, Rivoli Bldg. Archts. est. $50,000. Noted Feb. 1.

Wis., Madison—C. Tantillo, Regent St. and West Washington Ave., 1 story, 40 x 60 ft., brick and rein.-con. garage, to W. A. Kelly & Co., 157 Brettingham Blvd. Archts. est. $40,000.

Neb., Grand Island—Teeter-Homan Co., 1 story and basement, 132 x 132 ft., rein.-con. and brick garage, plain foundation, to Geer Co., Grand Island. Engrs. est. $40,000.

Kan., Augusta—Schoeb Motor Co. will build 1 story and basement, 125 x 125 ft., rein.-con. and brick garage, by day labor. $40,000. E. Forsblom, 405 Sedgwick Blvd., Wichita, archt.

Kan., Wichita—Western Glass Co., 231 North Market St., general contract, 2 story and basement, 73 x 130 ft. warehouse, to G. H. Siedhoff Constr. Co., c/o Broadview Hotel, $55,000.

Mont., Butte—Montana Power Co., 40 East Bway., hydro-electric plant and excavating for 2,500 ft. 4 ft. steel pipe line and 9,000 ft. 56 in. wood pipe, to Winston Bros., Columbus. Engrs. est. $1,250,000.

Mo., St. Louis—Armature Rewinding Co., 3305 Washington Ave., 2 story, 50 x 124 ft., brick and concrete factory, plain foundation, 605-11 North Leonard Ave., to C. A. Welsch Constr. Co., De Menil Bldg. Archts. est. $50,000.

Calif., Los Angeles—Black & White Taxi Co., Alexandria Hotel, 3 story, 100 x 125 ft. garage, rein.-con., Olive and 4th Sts., to Macdonald & Kahn, Loews State Bldg.

Calif., San Francisco—Christie Machine Wks., 191 Fremont St., 3 story and basement, warehouse, rein.-con., Howard St. near Beale St., to W. Martin, 180 Jessie St., $40,000.

Calif., San Francisco—Rincon Warehouse Co., 268 Lee St., Oakland, 3 story and basement, 80 x 87 ft. warehouse, rein.-con., Federal St., to Vukicevich & Bagge, 180 Jessie St. Engrs. est. $75,000.

Buildings

PROPOSED WORK

Me., Brewer—High School—School Dept. plans 2 story and basement, brick and steel. $150,000. Engineer and architect not selected.

Mass., Fall River—Apartment—J. A. Parker et al., 1656 Rodman St., plans 4 story, 70 x 210 ft., brick, Osborn and Florida Sts. $250,000. Engineer and architect not announced.

Mass., Methuen (Lawrence P. O.)—High School—School Dept. plans 3 story, brick, steel and concrete. $450,000. Engineer and architect not announced.

Mass., Northampton—Theatre—Goldstein Bros., Broadway Theatre Springfield, having plans prepared by Mowll & Rand, 21 School St., Boston, 2 story, 100 x 125 ft., King St., here. $175,000.

Mass., Springfield — Apartment — N. Howard, 145 State St., plans 4 story, Maple St. $300,000. R. B. Whitten, 580 Massachusetts Ave., Cambridge, archt.

Mass., Springfield — Hotel — Bridgeway Hotel Co., Bridge St., plans 4 story addition, Bridge St. $175,000. Engineer and architect not selected.

Mass., Watertown—High School—Bd. Educ. plans 3 story, brick and steel, Main St. $200,000. McLaughlin & Burr, 88 Tremont St., Boston, archts.

Mass., Worcester—Hospital—Worcester-Hahnemann Hospital, 261 Lincoln St., having plans prepared by Fuller & Delano, 44 Front St., and Kendall, Taylor & Co., 93 Federal St., Boston, associated archts., 3 story brick addition, to include power house. $300,000.

R. I., Edgewood (Providence P. O.)—Masonic-Harmony Lodge, F. of M., c/o Jackson, Robertson & Adams, archts., 1216 Turks Head Bldg., Providence, having plans prepared 3 story, brick and steel, Norwood Ave. $175,000.

Conn., Derby—Theatre—Goldstein Bros. Amusement Co., Broadway Theatre, Springfield, plans 2 story, here. $175,000.

Conn., Hamden—Town Hall—Town Hall Com., c/o R. Williams, archt., 185 Church St., New Haven, having plans prepared 2 story, brick and marble, Dixwell Ave. $160,000. Noted Jan. 4.

Conn., Mansfield—Hospital, etc.—Mansfield Training School and Hospital, plans hospital $150,000, nurses home $200,000, dormitory $150,000. C. T. LaMoure, supt. Engineer and architect not selected.

Conn., Meriden—High School—School Dept. plans 3 story. $750,000. Engineer and architect not selected.

Conn., New Britain — Schools — School Com. plans "Smalley" and "East St." schools, probably 2 or 3 story, brick, plain foundation. $185,000 and $150,000 respectively. E. O. Kilbourne, 1600 Stanley St., chn. school accommodations com. Engineer and architect not selected.

Conn., New Haven—Club—Elks Club Bldg. Com., c/o D. J. Maloney, chn., 216 Crown St., having sketches made by Brown & Von Beren, 185 Church St., 6 story, 60 x 160 ft., brick and rein.-con., Crown St. $250,000.

Conn., Norwalk—Schools—City plans two 2 story and basement, brick. $250,000. C. L. Barton, mayor. Engineer and architect not selected.

Conn., Rockville—High School—Rockville School Dept. plans 3 story, brick and steel, Main St. $400,000. F. I. Cooper Corp., 51 Cornhill, Boston, archts.

Conn., Storrs—College—Connecticut Agricultural College plans 4 story, $400,000. C. L. Beach, pres. Engineer and architect not selected.

Conn., West Hartford (Hartford P. O.)—Temple—Wyllis Lodge 90 Masonic Hall Assn. having plans prepared by W. T. Arnold, Meriden, 2 story and basement, 40 x 70 ft., brick, plain foundation, South Main St. $150,000. C. S. Griswold, 328 North Main St., chn. building com.

Conn., Winsted — Hospital — Litchfield County Hospital, Winchester Rd., having plans prepared by W. E. Hunt, 197 Water St., Torrington, three 2 story, 45 x 100 ft. additions. $150,000. Noted Nov. 16.

N. Y., Binghamton—Dormitory—Binghamton Practical Bible Training School plans new dormitory. $150,000. J. A. Davis, pres. building com.

N. Y., Binghamton—Hotel—Hotel Carlton plans 100 room brick addition. $150,000. Engineer and architect not announced.

N. Y., Brooklyn—School—Bd. Educ., 500 Park Ave., New York, had plans prepared by W. H. Gompert, archt. and engr., Flatbush Ave. extension and Concord St., P. S. 214, brick, steel and stone, plain foundation, Forbell and Conduit Aves. $850,000.

N. Y., Brooklyn—School—Bd. Educ., 500 Park Ave., New York, soon takes bids brick, steel and stone addition, plain foundation, Elm Pl. and Coney Island Ave., here. $225,000. W. H. Gompert, Flatbush Ave. extension and Concord St., archt. and engr.

N. Y., Brooklyn—School—Bd. Educ., 500 Park Ave., New York, having plans prepared by W. H. Gompert, archt. and engr., Flatbush Ave. extension and Concord St., brick, steel and stone addition, plain foundation, Decatur St. and Lewis Ave., here. $200,000.

N. Y., Brooklyn—Schools—Bd. Educ., 500 Park Ave., New York, plans school, Dahill Rd. and West 1st St., $1,000,000; 5 story, Bushwick Ave. between Meserole and Scholes Sts., $1,250,000; school, Stone and New York Aves., $850,000; P. S. 100, West 3rd St., $850,000, all brick, steel and stone, plain foundations, here. W. H. Gompert, Flatbush Ave. extension and Concord St., archt. and engr.

N. Y., Far Rockaway — Apartment — Crossways Apartment Corp., c/o M. Hyde, archt. and engr., 114 East 28th St., New York, had plans prepared 4 story, 127 x 186 x 277 ft., brick, steel and stone, plain foundation, Bway. and Mott Ave., here. $600,000.

N. Y., Jamaica—School—Bd. Educ., 500 Park Ave., New York, soon takes bids P. S. 116, brick, steel and stone, plain foundation, Wren Pl. and Polhemus Rd., here. $750,000. W. H. Gompert, Flatbush Ave. extension and Concord St., Brooklyn, archt. and engr. Noted Mar. 15.

N. Y., Lackawanna (Buffalo P. O.)—Schools—Bd. Educ. plans several new schools. To exceed $500,000. Engineer and architect not selected.

N. Y., New York—Apartment—One Hundred Eight East 86th St. Corp., c/o Rouse & Goldstone, archts. and engrs., 512 5th Ave., having plans prepared 14 story, 50 x 102 ft., brick, steel and stone, plain foundation, 108 East 86th St. $450,000.

N. Y., New York—Apartment—Three Hundred Four West 75th St. Corp., c/o R. T. Lyons, archt. and engr., 342 Madison Ave., having plans prepared 15 story, brick, steel and stone, plain foundation, 304 West 75th St.

N. Y., New York—Gymnasium—Fordham University, Fordham Rd., soon takes bids 2 story, cut stone, on campus. $250,000. E. G. Perrot, 233 Bway., archt. and engr. Noted Jan. 25.

N. Y., New York—Medical—Academy of Medicine, 27 East 57th St., having preliminary plans prepared by York & Sawyer, archts. and engrs., 50 East 41st St., 12 story, 100 x 100 ft., brick, steel and stone, plain foundation, East 60th St.

N. Y., New York—Nurses Home—Mt. Sinai Hospital, 100th St. and 5th Ave., plans brick, steel and stone, plain foundation on plot 100 x 125 ft., 99th St. and 5th Ave. $1,500,000.

N. Y., New York — Office — Rogers & Thompson, c/o Starrett & Van Vleck, archts. and engrs., 8 West 40th St., having plans prepared 12 story, steel and stone, plain foundation, Madison Ave. and 39th St.

N. Y., New York—Schools—Bd. Educ., 500 Park Ave., soon takes bids brick, steel and stone high school, plain foundation, East 172nd St., $1,915,000; P. S. 70, 105 x 175 ft., brick, steel and stone, plain foundation, Weeks Ave., $1,400,000. W. H. Gompert, Flatbush Ave. extension and Concord St., Brooklyn, archt. and engr. Noted Dec. 7.

N. Y., New York—School and Administration—Salvation Army, 120 West 14th St., plans brick, steel and stone, plain foundation, 123 West 13th St. $500,000. R. Best, in charge. Private plans.

N. Y., Schenectady—Bank—Mohawk National Bank, State St., purchased adjacent site and plans modern bank. $200,000.

N. Y., Seneca Falls—High School—Bd. Educ. plans new concrete, brick and steel. $200,000-$250,000. H. A. Carmer, pres.

N. J., Trenton—Y. W. C. A., 138 East Hanover St., having plans prepared by J. O. Hunt, 219 East Hanover St., 4 story building. $600,000. W. F. Thompson, 342 Madison Ave., New York City, engr.

Pa., Phila.—Office—C. H. K. Curtis, Independent Sq., soon takes bids 11 story and basement, 230 x 360 ft. rein.-con., brick and steel, caisson foundation, 6th, 7th and Chestnut Sts. $5,000,000. H. Trumbauer, Land Title Bldg., archt.

Pa., Phila. — Office — J. T. Windrim, archt., Commonwealth Bldg., soon takes bids 15 story and basement, rein.-con., brick and steel, concrete pile foundation, 9th and Sansom Sts., for Philadelphia Electric Co., 10th and Chestnut Sts. $2,000,000.

Md., Baltimore—Church and Sunday School—Catonsville Methodist Episcopal Church plans stone or granite, Frederick and Melvin Aves. $150,000. W. M. Gieske, Gunther Bldg., archt.

D. C., Wash.—College—George Washington University, 2033 G St., N. W., having plans prepared by A. L. Harris, 728 17th St., N. W., college building, 21st and G Sts., N. W. $250,000.

D. C., Wash.—Memorial—National Literary Society, International Bldg., conducting campaign to raise $3,000,000 for 3 story, white stone and marble memorial building, probably near Lincoln Memorial.

D. C., Wash. — Office — See "Industrial Work."

D. C., Wash.—School—Dist. Comrs., 509 Dist. Bldg., plan addition to Tenleytown School. $160,000.

Va., Fork Union—Dormitory, etc.—Fork Union Military Academy having plans prepared by Carneal & Johnston, Chamber Commerce Bldg., Richmond, dormitory and armory. $150,000.

W. Va., Welch—High School—Bd. Educ. receiving sketches, brick, fireproof construction, Elkhorn Dist. $150,000. Engineer and architect not selected.

N. C., Asheville—Hotel—G. Vanderbilt and Battery Park Hotel Companies soon take bids for above named hotels. $1,500,000. W. L. Stoddart, 9 East 40th St., New York City, archt. Noted Mar. 15.

N. C., Statesville—Church—First Presbyterian Church plans church and Sunday school. $150,000-$200,000. N. B. Mills, chn. finance com.

Fla., Ormond Beach—Hotel—J. P. Vining having plans prepared by Magaziner, Eberhard & Harris, 603 Chestnut St., Phila., 2 story, 150 ft. front, Hollow tile and stucco, on site of Bretton Inn. $250,000.

Fla., St. Petersburg—Church—Methodist Church having preliminary plans prepared by Hunt Bros., 329 Walnut St., Chattanooga, Tenn., church. $250,000. S. W. Walker, pastor.

Fla., Tampa — Hotel — Adair Realty & Trust Co., Healy Bldg., Atlanta, Ga., financing company which is being organized and plans 15 story, 105 x 140 ft., Florida Ave. and Lafayette St. $800,000.

Fla., Tavares—Court House—Lake Co. rejected bids for court house. $250,000. Will readvertise. G. E. Heller, Tavares, engr. Noted Nov. 30.

Tenn., Cleveland — Hotel — Cleveland Business Men plan 4 story, 84 x 105 ft., rein.-con. and brick, on Broad St. $150,000.

Ky., Louisville—Hotel—Citizens Hotel Co., had plans prepared by B. B. Davis, Norton Bldg., 18 story, 600 room, brick and stone, 19,000 sq.ft. floor space, 5th and Walnut Sts. $3,000,000.

O., Cleveland — Bank, Office, etc. — A. Greenwald, Society for Savings Bldg., had plans prepared by N. Petti, archts., Williamson Bldg., 1 and 2 story, 66 x 220 ft., brick and steel, bank, office and garage, Bway. and East 77th St. $150,000.

O., Cleveland — Commercial — Callow-Kirby Co., 1900 Euclid Ave., having plans prepared by Watson Eng. Co., 4614 Prospect Ave., 2 story and basement (ultimately 8 story), 66 x 189 ft., brick, steel and concrete, Euclid Ave. near East 18th St. $200,000.

O., Cleveland—Commercial—M. B. Scharfeld, Cleveland Discount Bldg., plans 5 story, brick, steel and concrete, rear 732 East Superior Ave. $200,000. Architect's name withheld.

O., Cleveland—Office—Cleveland Trust Co., c/o A. A. McCaslin, East 9th St. and Euclid Ave., plans brick, steel and concrete, East 9th St. and Huron Rd. To exceed $150,000. Engineer and architect not selected.

O., Cleveland—Office—H. Pennington, Jr., Williamson Bldg., interested in syndicate which plans altering and constructing 2 story, 17 x 104 ft., brick, steel and concrete addition, Euclid Ave. and East 8th St. $300,000. Engineer and architect's name withheld.

O., Cleveland — Store — McCrory Stores Corp., 1107 Bway., New York City, plans 4 story and basement, 60 x 110 ft., brick, steel and concrete, 2041 East 4th St., here. $160,000. P. A. Prior, vice pres.

O., Cleveland—Store—W. Taylor Sons & Co., 630 Euclid Ave., having plans pre-

Buildings (Continued)

pared by Osborn Eng. Co., archts. and engrs., 2848 Prospect Ave., altering 6 story, 620 Euclid Ave. $500,000.

O., Dayton—Church—Westminster Presbyterian Church, 305 Callahan Bank Bldg., plans 80 x 200 ft., stone and steel, 1st and Wilkinson Sts. $500,000. N. Emmons, Jr., chn. building com. Engineer and architect not selected.

O., Dayton—Office and Store—Westminster Building Co., c/o S. B. Kelly, 1305 Amer. Bldg., plans 6 to 8 story and basement, 90 x 135 ft., rein.-con. and brick or stone, concrete pile foundation, 3rd and Ludlow Sts. $500,000. Engineer and architect not selected.

O., Lorain—Clubhouse—Slovenian National Home Co., c/o W. L. Grills, chn. building com., 554 Bway., having plans prepared by P. Rissman, Lorain, 3 story, 60 x 110 ft., brick, steel and concrete, Pearl St. $200,000. Former bids rejected. Noted June 22.

O., Warren—City Hall—Plans election to vote on $200,000 bonds new city hall. G. T. Hecklinger, clk. Engineer and architect not announced.

Mich., Bad Axe — High School — Bd. Educ. having plans prepared by S. D. Butterworth, Tussing Bldg., Lansing, 2 story and basement, 134 x 137 ft. rein.-con., brick and steel, plain foundation. $150,000.

Mich., Detroit—Hotel—E. C. Pokorny, 849 Edison Ave., having plans prepared by H. S. Angell, 722 Free Press Bldg., 4 story and basement, 46 x 160 ft., brick, steel and stone, plain foundation, Winder St. $150,000.

Mich., Detroit—Loft—A. Des Rosiers, engr., 620 McKerchey Bldg., prepared plans 6 story and basement, 40 x 100 ft. rein.-con., brick and steel, plain foundation, Bagley Ave. $150,000. Owners name withheld.

Mich., Mt. Clemens—School—Dist. 1 Lake Twp. had plans prepared by B. E. Mills, 74 West Adams Ave., Detroit, 2 story and basement, 95 x 115 ft. brick, plain foundation. $150,000.

Ill., Chicago—Apartment—C. Minow, 1124 Independence Blvd., plans 3 story and basement, 170 x 170 ft., rein.-con., brick and steel, Sheridan Rd. and Chase St. $300,000. Loewenberg & Loewenberg, 111 West Monroe St., archts.

Ill., Rockford—Apartment—E. Oppenheim, 218 South Main St., plans 3 story and basement, 125 x 260 ft., rein.-con., brick and steel, South 3rd St. $250,000. Eliel & Eliel, 621 Stewart Bldg., archt.

Ill., Chicago—Apartment—Owner c/o A. Goldberg, Acorn Sheet Metal Wks., 617 West Jackson Blvd., having plans prepared by A. L. Himelblau, 179 West Washington St., 3 story and basement, 100 x 124 ft., rein.-con., brick and steel. $150,000.

Ill., Chicago—Church—D. S. Klafter, archt., 64 West Randolph St., preparing plans 1 story and basement, 75 x 150 ft., rein.-con., brick and steel, 6028 Champlain Ave. $250,000. Owners name withheld.

Ill., Chicago—Hotel—D. Jackson c/o J. H. Klafter, archt., 127 North Dearborn St., having plans prepared 3 story and basement, 75 x 100 ft., rein.-con., brick and steel, Winthrop St. near Wilson St. $200,000.

Ill., Chicago—Store and Office—Owner c/o C. W. and G. L. Rapp, archts., 190 North State St., plans 6 story, 100 x 142 ft., rein.-con., brick and steel, Rush and Ohio Sts. $500,000.

Ill., Chicago—Synagogue—Owner, c/o J. Lasker, 10 South La Salle St., plans 2 story and basement, 60 x 150 ft., rein.-con., brick and steel, Cary St., near Bway. $150,000. Loewenberg & Loewenberg, 111 West Monroe St., archts.

Ill., Chicago—Theatre, Store and Office—J. Horwitz, 10 South La Salle St., plans 2 story and basement, 244 x 307 ft., rein.-con., brick and steel, Robey St. and Belle Plaines Ave., $750,000. Denson & Oman, 5 North La Salle St., archts.

Wis., Janesville—Theatre—H. T. Jones, 107 North Franklin St., plans 2 story, 80 x 150 ft., brick and steel, plain foundation. $150,000. Engineer and architect not selected.

Wis., Madison—Hotel—Hotel Wisconsin Realty Co., c/o W. Schroeder, 86 Michigan St., Milwaukee, having preliminary plans prepared by M. Tullgren & Sons Co., 425 East Water St., Milwaukee, 8 story and basement, brick, tile and concrete, plain foundation, West Washington Ave. and Fairchild St., here. $1,000,000. Noted March 15.

Wis., Milton—Library, etc.—Milton College conducting campaign to raise funds for 4 story, library, womens dormitory, athletic field and stadium, rein.-con., brick and steel, plain foundation. $250,000. A. E. Whitford, pres. Engineer and architect not selected.

Wis., Milwaukee—Apartment—Franklin Arms Apartment Co., c/o Rosman & Wierdsma, archts., 424 Jefferson St., preparing plans 3 story and basement, 120 x 146 ft., brick and concrete, plain foundation, 32nd and Grand Sts. $150,000.

Wis., Milwaukee—Theatre—Office—Saxe Amusement Co., 204 11th St., having plans prepared by C. W. and G. L. Rapp, 190 North State St., Chicago, 4 story and basement, 125 x 150 ft., brick and concrete, plain foundation, Mitchell St. $450,000.

Wis., Platteville—Temple—Melody Lodge 2 having plans prepared by E. Tough, Conklin Bldg., Madison, 3 story, 90 x 100 ft., brick, rein.-con. and steel, plain foundation. $150,000.

Wis., Superior—Hotel—J. T. Flynn, pres. Amer. Exch. Bank, plans 6 story and basement, 100 x 140 ft., rein.-con., brick, steel and tile, 15th St. and Tower Ave. $250,000. Engineer and architect not announced.

Ia., Davenport—School—Defeated $150,000 bond issue for schools. Next election planned. Noted March 1.

Minn., Minneapolis—Church—Lowry Hill Congregational Church, c/o L. P. Penningroth, 2105 Newton Ave. S., plans brick and stone, 21st St. and Lake of the Isles Blvd. $150,000. Engineer and architect not announced.

Minn., Minneapolis—Office—T. Hamm, 631 East Minnehaha St., St. Paul, plans 6 to 12 story and basement, rein.-con., brick and tile, 6th St. and Hennepin Ave., here. $400,000-$1,000,000. Engineer and architect not announced.

Kan., Pittsburg—Temple—Masonic Lodge had plans prepared and soon takes bids 3 story and basement, 100 x 175 ft., rein.-con., brick, stone and steel. Henrici & Lowry, 222 Commerce Bldg., Kansas City, Mo., engrs. T. W. Williamson & Co., 312 Central National Bank Bldg., Topeka, archts. Noted Feb. 1.

Kan., Topeka—Hospital—Security Benefit Assn., Security Bldg., having plans prepared by Schmidt, Gardner & Martin, 104 South Michigan Bldg., Chicago, rein.-con., brick and stone. $250,000.

N. D., Mandan—Hospital—City and North Dakota Methodist Church having plans prepared by L. Bassindale, 321 Capital Bank Bldg., St. Paul, Minn., 3 story and high basement, rein.-con., brick, stone and tile. $250,000.

Mo., Chillicothe — High School — Voted $200,000 bonds and soon takes bids 2 story high school. Noted Mar. 15.

Mo., St. Louis—Administration, etc.—Plans 1 story, 63 x 156 ft. brick addition to administration building, $160,000, also 52 x 90 ft. brick kitchen, plain foundation, $60,000, both at Robert Koch Tuberculosis Sanitorium; 3 story, 48 x 122 ft., rein.-con. and brick dormitory, plain foundation, at Scott Farm for Feeble Minded, $120,000.

Mo., University (St. Louis P. O.)—Church—Washington-Compton Presbyterian Church, Washington and Compton Aves., rein.-con. and brick, plain foundation, plans equal to 3 stories, Delmar Blvd. and Pennsylvania Ave. $200,000. Engineer and architect not announced.

Tex., Dallas—Apartment—J. R. Hill, 824 North Marsalis St., plans 150 x 200 ft., rein.-con. and brick, plain foundation. $160,000. Engineer and architect not announced.

Tex., Houston—Office—Binz & Settagest, Binz Bldg., having plans prepared by A. J. Denham, engr., Houston, (street address not available), and Street & Bailey, archts., 2112 Main St., 3 story and basement, concrete and brick, plain foundation, 506 Caroline St. $150,000.

Tex., Houston—Store, etc.—Henke & Pillot Milan and Congress Sts., making plans 200 x 208 ft., Main, Milan and McGowan Sts. $150,000. Engineer and architect not announced.

Idaho, Moscow—Science Hall—State Bd. Educ., Boise, plans science hall at University of Idaho, here. $150,000. W. J. Hall, comr. Pub. Wks., Boise, in charge.

Wash., Seattle—Market—Farmers' Public Market Co., c/o Carter, MacDonald & Miller, agts., 208 Columbia St., plans 2 story and basement, 7th and Westlake Sts. $250,000.

Ore., Portland—High School—School Dist. 1, Administration Bldg., takes bids about Apr. 21, 3 story and basement, 160 x 180 ft. rein.-con. and terra cotta. $450,000. Houghtaling & Dougan, Elks Bldg., archts. Noted Jan. 18.

Calif., Berkeley—Bank—First Berkeley Branch of Mercantile Trust Co., having plans prepared by W. H. Ratcliff, 1st Natl. Bank Bldg., 1 story, fireproof, terra cotta or stone facing, Shattuck Ave. and Center St. $200,000.

Calif., Hermosa Beach—Club—Surf & Sand Club, c/o M. Hunt, archt., Hibernia Bldg., Los Angeles, having plans prepared 4 story, rein.-con. To exceed $200,000.

Calif., Lemoore—High School—Lemoore Union High School Dist. to vote on $350,000 bonds new high school. Engineer and architect not selected.

Calif., Los Angeles—High School—City soon takes bids rein.-con. and brick, with separate auditorium and shop buildings, San Pedro St. $500,000. E. Bergstrom, Citizens Nat'l. Bank Bldg., archt.

Calif., Los Angeles—Office and Loft—M. Harris, c/o H. Hewitt, archt., Van Nuys Bldg., soon takes bids 7 story and basement, 75 x 110 ft., rein.-con. and brick, Main and 11th Sts.

Calif., Los Angeles—School—City had plans prepared by E. H. Cline, 1445 South San Pedro St., two 2 story, brick, McCadden St. near Wilshire Blvd. To exceed $275,000.

Calif., Los Angeles—Theatre—J. M. Bowen, et al., c/o G. A. Lansburg, archt., Junior Orpheun Bldg., having preliminary plans prepared fireproof, Highland Ave. To exceed $500,000.

Calif., Monterey—Hotel—R. Jacks, c/o O'Brien Bros. Inc., archts., 315 Montgomery St., San Francisco, having plans prepared 2 story, rein.-con. or hollow tile. $350,000.

Calif., Oakland—Store and Loft—Smith Bros., 472 13th St., plans 3 or more stories, rein.-con., Bway. near 19th St. $150,000. Engineer and architect not selected.

Calif., Porterville—Hotel—R. Kendall, Pioneer Hotel, is backing company which plans 4 story, fireproof, Hockett and West Putnam Sts. $150,000. Engineer and architect not selected.

Calif., San Diego—Business—J. D. Spreckels, Union Bldg., plans 6 story, Bway. between 6th and 7th Sts.

Calif., San Francisco—Apartment—C. R. Bricca, 1330 4th Ave., had plans prepared by C. A. Meussdorffer, Humboldt Bank Bldg., 6 story and basement, rein.-con., Green St. near Jones St. $200,000.

Calif., San Francisco—Apartment—J. C. Shipp, pres. Sierra Securities, Inc., et al., 486 California St., having plans prepared by B. G. McDougall, 381 Bush St., 12 story and basement, fireproof, California and Mason Sts. $2,000,000.

Calif., San Francisco—Church—Sixth Church of Christ Scientist, c/o W. H. Crim, Jr., archt., 425 Kearny St., had plans prepared 1 story, basement and mezzanine, brick, Clay and Divisadero Sts. $150,000.

Calif., San Francisco—Office—Chamberlain & Proctor, Mills Bldg., plans brick or rein.-con., Sutter and Powell Sts. To exceed $150,000. Bakewell & Brown, 251 Kearny St., archts.

Calif., San Francisco—Store—A. Aronson, c/o M. I. Schwartz, archt., Nevada Bank Bldg., had plans prepared 5 story and basement, rein.-con., Mission St. near Ecker St. $150,000.

Calif., San Francisco—Theatre and Store—S. L. Levin, c/o Reid Bros., archts., 105 Montgomery St., having plans prepared 1 and 2 story, 137 x 282 ft., rein.-con. and brick, Union St. between Buchanan and Webster Sts.

Calif., Santa Rosa—High School—Santa Rosa High School Dist. takes bids in about 2 weeks, group rein.-con. and brick buildings, incl. main building, auditorium and gymnasium. $375,000. W. H. Weeks, 369 Pine St., San Francisco, archt. Noted June 8.

Calif., Visalia—Labor Temple—Tulare Co. Building Trades Council, being organized, and plans labor temple, fireproof construction, Locust and Acequia Sts. $175,000.

Ont., Hamilton—Business—J. E. Lister, 133 Glenfern Ave., takes bids about May 1, 4 story, 180 x 200 ft. business block, James St. $400,000. Prices wanted on materials.

Ont., Hamilton—High School—Bd. Educ. having plans prepared by R. H. Foster, c/o Bd. Educ., and takes bids about April 2, 2 story and basement, brick and stone, Main St. E. $300,000. Prices wanted on materials.

Ont., Hamilton—Hospital—Welland Co. Memorial Hospital plans brick addition. $150,000. Engineer and architect not announced.

Ont., Strathroy—Nurses' Home—Strathroy Hospital Bd. plans nurses' home, prob-

Buildings (Continued)

ably concrete, brick and steel. $150,000. D. Evans, pres. Engineer and architect not selected.

Ont., Toronto—Office—Canada Life Assurance Co., Canada Life Bldg., having plans prepared by Sproatt & Rolph, 36 North St., 100 x 100 ft., concrete, brick and steel, Yonge and Gerrard Sts. $300,000.

Ont., Toronto—Store—R. Simpson Co., Ltd., Yonge and Queen Sts., having plans prepared by Horwood & White, Ryrie Bldg., 6 story and basement, 150 x 200 ft. rein.-con., brick, steel and stone addition. $500,000.

BIDS DESIRED

Conn., Hartford—Apartment—Apr. 10, by N. Levitsky, 79 Barbour St., 3 story, 40 x 134 ft., brick, plain foundation, 433 Garden St. $150,000. G. Zunner, 182 High St., archt.

Conn., Hartford—Apartment—Apr. 7, by J. Howard, Lancaster Rd., West Hartford, 4 story, 90 x 120 ft., brick, plain foundation, Capitol Ave., here. $200,000. Berenson & Moses, 30 Allyn St., archts. Noted Mar. 22.

Conn., Hartford—Apartment—Apr. 10, by S. R. Avseer, 439 Garden St., 3 story, 40 x 140 ft., brick, plain foundation, 429 Garden St. $150,000. G. Zunner, 182 High St., archt.

Conn., Hartford—Apartment—Apr. 10, by Rossi Bros. & Montano, Shelston St., 3 story, 60 x 90 ft., brick and stone, plain foundation, Dennison Ave. $150,000. R. A. D'Anino, 647 Main St., archt.

Conn., Hartford—Apartment—Apr. 12, by M. Shulman, 207 Sisson Ave., 3 story, 40 x 70 ft., brick, plain foundation, Summer St. $150,000. G. Zunner, 182 High St., archt.

Conn., New Haven—High School—Apr. 20, by Bd. Educ., constructinp Augusta Lewis Troup Schools, 3 story, 200 x 200 ft., brick, steel and concrete, Edgewood Ave. $700,000. C. S. Palmer, 144 Whitney Ave., archt.

N. Y., Hicksville—Bank—Bank of Long Island will build brick, steel and stone, plain foundation. $250,000. Work will be done by separate contracts under supervision of W. L. Stoddart, archt. and engr., 9 East 40th St., New York. Noted Nov. 16.

N. Y., Marion—School—Apr. 18, by Bd. Educ., brick, steel and stone, plain foundation. $200,000. Tooker & Marsh, 101 Park Ave., New York City, archts. and engrs. Noted Feb. 1.

N. Y., New York—Apartment—B. L. and W. Constr. Co., c/o Gronenberg & Leuchtag, archts. and engrs., 450 4th Ave., 6 story, 120 x 220 ft., brick, steel and stone, plain foundation, Ft. Washington Ave. and 174th St. $250,000. Work will be done by separate contracts under supervision of architects.

N. Y., New York—School—Apr. 3, by Bd. Educ., 500 Park Ave., P. S. 6, brick, steel and stone, plain foundation, East Tremont Ave. between Bryant and Vyse Aves. $200,000. W. H. Gompert, Flatbush Ave. extension and Concord St., Brooklyn, archt. and engr.

Pa., Barnesboro—School—Apr. 4, by Bd. School Directors, 2 story and basement, 98 x 160 ft. $150,000. G. H. Lloyd, Telegraph Bldg., Harrisburg, archt.

Pa., Duquesne—School—Apr. 3, by Bd. Educ., 2 story and basement, 110 x 185 ft., 6th St. $300,000. Carlisle & Sharrer, Jenkins Arcade, Pittsburgh, archts.

Pa., Erie—Apr. 5, by Y.W.C.A., 134 East 44th St., New York City, 3 story, brick, steel and stone, plain foundation, West 7th St., here. $200,000. W. F. Thompson, 342 Madison Ave., New York City, archt. and engr. Noted Feb. 15.

Pa., Juniata — Church — Presbyterian Church Building Com., and K. O. C. McCracken, pastor, taking bids and opens same about Apr. 15, 1 story and basement, 80 x 95 ft., brick and stone, 7th Ave. and 6th St. $150,000. Hersh & Shollar, 312 Commerce Bldg., Altoona, archts.

Pa., Phila. — Office — H. C. Hollinger, Longacre Apartment, taking bids 4 story and basement, 22 x 117 ft., brick, steel and stone, plain foundation, 16th and Walnut Sts. $250,000. C. E. Oelschlager, 1615 Locust St., archt.

Pa., Pittsburgh—Bank—April 2, by City Deposit Bank, Penn and Center Aves., and Mowbray & Uffinger, archts., 56 Liberty Ave., New York City, altering and building 3 story and basement, 22 x 150 ft. addition, Penn and Center Aves. $150,000.

Pa., Woodlawn—High School—Apr. 2, by J. T. Bell, secy. Bd. Educ. building high school. $439,000.

Md., Baltimore—School—Apr. 4, by Bd. Awards, 3 story, 260 x 295 ft., brick, Calhoun, Carey and BaBker Sts. Owens & Sisco, Continental Bldg., archts. H. F. Doeleman, 507 North Charles St., engr. Noted Mar. 15.

N. C., Greenville—College—Apr. 4, by H. A. Underwood, engr., Commercial Bank Bldg., Raleigh, constructing East Carolina Teachers College, here, for State. $950,000, of which 15% will be alterations, remodeling and fireproofing existing buildings.

N. C., Swannanoa—High School—Apr. 4, by Superintendent Buncombe Co. (Asheville), brick high school. $150,000. F. B. Simpson, 110 East Lane St., Raleigh, archt.

W. Va., Charleston—Store and Office—Kanawha Investment Co., 8 story and basement, 200 x 200 ft., rein.-con. and brick. $450,000. Work will be done by separate contracts under supervision of Carmichael & Millspaugh, archts., 67 East Long St., Columbus, O. Noted Mar. 15.

O., Cleveland—Commercial—E. McGeorge, (owner, archt. and engr.), 1900 Euclid Ave., taking bids and opens same about April 10, 2 story and basement (ultimately 6 story), 80 x 110 ft., brick, steel and concrete, 2902 Euclid Ave. $150,000. A. G. Simon, 1900 Euclid Ave., archt. and engr.

O., Cleveland—Hospital—Apr. 6, by city, 2 story and basement, 40 x 250 ft., brick and concrete, Warrensville Farm. $225,000. R. Perkins, dir. Pub. Welfare. A. C. Wolf, Swetland Bldg., archt. Noted Nov. 2.

O., Medina—High School—Mar. 31, by Bd. Educ., 2 story, 14 room, brick, steel and concrete. $210,000. T. R. Ridley, Federal Oil and Gas Bldg., Akron, archt. Noted Dec. 7.

Mich., Battle Creek—Auditorium—Apr. 3, by Osgood & Osgood, archts., Grand Rapids, auditorium for Masonic Temple Assn.

Mich., Detroit—Church—Smith, Hinchman & Grylls, archts., 800 Marquette Bldg., taking bids 2 story and basement, 58 ft. high, 157 x 210 ft. rein.-con., brick and steel, plain foundation, Jefferson Ave., for Jefferson Ave. Presbyterian Church, c/o architects.

Mich., Detroit—School and Auditorium—Donaldson & Meier, archts., 1314 Penobscot Bldg., taking bids and opens same about Apr. 5, 2 story and basement, approximately 120 x 220 ft., rein.-con., brick and steel, plain foundation, Seminole and Sylvester Aves., for St. Catherines Parish, c/o architects. $250,000.

Ill., Chicago—Apartment—A. L. Klewer, archt., 220 South Michigan Ave., receiving bids 3 story and basement, 118 x 145 ft., rein.-con., brick and steel, Congress St. and Central Park. $180,000. Owners name withheld.

Ill., Chicago — Apartment — Rawson & Eisenberg, archts., 5 North La Salle St., receiving bids 3 story and basement, 111 x 132 ft., rein.-con., brick and steel, Hamlin Ave. near Ainslee St. $150,000. Owners name withheld.

Ill., Chicago—Apartment—Z. E. Smith, archt., 305 East 55th St., receiving bids 3 story and basement, 140 x 175 ft., rein.-con., brick and steel, 69th and Crandon Sts. $250,000. Owners name withheld.

Ill., Chicago — High School — Brust & Philipp, archts., 405 Bway., Milwaukee, Wis., receiving bids 4 story and basement, 220 x 236 ft. brick, plain foundation, here, for St. Joseph's Convent, 575 Layton Blvd., Milwaukee, Wis., $600,000. Noted Jan. 11.

Ill., Chicago—Office—Krieg & Hetherington, archts., 105 North Clark St., receiving bids 9 story, 27 x 80 ft., rein.-con., brick and steel, 62 East North Water St., for M. A. Price c/o architects. $175,000.

Ill., Chicago — Store and Recreation — Minchin, Spitz & Co., archts., 19 West Jackson Blvd., receiving bids remodeling 3 story, 50 x 187 ft., rein.-con., brick and steel, 336-38 West 63rd St., for Marks & Feinberg c/o architects. $150,000.

Ill., Forest Park—Store and Office—D. S. Klafter, archt., 64 West Randolph St., Chicago, receiving bids 2 story and basement, rein.-con., brick and steel, Des Plaines and Madison Sts., here, for Madison Des Plaines Building Corp., c/o Harris Bros., Forest Park. $200,000.

Ill., West Pullman—School—Apr. 2 by E. Brielmaier & Sons Co., archts., 432 Bway., Milwaukee, Wis., 2 story and basement, 72 x 115 ft., brick and tile, Parnell Sts., here, for Assumption Catholic Congregation c/o T. Langfort, 544 West 123rd St. $150,000. Noted Mar. 1.

Wis., Madison — Hotel — Apr. 1, by M. Tullgren & Sons Co., archts., 425 East Water St., Milwaukee, 7 story and basement, 132 x 144 ft., brick and concrete, plain foundation, West Washington St., here, for Wisconsin Hotel Realty Co., 88 Michigan St., Milwaukee. $1,000,000.

Wis., Milwaukee—Business—Bremming & Guth, archts., 521 Jackson St., taking bids and open same about Apr. 2, 7 story and basement, 62 x 92 ft., brick and concrete addition, plain and wood pile foundation, for Johnson Service Co., 149 Michigan St. $160,000.

Wis., Milwaukee—Exchange—Wisconsin Telephone Co., 418 Bway., taking bids on steel for 120 x 120 ft., brick and steel addition, Bway. $500,000. A. C. Eschweiler, 141 Wisconsin St., archt.

Neb., Omaha—Store and Office—Holabird & Roche, archts., 104 South Michigan St., Chicago, receiving bids and opens same about Apr. 1, 4 story, 135 x 260 ft., rein.-con. and brick, 16th and Howard Sts., here, for C. and R. C. Cook, of Chicago, c/o George & Co., 902 City Natl. Bank Bldg. $1,000,000. Noted Jan. 25.

Neb., Seward—Dormitory—Apr. 19, by Evangelical Lutheran Seminary, c/o W. F. Gernandt, archt., 701 Omaha Loan and Building Assn. Bldg., Omaha, 2 story and basement, 61 x 169 ft. dormitory and 32 x 32 ft. power plant, rein.-con. and brick, with 110 ft. brick chimney. $125,000 and $25,000 respectively.

Mo., St. Louis—Bank—Apr. 10, by Mauran, Russell & Crowell, archts., Chemical Bldg., 5 story, 160 x 269 ft., granite, concrete and steel, concrete pile foundation, Bway., for Federal Reserve Bank of St. Louis, Bway. and Pine St. $2,500,000. $3,000,000. H. H. Morrison, Fullerton Bldg., engr.

Mo., University (St. Louis P. O.)—High School—Apr. 5, by W. B. Ittner, archt., 911 Locust St., St. Louis, 2 story, rein.-con. and brick addition. $150,000. Will also take bids shortly for 12 room grade school for which $115,000 bonds were voted. Noted Feb. 8.

Ariz., Tucson—High School—Apr. 10, by Bd. Educ., c/o Lyman & Place, archts., 79 North Stone Ave., 2 story, rein.-con., concrete pile foundation. $750,000. Former bids rejected. Noted Mar. 22.

Calif., Los Angeles — Apartment and Store—L. L. Jones, archt., Grosse Bldg., receiving bids 4 story and basement, 60 x 140 ft., brick, 5th and Western Aves., for W. G. Terry, 457 South Western Ave.

Calif., Los Angeles—Loft—E. Mayberry, archt., Pacific Electric Bldg., receiving bids 13 story and basement, rein.-con., Hill St. near 7th St., for W. W. Paden, c/o architect. To exceed $250,000. Noted Feb. 22.

Calif., Pasadena — Church — Johnson, Coate & Kauffman, archts., Union Bank Bldg., Los Angeles, receiving bids concrete and brick, for All Saints Episcopal Church, here. To exceed $150,000. Noted July 27.

BIDS RECEIVED

N. Y., Brooklyn—School—W. H. Gompert, archt., Flatbush Ave. Extension and Concord St., Mar. 21, P. S. 190, Sheffield Ave., from T. A. Clarke Co., 122 Livingston St., $637,300; Blenton Building Corp., 342 Madison Ave., New York, $643,000; G. Dekemple, $659,000. Noted Mar. 8.

N. Y., New York—Schools—W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, Mar. 21, (1) annex to P. S. 72, East 104th and East 105th Sts. (2) addition to P. S. 121, southerly side of East 193rd St., from Blenton Building Corp., 342 Madison Ave., (1) $616,200; M. F. Kelly Co., Inc., 51 East 42nd St., (1) $656,945 (2) $438,945; G. Dekemple, (1) $669,000 (2) $439,000; T. A. Clarke Co., 122 Livingston St., Brooklyn, (2) $473,300. Noted Mar. 8.

Pa., Pittsburgh — School — Bd. Educ., Fulton Bldg., constructing Halls Grove School, from Cuthbert Bros., Bessemer Bldg., $127,300; Pittsburgh Eng. & Constr. Co., 511 Homewood Ave., $129,987; H. Busse Co., Main and Wabash Aves., $130,000.

Colo., Denver—Hospital—State Hospital Comn., Boston Bldg., 3 to 5 story, East 8th Ave. and Colorado Blvd., from A. Simpson Jr. Co., Colorado National Bank Bldg., $983,730; C. S. Lamble Co., Tramway Bldg., $1,063,000; Windsor & Lund, 212 Interstate Trust Bldg., $1,039,653. Archts. est. $1,250,000. Noted Jan. 25.

Calif., Stockton—Auditorium—City, rein.-con., cement and pre-cast sandstone, memorial auditorium, steel dome, Center, Oak, Fremont and Commercial Sts., general contract from Goulds & John, 436 East Maple St., $519,050; electric work from Butte Electric Mfg. Co., 534 Folsom St., San Francisco, $26,854; heating and ventilating from W. H. Picard, 5656 College Ave., Oakland, $50,642; combination bid for plumbing, heating and electric work from Lafourette-

Buildings (Continued)

Fical Co., 907 Front St., Sacramento, $94,-500. Noted Feb. 22.

CONTRACTS AWARDED

Mass., Adams—Bank and Office—South Adams Savings Bank, 2 story, 75 x 90 ft., brick, plain foundation, to Hoggson Bros., 485 5th Ave., New York City. Archts. est. $150,000.

Mass., South Hadley — Dormitory — Mt. Holyoke College, 4 story, rein.-con. and brick, plain foundation, to Ranger Constr. Co., 20 Bond St., Holyoke, $350,000. Noted Mar. 15.

Mass., Springfield—Mercantile—Tarbell Watters Co., 160 Chestnut St., 5 story, 52 x 150 ft., rein.-con. and brick, plain foundation, Eastern Ave., to E. J. Pinney, 374 Main St. $150,000.

Mass., Ware—Hospital—Mary Lane Gilbert Hospital, South St., 2 story, 80 x 150 ft., brick and steel, plain foundation, to Cummings Constr. Co., Ware. Archts. est. $250,000.

Conn., New Haven—Ward Baking Co., Southern Blvd. and St. Marys St., New York City, 4 story, 83 x 326 ft. bakery, Lombard St., here, to J. W. Ferguson Co., 253 Bway., New York City. Archts. est. $400,000.

N. Y., Brooklyn — Apartment — Palace Constr. Co., c/o Shampan & Shampan, archts. and engrs., 188 Montague St., 104 x 121 ft., brick, steel and stone, plain foundation, Eastern Parkway near Schenectady Ave., by day labor. $175,000.

N. Y., Cortland—High School—Bd. Educ., general contract brick, stone and steel addition, plain foundation, to Lowman Constr. Co., 312 R.R. Ave., Elmira, $236,000; heating and ventilating work, also plumbing, to Walter P. Dunn Corp., 42 Mechanic St., Newark, N. J., $38,845 and $27,500 respectively. Noted Feb. 22.

N. Y., Geneva—High School—Bd. Educ., to Felton Constr. Corp., 1450 Michigan Ave., Buffalo, general contract new high school, $364,064, plumbing and wiring, $42,535. Noted Oct. 26.

N. Y., New York—Apartments—Gaines-Roberts Co., c/o J. P. Boyland, archt. and engr., 120 East Fordham Rd., 5 story, 30 x 138 ft., Elliott Pl. and Walton Ave., $260,-000, 5 story, 80 x 100 ft., Elliott Pl. near Jerome Ave., $150,000, and two 5 story, Elliott Pl., $215,000, all brick, steel and stone, plain foundations, by day labor.

N. Y., New York — Apartment — L. A. Building Co., c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., 5 story, 80 x 125 ft., brick, steel and stone, plain foundation, Davidson Ave. near Tremont Ave., by day labor $225,000.

N. Y., New York — Apartment — Raven Realty Co., c/o G. G. Miller, archt. and engr., 1482 Bway., two 5 story, 50 x 80 ft., brick, steel and stone, plain foundations, College Ave. near 169th St., by day labor. $250,000.

N. Y., New York—Apartment—A. J. Schwarzler, c/o C. Schaefer, Jr., archt. and engr. 394 East 150th St, 6 story, 100 x 105 ft. brick, steel and stone, plain foundation, Sedgwick Ave. near 182nd St., by day labor, $225,000.

N. Y., New York—Apartment—H. Sonn, c/o Margon & Glaser, archts. and engrs., 2806 3rd Ave., 6 story, 110 x 130 ft., brick, steel and stone, plain foundation, Montgomery Ave. and 175th St., by day labor. $250,000.

N. Y., New York—Apartment—A. Wilson, c/o C. Schaefer, archt. and engr., 395 East 150th St., will build 5 story, 65 x 100 ft., brick, steel and stone, plain foundation, 182nd St. and Ryer Ave., by day labor. $150,000.

N. Y., New York — Apartment — Vyse Building Corp., c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., 5 story, 90 x 100 ft., brick, steel and stone, plain foundation, Grant Ave. near Jennings St., by day labor. $200,000.

N. Y., New York—Office—H. W. Johns-Manville Co., Inc., Madison Ave. and 41st St., 16 story, brick, steel and stone addition, plain foundation, to W. Crawford, 7 East 42nd St. Noted Jan. 11.

N. Y., Watertown—Office—Agricultural Insurance Co., Washington St., brick, concrete and steel, to C. T. Wills, Inc., 286 5th Ave., New York, $350,000.

Pa., Allentown—School—T. P. Weiner, secy. School Dist., 31 South Penn St., 24 room and gymnasium school, St. Cloud and Walnut Sts., to W. H. Gangwere, Allentown, $314,360. Noted Mar. 8.

Pa., Merion—Art Museum—P. Cret, archt., 1524 Chestnut St., Phila., 1 and 2 story, 50 x 156 ft., 48 x 68 ft., 21 x 24 ft. and 52 x 92 ft. rein.-con., brick and steel, plain foundation, to H. E. Baton, 1613 Sansom St., Phila., $500,000.

Md., Baltimore — Club House — Park Comrs., Druid Hill Park, 1 story, 42 x 230 ft., 33rd St., to R. B. Mason, 308 West Madison St., $187,780. Noted Mar. 15.

Md., Baltimore — Office — Canton Co., Commerce and Water Sts., 4 story, 38 x 82 ft., brick and stone, South and Water Sts., to West Constr. Co., Amer. Bldg.

Va., Richmond—Bank and Office—Grace St. Bldg. Corp., 10 story, rein.-con. and steel, 3rd and Grace Sts., to Wise Granite & Constr. Co., Amer National Bank Bldg., $385,000.

Va., Richmond—Bank and Office—Office Bldg. Corp., 10 story, rein.-con. and steel, 3rd and Grace Sts., to Wise Granite & Constr. Co., Amer. National Bank Bldg., $375,000.

Va., Richmond—Office—State Building Comm., 4 story addition to state office, to J. T. Wilson Co., Inc., Mutual Bldg., $350,000.

W. Va., Logan—Store and Office—White & Browning Co., 5 story and basement, 70 x 110 ft., to C. W. McNulty, 208 4th St., Huntington. Archts. est. $180,000. Noted Nov. 2.

Fla., St. Petersburg — Hotel — S. Lund & Son, 8 story, 200 room, rein.-con., 1st Ave. and Bay Shore Dr., to G. A. Miller, Stovell-Nelson Bldg., Tampa, cost plus percentage basis. Archts. est. $750,000. Noted Jan. 4.

SEWERS, NEW CASTLE, PA.

Following are lowest three bids opened by Borough, Mar. 12, for main sewer extension. (A) Frank George, Youngstown; (B) Harris, Andrews, Henderson Co., Youngstown; (C) T. Sheahan, Hagerstown, Md. The unit bids were as follows:

	A	B	C
2200 cu.yd. excavation 0-6 ft	$1.50	$1.20	$1.85
4700 cu.yd. excavation 0-8 ft	1.50	1.20	1.85
2200 cu.yd. excavation 0-10 ft	1.50	1.20	2.00
700 cu.yd. excavation 0-12 ft	1.50	2.00	2.00
300 cu.yd. excavation 0-14 ft	1.50	2.50	2.50
300 cu.yd. excavation 0-16 ft	1.50	3.00	2.75
300 cu.yd. excavation 0-18 ft	1.50	3.50	3.50
100 cu.yd. excavation 0-20 ft	1.50	5.00	4.00
10 cu.yd. rock excavation	10.00	5.00	8.00
4605 lin.ft. 48 in. reinforced concrete pipe	8.00	6.50	8.00
4605 lin.ft. 48 in. reinforced monolithic concrete pipe	12.00	.....	8.45
4604 lin.ft. 48 in. brick pipe	12.00	.....	.....
720 lin.ft. 10 in. vitrified pipe	1.00	1.30	2.00
850 lin.ft. vitrified pipe	.90	1.20	1.75
10—10-in. vitrified pipe specials	4.00	6.00	3.00
10—8-in. vitrified pipe specials	3.60	6.00	2.50
200 lin.ft. standard manholes	8.00	10.00	6.50
21 standard manhole frames and covers	30.00	20.00	35.00
Penn. R.R. protection at Baltimore & Ohio R.R. (lump sum)	1,000.00	500.00	400.00
Penn. R.R. protection at Lafayette Street (lump sum)	1,000.00	500.00	1,000.00
117 tons cast iron pipe	82.70	85.00	95.00
17 tons cast iron specials	175.00	175.00	185.00
40 cu.yd. additional class A concrete	20.00	30.00	18.00
75 cu.yd. additional class B concrete	18.00	25.00	15.00
15 cu.yd. additional brick masonry	20.00	20.00	30.00
1000 lb. additional steel reinforcement	.05	.08	.08
20M ft. b.m. sheeting and timbering left in place	20.00	20.00	20.00
7M ft. b.m. lumber in foundation	70.00	40.00	80.00
200 lin.ft. piles	1.50	7.00	3.00
40 cu.yd. crushed stone	5.00	3.00	5.00
100 sq.yd. cutting and rebuilding pavement	5.00	5.00	4.00
50 sq.ft. taking up and replacing walk	.30	.25	.50
100 lin.ft. removing and rebuilding curb	1.00	1.00	1.00
Ejector station (lump sum)	2,975.00	4,000.00	4,200.00
Machinery for ejector station (lump sum)	3,205.00	2,500.00	2,800.00
Extended totals omitting 48 in. reinforced concrete pipe, reinforced monolithic concrete pipe and brick pipe	$45,427	$46,754	$54,008
Extended totals omitting rein. monolithic concrete and brick pipe	82,267	76,686	90,848
Extended totals omitting reinforced concrete and brick pipe	100,687	.....	92,920
Extended totals omitting rein. concrete and rein. monolithic pipe	100,687	.....	.....

SEWERS, NEOSHA, MO.

Following are lowest three bids opened by city, Feb. 27, for constructing (1) district sewers in Dist. No. 3, (2) public sewers, (A-1) Queal Constr. Co., Herington, Kan., (awarded contract); (B-1) J. P. Collins, Leavenworth, Kan.; (C-1) Chanute Constr. Co., Chanute, Kan.; (A-2) J. P. Collins; (B-2) Burt & Tripp, Hutchinson; (C-3) Queal Constr. Co., (awarded contract). The unit bids were as follows:

I

	A	B	C
10,973 lin.ft. trenching, 0-6-ft.	$0.23	$0.33	$0.40
19,317 lin.ft., 6-8-ft.	.30	.45	.55
13,850 lin.ft., 8-10-ft.	.40	.55	.70
4,727 lin.ft., 10-12-ft.	.53	.65	1.00
2,153 lin.ft., 12-14-ft.	.70	.75	1.10
258 lin.ft., 14-16-ft.	.90	.90	2.00
15 lin.ft., 16-18-ft.	1.80	2.00	3.00
6,874 cu.yd. rock excavation	5.00	5.00	4.50
M. ft. b.m. old sheeting	50.00	45.00	60.00
M. ft. b.m. new sheeting	60.00	55.00	65.00
51,119 lin.ft. furnishing and laying 8-in. vitrified sewer pipe	.45	.45	.50
84 lin.ft. furnishing and laying 8-in. c.i. pipe	2.50	2.50	3.00
116 brick manholes	90.00	70.00	85.00
21 brick drop manholes	100.00	80.00	90.00
6,300 lin.ft. furnishing and laying ¾-in. galvanized iron pipe	.40	.35	.30
42 brick flush tanks	125.00	110.00	120.00
Extended totals	$96,060	$99,125	$107,829

II

	A	B	C
8,836 lin.ft. trenching, 0-6-ft.	$0.30	$0.30	$0.23
14,088 lin.ft., 6-8-ft.	.40	.40	.30
7,830 lin.ft., 8-10-ft.	.50	.50	.40
2,494 lin.ft., 10-12-ft.	.60	.60	.53
796 lin.ft., 12-14-ft.	.70	.80	.70
161 lin.ft., 14-16 ft.	.80	1.05	.90
7 lin.ft., 16-18-ft.	2.00	1.30	1.20
35 lin.ft., 18-20-ft.	2.50	1.60	1.80
927 cu.yd. rock excavation	4.50	6.00	5.00
M. ft. b.m. old sheeting	40.00	70.00	50.00
M ft. b. m. new sheeting	50.00	70.00	60.00
7,519 lin.ft. furnishing and laying 8-in. vitrified sewer	.40	.45	.45
12,206 lin.ft. furnishing and laying 10-in. vitrified sewer	.55	.65	.66
4,409 lin.ft. furnishing and laying 12-in. vitrified sewer	.75	.85	.85
9,895 lin.ft. furnishing and laying 15-in. vitrified sewer	1.15	.95	1.30
60 lin.ft. furnishing and laying 8-in. c.i. pipe	2.00	2.50	2.50
60 lin.ft. furnishing and laying 10-in. c.i. pipe	2.50	3.50	4.00
60 lin.ft. furnishing and laying 12-in. c.i. pipe	3.25	4.00	3.25
48 lin.ft. furnishing and laying 16-in. c.i. pipe	5.00	5.00	5.00
17 brick manholes (drop)	65.00	90.00	100.00
71 brick manholes	60.00	70.00	90.00
Extended totals	$49,133	$51,936	$53,086

Buildings (Continued)

Fla., Tampa—Apartment—Shawmut Investment Co., Atlanta, Ga. (street address not available), will build 6 story and basement, 111 x 138 x 180 ft., on block bounded by North A and Lafayette Sts. and Crescent Pl. Work will be done under supervision of Adair & Senter, Healy Bldg., Atlanta, Ga. $500,000.

O., Greenfield—School—Bd. Educ., general contract 2 story, rein.-con. and brick, plain foundation, to Murch Bros., Ry. Exch. Bldg., St. Louis, Mo., $221,777.

O., Lorain — High Schools — Bd. Educ. general contract 2 story, 26 x 120 ft. brick and metal lumber additions to Hawthorne and Whittier Schools, to J. Kaiser & Bro., Elyria (street address not available), $112,652. Noted Mar. 1.

O., Osborn—School—D. S. Lynn, clk. Bath Twp. Consolidated School Dist., 2 story and basement, rein.-con. and brick, plain foundation, Central Ave., to H. R. Blagg Co., 1229 East 3rd St., Dayton, about $210,000. Noted Mar. 15.

Ind., Ft. Wayne—Temple—C. R. Weatherhogg, archt., Citizens Trust Bldg., 10 story, 90 x 130 ft., brick, steel and concrete, for Masonic Temple Building Co., to W. H. Sheets, Utility Bldg., Cleveland, O. Archts. est. $1,000,000. Noted Feb. 1.

Mich., Ann Arbor—Gymnasium—Athletic Assn. University of Michigan, 2 story, 160 x 350 ft. gymnasium and field house rein.-con., brick and steel, plain foundation, Ferry Field, to H. G. Christman Co., 315 Stevens Bldg., Detroit. Archts. est. $350,000.

Mich., Detroit—Nurses Home—Childrens Hospital, Farnsworth Ave., 5 story and part basement, 150 x 225 ft. rein.-con., brick and steel, plain foundation, Farnsworth Ave., to H. G. Christman & Co., 315 Stevens Bldg.

Ill., Chicago — Store — See "Industrial Work."

Ill., Chicago—Apartment—S. Anderson, 6856 East End Ave., 3 story and basement, 214 x 259 ft., rein.-con., brick and steel, 68th St. and Dorchester Ave., to Turnquist Bros. Constr. Co., 217 East 69th St. Archts. est. $500,000.

Ill., Chicago—Apartment—E. A. Wall, 3 story, 88 x 176 ft., rein.-con., brick and steel, Austin Blvd. and Adams St., to E. A. Wall Constr. Co., 2619 Mary St. Archts. est. $150,000.

Ill., Chicago—Hotel—W. W. Ahlschlager, archt., 65 East Huron St., 8 story and basement, 200 x 216 ft., rein.-con., brick and steel, Washington and Homan Sts., to Shank & Co., 30 North La Salle St. Archts. est. $2,000,000. Owners name withheld. Noted Nov. 2.

Wis., Milwaukee—Convent—St. Joseph's Convent, 23rd and Greenfield Aves., superstructure 4 story, 158 x 180 ft., brick and concrete addition, to E. Steigerwald & Sons, 2303 Galena St. Archts. est. $300,000. Noted Feb. 22.

Ia., Mason City — Home — Independent Order Odd Fellows, c/o A. W. Stubbs, supt. Odd Fellows Home, general contract 2 story and basement, rein.-con., brick, tile and stone addition, to Sugarman Constr. Co., 8th and Tuttle Sts., Des Moines, $88,730. Noted Mar. 15.

Ia., Wapello—School—Bd. Educ., general contract 2 story and basement, rein.-con., brick, tile and stone, to E. Marxer Co., 516 32nd St., Des Moines. $112,350.

Minn., Mankato—School—State Bd. of Control, St. Paul, 3 story and basement, rein.-con., brick and tile, here, general contract to J. B. Nelson Constr. Co., Mankato, $256,980. Noted Jan. 25.

Kan., Salina—School Administration—Kansas Wesleyan University, general contract, 4 story and basement, 87 x 204 ft., rein.-con., brick and stone, to Eberhardt Constr. Co., Salina. Archts. est. $350,000.

Kan., Winfield — College — Southwestern College, general contract, 3 story and basement, 150 x 170 ft., brick, stone and rein.-con., to G. H. Gassman, Arkansas City, $197,600. Archts. est. $225,000.

Neb., Omaha—Home—St. Joseph's Hospital, 10th St. near Castellar Ave., 6 story and basement, 50 x 130 ft., rein.-con. and brick, to A. Kettler, 2316 Fontenelle Blvd., plus percentage basis. Archts. est. $200,000.

Neb., Omaha—Store—T. Kilpatrick Co., 1507 Dodge St., 5 story, 44 x 90 ft., rein.-con. and brick, 1507 Dodge St., general contract to P. Kiewits Sons, 908 Omaha Natl. Bank, cost plus percentage basis. Archts. est. $150,000. Noted Mar. 8.

Wyo., Cheyenne—Church—Bd. Trustees Presbyterian Church, general contract 2 story, 60 x 150 ft., brick, concrete and stone, to J. McDonald, Denver, Colo. (street address not available), $133,505. Noted June 22.

Tex., Abilene—High School—For 3 story and basement, 72 x 195 ft., concrete and brick, plain foundation, general contract to Walsh & Burney, Bedell Bldg., San Antonio, $130,300. Archts. est. $175,000.

Calif., Crockett — School — Carquinez Grammar School Dist., 2 story, rein.-con. and brick, excavation, concrete and carpentry work, to Trobock & Cress, 180 Jessie St., San Francisco, $99,700; lath and plastering to W. Makin, 1048 Excelsior St., Oakland, $24,400; brick, hollow tile and terra cotta to Hock & Hoffmeyer, 180 Jessie St., San Francisco, $22,475. Noted Mar. 22.

Calif., Los Angeles—Office—Chamber of Commerce, 8 story and basement, rein.-con. and brick, 12th St., to C. J. Kubach Co., 701 Merchants National Bank Bldg., $2,200,000. Noted Mar. 15.

Calif., Oakland—Hospital—Supervs. Alameda Co., completing 4 story, rein.-con., Highland Hospital, 14th St., to Globe Indemnity Co., 444 California St., San Francisco, $156,344. Noted March 15.

Calif., San Francisco—Apartment—W. L. Growall, Mutual Bank Bldg., 8 story and basement, concrete, Chestnut and Larkin Sts., to Lange & Bergstrom, Sharon Bldg., $260,000. Noted Mar. 15.

Federal Government Work

PROPOSED WORK

R. I., Providence—Dredging—U. S. Engineer Office plans dredging in Duck Island Harbor, Conn.

Del., Wilmington—Quarter-boat—U. S. Engineer, Wilmington, rejected bids 1 steel quarter-boat. Noted Jan. 25.

D. C., Anacostia (Wash. P. O.)—Laboratory—Spec. 4824—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans photographic laboratory, here.

D. C., Wash. — Repairs — Spec. 4822—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans repairs to dock at Naval Reservation Armory.

D. C., Wash.—Tunnel, etc.—U. S. Engineer Office, 250 Old Land Office Bldg., plans concrete lined tunnel on conduit road. Major Tyler in charge.

Va., Hampton Roads—Repairs to Roof—Spec. 4819—Bureau Yards & Docks, Navy Dept., Wash., plans repairs to roof of Bldg. 100 at Naval Operating Base, here.

Miss., Vicksburg—Steel Hull—Mississippi River Comn., 3rd Dist., plans to purchase 1 steel hull for motor launch.

Tenn., Memphis — Brush and Poles — Mississippi River Comn., 1st and 2nd Dist., Custom House, plans purchasing 65,000 cords brush and poles.

Ill., Chicago—Dredging, etc.—U. S. Engineer, 537 South Dearborn St., plans dredging and pier removal in Calumet Harbor and River.

Wash., Seattle—Dredging—U. S. Engineer plans dredging Lake Washington Ship Channel.

Calif., Richmond—Dredging—U. S. Engineer, Custom House, San Francisco, rejected bids dredging 1,000,000 cu.yd. in harbor, here. Noted Jan. 11.

H. T., Pearl Harbor—Piers and Wharf—Spec. 4799—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans piers and wharf at Submarine Base, here. Bids will be opened at local yard.

China, Pekin—Addition—Spec. 4797—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans addition to Marine Barracks, here.

BIDS DESIRED

Pa., Tobyhanna — Disposal Plant, Etc.—Apr. 17, at office Constructing Quartermaster, 39 Whitehall St., New York City, sewage disposal plant and sewerage system at Tobyhanna Artillery Target Range, here; adv. this issue

Ala., Florence—Head-Gate Track, etc.—Apr. 3 at office U. S. Engineer, furnishing head-gate track, screen track, etc., for power house section of Wilson Dam; adv. this issue. This corrects report in Mar. 8 issue.

Ala., Florence—Valves, etc.—Apr. 20, at office U. S. Engineer, 6 sets cylinder valves, etc., for Wilson Dam; adv. this issue. Noted Feb. 8.

Miss., Greenville—Levee Work—Apr. 2 by Mississippi Levee Comrs., Greenville, 600,000 cu.yd. levee work. J. S. Allen, ch. engr.

Tenn., Chattanooga—Lock Gates—Apr. 13 at office U. S. Engineer, Chattanooga, steel lock gates for Widows Bar Lock, in Tennessee River, 56 mi. below, here, 112,000 lb. structural steel, 18,600 lb. steel castings, etc. Noted Mar. 1.

BIDS RECEIVED

Pa., Phila.—Dredging—U. S. Engineer, 815 Witherspoon Bldg., dredging Delaware River, in Harbor here, 573,000 cu.yd. excav., 299,000 cu.yd. maximum allowable overdepth, (1) dredging material and disposing of same at locality to be selected by contractor and approved by District Engineer (2) placing behind bulkhead constructed by Navy Dept. at Navy Yard, here, from Great Lakes Dredge & Dock Co., 17 Battery Pl., New York City, (1) $0.779; Amer. Dredging Co., Mariner and Merchant Bldg., (1) $0.385 (2) $0.415. Noted Feb. 22.

Mich., Detroit—Dredging—U. S. Engineer, dredging Vidal Shoals, St. Marys River, 102,000 cu.yd. sand, gravel and hardpan excav. with possible overdepth of 60,000 cu.yd., from Great Lakes Dredge & Dock Co., 104 South Michigan Ave., Chicago, $246,840; Duluth-Superior Dredging Co., foot of 45th Ave. West, Duluth, Minn., $256,740; Dunbar & Sullivan, 212 Dime Bank Bldg., $257,400. Noted Feb. 22.

CONTRACTS AWARDED

N. Y., New York—Dredging—U. S. Engineer, 2nd Dist., maintenance dredging in Woodbridge Creek, N. J., to Willms & Quinlivan, 2 Rector St., $7,200.

N. Y., New York—Dredging—U. S. Engineer, 710 Army Bldg., 39 Whitehall St., dredging in Newtown Creek, to Great Lakes Dredge & Dock Co., 17 Battery Pl., $109,688. Noted Feb. 15.

Del., Wilmington—Barges—U. S. Engineer, Wilmington, 2 barges to Bethlehem Shipbuilding Corp., 25 Bway., New York City. Noted Jan. 25.

Del., Wilmington—Stone—U. S. Engineer, Wilmington, furnishing and delivering stone for jetty repairs at mouth of Broadkill River, to F. R. Jones, 1209 King St., $11,880. Noted Jan. 25.

Ala., Florence—Barge—U. S. Engineer, 1 steel barge, to Nashville Bridge Co., foot of Shelby Ave., Nashville, Tenn., $6,740. Noted Feb. 15.

Ala., Florence—Generator—U. S. Engineer, Florence, 1 electric generator, to Westinghouse Electric & Mfg. Co., Union Bldg., Pittsburgh, Pa., $6,490. Noted Jan. 25.

Miss., Gulfport—Stack—Spec. 4781—Bureau Yards & Docks, Navy Dept., Wash., D. C., radial brick stack at U. S. Veterans Hospital, here, to H. R. Heinicke, Inc., 221 South New Jersey St., Indianapolis, Ind., $5,700 (200 days). Noted Mar. 1.

Calif., Richmond—Piling—U. S. Engineer, Custom House, San Francisco, sheet piling for 2,000 ft. retaining wall in Harbor, here, to Tibbitts Pacific Co., 16 California St., San Francisco, $18,000. Noted Jan. 11.

Miscellaneous

PROPOSED WORK

Memorial Gateway — Boston, Mass. — Edwin V. Curtis Memorial Assn., c/o A. B. Chapin, 60 State St., had plans prepared by G. Lowell, 12 West St., and soon takes bids memorial gateway on Charles River Esplanade at end of Clarendon St., granite and marble, wood pile and concrete foundation. $40,000-$50,000.

Road Materials — Boston, Mass. — Supply Dept. soon takes bids 475,000 gal. 45% and 25,000 gal. 60% asphaltic road oil, 200 tons tar for cold patching, 1,000 tons road asphalt, 250 tons emulsified asphalt and 250 tons asphalt for cold patching. F. P. Rocke, supt.

Loading House—Buffalo, N. Y.—Spencer Kellogg & Sons Co., Kellogg Slip, plans loading house. $70,000-$75,000.

Elimination of Grade Crossing—Conklin, N. Y.—Delaware, Lackawanna & Western R.R., 90 West St., New York, plans elimination grade crossing at point 1.35 mi. west of here. $100,000. G. J. Ray, Hoboken, N. J., ch. engr.

Sand, Stone, etc.—Erie, Pa.—Rejected bids Mar. 16, furnishing sand, limestone, asphalt, cement, etc. Noted Mar. 8.

Telephone Lines, etc.—Sharon, Pa.—Bell Telephone Co., South Dock St., plans to expend $250,000 improving lines and plants in and around city, incl. new underground and aerial cable. L. Shaughnessy, supt.

Street Lighting System—Williamsport, Pa.—Lycoming-Edison Co., 324 West St. plans street lighting system in Elmira and Mulberry Sts., and along Pennsylvania R.R. $50,000.

Elimination of Grade Crossings — North Carolina—State Hy. Comn., Raleigh, had surveys and plans prepared grading and constructing underpass under Norfolk & Western Ry., State Project 714, Ashe Co., under Norfolk Southern Ry. east of Charlotte, State Project 659, Mecklenburg Co., under Norfolk-Southern Ry. near Pinehurst, State Project 570, Moore Co., under Southern Ry. at Canton, State Project 944.

Miscellaneous (Continued)

Haywood Co., under Southern Ry. southeast of Charlotte, State Project 655, Mecklenberg Co., under Southern Ry. east of Statesville, State Project 643, Iredell Co., under Southern Ry., State Project 537, Guilford Co., under Southern Ry. near Clayton, State Project 236, Johnston Co.; grading approaches and constructing rein.-con. bridge over Atlantic Coast Line Ry., near Halifax, State Project 141, Edgecombe and Halifax Counties, over Seaboard Air Line Ry., near Wyatt, State Project 485, Wake Co. Railroads will probably participate in work. C. M. Upham, state highway engr.

Terminals, etc.—West Palm Beach, Fla.—Defeated $250,000 bonds for water front terminals, docks, railway line, etc. K. Riddle, city mgr. Noted Feb. 1.

Grandstand — Detroit, Mich. — Michigan State Fair Assn., 502 Bowles Bldg., plans concrete and timber addition to grandstand, $100,000. Engineer not selected.

Pavilion—Detroit, Mich.—Michigan State Fair Assn., 502 Bowles Bldg., plans 1 and 2 story, rein.-con., brick and steel pavilion, plain foundation, on State Fair Grounds, $150,000. Engineer and architect not selected.

Athletic Field and Stadium—Milton, Wis.—See "Buildings."

Heating Mains—Jackson, Minn.—See "Industrial Works."

Pavilion—Minneapolis, Minn.—Bd. Park Comrs. plans pavilion, 7,500 seating capacity, fan shaped, about 220 x 320 ft., rein.-con., Lake Harriet near Queen Ave. S and 42nd St. $150,000. J. A. Ridgway, City Hall, secy. Engineer and architect not announced.

Heating Mains — Virginia, Minn. — See "Industrial Works."

Lighting System — Santa Ana, Calif.—Plans lighting system, 75 metal standards, $50,000. W. G. Knox, city engr.

Power Development—Rimouski, Que.—Lower St. Lawrence Power Co. having plans prepared and takes bids in May, development water power on Metic River, generator station at Princeville, 80 mi. transmission line from Matane to Princeville. J. A. Brillant, pres.

Oil Storage Plant—Owen Sound, Ont.—Imperial Oil Co. Ltd., Imperial Oil Bldg., Toronto, plans oil storage plant here, incl. concrete and steel tanks, pumps, etc. $70,000. Private plans.

Well Drilling—Renwick, Ont.—Kaiser & Laurier plan extensive deep well oil drilling. $50,000.

Cable and Underground Conduit Work—Toronto, Ont.—Bell Telephone Co., 76 Adelaide St. W., plans to expend $255,000 on outside plant construction in Hudson Exch. area, incl. wire, cable and underground conduit work. F. Kennedy, mgr.

BIDS DESIRED

Lumber—Brooklyn, N. Y.—Apr. 4, by E. Riegelmann, boro pres., Boro Hall, 56,888 ft. lumber, delivered to Ave. U bridge, over Gerritsens Creek.

Pier—Buffalo, N. Y.—Apr. 10, by Commissioner Pub. Wks., extending Bird Island pier, 1,100 ft. dock wall on timber cribs and 1,072 ft. 8 ft. 6 in. submerged rein.-con. pipe. To exceed $200,000. G. H. Norton, Municipal Bldg., engr.

Steam Hoists, etc.—Buffalo, N. Y.—F. W. Knukenberg, 702 Michigan Ave., taking bids 3 drum steam hoists and stiff leg derrick.

Metals and Castings—New York, N. Y.—Apr. 5, by Bd. Purch., Municipal Bldg., metals and castings to Depts. Parks-Bronx, Parks-Manhattan, Water Supply, Plant & Structures, Health, Police and Fire Depts. G. A. Whalen, chn.

Generator—Watertown, N. Y.—J. W. Ackerman, city mgr. and P. B. Sutton, city engr., taking bids three 2,250 k.w. generators, switchboard and transformer equipment for new power plant on Delano Island. $75,000-$100,000.

Heating and Ventilating System—Allentown, Pa.—April 10, by Bd. Educ., heating and ventilating system in 24 room school, St. Cloud and Walnut Sts., $45,000. Jacoby & Everett, Commonwealth Bldg., engrs.

Dump Truck, etc.—Erie, Pa.—Apr. 3, by M. J. Henry, city clk., 4 ton steel dump truck $4,000, heavy tractor $3,600, road machine, $600.

Dump Truck—Sharon, Pa.—Apr. 7, by F. S. Williams, clk., 3.5 ton auto dump truck. Cost to exceed $1,000. L. Burnside, city engr.

Transmission Line—Whitakers, N. C.—W. T. Bearne, supt., receiving bids 5¾ mi. electric transmission line.

Steam Shovel and Boiler—Key West, Fla.—Apr. 5, by Monroe Co., 1 cu.yd. and ¾ cu.yd. steam shovels and 30 hp. boiler, delivered to Miami.

Bituminous Road Binder, etc.—Milwaukee, Wis.—Apr. 6, at office Central Bd. Purchases, Spec. 1, 400,000 gal. more or less medium-light road surfacing oil, f.o.b. oil stations located on Chicago, Missouri and St. Paul Ry.; Spec. 2, 50,000 gal. more or less light bituminous road surfacing material, Spec. 3, 200,000 gal. more or less bituminous road surfacing material, Spec. 4 (a) 150,000 gal. more or less bituminous road binder (b) 100,000 gal. more or less bituminous road binder, delivered and applied on streets as directed. D. W. Hoan, chn.

Refrigeration Machinery — Milwaukee, Wis.—Central Produce Co., c/o J. A. Padway, 603 Caswell Blk., taking bids refrigeration machinery, several ton capacity.

Steel—Milwaukee, Wis.—See "Buildings" under Exchange.

Road Oil—Racine, Wis.—J. W. Beaugrand, city engr., taking bids 170,000 gal. road oil with option on 30,000 additional gal.

Tar—Cincinnati, O.—Apr. 6, by Hamilton Co., 200,000 gal. Grade 1 tar. $20,000. E. A. Gast, Court House, engr.

Dump Trucks—Cleveland, O.—Purchasing Department taking bids several garbage dump trucks.

Mixing Machine—Shaker Heights (Cleveland P. O.), **O.**—C. A. Palmer, village clk., Lee Rd. and Shaker Blvd., taking bids concrete mixing machine, capacity 7 cu.ft. mixed material.

Lumber, Piling ,etc.—Primghar, Ia.—Apr. 3, by Auditor O'Brien Co., 4 cars standard sawed bridge lumber, 2 cars cypress piling, and 2,900 ft. corrugated culvert metal or concrete pipe. W. L. Anderson, Primghar, engr.

Culverts—Buffalo, Minn.—Apr. 10, by Wright Co., corrugated culvert metal and sectional concrete culverts for 1923 season. C. E. Stahl, Buffalo, engr.

Culverts—St. Cloud, Minn.—Apr. 11, by N. Thomey, aud. Stearns Co., furnishing 9-60 in. corrugated metal culverts for 1923 season. M. J. Cleveland, St. Cloud, engr.

Cement Tile—St. Paul, Minn.—Apr. 2, by H. W. Austin, city purch. agt., 10,000 cement tile, 24 in. square, and 4,000, 18 in. square. G. M. Shepard, city engr.

Road Graders—Aberdeen, S. D.—Apr. 4, by L. C. Kranhold, aud. Brown Co., 10 and 12 ft. road graders.

Culverts, Plows, etc.—Webster, S. D.—Apr. 3, by R. W. Pitsor, aud. Day Co., 1,450 lin.ft. 12, 15 and 24 in. corrugated metal or concrete culverts, 2 road plows of 185-200 lb., 3 rooter plows, two 6-in. blade machines of 1,000-1,500 lb.

Graders and Metal Culverts—Lakota, N. D.—Apr. 5, by H. Lelander, aud. Nelson Co., 3 graders, 120 in. wheel base, 1,300 lb. weight, 8 ft. blades, and metal culverts.

Road Machinery—Minnewaukon, N. D.—Apr. 6, by G. A. Gilbertson, aud. Benson Co., 3 graders with 6-10 ft. blades, 1,200 lb. machine with 8 ft. blade preferred.

Riveted Pipe—Oreville, Calif.—Apr. 4, by R. A. Leonard, secy. Thermalito Irrigation Dist., 50,400 lin.ft. riveted slip joint pipe with all fittings.

Steam Shovel and Rock Crusher—San Rafael, Calif.—Marin Co. taking bids rock crusher and steam shovel. R. E. Graham, co. clk.

BIDS RECEIVED

Paving Stone, etc.—Buffalo, N. Y.—Commissioner Pub. Wks., Municipal Bldg., Mar. 5, various paving materials for year ending Dec. 31, 1923, (1) paving stone (2) dressed block stone (3) crosswalk stone (4) 4 x 16 in. curbing (5) 2,800 lb. coarse sand (6) 3,200 lb. gravel (7) crushed stone, from M. A. Ryan Sandstone Quarries, Albion, (1) $2.50 per sq.yd. (2) $3.10 per sq.yd. (3) $0.45 per sq.ft. (4) $0.50 per lin.ft., all foregoing f.o.b. Buffalo; B. F. Spire, 24 Colonial Circle (1) $10 per ton (2) $11.30 per ton (3) $2 per sq.ft. (4) $1 per lin.ft.; Holloway Sand Co., Inc., Builders Exch., delivered to teams on trucks at company's yard, (5) $0.92 per ton (6) $0.83, delivered to city yard, foot of Court St., (5) $1.32 (6) $1.22, delivered by truck to various zones in city, 1st zone (5) $1.32 (6) $1.22, 2nd zone (5) $1.47 (6) $1.37, 3rd zone (5) $1.62 (6) $1.52, 4th zone (5) $1.77 (6) $1.67, 5th zone (5) $1.91 (6) $1.81; Buffalo Crushed Stone Co., Ellicott Sq., (7) 1,000 cu.yd. at city yard $2.60, 2,000 cu. yd. at Macadam St. $2.20, 1,000 cu.yd. at yard of contractor $1.50 and 250 cu.yd. on any street $2.50. Noted Mar. 1.

Asphalt Binder—New York, N. Y.—Bd. Purch., Municipal Bldg., Mar. 20, asphalt binder to Dept. Parks-Bronx, from C. D. Beckwith, 2875 Bway., $1,478. Noted Mar. 15.

Asphalt Wearing Sand—New York, N. Y.—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., Mar. 20, 4,000 cu.yd. asphaltic wearing sand, from C. W. Crane, 17 Battery Pl., $4,720. Noted Mar. 15.

Steel Frame—New Orleans, La.—Bd. Port Comrs., New Court Bldg., steel frame for Poland St. wharf, (a) furnishing and erecting 1,685,500 lb. structural (b) 71,300 lb. steel for adjoining elevator shaft (c) painting 1,756,800 lb. steel, from Virginia Bridge & Iron Co., Whitney Bldg., (a) $85,876 (b) $3,722 (c) $1,511 (180 days); Nashville Bridge Co., Shelby Ave., Nashville, Tenn., (a) $90,007 (b) $3,878 (c) $52,704 (240 days); Converse Bridge Co., Anderson and Berkeley Sts., Chattanooga, Tenn., (a) $91,860 (b) $3,886 (c) $2,635. Noted Mar. 8.

Lighting System—St. Paul, Minn.—City, Mar. 19, installing two hundred and ten 400 candle-power single light posts, Selby Ave. from Summit to Lexington Ave., and in Western Ave. from Laurel to Marshall Aves., from Hubbard Electric Light Co., 368 Wabasha St., $39,100; Donovan Constr. Co., 417 Commerce Bldg., $40,303 and $41,910; Commonwealth Electric Co., 132 East 6th St., $44,843. Noted Mar. 15.

Road Oil — St. Paul, Minn. — H. W. Austin, city purch. agt., Mar. 19, 700,000 gal. road oil for 1923 season (a) Specification "AA" (b) Specification "B," from White Eagle Oil and Refining Co., Federal Reserve Bank Bldg., Kansas City, Mo., (a) $0.065 (b) $0.065; Minnesota Road Equipment Co., Plymouth Bldg., Minneapolis (a) $0.0653 (b) $0.0675; Camden Petroleum Co., 208 South La Salle St., Chicago (a) $0.077 (b) $0.077. Noted Mar. 15.

CONTRACTS AWARDED

Mowers and Tractors—New York, N. Y.—Bd. Purch., Municipal Bldg., mowers and tractors, to Dept. Parks-Bronx, to J. S. Woodhouse, 191 Water St., $3,405. Noted Mar. 8.

Paving Blocks—New York, N. Y.—Bd. Purch., Municipal Bldg., creosoted wood paving blocks, for Dept. Plant & Structures, to Amer. Creosoting Co., 17 Battery Pl., $22,415. Noted Mar. 22.

Road Oil—Syracuse, N. Y.—F. X. Wood, purch. agt. Onondago Co., 50,000 gal. road oil with option 125,000 gal., delivered in tank car, to Barrett Co., 36th St., Phila., $0.09 per gal.

Swimming Pool—Trenton, N. J.—Hildinger-Bishop Amusement Co., Arcade Bldg., 200 x 310 ft. swimming pool, 2,200 gal. capacity, in Woodlawn Park, to Turek Constr. Co., 40 Park Pl., Newark, $150,000.

Crushed Stone—Phila., Pa.—See "Streets and Roads."

Cement—Detroit, Mich.—Dept. Pub. Wks., City Hall, 75,000 bbl. cement, f.o.b. Detroit, to Wyandotte Portland Cement Co., 1325 Ford Bldg., $2.77 per bbl. (less $0.10 for each returned sack).

Gas Reservoir—Duluth, Minn.—Duluth Water and Light Dept., 1,000,000 cu.ft. gas reservoir, 127 ft. high, steel, foot of 47th Ave. E., to Stacy Bros. Gas Constr. Co., 5535 Carthage Pike, Elmwood, Cincinnati, O., $127,400. Noted Feb. 8.

Fences—Wyoming—See "Railways."

Pipe Line—Butte, Mont.—See "Industrial Works."

Grain Elevator—St. Louis, Mo.—Missouri Pacific Ry., Ry. Exch. Bldg., 130 x 309 ft., grain elevator, 226 ft. high, rein.-con. and steel, concrete pile foundation, 2,000,000 bu. capacity, containing eighty 16 x 112 ft. circular bins also loading dock for barges and storage tracks for 250 cars, along Mississippi River at Primm St., to Folwell-Ahlskog Co., 323 North Michigan Ave., Chicago; 37,500 bbl. cement, to Alpha Portland Cement Co., St. Louis (street address not available); 1,050 tons reinforcing, to Laclede Steel Co., Arcade Bldg. Archts. est. $2,000,000.

Hydro-Electric Equipment — Spokane, Wash.—Washington Water Power Co., 825 Trent St., completing Long Lake Hydro-Electric plant, last unit, 22,500 hp., incl. turbine, 4,000 volt 3 phase generator, switch board transformer connections and penstock, contracts as follows: hydraulic machinery, to W. Cramp & Sons Ship and Engine Building Co., Richmond and Norris Sts., Phila.; electrical equipment, to General Electric Co., River Rd., Schenectady, N. Y.; penstock, to Willlamette Iron & Steel Wks., Front and Nicholai Sts., Portland, Ore.

Asphalt—Ottawa, Ont.—Bulk refined asphalt in tank cars to Imperial Oil Co. Ltd., 918 St. Patrick St., Montreal, Que., $20 per ton; in packages to U. S. Asphalt Refining Co., 90 West St., New York City, $24.65 per ton.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by interested bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ADVERTISEMENTS ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE.

OFFICIAL PROPOSALS

Bids: April 3.

Highway Work

Albany, N. Y.

State Commission of Highways, Albany, N. Y.—Pursuant to Chapter 30, Laws of 1909, and amendments thereto, sealed proposals will be received by the undersigned at No. 55 Lancaster Street, Albany, N. Y., at 1 o'clock p.m., on Tuesday, the third day of April, 1923, for the furnishing and delivering bituminous material "A" f.o.b. railroad cars at destination for use by the State Highway Commission, in the maintenance and repair of improved state and county highways in all of the counties of the State, unless otherwise specified, for the following contracts:

B. M. Contract No. 1, Bituminous Material "A"—Cut Back for use in Divisions Nos. 1 & 5.

B. M. Contract No. 2, Bituminous Material "A"—Cut Back for use in Divisions Nos. 2, 3 & 4.

B. M. Contract No. 3, Bituminous Material "A"—Cut Back for use in Divisions Nos. 6, 7, 8 & 9.

Proposals will be for furnishing the specified material at any railroad delivery point within the divisions named in the proposal.

Table showing approximate quantities and anticipated railroad delivery points, specifications and proposals may be obtained at the office of the State Commission of Highways at Albany, N. Y.

Special attention of bidders is called to "General Information for Bidders" in the proposal, specifications and contract agreement. Proposal for each contract must be submitted in a separate sealed envelope with the name and number of the contract plainly endorsed on the outside of the envelope. Each proposal must be accompanied by cash, draft of certified check payable to the order of the State Commission of Highways for an amount equal to at least 3 per cent of the amount of the proposal. The retention and disposal of such cash, draft or check by the State Commission of Highways shall conform with Subdivision 3, Section 130 of the Highway Law, as amended by Chapter 623, Laws of 1919.

The successful bidder will be required to execute the contract and comply in all respects with Section 130 of the Highway Law as amended by Chapter 623.

The right is reserved to reject any or all bids.

FRED'K STUART GREENE
Commissioner

W. A. PATTON, Secretary.

Bids: April 26.

Water Tube Boilers

New Orleans, La.

Sealed proposals will be received by the Sewerage and Water Board of New Orleans up to 12 o'clock noon, Thursday, April 26th, 1923, for furnishing 1,500-1,800 hp. Water Tube Boilers.

Specifications and blank forms of proposals may be obtained at Room 303, No. 526 Carondelet Street, New Orleans.

The right is reserved to reject any or all bids.

GEO. G. EARL,
General Superintendent.

A. G. MOFFAT,
Secretary.

OFFICIAL PROPOSALS

Bids: April 11

Farmingdale-Manasquan Road

Freehold, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Monmouth for the reconstruction of the Farmingdale-Manasquan Road, No. 34, (Section 1), with a reinforced concrete pavement for a distance of 1.91 miles and opened and read in public at the rooms of said board, Court House, Freehold, New Jersey on Wednesday, April 11th, at 11:00 a.m.

Drawings and specifications for the proposed work, prepared by George D. Cooper, Engineer, have been filed in the office of said Engineer at 60 Broad Street, Red Bank, New Jersey, and may be inspected by prospective bidders during business hours. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

Plans and specifications will be furnished to prospective bidders upon payment of ten dollors ($10.00), which amount will be refunded upon the return of plans and specifications before the time specified for the opening of bids.

Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and name of proposed work on the outside, addressed to the Board of Chosen Freeholders of the County of Monmouth and must be accompanied by a certified check for a sum not less than ten (10) per cent of the amount bid on the work, payable to the order of the County Treasurer and a surety company certificate that said surety company will provide the bidder with the required bond, and must be delivered at the place and before the hour above named.

The Board of Chosen Freeholders of the County of Monmouth reserves the right to reject any or all bids if deemed to the best interests of the County so to do.

By order of the Board of Chosen Freeholders of the County of Monmouth.

BRYANT B. NEWCOMB,
Director.

Attest:
CHAS. E. COLE, Clerk.
Freehold, N. J. Feb. 7th, 1923.

Bids: April 3.

Highway Work

Harrisburg, Pa.

Pennsylvania State Highway Department, Harrisburg, Pa. Sealed proposals will be received at the State Capitol until 10 a.m., April 3, 1923, when bids will be publicly opened and scheduled and contract awarded as soon thereafter as possible for the reconstruction of 40 miles of either Bituminous Surface on a Concrete foundation or One Course Reinforced Concrete Pavement, 30 miles of One Course Reinforced Concrete Pavement and 3 miles of Bituminous Macadam Pavement. Bidding blanks and specifications may be obtained free, and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg. No refund for plans returned. They also can be seen at office of State Highway Department, Harrisburg, 1001 Chestnut Street, Philadelphia, and 119 Federal Street, N. S., Pittsburgh, Pa.

P. D. WRIGHT,
State Highway Commissioner.

OFFICIAL PROPOSALS

Bids: April 3

Dam Construction

Newburgh, N. Y.

Sealed proposals for the construction of dams will be received by the City Manager, Newburgh, N. Y., at his office in the City Hall until 12 o'clock, noon, on Tuesday, the 3rd day of April, 1923, and at that time will be publicly opened and read.

The work comprises the construction of two dams, an easterly earth dam with a concrete core wall and spillway, and alternate bids are asked for the construction of the second dam adjacent to the easterly dam, two alternatives providing for an earth dam with concrete core wall and the other for a reinforced concrete facing wall with earth backing. The work lies about two miles southerly of Newburgh at the point where the southerly branch of Silver Stream crosses under the New York City Aqueduct. While the bids are divided as between the east and west dam, the work will be let to a single contractor, the character of construction for the west dam being decided by economical construction as represented by the bids.

Each bid must be accompanied by a certified check upon an acceptable National Bank or Trust Company, made payable to the order of the city of Newburgh, or by cash to the amount of $5,000.

Copies of the plans and specifications may be examined at the office of the City Engineer of Newburgh, N. Y., and copies of plans, specifications, contract and form of proposal may be obtained at that office or at the office of the Engineers, Fuller & Harding, 170 Broadway, N. Y., upon the deposit of $15, of which $10 will be refunded if the said plans and specifications are returned in good condition.

W. JOHNSTON McKAY,
City Manager.

Bids: April 5.

Reinforced Concrete and Brick Pavement

Burlington, Vt.

Sealed proposals will be received by the City of Burlington on April 5th at five p.m. o'clock, standard time, at the City Hall, Burlington, Vermont, for the improvement of sections of Church, Pearl, Winooski Avenue Bank and Battery Streets. The work will consist of approximately 11,500 square yards of reinforced concrete, 1,400 square yards brick pavement and 4,900 lin.ft. concrete curb.

All bids must be upon blanks provided in the proposal furnished to bidders.

Bids must be accompanied by a certified check for three per cent (3%) of the amount of the bid. Plans and specifications will be on file at the City Clerk's office, City Hall, Burlington, Vermont, and at the office of the Engineer, H. Eltinge Breed, Room 600, 507 Fifth Avenue, New York City.

Copies of the plans and specifications may be obtained as above for three dollars ($3.00) per set.

No refund for blanks returned. Bidding blanks will be furnished free.

The right is reserved to reject any or all bids.

EDWARD CORLEY,
City Clerk.

CONSTRUCTION NEWS

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Apr. 9	Buffalo, N. Y.	Mar. 29
Apr. 10	Toronto, O.	Mar. 15
Apr. 10	Franklin, Tenn.	Mar. 29
Apr. 10	New York, N. Y.	Apr. 5
Apr. 10	Brooklyn, N. Y.	Apr. 5
Apr. 11	Franklin, Tenn.	Mar. 29
Apr. 12	Astoria, Ill.	Mar. 15
Apr. 12	Poughkeepsie, N. Y.	Mar. 29
	Adv. Mar. 29 and Apr. 5.	
Apr. 13	Staples, Minn.	Apr. 5
Apr. 14	Akron, O.	Apr. 5
Apr. 14	Lansing, Ont.	Apr. 5
Apr. 16	Totowa (Paterson P. O.), N. J.	Mar. 29
	Adv. Mar. 29 and Apr. 5.	
Apr. 16	Pennington, N. J.	Apr. 5
Apr. 18	Richmond, Va.	Mar. 22
	Adv. Mar. 22 to Apr. 5.	
Apr. 23	Springfield, Ill.	Apr. 5
	Adv. Apr. 5.	
Apr. 26	New Orleans, La.	Mar. 8
	Adv. Mar. 8 to Apr. 5.	

SEWERS

Apr. 6	Lyndonville, N. Y.	Mar. 15
	Adv. Mar. 15 to Apr. 5.	
Apr. 9	Merced, Calif.	Mar. 29
Apr. 9	Nelson, B. C.	Mar. 29
Apr. 9	Camden, N. Y.	Apr. 5
Apr. 9	Rochester, Mich.	Apr. 5
Apr. 9	Long Island City, N. Y.	Apr. 5
Apr. 10	Toronto, Ont.	Mar. 8
Apr. 10	Toledo, O.	Mar. 15
Apr. 10	Hazard, Ky.	Mar. 22
Apr. 10	Ogden, Utah	Apr. 5
Apr. 10	Ossian, Ia.	Apr. 5
Apr. 11	Dunlap, Ia.	Mar. 29
Apr. 13	Milwaukee, Wis.	Apr. 5
Apr. 14	Milwaukee, Wis.	Apr. 5
Apr. 16	Urbana, Ill.	Mar. 15
Apr. 16	Johnstown, Pa.	Mar. 29
Apr. 16	Akron, O.	Apr. 5
Apr. 16	Lebanon, Pa.	Apr. 5
	Adv. Apr. 5.	
Apr. 16	Waterloo, Ia.	Apr. 5
Apr. 16	Vermilion, S. D.	Apr. 5
Apr. 17	Paterson, N. J.	Mar. 29
Apr. 18	Hamilton, Ont.	Apr. 5
Apr. 19	Laramie, Wyo.	Apr. 5
Apr. 23	Marysville, Kan.	Apr. 5
	Adv. Apr. 5.	
Apr. 24	Buffalo, N. Y.	Mar. 29
	Adv. Mar. 29 and Apr. 5.	
Apr. 24	Indianapolis, Ind.	Apr. 5
Apr. 24	Louisville, Ky.	Apr. 5
	Adv. Apr. 5.	

WASTE DISPOSAL

Apr. 26	Cleveland, O.	Apr. 5

BRIDGES

Apr. 9	Pauls Valley, Okla.	Apr. 5
Apr. 10	Fonda, N. Y.	Mar. 15
Apr. 10	Quay, Fla.	Mar. 29
Apr. 10	Boston, Mass.	Apr. 5
Apr. 12	Mermentau, La.	Mar. 29
Apr. 12	Louisiana	Mar. 22
Apr. 13	Illinois	Mar. 29
Apr. 14	Eden, N. Y.	Mar. 29
Apr. 16	Johnstown, Pa.	Mar. 29
Apr. 16	Chicago, Ill.	Apr. 5
	Adv. Apr. 5.	
Apr. 17	Chehalis, Wash.	Apr. 5
Apr. 18	Appleton, Wis.	Apr. 5
Apr. 20	Sacramento, Calif.	Apr. 5
Sept. 1	Sydney, New South Wales, Australia	Aug. 3

DAMS

Apr. 9	Ft. Wayne, Ind.	Apr. 5
	Adv. Apr. 5.	
Apr. 12	Oroville, Calif.	Mar. 22

EXCAVATION, DRAINAGE, IRRIGATION

Apr. 9	Lamar, Colo.	Mar. 22
Apr. 9	Vancouver, B. C.	Mar. 29
Apr. 9	Pauls Valley, Okla.	Apr. 5
Apr. 12	Algona, Ia.	Apr. 5
Apr. 14	Savannah, Tenn.	Mar. 22
Apr. 16	Oroville, Calif.	Apr. 5
Apr. 17	New York, N. Y.	Apr. 5
Apr. 23	Audubon, Ia	Apr. 5

STREETS AND ROADS

Apr. 9	Cleveland, O.	Mar. 29
Apr. 9	Mineola, N. Y.	Mar. 29
	Adv. Mar. 29 and Apr. 5.	
Apr. 9	Michigan	Mar. 29
Apr. 9	San Diego, Calif.	Mar. 29
Apr. 9	Council Bluffs, Ia.	Mar. 29
Apr. 9	Reno, Nev.	Mar. 29
Apr. 9	Jesup, Ia.	Apr. 5
Apr. 9	Cherryvale, Kan.	Apr. 5
Apr. 9	Chesterford, Va.	Apr. 5
Apr. 9	Elmhurst, Ill.	Apr. 5
Apr. 9	Villa Park, Ill.	Apr. 5
Apr. 10	Brooklyn, N. Y.	Apr. 5
Apr. 10	New Castle, Pa.	Mar. 22
Apr. 10	Washington	Mar. 15
Apr. 10	Louisiana	Mar. 22
Apr. 10	Maryland	Mar. 29
	Adv. Mar. 29 and Apr. 5.	
Apr. 10	Buffalo, Minn.	Mar. 29
Apr. 10	Moorhead, Minn.	Mar. 29
Apr. 10	Easley, S. C.	Mar. 29
	Adv. Mar. 29 and Apr. 5.	
Apr. 10	Michigan	Mar. 29
Apr. 10	Pierre, S. D.	Mar. 29
Apr. 10	Ripon, Wis.	Mar. 29
Apr. 10	Fond du Lac, Wis.	Mar. 29
Apr. 10	Indiana	Mar. 29
Apr. 10	Louisiana	Apr. 5
Apr. 10	Cherokee, Ia.	Apr. 5
Apr. 10	Newton, N. C.	Apr. 5
Apr. 10	Eau Claire, Wis.	Apr. 5
Apr. 10	Erie, Pa.	Apr. 5
Apr. 11	Waukegan, Ill.	Apr. 5
Apr. 11	Gaffney, S. C.	Apr. 5
Apr. 11	Freehold, N. J.	Mar. 29
	Adv. Mar. 29 and Apr. 5.	
Apr. 11	Delaware	Mar. 29
Apr. 11	Dunlap, Ia.	Mar. 29
Apr. 11	Cleveland, O.	Apr. 5
Apr. 11	Litchfield, Minn.	Apr. 5
Apr. 11	Shawano, Wis.	Apr. 5
Apr. 11	Charlottesville, Va.	Apr. 5
Apr. 11	Brooklyn, N. Y.	Apr. 5
Apr. 12	Jacksonville, Fla.	Mar. 29
Apr. 12	Monroe, Wis.	Apr. 5
Apr. 12	Denver, Colo.	Apr. 5
Apr. 13	Illinois	Mar. 29
Apr. 13	Two Rivers, Wis.	Apr. 5
Apr. 13	Indianapolis, Ind.	Apr. 5
Apr. 13	Green Bay, Wis.	Apr. 5
Apr. 13	Michigan	Apr. 5
Apr. 14	Bessemer, Mich.	Mar. 22
Apr. 14	St. Johns, Mich.	Mar. 29
Apr. 14	Watertown, Wis.	Apr. 5
Apr. 14	Idaho	Apr. 5
Apr. 16	Canonsburg, Pa.	Mar. 22
	Adv. Mar. 22 to Apr. 5.	
Apr. 16	Kingston (Wilkes-Barre P. O.), Pa.	Mar. 29
Apr. 16	Shenandoah, Pa.	Mar. 29
	Adv. Mar. 29 and Apr. 5.	
Apr. 16	Mitchell, S. D.	Mar. 29
Apr. 16	Glendive, Mont.	Mar. 29
Apr. 16	Olympia, Wash.	Apr. 5
Apr. 16	San Diego, Calif.	Apr. 5
Apr. 16	Akron, O.	Apr. 5
Apr. 16	Redwood City, Calif.	Apr. 5
Apr. 17	Alabama	Mar. 22
Apr. 17	St. Louis, Mo.	Mar. 29
Apr. 17	Washington	Apr. 5
Apr. 17	Florida	Apr. 5
Apr. 17	Louisiana	Apr. 5
Apr. 17	West Bend, Wis.	Apr. 5
Apr. 17	Maryland	Apr. 5
	Adv. Apr. 5.	
Apr. 18	Delaware	Apr. 5
	Adv. Apr. 5.	
Apr. 18	Freehold, N. J.	Apr. 5
	Adv. Apr. 5.	
Apr. 18	Bennington, Vt.	Apr. 5
	Adv. Apr. 5.	
Apr. 18	Florida	Apr. 5
Apr. 18	Ebensburg, Pa.	Apr. 5
Apr. 18	Nevada	Apr. 5
Apr. 19	Petersburg, Ind.	Apr. 5
Apr. 19	Newton, N. J.	Apr. 5
	Adv. Apr. 5.	
Apr. 20	Sioux Falls, S. D.	Mar. 29
Apr. 20	Kentucky	Apr. 5
Apr. 20	Illinois	Apr. 5
Apr. 20	Harvey, Ill.	Apr. 5
Apr. 23	Sanford, Fla.	Apr. 5
Apr. 25	Seneca, Kan.	Apr. 5
Apr. 25	Crookston, Minn.	Apr. 5
Apr. 26	St. Francis, Kan.	Apr. 5
Apr. 27	Wellington, Kan.	Apr. 5
May 1	Atchison, Kan.	Apr. 5
May 1	Washington	Apr. 5

INDUSTRIAL WORK

Apr. 9	St. Paul, Minn.	Apr. 5
Apr. 10	Crugar, Miss.	Mar. 29
Apr. 10	Rapid City, S. D.	Apr. 5
Apr. 11	Central City, Ky.	Apr. 5
Apr. 13	New York, N. Y.	Apr. 5
Apr. 16	Altoona, Pa.	Apr. 5
Apr. 18	Muscatine, Ia.	Mar. 29
Apr. 20	Green Bay, Wis.	Apr. 5
Apr. 23	Rapid City, S. D.	Apr. 5
Apr. 24	Huron, S. D.	Apr. 5

BUILDINGS

Apr. 9	St. Louis, Mo.	Apr. 5
Apr. 9	Millbank, S. D.	Apr. 5
Apr. 9	Southmont, Pa.	Apr. 5
Apr. 9	Manitowoc, Wis.	Apr. 5
Apr. 10	Springfield, Mass.	Mar. 22
Apr. 10	Cedar Falls, Ia.	Mar. 22
Apr. 10	Columbus, O.	Mar. 15
Apr. 10	St. Louis, Mo.	Mar. 29
Apr. 10	Tucson, Ariz.	Mar. 29
Apr. 10	Hartford, Conn.	Mar. 29
Apr. 10	Wichita, Kan.	Apr. 5
Apr. 10	West Springfield (Springfield P. O.), Mass.	Apr. 5
Apr. 10	McKenzie, Tenn.	Apr. 5
Apr. 10	Shamokin, Pa.	Apr. 5
Apr. 10	Spring Valley, N. Y.	Apr. 5
Apr. 11	Los Angeles, Calif.	Apr. 5
Apr. 11	Chester, S. C.	Apr. 5
Apr. 12	Savannah, Ill.	Mar. 22
Apr. 12	Hartford, Conn.	Mar. 29
Apr. 12	St. Louis, Mo.	Apr. 5
Apr. 12	Milwaukee, Wis.	Apr. 5
Apr. 14	Austin, Tex.	Apr. 5
Apr. 14	Kenosha, Wis.	Apr. 5
Apr. 16	Marquette, Mich.	Apr. 5
Apr. 16	Ann Arbor, Mich.	Apr. 5
Apr. 17	Williamson, W. Va.	Apr. 5
Apr. 17	Akron, O.	Apr. 5
Apr. 18	Mayville, Wis.	Apr. 5
Apr. 18	Marion, N. Y.	Mar. 29
Apr. 18	Sioux City, Ia.	Apr. 5
Apr. 19	Seward, Neb.	Mar. 29
Apr. 19	New York, N. Y.	Apr. 5
Apr. 19	Brooklyn, N. Y.	Apr. 5
Apr. 20	New Haven, Conn.	Mar. 29
Apr. 21	Mayville, N. Y.	Apr. 5
Apr. 21	Racine, Wis.	Apr. 5
Apr. 24	Green Bay, Wis.	Apr. 5
Apr. 31	Capa, S. D.	Mar. 8
May 1	Mason City, Ia.	Mar. 22

FEDERAL GOVERNMENT WORK

Apr. 9	Dredging — New Orleans, La.	Mar. 15
Apr. 9	Cement—Louisville, Ky.	Mar. 15
	Adv. Mar. 15, 29 and Apr. 5.	
Apr. 10	Lock—Newburg, Ind.	Mar. 1
	Adv. Mar. 1, 8, 29 and Apr. 5.	
Apr. 10	Cement—Nashville, Tenn.	Apr. 5
Apr. 11	Removing Fenders — Norfolk, Va.	Mar. 15
Apr. 12	Machinery, etc. — Honolulu, H. I.	Mar. 1
Apr. 12	Steel Hull—Rock Island, Ill.	Mar. 22
	Adv. Mar. 22 to Apr. 5.	
Apr. 12	Wire—Fremont, Calif.	Mar. 23
Apr. 13	Lock Gates—Chattanooga, Tenn.	Mar. 29
Apr. 16	Tunnel, etc. — Mitchell, Neb.	Mar. 1
Apr. 16	Barges—Galveston, Tex.	Mar. 15
	Adv. Mar. 22 and Apr. 5.	
Apr. 16	Ice-Making and Refrigerating Plant—Chelsea, N. Y.	Mar. 22
Apr. 17	Disposal Plant, etc.—Tobyhanna, Pa.	Mar. 29
Apr. 18	Monument — Plattsburg, N. Y.	Mar. 22
	Adv. Mar. 22 to Apr. 5.	
Apr. 20	Dredging Pump—Jacksonville, Fla.	Mar. 22
	Adv. Mar. 22 to Apr. 5.	
Apr. 20	Valves, etc.—Florence, Ala.	Mar. 29
	Adv. Mar. 29 and Apr. 5.	
Apr. 20	Road—New Mexico	Apr. 5
Apr. 20	Cement—Nashville, Tenn.	Apr. 5
Apr. 23	Earthwork — Memphis, Tenn.	Apr. 5
	Adv. Apr. 5.	
Apr. 23	Steel Bars, etc. — Memphis, Tenn.	Apr. 5
	Adv. Apr. 5.	
Apr. 25	Hospital Buildings — Chelsea, N. Y.	Apr. 5
	Adv. Apr. 5.	
Apr. 25	Mechanical Equipment—Chelsea, N. Y.	Apr. 5
Apr. 25	Reconstructing Dike — Mare Island, Calif.	Mar. 22
Apr. 25	Steel Gates — Nashville, Tenn.	Apr. 5
	Adv. Apr. 5.	
Apr. 27	Barges—Portland, Ore.	Apr. 5
Apr. 27	Boilers—Florence, Ala.	Apr. 5
Apr. 30	Barges—Jacksonville, Fla.	Apr. 5
	Adv. Apr. 5.	
Apr. 30	Dredging—Baltimore, Md.	Apr. 5
	Adv. Apr. 5.	
Apr. 30	Post Office—Vernal, Utah.	Apr. 5

Bids Close		See Eng. News-Record
May 3	Superstructure — Detroit, Mich. Adv. Apr. 5.	Apr. 5
May 10	Post Office — Cordova, Alaska	Jan. 25

MISCELLANEOUS

Apr. 9	Stadium—East Cleveland (Cleveland P. O.), O.	Mar. 15
Apr. 9	Fire Alarm System—Wichita, Kan.	Mar. 22
Apr. 9	Steel, etc.—St. Paul, Minn.	Apr. 5
Apr. 9	Power Development — New York	Apr. 5
Apr. 10	Electric Standards—St. Louis, Mo.	Mar. 22
Apr. 10	Culverts—Buffalo, Minn.	Mar. 29
Apr. 10	Heating and Ventilating System—Allentown, Pa.	Mar. 29
Apr. 10	Pier—Buffalo, N. Y.	Mar. 29
Apr. 10	Broken Stone — Trenton, N. J.	Apr. 5
Apr. 10	Grand Stand — Topeka, Kan.	Apr. 5
Apr. 10	Dock—Milwaukee, Wis.	Apr. 5
Apr. 10	Heating and Ventilating Apparatus, etc. — Brooklyn, N. Y.	Apr. 5
Apr. 11	Culverts—St. Cloud, Minn.	Mar. 29
Apr. 11	Tar—Maine	Apr. 5
Apr. 13	Transmission and Telephone Lines—Seattle, Wash.	Mar. 22
Apr. 13	Bituminous Material — Albany, N. Y. Adv. Apr. 5.	Apr. 5
Apr. 13	Steam Main—Cleveland, O.	Apr. 5
Apr. 13	Road Oil—Green Bay, Wis.	Apr. 5
Apr. 18	Road Oil—Clayton, Mo.	Apr. 5

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Fla., Gainesville—Apr. 10, to vote on $38,633 bonds extending water system. G. H. Caimes, Gainesville, engr.

La., Port Allen—Plans waterworks system. $35,000. Swanson-McGraw Inc., United Fruit Bldg., New Orleans, consult. engrs.

La., Welch—Town plans to complete waterworks system and remodel electric light plant. $115,000. Swanson-McGraw, United Fruit Bldg., New Orleans, consult. engrs.

O., Columbus—See "Streets and Roads."

Mich., Trenton — Having preliminary plans prepared filtration plant, extensions, etc. $70,000. Hoad, Decker, Shoecraft & Drury, Ann Arbor, engrs.

Wis., Stoughton—Bd. Water Comrs. making plans deep well pumping unit, 1,000 g.p.m. S. B. Snyder, supt. Private plans.

Ia., Garrison—Making plans waterworks system. $20,000. W. E. Buell & Co., 205 Davidson Bldg., Sioux City, engrs.

Kan., Gaylord—Apr. 8, to vote on $32,000 bond issue for complete waterworks. Black & Veatch, 701 Mutual Bldg., Kansas City, Mo., engrs.

Minn., Owatonna—Plans waterworks improvements, incl. mains, 500,000 gal. tank on 100 ft. tower, etc. $100,000. J. H. A. Brahtz, 409 Metropolitan Opera House Bldg., St. Paul, engr.

Mo., Oran — Had preliminary surveys made distribution system, 2½ mi. 4-8 in. vitr. pipe, also 1 story, brick and concrete building to house combined water and electric light plant. $40,000. W. A. Fuller, 1917 Ry. Exch. Bldg., St. Louis, engr.

Tex., Elgin—Apr. 10, to vote on $40,000 bond issue for waterworks improvements. Former election declared illegal. Address J. Keeble, mayor. Noted Mar. 22.

Tex., Hamilton—Attorney Generals Dept., Austin, approved $90,000 bond issue for waterworks improvements. Address Mayor.

Tex., Roby—Apr. 14, to vote on $40,000 bond issue for waterworks improvements. M. A. Hopson, mayor.

Tex., San Saba—See "Excavation, Drainage, Irrigation."

Okla., Sayre—Voted $35,000 bonds extensions to waterworks system. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs. Noted Mar. 8.

Wash., Seattle — Rejected bids opened Mar. 13, c.i. mains in Leo St. et al. $131,365. Will readvertise. J. D. Blackwell, city engr.

Calif., Compton—Plans election to vote on $60,000 bonds improving and extending waterworks system.

Calif., San Diego—Voted $325,000 bonds for c.i. mains and 1,200,000 gal. standpipe. F. A. Rhodes, city engr. Noted Feb. 15.

Calif., San Francisco — City and San Francisco Co., high pressure fire mains in portions Jefferson Beach, Leavenworth and Jones Sts., to H. McGill, 763 San Bruno Ave., $15,771. City to furnish materials. Noted Mar. 15.

Ont., Hamilton—Making plans filtering basin chlorination plant. $100,000. Prices wanted on materials. E. R. Gray, city engr. Noted Mar. 8.

Ont., Fonthill—Plans waterworks system, incl. c.i. pipe, mostly 6 in., hydrants, centrifugal pumps, and pumphouse. $40,000,-$50,000. James, Proctor & Redfern, 36 Toronto St., Toronto, engrs.

BIDS DESIRED

N. Y., Brooklyn — Apr. 10, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Glenwood Rd., Delamere Pl., Blake, Williams and Gilmore Courts, Empire and Shore Blvds., Aves., T, Y and Z, Atkins, Banner, Christopher, Denton, Kingston, Stone, Voorhies and 16th Aves., Beadel, Hendrickson, Jaffray, 53rd, 56th, 63rd, 65th, 70th, 73rd, 77th, 80th, 81st, 82nd, Beach 45th, Beach 46th, Beach 47th, East 11th, East 12th, East 34th, East 35th, East 52nd, West 3rd, West 4th, West 5th, West 6th and West 9th Sts., here.

N. Y., New York—Apr. 10, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in Bway., Marginal, East 26th, East 57th, West 57th, West 96th, West 141st and West 176th Sts.

N. J., Pennington — Apr. 16, by Boro Council, 100 ft. steel standpipe, 18 ft. diameter. Remington & Vosbury, 601 Market St., Camden, engrs.

O., Akron—Apr. 14, by B. J. Hill, city purch. agt., 51,900 lin.ft. 4-20 in. Class B and 14,020 lin.ft. 4-20 in. Class C c.i. pipe, 1 ton 4 in. and smaller and 65 tons 6 in. and larger standard special castings.

Ill., Springfield — Apr. 23, at office of Mayor, centrifugal pumps and settling basins for pumping station. Burns & McDonnell Eng. Co., 402 Interstate Bldg., Kansas City, Mo., engrs.; adv. this issue. Noted Mar. 22.

Minn., Staples—Apr. 13, water extensions, about 15,000 lin.ft. mains, hydrants, valves, specials, etc. $20,000. F. W. Findsen, city clk.

Ont., Lansing—Apr. 14, by H. D. Goode, Lansing, waterworks system incl. furnishing c.i. pipe, pumping machinery, c.i. specials, furnishing and erecting elevated steel tank, filter equipment, laying c.i. mains, constructing pumphouse, filter house, plant and concrete dam, for North York Twp., $125,000. James, Proctor & Redfern, 36 Toronto St., Toronto, engrs. Noted Dec. 28.

BIDS RECEIVED

N. Y., New York — N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., Mar. 27, mains in Webster Ave., Bronx Boro, from Norton Eng. Co., 510 West 149th St., $42,000; Paladino Contg. Co., 437 East 120th St., $44,768; Melrose Constr. Co., 230 East 172nd St., $45,100. Noted Mar. 22.

N. J., Trenton—For (1) 329 tons 6-16 in. pipe (2) 24 hydrants (3) 150 tons sulphuric acid, from R. D. Wood & Co., 400 Chestnut St., Phila., (1) $59 per ton (2) $2,042; U. S. Cast Iron Pipe & Fdry. Co., Morris Bldg., Phila., (1) $59.30; Rensslaer Valve Co., 50 Church St., New York City, (2) $2,162; General Chemical Co., 1421 Chestnut St., Phila., (3) $13.50 per ton; E. I. Du Pond de Nemours Co., 125 South 5th St., Phila., (3) $17; Grasselli Chemical Co., 347 Madison Ave., New York City, (3) $17.60. Noted Mar. 22.

Wis., Milwaukee—Gate valves for Riverside Pumping Station (1) three 54 in. flanged gate valves (2a) three 42 in. (2b) two 42 in. (2c) six 4 in., (3) three 54 in. flanged horizontal check valves, from Kennedy Valve Co., East Water St., Elmira, N. Y., (1) $2,248 each (2a) $1,403 (2b) $1,340 (2c) $14.63; Michigan Valve & Fdry. Co., 3631 Parkinson St., Detroit, Mich., (3) $5,585 each. Noted March 8.

Wis., Milwaukee — Cast iron pipe and special castings for Riverside pumping station, from U. S. Cast Iron Pipe & Fdry. Co., 122 South Michigan Ave., Chicago, $35,681. Noted Mar. 22.

Wis., Milwaukee—For 1 story 130 x 240 ft., pumping station, brick and concrete, foot Chambers St., from P. Riesens Sons, 1018 Humboldt Ave., $434,791; H. Danischefsky, 1484 Humboldt Ave., $444,910; W. W. Oeflein, 86 Michigan Ave., $460,000. Noted March 15.

CONTRACTS AWARDED

N. Y., Brooklyn — Bd. Water Supply, Municipal Bldg., New York, Narrow Siphon 2, portion Catskill Aqueduct extending across New York Harbor from 86th St. and Shore Rd., Bay Ridge, here, to Vanderbilt Ave. and Bay St., Clifton, Staten Island, to Merritt, Chapman & Scott Corp., 17 Battery Pl., New York, $1,523,136; Park Slope and Ft. Hamilton conduits portion of city conduits of Catskill Aqueduct extending from Shaft 23 of city tunnel at Schermerhorn St. and 3rd Ave., etc., to T. A. Gillespie Co., 7 Dey St., New York, $2,338,805. Noted Mar. 29.

N. Y., Canandaigua — Bd. Pub. Wks., City Hall, Mar. 20, 12,061 ft. 16 in. and 806 ft. 12 in. c.i. mains, to P. R. Bowerman, Exch. Pl. Bldg., Rochester, $16,952. Engrs. est. $20,000. Noted Mar. 1.

N. Y., Scottsville—New Waterworks system, to Pittsburgh-Des Moines Co., Curry Bldg., Pittsburgh, Pa., $60,000. Noted Feb. 1 under "Sewers."

N. C., Roxboro—Laying 20,000 ft. 12 in. pipe, concrete and brick filter plant and pumping station, concrete reservoir, one 500 g.p.m. centrifugal pump, electric motor, one 500 gal. centrifugal pump, gas engine driven, to Boyd, Higgins & Goforth, Inc., Realty Bldg., Charlotte, $92,572. Noted Mar. 1.

O., Cleveland—Cuyahoga Co. 6,065 ft. 6 and 8 in. c.i. mains in Impvt. 27 of Co. Sewer Dist. 1, to Langahan Constr. Co., Marshall Bldg., $27,814. Noted Mar. 15.

O., Cleveland—Cuyahoga Co., 7,840 ft. 6 eand 8 in. c.i. mains, Impvt. 26, to J. B. Lynn, 1852 Rudwick Rd., $22,398. Noted Mar. 29.

Ind., Evansville—Water Dept., to United States Cast Iron Pipe and Fdry. Co., 520 Security Bldg., St. Louis, Mo., 540 tons 30 in. Class C bell and spigot water pipe $9.30 per ft. delivered, and 100 tons 6 and 8 in. Class C pipe, $47.50 per ton delivered.

Ia., Maurice—For 8,000 ft. 4-6 in. c.i. mains, tower, tank, pump machinery and well, to C. W. Roland Co., 216 Goodridge St., Des Moines, $16,200. Noted Jan. 4.

Md., Baltimore—Bd. Awards, addition to Montebello filtration plant, Contr. 63, 365,000 cu.yd. excav., 74,000 cu.yd. rolled embankment, 45,400 cu.yd. concrete, 3,760,000 lb. steel reinforcing, 800 tons setting c.i. pipe, valves and sluice gates, to Carozza-Rowe Constr. Co., 624 North Gilmor St., $1,070,000. Noted Mar. 15.

Minn., Lake City—For 33,870 lin.ft. 6 in. and 768 lin.ft. 4 in. main, sixty-four 4 in. and one 5 in. hydrants, forty-seven 6 in. valves and boxes, 18,000 lb. specials, 29 connections to present mains, to Litchfield Drainage & Constr. Co., Litchfield, $58,943. Noted Mar. 8.

Minn., Lamberton—Water main extensions, 19,100 lin.ft. 4 and 6 in. c.i. pipe, forty-two 4 and 6 in. gate valves and boxes, 21 hydrants, 9,500 lb. specials, to Camden Constr. Co., Benson, $27,000. Noted Mar. 15.

Neb., Davenport — Elevated steel tank and tower, pump and pump house, 8 in. well, 4 and 6 in. pipe, valves, to C. Roebeck, 526 Securities Bldg., Omaha, $25,000. Noted Mar. 8.

Tex., Ft. Worth—For 6-20 in. c.i. pipe, to Amer. Cast Iron Pipe Co., Acipco, Birmingham, Ala., $52 per ton, total $400,000.

Colo., Grand Junction—Concrete reservoir, 13,500,000 gal., to Orman Constr. Co., Pueblo, (street address not available), $97,722. Noted Jan. 11.

Que., Montreal—Furnishing 1,371 ft. 8, 10, 12 and 30 in. c.i. pipe, to Canada Iron Foundries, Ltd., Three Rivers, $52.50 per ton and 7 tons 4 in. c.i. pipe, $57.50 per ton.

Sewers

PROPOSED WORK

Conn., Hartford—Plans 2,500 ft. 10-24 in. vitr. clay sewers in Cornwall, Thomaston and Plainfield Sts. $26,000. R. N. Clark, Municipal Bldg., engr.

N. Y., Jamestown—See "Streets and Roads."

N. Y., Rochester — See "Streets and Roads."

Fla., Gainesville — Apr. 10, to vote on $102,152 bonds extending sewerage system. G. H. Caimes, Gainesville, engr.

O., Columbus — Making plans 5,130 ft. 8-24 in. vitr. sewer in alley east of Cleveland Ave. $14,597; 3,405 ft. 6 and 8 in. vitr. sewer in Neil Ave. R. H. Simpson, city engr.

O., Columbus—See "Streets and Roads."

Ia., Bedford—Rejected bids Sect. 1, 21,413 ft. 8 in. and 2,637 ft. 10 in. sewers, etc., Sect. 2, sludge bed, sprinkling filter, dosing chamber, etc. Work will probably be readvertised. Noted Mar. 15.

Tex., Big Springs—Apr. 16, to vote on $60,000 for sewerage extensions and improvements. W. R. Purser, mayor.

Calif., Compton—Plans election to vote on $25,000 bonds for sewers.

Sewers (Continued)

Calif., Pasadena—Having plans prepared 20 mi. sewers. W. C. Earle, city engr.

Calif., Santa Ana—Soon takes bids 1,000 tons c.i. sewer pipe.

Calif., Santa Barbara—Plans eelction to vote on $400,000 bonds for sewers.

Calif., Turlock—Soon takes bids 1,400 lin.ft. 10 in., 3,000 lin.ft. 8 in. and 6,000 lin.ft. 6 in. glazed, cement bell and spigot sewer pipes, to be delivered 60 days after award of contract. H. Hall, city engr.

Ont., Port Dalhousie—Plans 10,000 ft. sanitary sewers in Verdun Ave., Front, Main, Church, Queen and Lock Sts., vitr. tile pipe 8 in. up. $30,000. Engineer not selected.

Ont., Toronto—Making plans 15,000 ft. storm sewers in Oriole Parkway, Lascelles Blvd., Kilbarry and Wilberton Rds., vitr. tile, 8 in. up. $42,825. R. C. Harris, city engr.

Alta., Drumheller—Plans sewerage system. $50,000. J. Haddin, 209 8th Ave. W., Calgary, engr.

BIDS DESIRED

Vt., Bennington — See "Streets and Roads."

N. Y., Camden—Apr. 9, sanitary and storm water sewer in Main St. To exceed $25,000. L. G. Rush, clk. Bd. Village Trustees.

N. Y., Long Island City—Apr. 9, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sewers in Goodrich, 77th, 117th and 130th Sts., Ulster, and 89th Aves., 78th St. from 101st to 97th Aves., 101st Ave. from 78th to 80th Sts., 78th St. from Liberty to 101st Aves., 101st Ave. from 77th to 78th Sts.

Pa., Lebanon—Apr. 16, by Mayor and Council, extending sanitary sewerage system. W. S. Davis, city engr.; adv. this issue.

Ky., Louisville—Apr. 24, by Comrs. of Sewerage, Portland Relief sewer, 34th St. sewer and laterals. J. B. F. Breed, ch. engr.; adv. this issue.

O., Akron—Apr. 16, by W. F. Peters, dir. Pub. Serv., 3,800 lin.ft. 63 in. brick sewer in West Market St., $130,000; 5,215 lin.ft. 30-36 in. brick or segmental block sewer in South Main, Eimerling and South Arlington Sts., $85,000; 5,000 lin.ft. 8-24 in. vitr. clay sewer in Baird and Arlington Sts., Contrs. 3 and 4, $25,000. J. E. Root, Delaware Bldg., engr.

Ind., Indianapolis—Apr. 24, by Bd. Sanitary Comrs., City Hall, derydration building and equipment, of Sect. 5, Div. 3, for sewage disposal plant. J. A. Craven, pres.; adv. this issue.

Mich., Rochester—Apr. 9, by G. J. Taylor, clk., 4,930 ft. 8, 12 and 15 in. vitr. crock sewers in Main St. $25,000. Ruhling, Holdsworth & Hudson, 16549 Woodward Ave., Highland Park (Detroit P. O.), engrs.

Wis., Milwaukee — Apr. 14, by J. H. Fowles, secy. Metropolitan Sewerage Comn., 508 Market St., 9,250 ft. 30 and 42 in. concrete pipe from east disposal plant in West Allis to 34th and National Aves., here. T. C. Hatton, c/o owner, engr.

Wis., Milwaukee — Apr. 13, by J. H. Fowles, secy. Sewerage Comn., 508 Market St., 167½ ft. twin outfall conduit from disposal plant on Jones Island to outer breakwater, rein.-con. on pile foundation. T. C. Hatton, c/o owner, engr.

Ia., Ossian — Apr. 10, for 18,000 ft. sewer, 50 manholes and 4 small disposal plants. C. Green, clk. H. R. Green, Co., Cedar Rapids Savings Bank Bldg., Cedar Rapids, engrs. Noted Nov. 22.

Ia., Waterloo—Apr. 16, for 12,808 lin.ft. 8-15 in. sewers and 27 manholes. R. B. Slippy, city engr.

Kan., Marysville — Apr. 23, sanitary sewers. B. F. Bowman, city engr.; adv. this issue.

S. D., Vermillon—Apr. 16, 7,296 ft. 6, 8, 10 and 15 in. sanitary sewer, 2,800 lin. ft. relief storm sewer, etc. $25,000. C. I. Vaughn, city aud.

Wyo., Laramie—Apr. 19, for 38,457 lin.ft. 8-27 in vitr. and 896 ft. 10-24 in. c.i. sewers, 87 standard and 5 drop manholes, 12 flush tanks, 10 special shallow manholes, etc., also sewage disposal plant. Black & Veatch, Mutual Bldg., Kansas City, Mo., engrs. Noted Nov. 2.

Utah, Ogden—Apr. 10, 14,618 ft. 8-12 in. concrete or vitr. clay sanitary sewers, Dist. 147. $43,000. W. S. Craven, city engr. Noted Feb. 22.

Ont., Hamilton—Apr. 18, by T. W. Gutten, chn. Bd. Control, 922 ft. of 54 in. brick sewer in tunnel in McNab and Main Sts. $35,000. E. R. Gray, city engr. Noted Mar. 1.

BIDS RECEIVED

O., Akron—W. F. Peters, dir. Pub. Serv., Mar. 26, for (1) 3,860 ft. brick or segmental block sewer in Brown St., engrs. est. $76,000, (2) 3,930 ft. brick sewer in Carpenter Heights, engrs. est. $108,000, from F. George, 47 Buchtel Ave., (1) $64,-048 (2) $99,199; J. J. Hunt & Co., 842 Kenyon St., (1) $71,195; Di Foti Constr. Co., 72 Furnace St., (1) $73,108; R. D. Salisbury, 160 Walnut Terrace, (2) $94,-303; Shullo Constr. Co., 932 2nd National Bldg., (2) $102,894. Noted Mar. 22.

Calif., Alhambra—For San Marino Outfall system, (1) Div. 1 (2) Divisions 2, 3, 4 and 5, A, B, C, D, E, F, G, H and J lines, from R. H. Downer, 2234 Macdonald Ave., Richmond, (1) $18,605 (2) $141,409, alternate $134,635; Hickey & Harmon, East San Diego, (1) $20,064 (2) $123,806 and $118,939; G. W. Kemper, Venice, (1) $20,-474 (2) $140,350 and $136,587; H. D. Churchill Co., 253 South Bway., Los Angeles, (2) $144,222 and $134,963.

CONTRACTS AWARDED

N. Y., Binghamton—For 18,000 ft. 27 in. sewer in Leroy St., to G. D'Angelo, Binghamton (street address not available) $46,500.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., storm water sewer in 25th St. from Riker to Ditmars Aves., etc., to Booth & Flinn, Ltd., Green and Tompkins Aves., Brooklyn, $528,002. Noted Mar. 15.

N. Y., Long Island City—See "Streets and Roads."

N. Y., Spring Valley—Sewers and sewage disposal plant, to B. Pizzimenti, Harrison, $219,018. Noted Feb. 15.

N. J., Newark—Passaic Valley Sewerage Comrs., 128 Market St., Union Outlet Sewer Connections, to H. L. Harrison, 31 Clinton St., $35,600. Noted Mar. 29.

Pa., Natrena—Harrison Twp., 5 mi. 24 in. terra cotta sewers, to S. Baumgardner, Orchard Ave., Bellevue (Pittsburgh P. O.) $59,700.

Pa., Washington—Sanitary sewers incl. 9,400 ft. 8-12 in. terra cotta, to M. H. Kumselman, Fayette St., $29,348.

Mich., Pleasant Ridge—O. C. Keil, village clk., 24,400 ft. 12-66 in. vitr. crock, concrete or segment block sewers, to G. Ponterilli, Wolverine Hotel, Detroit, $156,-446. Noted Mar. 29.

Wis., Milwaukee—East high level sewer, Sect. 1, from Mason St. and Bway, to Cambridge and Brady Sts., to Wenzel & Henoch Co., 498 27th St., $495,468. Noted Mar. 15.

Wis., Milwaukee—Metropolitan Sewerage Comn., 508 Market St., main sewer, Sect. 2, 9,060 ft. 36 in. concrete pipe in tunnel, to A. H. Prange, 101 Campeau Ave., Grand Rapids, Mich., $317,425. Noted Mar. 15.

Minn., Lake City — Sanitary Sewerage system, 59,303 lin.ft. 8-18 in. sewer pipe, manholes, flush tanks, etc., 6,600 lin.ft. 8-12 in. storm sewers, 11 manholes, 65 storm water inlets, etc., to Christensen & Axelsen, Clear Lake, Ia., $99,080. Noted Mar. 8.

Kan., Wichita — To Foster & Skaer, Wichita (street address not available) 1,970 lin.ft. 10 in. sewer pipe $0.99, 4,100 lin.ft. 8 in. 0.78, 2,300 lin.ft. 8 in. $0.85, 2,650 lin.ft. 8 in. $0.82, 38 manholes $55.50, 10 manholes $39, 12 manholes $55; to Municipal Excavator Co., 200 East Main St., Oklahoma City, Okla., 350 lin.ft. 18 in. $2.18, 200 lin.ft. 15 in. $1.78, 450 lin.ft. 12 in. $1.49, 2,600 lin.ft. 8 in. $0.75, 160 lin.ft. 18 in. $2.22, 3 manholes $65, 12 manholes $66, 7 combination manholes and catch basins $75; to H. L. Miles, 331½ East Douglas St., 350 lin.ft. 12 in. pipe $1.56, 3 manholes $45, 12 sanitary sewer connections $5; to F. C. Kensler, 1558 South Water St., 1,562 lin.ft. combined curb and gutter $0.84; to F. T. Newell, (street address not available) 2,198 sq.yd. excav. $0.57.

Utah, Ogden — For 18,019 ft. 8-24 in. concrete sanitary sewers, Dist. 149, and 21,429 ft. 8-15 in. concrete sewers, Dist. 148, to W. E. Roche, Ogden (street address not available), $74,236 and $68,663 respectively. Noted Mar. 29.

Calif., Santa Barbara—See "Streets and Roads."

Waste Disposal

PROPOSED WORK

Wis., West Allis — Soon takes bids 2 story garbage incinerator, brick and concrete, 20 ton furnace and digester, 44th Ave. and Burham St. $30,000. W. Darby, City Hall, engr. Noted Jan. 11.

BIDS DESIRED

O., Cleveland—Apr. 26, by J. F. Maline, dir. Pub. Serv., City Hall, 3 story garbage reduction plant, steel frame, 400 tons daily capacity, Canal Rd. $850,000. Noted Nov. 2.

Bridges

PROPOSED WORK

New Hampshire — See "Streets and Roads."

Mass., Russell—Plans steel and concrete bridge. $70,000. A. L. Quance, member Bd. Selectmen. Engineer not selected.

N. Y., Hammondsport—Apr. 12, to vote on $25,000 bonds for concrete highway bridges on Hammondsport-Branchport Rd.

N. Y., Niagara Falls—Niagara Falls Power Co. plans new concrete bridges over Hydraulic Canal, at Little 4th and 2nd Sts. To exceed $25,000. F. L. Lovelace, secy.

N. Y., Norwich — Voted $27,000 bonds rein.-con. bridge over Canasawacta Creek. L. H. Babcock, mayor. Noted Mar. 1.

N. Y., Utica—Common Council and New York Central R.R., Grand Central Terminal, New York City, plan viaduct over railroad tracks on Miller Rd. and Park Ave. or Mohawk St., here. To exceed $100,000. Address R. S. Cookinham, city engr.

N. J., Washingtons Crossing (Taylorsville, Pa., P. O.)—State Legislature, Trenton, appropriated $200,000 for bridge over Delaware River, here. State of Pennsylvania will appropriate $200,000 and Federal Government $400,000.

Pa., Athens—Bradford Co., Towanda, plans new bridge across Chemung River, here. $100,000-$125,000.

N. C., Graham—See "Streets and Roads."

Mich., Detroit—Crowley Milner Co., Gratiot Ave., having plans prepared steel bridge 20 ft. wide, 55 ft. span, connecting 2 buildings and extending from 3rd to 7th floors inclusive, across Library Ave. $25,000. Private plans.

Utah—State Road Dept., Salt Lake City, soon takes bids ½ mi. steel and concrete overhead crossing over Union Pacific R.R. tracks, on Price-Castlegate Rd., Weber Co. $200,000. H. C. Means, state road engr.

Wash., Vancouver—Clarke Co. plans steel bridge, one 140 ft. and one 70 ft. span, over Washougal Creek. $25,000. W. A. Swartz, Vancouver, engr.

Calif., Dumbarton (Centerville P. O.)—Harrington, Howard & Ash, Orear-Leslie Bldg., Kansas City, Mo., plan 5,600 ft. bridge, 28 ft. wide, 2 mi. approach, over San Francisco Bay, here. $2,000,000.

Calif., Pasadena—To vote on $100,000 bonds to replace Linda Vista Bridge.

Ont., Oakville — Plans highway bridge over Sixteen Mile Creek, 300-400 ft. long, 20 ft. wide, concrete piers and abutments, steel trestle. $90,000. P. Bath, town clk.

Ont., Toronto—York Twp., 40 Jarvis St., having plans prepared 200 ft. concrete cantilever bridge over Rosedale Ravine on Astley Ave. $135,000. F. G. Engholm, 16 Gloucester St., engr. Noted Dec. 28.

BIDS DESIRED

Massachusetts—Apr. 10, by F. B. Freeman, ch. engr., Boston & Albany R.R., South Sta., Boston, fabrication and delivery of structural steelwork, 226,000 lb. more or less, Bridge 70.68, 1.08 mi. west West Brookfield; 38,000 lb. more or less, Bridge 142.76, Main St., Hinsdale; 38,000 lb. more or less, Bridge 144.18, East Main St., Dalton.

Illinois—See "Streets and Roads."

Ill., Chicago — Apr. 16, by South Park Comrs., 57th St. and Cottage Grove Ave., for South Park Blvd. viaduct. J. F. Neil, secy. Condron Co., consult. engrs.; adv. this issue.

Wis., Appleton — Apr. 18, by E. L. Williams, city clk., 2 rein.-con. and steel bridges across Fox River at Lawe and Cherry Sts. Harrington, Howard & Ash, Orear-Leslie Bldg., Kansas City, Mo., engrs. Noted Mar. 1.

Wis., Eau Claire — See "Streets and Roads."

Wis., Monroe—See "Streets and Roads."

Minn., Crookston — See "Streets and Roads."

Kan., St. Francis — See "Streets and Roads."

Kan., Seneca—See "Streets and Roads."

Okla., Pauls Valley—Apr. 9, by J. S. Bottons, city clk., 3 rein.-con. beam bridges, concrete foundations, to replace present wooden bridges. $25,000. T. B. Mathews, Durant, engr. Noted Dec. 28.

Wash., Chehalis — Apr. 17, by Comrs. Lewis Co., 220 ft. steel bridge, concrete piers, at Claquato. R. L. Greene, Chehalis, engr. Noted Mar. 1.

Wash., Olympia — See "Streets and Roads."

Bridges (Continued)

Calif., Sacramento—Apr. 20, by H. W. Hall, clk. Sacramento Co., structural steel and machinery for Paintersville Bridge, 700 ft. long, and Steamboat Slough Bridge, 280 ft. long. C. W. Deterding, co. engr. Noted Mar. 22.

Ont., Walkerton—Bruce Co. taking bids 118 ft. steel truss highway bridge, 18 ft. roadway, on Concession B, Greenock Twp. $35,000. G. E. Stevenson, Box 201, engr.

CONTRACTS AWARDED

Pa., Media—Delaware Co., Plush Mill Bridge 107. (a) lump sum bids, (b) quantity tabulation, from Seeds & Durham, 6314 Wissahicken Ave., Phila., (a) $197,-475, (b) $203,380; T. Sheahan, P. O. Box 508, Hagerstown, Md., (a) $224,418, (b) $233,070; H. Denburger Contg. Co., Bethlehem, (a) $240,000, (b) $246,040. Contract awarded to lowest bidder.

O., Akron—W. F. Peters, dir. Pub. Serv., 30 x 200 ft. concrete trestle and 40 x 98 ft. steel encased concrete bridge, West Market St., to T. E. McShaffrey Constr. Co., 171 South Forge St., $38,320. Engrs. est. $35,000. Noted Mar. 22.

Wis., Eau Claire—State Hy. Comn., Madison St. Bridge over Chippewa River, to Stein Constr. Co., 204 Grand Ave., Milwaukee, additional concrete in substructure at same depth $20, at greater depth $40, less concrete in substructure than shown $4, etc., total $201,640. Noted March 8.

Wis., Watertown—Jefferson Co. (Jefferson), Tourist Park bridge, near here, to Hoffman Constr. Co., 1087 Oneida St., Appleton, 1,102 cu.yd. Class A concrete $24.50, etc., total $28,963.

Ia., Ft. Madison—Lee Co. will build 2 box culverts, 2 I-beams and 2 pony trusses by day labor. M. F. McFarland, Ft. Madison, engr.

Utah—State Rd. Comn., Salt Lake City, 75 ft. steel bridge, 18 ft., over Coal Creek, Federal Aid Project 48, Iron Co., to Kraft & Bundy, Ogden, (street address not available), $26,590. Noted Mar. 8.

Ont., Brantford—C. S. Moyer, ch. Pub. Wks., c/o City Clerk, 3 span rein.-con. bridge, 500 ft. long, 64 ft. wide, to Port Arthur Constr. Co., Excelsior Life Bldg., Toronto, $260,300. City supplies 16,000 bbl. cement, paves bridge, constructs railings, etc., $74,345. Noted Mar. 8.

Dams

PROPOSED WORK

N. Y., Watertown—See "Miscellaneous."

Tex., San Saba—See "Excavation, Drainage, Irrigation."

Ore., Milton—K. C. Harlan, Walla Walla, Wash. (street address not available), plans dam on Walla Walla River near here, to develop 4,000 hp. for light and power, also to irrigate 10,000 acres.

BIDS DESIRED

New York—See "Miscellaneous."

Ind., Ft. Wayne—Apr. 9, by Bd. Pub. Wks., movable dam and appurtenances across Maumee River. J. B. Kocks, member of Bd.; adv. this issue. Noted Dec. 28.

Ont., Lansing—See "Waterworks."

Railways

PROPOSED WORK

New York—Erie R.R. Co., 50 Church St., New York, plans improvements here, incl. relaying and ballasting new tracks, switches and regrading. $100,000. J. J. Mantell, vice pres. in charge New York Div.

New York—New York State Railways plan extending trolley tracks from James to St. Vincent Sts.; relaying tracks on Bleecker and Genesee Sts.; trolley track loop at Yahnundasis Club entrance, here. $150,000. B. E. Tilton, vice pres. and genl. mgr.

North Carolina—Murphy & Peachtree Ry., (recently incorporated), Murphy, plans 6 mi. railroad to connect Murphy with Carolina and Georgia R.R. at Peachtree. $200,000. B. W. Snipe, Murphy, dir.

North Carolina — Atlantic Coast Line R.R., Atlantic Coast Line Bldg., Wilmington, plans station facilities, shops, rails, yards, completion of double track from Richmond, Va., to Jacksonville, Fla., 95 locomotives, 100 passenger cars, 5,331 freight cars, 2,000 of which will be built at Rocky Mount, large coach and repair shop at Rocky Mount and shops at Wilmington will be enlarged. $26,000,000. J. E. Willoughby, ch. engr.

Florida—City of South Jacksonville, (Jacksonville P. O.), election Apr. 10, to vote on $100,000 bonds for street railway. S. Cates, city clk.

Washington — Hammond Lumber Co., Gasco Bldg., Portland, Ore., plans 6 mi. railroad from Kelso to Sawmill on Coweman River. $150,000. G. B. McCloud, Gasco Bldg., Portland Ore., ch. engr.

California — See "Miscellaneous, under San Diego."

Ontario—Hydro Electric Power Comn., Hydro Bldg., University Ave., Toronto, plans to expend $760,000 improving electric street railway system in Windsor, incl. new trackwork, repairs, switches, ties, etc. F. A. Gaby, ch. engr.

Quebec — Montreal Tramways Co., 78 Craig St. W., plans to lay 82,450 ft. track in Notre Dame St. from Fulford to Atwater Aves., Notre Dame St., from Atwater Ave. to city limits, Notre Dame St. from Frontenac to Bourbonniere Sts., Defleurimont St. from St. Denis to DeNormanville Sts., St. Dominique St. from Bellechasse to Isabeau Sts. $2,000,000. R. B. Graves, ch. engr.

CONTRACTS AWARDED

California—Southern Pacific Co., 65 Market St., San Francisco, 6.7 mi. double track railroad in Nevada Co. in vicinity of Truckee, 100,000 cu.yd. excav. to Erickson & Peterson, Monadnock Bldg., San Francisco; double tracking 5 mi. railroad in Nevada Co. in vicinity of Truckee, 70,000 cu.yd. excav., to Utah Constr. Co., Phelan Bldg., San Francisco. Noted Mar. 29.

Excavation, Drainage, Irrigation

PROPOSED WORK

Mo., Labaddie—Labaddie Bottoms D.D. having preliminary surveys made and takes bids about July 1, control of Missouri River to provide protection for approximately 35,000 acres land, near here. C. E. Jacobi, 527 Shukert Bldg., Kansas City, engr.

Mo., St. Charles — Dradenne-Peruque Drainage & Levee Dist., had plans prepared levee protection and drainage system for 30,000 acres, incl. diversion channel, drainage ditches, levees and 1 story, 40 x 60 ft. brick and concrete pumping station. Work involves 3,020,500 cu.yd. dry earth excav. and 900,000 cu.yd. rein.-con. for levee work. $621,233. T. N. Jacob, 1900 Ry. Exch. Bldg., St. Louis, engr.

Illinois—See "Miscellaneous."

Mo., Memphis — Little Fox River D.D. having plans prepared 200,000 yd. open ditch excav. $40,000. C. J. Wiegner, Memphis, engr.

Mo., Memphis—South Davies Co., D.D., having plans prepared and takes bids May 15 to June 1, for 2,500,000 yd. excav. $360,-000. C. J. Wiegner, Memphis, engr.

Tex., San Saba—San Saba Co. plans election to create irrigation district to embrace 40,000 acres in San Saba River Valley. Tentative plans include dam 16 mi. west of here, 100 ft. high, 300 ft. long, and 140,000 acre feet storage reservoir. $2,000,000.

Wis., New London—City Council appropriated $75,000 to construct canal and drainage system to join Wolf and Embarrass Rivers. C. J. Thompson, clk. Engineer not selected.

Calif., Long Beach — Plans to dredge harbor. To exceed $50,000. C. H. Windham, city mgr.

Ont., Barrie—Simcoe Co. and Provincial Dept. Pub. Wks., Parliament Bldgs., Toronto, had report prepared for draining lowlands along Nottawasoga River, earth ditching and excav. $860,000. G. M. McCubbin, 135 King St., Chatham, engr. Noted Dec. 28.

BIDS DESIRED

N. Y., New York—Apr. 17, by Commissioner Docks, Pier "A," North River, dredging between West 97th and West 99th Sts.

Ia., Algona—Apr. 12, by Auditor Kossuth Co., Drainage Dist. 160, 44,475 lin.ft. 6-30 in. tile, 1 rein.-con., headwall, 25 intakes, etc. $25,000.

Ia., Audubon—Apr. 23, by Auditor Audubon Co., East Nishnabotna River D. D. 4, 12 mi. main ditch and 6 laterals 5 mi., 945,680 cu.yd. excav. $125,000-$150,000. A. J. Van Sise, Atlantic, engr. Noted Feb. 1.

Okla., Pauls Valley—Apr. 9, by J. S. Bottons, city clk., straightening Rush Creek through city limits, 53,400 cu.yd. earth excav., etc. $25,000. T. B. Mathews, Durant, engr.

Calif., Oroville—Apr. 16, by J. A. Wisner, secy. Oroville-Wyandotte Irrigation Dist., 3,720 ft. continuous red wood stave pipe, trench and ditch, incl. 2,600 cu.yd. earth, 2,600 cu.yd. loose or soft rock and 2,600 cu.yd. solid rock excav. S. J. Norris, ch. engr.

BIDS RECEIVED

N. Y., Buffalo—Dredging Buffalo Inner Harbor to completed contract depth for maintenance of channel, from Empire Eng. Co., Inc., North Tonawanda, $0.345 per cu.yd. scow measure; Great Lakes Dredge & Dock Co., D. S. Morgan Bldg., $0.38; Dunbar Sullivan Dredging Co., 505 Iroquois Bldg., $0.40. Noted Mar. 15.

N. Y., New York—See "Miscellaneous."

CONTRACTS AWARDED

N. J., Mays Landing—Commerce & Navigation Dept., State House, Trenton, dredging 57,142 sq.yd. main channel, Absecon Inlet, here, to Hill Dredging Co., Atlantic and Somerset Sts., Atlantic City, $0.35 per sq.yd.

Wis., Janesville — See "Miscellaneous" under foundation.

Ia., Newton—Jasper Co., Drainage Ditch 11, Sect. 1, 32,400 lin.ft. main ditch, 324,340 cu.yd. excav., Sect. 2, 16,100 lin.ft. main ditch, 239,340 cu.yd. excav., Sect. 3, 3,258 lin.ft. Indian Creek cutoff, 25,000 cu.yd. excav., to Storm Lake Constr. Co., Storm Lake, $100,000. Noted Mar. 1.

Mo., Clayton—St. Louis Co. River Impvt. Assn., c/o B. Hoekstra, member Bd. Supervs., standard river retards in Missouri River between Franklin Co. line and St. Charles, to divert current to north bank, provides protection for 12,000 acres, to Wood Bros. Constr. Co., Lincoln, Neb. (street address not available), $142,500. Engrs. est. $150,000. Noted Nov. 9.

Tex., Houston—See "Industrial Works."

Calif., Yuba City—See "Miscellaneous."

Streets and Roads

PROPOSED WORK

New Hampshire—State Hy. Comn., Concord, appropriated $1,033,500 for road work, incl. $28,588 for Pinkham Notch Rd. and $30,000 for bridges on same; also $1,-466,500 for road maintenance. F. E. Everett, state highway engr.

N. Y., Binghamton—Preparing plans 12,-000 sq.yd. paving and 5,500 lin.ft. curbing on State St. W. E. Weller, city engr. Noted Jan. 11.

N. Y., Canandaigua—Ontario Co. plans to appropriate $330,000 for highways during 1923. Engineer not announced.

N. Y., East Aurora—Plans paving Fillmore Ave. $30,000. E. Hubbard, 2nd. village pres.

N. Y., Jamestown — Plans paving 20 streets, 21,700 ft. brick on concrete. To exceed $25,000. L. O. Bergman, city engr.

N. Y., Jamestown—Plans concrete curbing, guttering and paving West 3rd St. extension, also sewer in Lakeview Ave. extension. $25,000. L. O. Bergman, city engr.

N. Y., Lockport—Bd. Pub. Wks. plans paving 2 mi. road between South Transit St. and city line. $30,000.

N. Y., Lockport—Niagara Co. plans paving 2 mi. South Transit Rd., 16 ft., concrete or like material. $30,000. T. Brennan, Lockport, engr.

N. Y., Olean—Plans paving Monroe Terrace, Virginia and Carolina Sts., brick or similar material. $25,000. S. W. Ostrom, comr. Pub. Wks.

N. Y., Perry—Voted $50,000 bonds new pavements and macadam highways. M. H. Wright, village pres. Noted Mar. 15.

N. Y., Rochester—Bd. Pub. Wks., plans willite asphalt paving Ernst St. $17,250; asphalt paving Renwood, Sobieski and St. Stanislaus Sts., $48,100; grading, laying sidewalks and sewers in Northland Ave. and other streets, $133,000. C. A. Poole, city engr.

N. Y., Syracuse—Had plans prepared grading Lombard, Turtle, Spencer, Pulawski and North Geddes Sts. $101,100. T. H. Mather, city engr.

N. Y., Utica—Plans paving Richardson Pl., Proctor Blvd. and Higby Rd. To exceed $25,000. R. S. Cookinham, city engr.

N. J., Roselle Park (Elizabeth P. O.)—Soon takes bids curbing, laying sidewalks and paving Walnut St., Clay and Sheridan Aves., rein.-con. $75,000. J. Wallace Higgins, 52 Vanderbilt Ave., New York City, engr.

N. J., Trenton — Plans widening North Montgomery St. from Federal Bldg. to East Hanover St. $42,000. A. Swan, City Hall, engr.

Pa., Lebanon—Plans paving 40,000 sq. yd. on 9 streets. W. S. Davis, city engr.

Pa., Oil City—Plans grading, curbing and paving with brick on concrete, Grandview Ave. and Innis St., $50,000, curbing and paving with brick and concrete Carroll and Cedar Aves., Wayne, Smithman and Merritt Sts., $25,000. M. Weber, city engr.

Pa., Sharon—Plans 6,260 ft. asphalt and brick pavements. L. E. Burnside, city engr.

Pa., Sharon—Plans 3,160 ft. brick, asphalt, or bitulithic on Highland and

Streets and Roads (Continued)

Stambaugh Aves. $55,000. L. E. Burnside, city engr.

N. C., Graham—Alamance Co. plans road and bridge construction. $50,000. J. T. Love, Burlington, co. comr.

N. C., Leaksville—Plans grading, granite curbing, concrete guttering and paving various streets with some asphaltic type on concrete. $190,000. Webb & Cole, Salisburg, engrs.

N. C., Lincolnton—Lincoln Co. plans hard surfacing 6 mi. road from Macpelah to Lowesville $180,000; road from Macpelah to Denver $170,000. R. C. Goode, ch. Bd. Comrs.

N. C., Raleigh — North Carolina State College of Agriculture and Engineering plans curbing, guttering, laying concrete sidewalks, driveways, etc., on campus. $30,000. W. C. Riddick, pres.

Fla., Clearwater—Pinellas Co. election May 2, to vote on $3,275,000 bonds for county roads. C. E. Burleson, Clearwater, engr.

Tenn., Manchester—Coffee Co. Comn. takes bids about Apr. 23, macadam surface on hand placed limestone 7 mi. Manchester Beech Grove Rd. N. H. Meriwether, Tullahoma, ch. engr.

Ohio—Dept. Highways and Pub. Wks., Columbus, cancelled bids which were to be opened Mar. 30, grading, bridging and paving 18.7016 mi. roads in Darke, Erie, Gallia, Miami, Putnam, Richland, Warren and Delaware Counties. Noted Mar. 22.

O., Canton—Stark Co. plans grading and paving 2.5 mi. Swamp Rd., 16 ft., asphalt macadam or rein.-con., $100,000; 1.15 mi. Oberlin Rd., 16 ft., vitr. brick, vertical fibre brick, concrete or bituminous concrete, $45,000. G. L. Sickafoose, co. surv.

O., Columbus — Making plans grading, curbing, laying necessary water services and sewer connections and paving Binns Blvd., Crescent Dr., Wyandotte Ave., 5th and 8th Sts., alley west of 4th St., alley west of Waldeck Ave., alley north of Norwich Ave., alley west of Taylor Ave., alley north of 10th Ave., alley north of Clark St., and alley north of McMillen Ave., brick, concrete or asphalt. R. H. Simpson, city engr.

Michigan — State Hy. Dept., Lansing, soon takes bids grading and surfacing 17 mi. roads in Mason, Oakland, Ingham, Eaton, Ottawa and Muskegon Counties, concrete; 5½ mi. road in Macomb Co., asphalt, concrete or bituminous concrete; 10 mi. road in Antrim and Charlevoix Counties, gravel. F. F. Rogers, state comr.

Ia., Carroll—Carroll Co. making plans paving 17 blocks Lincoln Highway, Primary Rd Project 18. $36,000. J. F. Maher, Carroll, co. engr.

Kan., Wichita—Plans curbing, guttering and paving approximately 44 blocks, asphaltic concrete on 5 in. base, concrete, vertical brick and sheet asphalt. P. L. Brockway, city engr.

Neb., Norfolk—Plans paving 26 blocks, Dist. 16, various types. H. H. Tracy, Norfolk, engr.

Neb., Schuyler—Having plans prepared paving various streets. $100,000-$125,000. Prince-Nixon Eng. Co., 501 Peters Trust Bldg., Omaha, engrs.

S. D., Rapid City—Making plans paving 12 blocks. $45,000. J. P. Egan, city aud.

N. D., Williston — Williams Co. plans grading and improving roads. $30,000. A. F. Young, co. surv.

Mont., Helena — Plans grading, paving and storm sewers in 2,960 ft. Madison and Powers Sts., 31 ft., bituminous concrete or bituminous macadam, $36,500; 4,500 ft. 6th Ave., 36 ft., concrete, bituminous concrete or bituminous macadam, also 1,588 lin.ft. 10-12 in. sewers, $75,000; resurfacing present brick pavement on 3,750 ft. Main St., 40 ft., bituminous concrete, $48,000. T. Carmichael, city engr.

Mo., Marshall—Soon takes bids for 20,000 sq.yd. asphaltic macadam pavements. C. T. Hough, Marshall, engr.

Mo., St. Louis—Plans widening 12th St. from 60 to 90 ft. $1,240,000 exclusive of paving. City's share $350,000.

Ark., Fayetteville—Making plans paving College Ave., asphaltic concrete or concrete or stone. $50,000. Radcliff & Bird, Fayetteville, engrs.

Ark., Sprindale—Takes bids about Apr. 14, paving various streets, concrete or asphaltic macadam. $30,000. Radliff & Bird, Fayetteville, engrs.

Tex., Brenham—Attorney Generals Dept., Austin, approved $700,000 bond issue highway improvements in Washington Co. G. A. Bracher, co. engr.

Tex., Bryan—Apr. 10, to vote on $50,000 bond issue improving streets. E. E. McAdams, engr. and city mgr.

Tex., Canton — Van Zandt Co. making plans grading and gravel surfacing 9.25 mi. Dixie Highway, Grand Saline, 16 ft. $50,500. E. W. Gaines, co. engr.

Tex., Galveston — May 8, to vote on $1,250,000 bond issue grading, paving, etc. from Ave. J south and west of 40th St. to city limits. C. A. Holt, Jr., city engr.

Tex., Kountze—Hardin Co. making plans and soon takes bids grading and shell surfacing 15.66 mi. Beaumont-Mountze-Valley Mills Highway, 16 ft. $185,000. G. C. Brown, co. engr.

Tex., Sinton—San Patricio Co. making plans grading and shell surfacing 8.6 mi. Arkansas Pass-Gregory Highway, 16 ft. $72,500. F. M. Percival, Rockport, co. engr.

Okla., Garber—Soon takes bids paving Main St., various types. $80,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs. Noted Mar. 22.

Okla., Sapulpa—Creek Co. voted $300,000 bonds hardsurfacing 21 mi. Albert Pike Highway.

Colorado—State Hy. Dept., Denver, rejected bids paving 1.957 mi. road, State Project 791, Araphoe Co., cement concrete or Topeka specification bituminous. $71,160. Will probably readvertise soon. L. D. Blauvelt, State Office Bldg., Denver, engr. Noted Mar. 15.

Utah—State Rd. Dept., Salt Lake City, soon takes bids hard surfacing 0.8 mi. road near Ogden, Carbon Co., $30,000;

SIPHON—BROOKLYN, N. Y.

Bids were opened by Bd. Water Supply, Municipal Bldg., New York City, March 20, for constructing Narrows Siphon No. 2 of Catskill Aqueduct, New York Harbor, from (A) Merritt, Chapman & Scott Corp., 17 Battery Pl., New York City (awarded contract); (B) F. Snare Corp., 8 West 40th St., New York City. The unit bids were as follows:

	A	B
4,650 ton furnishing submarine pipe	$130.00	$156.60
290 ton furnishing straight hub and spigot cast-iron pipe	78.00	79.00
40 ton furnishing cast-iron hub and spigot pipe specials	240.00	160.00
48 x 24 in. and 42 x 24 in. Venturi meters (lump sum)	10,800.00	14,000.00
425,000 cu.yd. submarine excavation	.535	.48
8,800 lin.ft. laying submarine pipe line	39.79	44.00
180,000 cu.yd. refilling over submarine pipe line with sand or sand and gravel from harbor bottom	.48	.54
25,000 cu.yd. refilling over submarine pipe line with sand and gravel not from harbor bottom	.70	1.20
12,000 cu.yd. refilling over submarine pipe line withbroken stone	2.94	3.00
5,000 cu.yd. earth excavation and refilling on land	4.44	5.50
300 cu.yd. rock excavation on land	25.00	11.00
1,050 lin.ft. laying hub and spigot cast-iron pipe and special pipe castings	4.50	6.00
120,000 lb. miscellaneous cast iron, wrought iron and steel	.10	.14
35,000 lb. caring for and setting metal-work furnished by the city	.04	.03
80 man-day preliminary tests on flexible pipe joints (skilled labor)	20.00	20.00
200 man-day preliminary tests on flexible pipe joints (unskilled labor)	6.00	15.00
30 day preliminary tests on flexible pipe joints (plants and materials)	75.00	200.00
1,500 bbl. portland cement	3.60	3.20
450 cu.yd. reinforced-concrete masonry trough	14.40	20.00
500 cu.yd. brick and concrete masonry not included in Item 19	20.00	18.00
150 cu.yd. stone masonry of Brooklyn sea wall	42.00	20.00
500 cu.yd. stone foundation of Brooklyn sea wall	5.00	10.00
50 lin.ft. vitrified pipe	6.00	5.00
20 cu.yd. crushed stone and gravel for drains and ballast	7.20	5.00
250 sq.yd. street pavement, sidewalks and crosswalks	7.20	6.00
4,600 lin.ft. piles for foundations	1.60	1.10
70 M ft. b.m. timber and lumber	150.00	125.00
850,000 lb. steel sheet piling	.065	.055
Extended totals	$1,523,136	$1,684,660

CONDUITS—BROOKLYN, N. Y.

Bids were opened by Bd. Water Supply, Municipal Bldg., New York City, March 20, for constructing Park Slope and Fort Hamilton Conduits of Catskill Aqueduct, (A) T. A. Gillespie Co., 7 Dey St., New York City (awarded contract); (B) P. McGovern, Inc., 50 East 42nd St., New York City; (C) A. Paino, 32 Court St., Brooklyn; (D) P. F. Connolly, 2029 East 102nd St., Cleveland, O. The unit bids were as follows:

	A	B	C	D
150,000 cu.yd. earth excavation and refilling not included in Item 2	$4.18	$4.25	$2.30	$4.40
5,100 cu.yd. earth excavation and refilling at railroad and sewer crossings	8.91	8.00	2.00	20.00
7,500 cu.yd. rock excavation	2.75	6.75	2.00	4.40
110 M. ft. b.m. timber and lumber ordered left in place	45.00	90.00	60.00	100.00
5,980 lin.ft. 72-in. steel pipe, ½-in. plate, lap joints	32.33	36.20	46.00	34.55
33,310 lin.ft. 72-in. steel pipe, 7/16-in. plate, lap joints	32.33	31.20	43.00	32.25
2,140 lin.ft. 66-in. steel pipe, ½-in. plate, lap joints	32.33	30.70	38.00	31.80
140 ton cast-iron pipe, straight hub-and-spigot	101.60	82.50	185.00	75.00
110 ton cast-iron hub and spigot specials	188.00	168.00	200.00	145.00
60 ton cast-iron flanged pipe and specials	228.00	177.00	200.00	215.00
85 ton cast-iron valve-boxes, manhole heads and covers	120.00	150.00	100.00	120.00
34,000 lb. steel castings	.25	.25	22	.20
550,000 lb. caring for and setting metal work furnished by the city	.02	.02	.02	.015
1 meter, 72 x 36 in. Venturi meter	25,533.00	5 500.00	21 500.00	7,250.00
90,000 lb. structural and reinforcing steel	.07	.07	.04	.08
110,000 lb. miscellaneous cast iron, wrought iron and steel	.10	.15	.10	.12
9,000 bbl. Portland cement	2.60	2.75	3.00	3.00
1,300 cu.yd. concrete masonry at railroad and sewer crossings	11.50	11.15	7.50	13.00
100 cu.yd. concrete masonry as cradles for sewers and drains	10.00	10.90	7.50	10.00
4,700 cu. yd. concrete masonry under pavements and curbs	7.00	7.15	5.00	8.00
1,250 cu.yd. brick and concrete masonry	17.00	28.00	10.00	20.00
8,000 sq.ft. mortar lining of steel pipes	.35	.25	.40	[illegible]
450 changing water services, 2-in. and smaller	9.00	30.00	5.00	10.00
1 20-in. wet connection to 30-in. cast-iron pipe	1,075.00	1,600.00	2,700.00	3,000.00
1 20-in. pressure-regulating valve	1,100.00	1,400.00	3,500.00	2,000.00
70 cu.yd. crushed stone and gravel for drains and ballast	3.75	4.50	5.00	5.00
6,500 lin. ft. vitrified pipe, 3 to 8 in. in diameter	.55	.70	.75	.80
3,500 lin.ft. vitrified pipe, 9 to 18 in. in diameter	1.30	1.50	3.00	1.50
26,000 sq.yd. asphalt pavement	1.85	2.50	1.50	1.80
200 sq.yd. wood block pavement	4.41	5.00	3.00	5.00
2,300 sq.yd. granite block pavement	1.52	4.00	2.00	3.00
2,700 sq.yd. telford macadam pavement	1.25	2.00	2.00	2.00
3,000 sq.yd. flag sidewalks and cross walks	2.50	1.50	.50	2.50
1,500 sq.yd. cement concrete sidewalks	2.25	2.00	2.00	2.25
1,300 lin.ft. curb	2.00	1.00	1.50	1.50
Extended totals	$2,338,805	$2,388,426	$2,445,435	$2,450,434

Streets and Roads (Continued)

concrete or bitulithic paving 1.5 mi. richfield-Elsimore Rd., Senier Co., $47,000, 1.5 mi. road near Salina City, Senier Co., $48,000; grading and gravel surfacing 11.2 mi. Castle Dale-Ferron Rd., Emory Co., $34,000, 7.1 mi. Moroni-Fountain Green Rd., Sanpete Co., $25,000; concrete or some hard surface 1 mi. road in city of Moroni, Sanpete Co., $35,000, 1 mi. in city of Fountain Green, Sanpete Co., $35,000; gravel surfacing 7.5 mi. Woodruff-Wyoming line Rd., Rich Co., $25,000. H. C. Means, state road engr.

Ariz., Phoenix—Plans 10,000 yd. paving, incl. 1 industrial street, 3rd, 4th and 5th Aves., Madison and Jackson Sts., warrenite, bitulithic, asphaltic concrete or concrete. $45,000. H. Read, city engr.

Ariz., Phoenix—Takes bids about Apr. 24, paving 20,000 yd. in Story tract, 7th and 9th Aves., Portland, Latham, Moreland, Culver and Willetta Sts. $65,000. Alternate bids on various types. H. Read, city engr.

Calif., Hanford—Had plans prepared grading, curbing, guttering and paving portion Center St., 23,090 sq.ft. 1½ in. warrenite on 4-in. asphaltic concrete, 26,600 sq.ft. grading, etc. B. Duffield, city engr.

Calif., Hayward — Had plans prepared concrete curbing, guttering and paving portions B St., 110,000 sq.ft. 3½ in. asphaltic concrete with 2 in. surface, etc. J. B. Holly, 505 17th St., Oakland, engr.

Calif., Los Angeles — Los Angeles Co. soon takes bids shaping roadbed, guttering and paving Los Angeles St., 12,444 sq.yd., willite, etc. To exceed $25,000.

Calif., Madera — Had plans prepared grading, curbing, guttering and paving West Yosemite Ave., 114,644 sq.ft. grading, 107,899 sq.ft. 1½ in. bitulithic on 2½ in. bituminous, etc., 6th and B Sts., 107,136 sq.ft. grading, 99,391 sq.ft. 1½ in. bitulithic on 2½ in. bituminous, etc. A. M. Acton, city engr.

Calif., Napa—Napa Co. had surveys made rebuilding 8 mi. Winters Rd. E. P. Ball, co. highway engr.

Calif., Oakland — Had plans prepared grading, curbing, guttering and paving 96th Ave., 116,950 sq.ft. oil macadam, 227,350 sq.ft. grading, 42,898 sq.ft. cement walks, etc. W. W. Harmon, city engr.

Calif., Oakland — Plans repaving East 14th St. $365,000. City to pay $100,000, Alameda Co. $150,000, and property owners abutting, balance. W. W. Harmon, city engr.

Calif., Palo Alto—Had plans prepared curbing, laying sidewalks and paving Churchill, Sequoia and Madrona Aves., etc., 250,000 sq.ft. 5-in. concrete, etc. J. F. Byxbee, Jr., city engr.

Calif., Sacramento — Soon takes bids grading, concrete curbing, guttering and paving 18th, 14th, 12th and 19th Sts., 735,441 sq.ft. 2 in. asphaltic concrete; 36th St. between Y and 5th Sts., 32nd St., 203,629 sq.ft. 5½ in. asphaltic concrete; 7th St., 42,708 sq.ft. 4 in. asphaltic concrete; Santa Ynez, 36th and H Sts., 2,250 sq.ft. 5½ in. and 48,078 sq.ft. 4 in. pavement, 16,850 sq.ft. walks; Gerber Ave., 800 sq.ft. 5½ in. and 23,520 sq.ft. 4 in. asphaltic concrete; alley between N. O. 23rd and 24th Sts., 19,200 sq.ft. 5 in. hydraulic concrete. A. Givan, city engr.

Calif., San Bruno — Having plans prepared grading, curbing, laying sewers and paving with asphaltic oil and screenings on waterbound macadam, Tucker, Linden, Acacia and Cypress Sts., etc. To exceed $25,000. G. A. Kneese, Courthouse, Redwood City, engr.

Calif., San Diego—See "Miscellaneous."

Calif., San Diego—Voted $100,000 bonds for street paving. F. A. Rhodes, city engr.

Calif., San Diego—Had plans prepared curbing and paving E St., 146,186 sq.ft. 1½ in. warrenite bitulithic on 2½ in. bituminous; grading, curbing, laying sidewalks and paving Elm St., 86,342 sq.ft. 1½ in. asphaltic concrete on 3 in. bituminous, Maryland St., 104,866 sq.ft. 1½ in. asphaltic concrete on 3 in. bituminous, etc. F. A. Rhodes, city engr.

Calif., Santa Rosa—Had plans prepared grading, curbing, guttering and paving Wilson St., 49,463 sq.ft. 1½ in. warrenite on 2½ in. bituminous concrete, A St., 43,708 sq.ft. 3 in. warrenite bitulithic, Davis St., 43,138 sq.ft. 3 in. warrenite bitulithic; grading and paving Cherry St., 44,327 sq.ft. 3 in. warrenite bitulithic. L. L. Mills, city engr.

Calif., Stockton—Had plans prepared grading, laying sidewalks and paving streets in City Park Terrace, 163,408 sq.ft. 2-in. asphaltic concrete on 3-in. crushed rock, etc. To exceed $50,000. W. B. Hogan, city engr.

Calif., Sunnyvale—Having plans prepared paving various streets, probably 1½-in. warrenite on asphaltic concrete, 260 ft. pavement 40 ft. wide, 260 ft. 18 ft. wide and 1,400 ft. 18 ft. wide. H. Fisher, Growers Bank Bldg., San Jose, engr.

Ont., Chatham—Plans 15,000 sq.yd. asphalt or concrete on Elizabeth, William, Water, Colborne, St. Claire and Barthe Sts., mostly 24 ft. $60,000. C. H. Fuller, city engr.

Ont., Elora—Making plans 1½ mi. concrete pavements, mostly 24 ft. $50,000. H. Clarke, city clk.

Ont., Hamilton—Wentworth Co. plans to expend $75,000 improving and repairing old roads and building new roads, mostly gravel and macadam. J. Vance, co. clk.

Ont., Hamilton — Plans to widen King William St. at James St., asphalt pavements, concrete sidewalks, $80,500. E. R. Gray, city engr.

Ont., Port Dalhousie—Lincoln Co. (St. Catherines) plans to pave ½ mi. Main St., here, 10,000 sq.yd. concrete. $32,000. J. Clench, co. clk.

Ont., Port Dover—Having plans prepared new macadam roads. $30,000. G. Marston, Simcoe, engr.

Ont., Toronto—Plans 24,300 sq.yd. asphalt pavements on Rose Park Dr., Wolverleigh, Avonlea and Milverton Blvds., Pullen, Westlake, Woodington, Ladykirk and Cannon Aves., 3,000 ft. concrete sidewalks on Hendrick and Bingham Aves., concrete curb on Pullen and Canon Aves., $119,257. R. C. Harris, city engr.

BIDS DESIRED

Vt., Bennington—Apr. 18, by President and Trustees of Bennington at office of Village Clerk, concrete paving, vitr. clay or concrete storm sewers, etc. H. E. Breed, 507 5th Ave., New York City, engr.; adv. this issue.

N. Y., Brooklyn—Apr. 11, by E. Riegelmann, boro pres., Boro Hall, asphalt paving Carroll, East 7th, East 17th, East 34th and East 55th Sts., Ave. I from East 26th St. to Nostrand Ave., Ave. I from Flatbush Ave. to Nostrand Ave., etc.; grading, curbing and flagging Ave. I from Flatbush to Nostrand Aves., laying sidewalks where not already laid on Flatbush Ave. west side; curbing and laying cement sidewalks on West 25th St.; cement sidewalks on West 32nd and West 37th Sts.

N. Y., Coney Island (Brooklyn P. O.)—Apr. 10, by Park Bd., Municipal Bldg., New York, concrete parking space, at Dreamland Park, here.

N. J., Freehold—Apr. 18, by Monmouth Co. reconstructing 1.44 mi. Sect. 3 Farmingdale-Manasquan Rd. 34, and 2.54 mi. Sect. 1 Atlantic Highlands-Hendrickson's Corner Rd. 58. B. B. Newcomb, dir.; adv. this issue.

N. J., Newton—Apr. 19, by Sussex Co., graveling Vernon-Glenwood Rd., Vernon Twp. H. Snook, co. engr.; adv. this issue.

Pa., Ebensburg—April 18, by Supervs. Susquehanna Twp., c/o Controller Cambria Co., 3.25 mi. vitr. brick on concrete on Route 62. $130,000. C. E. Schlicher, Spangler, engr.

Pa., Erie—Apr. 10, by City Council, 10 mi. asphalt pavements through city. F. G. Lynch, city engr.

Delaware—Apr. 18, by State Hy. Dept., Dover, 4.43 mi. Contr. C S 18, 4.583 mi. Contr. C S 19, 5.45 mi. Contr. C S 20; adv. this issue.

Maryland — Apr. 17, by State Roads Comn., Baltimore, building 4.3 mi. state highways, concrete, Contrs. M-38, Co.-27 and Wi-23, in Montgomery, Caroline and Wicomico Counties, gravel surfacing 2 mi. Contr. Ho-39, Howard Co. J. N. Mackall, chn.; adv. this issue.

Va., Charlottesville—Apr. 11, by Clerk Albermarle Co., paving 17,200 sq.yd. Heards Rd., bituminous macadam, etc.

Va., Chesterfield—Apr. 9, by Clerk Chesterfield Co., bituminous macadam paving 1.65 mi. Iron Bridge Rd., 16 ft.

N. C., Newton—Apr. 10, by S. J. Smyre, mayor, 25,000 sq.yd. hard surface on concrete, 30,000 sq.yd. one course concrete, 18,601 lin.ft. concrete curb and gutter, etc. Mees & Mees, Kinney Bldg., Charlotte, engrs.

S. C., Gaffney—Apr. 11, by Cherokee Co. Highway Comn., grading and topsoiling 8.11 mi. State Route 5, Federal Aid Project 147, 22,996 cu.yd. topsail, etc.

Florida—April 17, by State Rd. Dept., Tallahassee, grading and surfacing 5.674 mi. Rd. 2, from Lake City south, Project 27 A, Columbia Co.; 6.886 mi. Rd. 2, from Project 27 A to Project 505, Project 27 B, Columbia Co.; alternate bids on bituminous macadam on 8 in. rock, sheet asphalt with binder course on 8 in. rock or 6-8-6 in. plain concrete. W. Cocke, state highway engr.

Florida—Apr. 17, by State Rd. Dept., Tallahassee, clearing, grading and surfacing 10.71 mi. Rd. 8, Project 562 B, Polk and Highlands Counties, bituminous macadam on 8 in. rock, sheet asphalt with binder course on 8 in. rock or 6-8-6 in. plain concrete. W. F. Cocke, state highway engr. Noted Dec. 28.

Florida—April 18, by State Rd. Dept. Tallahassee, surfacing with 8 in. rock 11.81 mi. Rd. 125, Project 534, Melbourne Co. W. F. Cocke, state highway engr.

Fla., Sanford—Apr. 23, paving 9,764 sq. yd. 2nd St. and Avocado Ave. $28,000; 10,371 sq.yd. 3rd St. from Sanford to Magnolia Sts. and from Oak to Avocado Sts., $35,000; 11,139 sq.yd. 13th and Laurel Sts., $40,000; 11,746 sq.yd. Central and Oak Sts., $40,000. Alternate types paving. F. T. Williams, Sanford, engr.

Louisiana—Apr. 10, by State Hy. Dept., Reymond Bldg., Baton Rouge, 21.13 mi. roads in Madison and Lincoln Parishes, also furnishing 15,483 cu.yd. washed gravel and 30,964 cu.yd. sand clay gravel, 40 per cent retained on ¼ in. screen or as an alternate 46,447 cu.yd. sand clay gravel not less than 60 per cent stone retained on ¼ in. screen.

Louisiana—Apr. 17, by State Hy. Dept., Reymond Bldg., Baton Rouge, 12.5 mi. road in Plaquemine Parish, also furnishing 29,500 cu.yd. clam shells or 20,550 cu.yd. clam shells and 5,900 cu.yd. washed gravel. J. M. Fourmy, ch. engr.

Kentucky—Apr. 20, by State Hy. Comn., Frankfort, cleaning surface, applying bituminous material and spreading covering material in Boyle, Fayette, Mercer, Woodford and Montgomery Counties, 198,362 sq.yd. cleaning surface, 5,600 gal. medium tar, 38,100 gal. heavy oil or medium tar, 1,401 tons stone chips or pea gravel; in Garrard, Jessamine, Madison and Estill Counties, 263,236 sq.yd. cleaning surface, 34,000 gal. heavy oil, 16,000 gal. light tar, 8,000 gal. medium tar, 19,650 gal. heavy oil or medium tar, 2,185 tons stone chips or pea gravel; in Shelby, Scott, Henry and Oldham Counties, 195,946 sq.yd. cleaning surface, 33,000 gal. light tar, 45,600 gal. heavy oil, 1,838 tons stone chips or pea gravel; in Pulaski, Lincoln, Rockcastle and Bell Counties, 312,300 sq.yd. cleaning surface, 16,000 gal. medium tar, 62,000 gal. heavy oil, 2,884 tons stone chips or pea gravel; in Nelson and Marion Counties, 90,345 sq.yd. cleaning surface, 8,000 gal. light tar, 5,100 gal. medium tar, 14,000 gal. heavy oil, 710 tons stone chips or pea gravel; in Bracken, Pendleton and Bourbon Counties, 413,068 sq.yd. cleaning surface, 43,590 gal. medium tar, 50,630 gal. heavy oil, 2,884 tons stone chips or pea gravel. J. S. Boggs, state highway engr.

O., Akron—Apr. 16, by S. Porter, clk. Summit Co., 12,000 sq.yd. 5 in. bituminous macadam on concrete on Hammond Corners Ira Rd. 46, Sect. A-2, $38,216; grading and paving Akron-Northampton Rd. 27, Sect. A-1, 6,000 sq.yd. brick on concrete and 8,000 sq.yd. gravel, $50,126. J. Weaver, Court House, engr. Noted Jan. 25.

O., Cleveland—Apr. 11, paving Beyerle Rd. S.E., Grovewood Ave. N.E., Idarose Ave. N.E., Jesse Ave. S.E., Sylvia Ave. N.E., East 105th, East 116th, East 121st, East 127th and East 131st Sts. $200,000. R. Hoffman, City Hall, engr.

Michigan—April 13, by State Hy. Dept. Lansing, gravel surfacing 2.813 mi. road in Kalamazoo and Calhoun Counties, 20,180 cu.yd. excav., 19,794 sq.yd. gravel. F. F. Rogers, state comr.

Ind., Evansville—Apr. 13, by Auditor Vanderburgh Co., paving Evansville and Princeton Rd., 23,525 sq.yd. concrete on concrete, $65,451. R. W. Meissinger, Evansville, engr.

Ind., Hammond—Apr. 13, by Auditor Lake Co., grading and graveling 2.95 mi. Fred Schlueter Rd., 18 ft. $28,500. R. Seely, Hammond, engr.

Ind., Indianapolis—Apr. 13, by Auditor Marion Co., grading and graveling 3.1 mi. Charles Harting Rd., 16 ft. $25,836. J. J. Griffith, Indianapolis, engr.

Ind., Petersburg — Apr. 19, by town. 50,000 yd. paving, brick, sheet asphalt, asphaltic concrete or concrete. $210,000. H. T. Watts, Vincennes, engr.

Ind., Terre Haute—Apr. 13, by Auditor Vigo Co., paving Doveland Rd., 25,956 sq.yd. concrete on concrete. $77,800. G. Grimes, Terre Haute, engr.

Ind., Valparaiso—Apr. 13, by Auditor Porter Co., grading and graveling 2.598 mi. County Unit Rd., 30 ft. $28,400. F. R. McNeice, Valparaiso, engr.

Illinois—Apr. 20, by Dept. Pub. Wks. and Buildings, Div. Highways, Springfield. 33.83 mi. paving, 18 ft., alternate bids on portland cement concrete, monolithic brick, bituminous filled brick, and bituminous concrete with or without binder course; also 2 rein.-con. bridges. C. Older, ch. highway engr.

Ill., Elmhurst—Apr. 9 paving various streets. E. Hancock, 2047 Ogden Ave., Chicago, engr.

Streets and Roads (Continued)

Ill., Harvey—Apr. 20, paving alleys in Block 69, concrete, and Central Ave. from 155th St. to Park Ave., asphalt. $27,400. A. W. Hersey, city engr.

Ill., Villa Park—Apr. 9 paving various streets. E. Hancock, 2047 Ogden Ave., Chicago, engr. Noted Dec. 28.

Ill., Waukegan—Apr. 11 at office C. E. Russell, supt. Waukegan Co. highways, grading and concrete paving Sects. X Highway-Halfday Rd., Sect. 28 Hainesville-Round Lake Rd., and Sect. 27 Green Bay Rd., State Aid 15-D, 44,573 cu.yd. excav. and 96,222 sq.yd. concrete.

Wis., Eau Claire—Apr. 10, by Eau Claire Co. Road and Bridge Com. shale surfacing, etc., 11,500 ft. roads in towns of Seymour, Ludington and Pleasant Valley; 3,891 cu.yd. earth excav., town Wilson; concrete and steel bridges in towns Bridge Creek, Hanke and Clear Creek. G. Osborn, comr.

Wis., Green Bay—April 13, paving Cedar, Dousman, Madison, South Chestnut and North Maple Sts., Irwin, 12th and 13th Aves. and alleys, 38,800 sq.yd. creosoted blocks, brick or sandstone, or 46,823 sq.yd. rein.-con. or vibrolithic, etc. A. E. Kringel, City Hall, engr.

Wis., Monroe—Apr. 12, by Green Co. State Road and Bridge Com., grading, surfacing and bridging Monticello-Argyle Rd., 3,972 cu.yd. crushed rock; York Church, Broadhead-Monroe, Monroe-Browntown and Browntown-Dill Rds., 142,540 sq.yd. concrete. C. J. Smith, comr.

Wis., Shawano—April 11, paving 15,065 sq.yd. on Andrews, Center, Richmond and Franklin Sts., 1 or 2 course rein.-con. or asphalt; 21,850 sq.yd. resurfacing Main St., sheet asphalt. $35,000. J. Donohue & Co., 608 North 8th St. Sheboygan, engr. Noted March 29.

Wis., Two Rivers—Apr. 13, by H. R. Gowan, clk., paving 9,652 sq.yd. Washington St., 1 or 2 course concrete, 2,000 lin.ft. concrete curb and gutter. $25,000. D. H. Ames, City Hall, engr.

Wis., Watertown—April 14, by Bd. Pub. Wks., paving 13,089 sq.yd. Milwaukee, West Milwaukee, Milford and North 6th Sts., 6,657 sq.yd. state aid portion North Church St., both rein.-con. or vibrolithic concrete. A. Kraeft, City Hall, engr.

Wis., West Bend—Apr. 17, by Washington Co. State Road and Bridge Com., 45,900 sq.yd. concrete paving, etc., Allenton-West Bend-Newburg Rd. C. A. Distelhorst, co. highway engr.

Ia., Cherokee—Apr. 10, by Auditor Cherokee Co., gravel surfacing 20.5 mi. road. Iowa Hy. Comn., Ames, engrs.

Ia., Jesup—Apr. 9, 13,340 sq.yd. pavement, 8,014 cu.yd. excav., 13,629 lin.ft. curb. $55,000. M. Tschirgi & Sons, 712 Amer. Trust Bldg., Cedar Rapids, engrs.

Minn., Crookston—Apr. 25, by H. J. Welte, aud. Polk Co., Job 2301, 60,000 cu. yd. excav.; Job 2302, 50,450 cu.yd. excav., 3 bridges. $32,000. E. H. Harding, Crookston, engr.

Minn., Litchfield—Apr. 11, by J. A. Simonson, aud. Meeker Co., 5.5 mi. Job 2301 and 8.5 mi. Job 2303, State Rd. 14, 98,739 cu.yd. excav., 197,602 cu.yd. overhaul, etc.; graveling 6.5 mi. Job 2304, State Rd. 8. $33,000.

Kan., Atchison — May 1, by Comrs. Atchison Co., grading 3.335 mi. King of Trails Rd., Federal Aid Project 112, 29½ ft. $30,000. R. D. Coleman, co. engr. Noted Mar. 22.

Kan., Cherryvale—Apr. 9, paving 7,625 sq.yd. various streets, brick or asphaltic concrete. F. E. Devlin, Sedgwick Bldg., Wichita, consult. engr.

Kan., St. Francis—Apr. 26, by Comrs. Cheyenne Co., grading 14.067 mi. Kansas City-Denver Air Line Rd., 28 ft., 115,000 cu.yd. excav., three 35 ft. span deck girder bridge. $70,000. Noted Mar. 15.

Kan., Seneca—Apr. 25, by Comrs. Nemaha Co., earthwork 6.226 mi. Capitol Highway, Federal Aid Project 152, Sect. A, 27½ ft., 62,000 cu.yd. earth and 636 cu.yd. rock excav., two 35 ft. deck girder bridge. $60,000. L. P. Price, Seneca, engr. Noted Feb. 15.

Kan., Wellington—Apr. 27, by Sumner Co. paving 89,230 sq.yd. Federal Aid Project 35 D, E, $300,000; 16,591 sq.yd. in city South Haven, $40,000; both will concrete, brick, bituminous concrete or bituminous macadam. J. W. Mavity, co. engr.

Colo., Denver—Apr. 12, by Dept. Impvts. and Parks, asphaltic paving 11 blocks Washington Park Paving Dist. 1. $31,770. A. K. Vickery, City Hall, engr.

Idaho—Apr. 14, by State Highway Engineer, at Wallace, grading 3.4 mi. Federal Aid Project 64-B, Shoshone Co., mostly heavy rock work. $63,000. C. D. Olson, Boise, dir. highways.

Nevada—Apr. 18, by State Hy. Comn., Carson City, grading and concrete paving 1.22 mi. from west to east city limits of Fallon, Churchill Co., 1,900 cu.yd. excav., 22,788 yd. sta. overhaul, 12,890 sq.yd. cement concrete pavement, etc. State furnishes cement. G. W. Borden, state highway engr.

Washington—Apr. 17, by State Hy. Comn., Olympia, clearing and crushed rock surfacing 6.9 mi. Inland Empire Highway from Colville to Meyers Falls; concrete paving 3.07 mi. Sunset Highway from Wenatchee Bridge north; 4.78 mi. Pacific Highway from Neals to Toledo. Noted Mar. 15.

Washington—May 1, by J. Allen, state highway engr., Olympia, grading and surfacing with crushed gravel 6 mi. Chelan-Okanogan Highway from Riverside to Omak. G. G. Harvey, Realty Bldg., Spokane, dist. highway engr. Noted Mar. 15.

Wash., Olympia—Apr. 16, by Thurston Co., scarifying and bringing up to grade 6,780 ft. roadway, building 165 ft. wooden bridge, 106 ft. truss, 300 cu.yd. graveling, etc. on Olympia-Little Rock Rd. F. A. Weir, Olympia, engr.

Calif., Los Angeles—Supervs. Los Angeles Co., receiving bids grading, curbing, laying sidewalks and paving Ocean Ave., 10,235 cu.yd. excav., 17,953 lin.ft. concrete curb, 180,525 sq.ft. 5 in. concrete, etc. To exceed $50,000.

Calif., Martinez—City Trustees receiving bids grading, curbing, guttering and paving portions Mason, Castro, Warren and Arreba Sts., etc., 251,453 sq.ft. grading, 110,265 ft. 2 in. warrenite on 3 in. asphaltic concrete, 103,842 sq.ft. 1½ in. warrenite on 3 in. asphaltic concrete, etc. B. H. Green, city engr.

Calif., Redwood City—Apr. 16, by San Mateo Co., grading and surfacing portion Harrison Ave., 50,525 sq.ft. grading, 33,885 sq.ft. 6 in. waterbound macadam with oil and screenings surface. G. A. Kneese, co. surv.

Calif., Sacramento—Receiving bids curbing, guttering, grading and paving T St., 206,240 sq.ft. 2 in. asphaltic concrete, etc. A. Givan, city engr.

Calif., San Diego—Apr. 16, by A. H. Wright, city clk., paving Eagle St., 83,544 sq.ft. 1½ in. asphaltic concrete on 2½ in. bituminous, etc.; 8th and A Sts., 91,645 sq.ft. 1½ in. asphaltic concrete on 2½ 94,645 sq.ft. 1½ in. asphaltic concrete on 2½ in. bituminous, etc.; Goldsmith and Evergreen Sts., 101,779 sq.ft. 1½ in. asphaltic concrete on 2½ in. bituminous. F. A. Rhodes, city engr. Noted Mar. 8.

BIDS RECEIVED

S. C., York—York Co., grading, curbing, guttering and paving 2.82 mi. State Route 7, from Catawba River to city limits of Fort Mill, (a) asphaltic concrete (b) sheet asphalt, from General Road Drainage & Constr. Co., Liberty Bank Bldg., Columbia, (a) $107,812 (b) $115,433; Slattery & Henery, Greenville, (a) $111,691 (b) $115,959; Carolina Constr. Co., Stanley, N. C., (a) $118,284 (b) $122,856. Noted Mar. 15.

O., Akron—S. Porter, clk. Summit Co., Mar. 29, paving (1) 2.64 mi. Vaughn Twinsburg Rd., 16 ft., 22,500 cu.yd. earth excav., 26,750 sq.yd. bituminous macadam on waterbound macadam, engrs. est. $82,875, grading and paving (2) 1.069 mi. South Main St. Rd. 50, Sect. C-1, 11,300 lin. ft. 2x6 in. concrete curb, 8,500 cu.yd. earth excav., 9,725 sq.yd. bituminous concrete, 10,350 sq.yd. 6 in. concrete base, engrs. est. $46,355 (3) 1.31 mi. Granger Ghent Rd. 79, Sect. A-2, 16 ft. 7,650 cu.yd. earth excav., 12,700 sq.yd. 2 in. bituminous concrete on 6 in. concrete, engrs. est. $46,865, from Mahoning Constr. Co., Warren (1) $67,435; Kahl Bros. Constr. Co., 13,004 Woodland Ave., Cleveland, (1) $72,685; A. F. Wible, 859 Chalker St., (1) $75,703; T. E. McShaffrey Constr. Co., 171 Forge St., (2) $38,748 (3) $50,575; W. P. McCourt Constr. Co., Akron (street address not available) (2) $40,663. Noted Mar. 22.

O., Cincinnati—Hamilton Co., Mar. 23, grading and bituminous macadam paving 9,300 ft. Blue Ash Rd., 20 ft., from J. S. Slone, 2312 Mound St., Norwood, $32,514; O. E. Radabaugh, Hazelwood, $34,278; W. P. Flynn, 1252 Chase Ave., $34,398. Noted Mar. 15.

O., Cleveland—Cuyahoga Co., Court House, Mar. 21, paving Noble Rd., 24,660 lin. ft. stone curb and 4 in. sewer pipe gutter, 24,400 cu.yd. earth excav., 9,800 cu.yd. concrete base, 39,400 sq.yd. vitr. brick, asphalt, engrs. est. (c) brick $311,877 (d) asphalt $305,463, from Gould & Maybach, 825 East 150th St., (c) $305,117 (d) $295,039, Rieley Bros., The Arcade, (c) $311,245 (d) $304,301, Cleveland Trinidad Paving Co., The Arcade, (d) $296,646, Freshwater Constr. Co., National Bldg., (c) $311,798. Noted Mar. 15.

Wisconsin—State Hy. Comn., Madison, improving Arcadia-Independence Rd., Trempealeau Co., from E. G. Bingham, Arcadia, 16,204 cu.yd. earth excav. $0.33, 2,652 cu. yd. borrow $0.38, 7,700 cu.yd. shale surfacing $1.03, etc., total $26,493.

Wis., Port Washington — Ozaukee Co. Road and Bridge Com., Port Washington-Cedar Grove Rd., (1) 11,790 cu.yd. earth excav. (2) 31,400 sq.yd. concrete surfacing, etc., from J. Ubbink & Sons, Port Washington, (1) $0.85, (2) $1.53, etc., total $68,743; F. Doherty Co., 753 47th St., Milwaukee, (1) $0.78 (2) $1.64, etc., total $72,884; Schaefer & Thompson, Marshfield, (1) $0.87 (2) $1.62, etc., total $74,171. Noted March 8.

Ia., Clinton—To McCarthy Improvement Co., 802 Kahl Bldg., Davenport, grading, curbing and paving Sects. A, B, C, D, E, F, G, H, and J, 78,691 sq.yd. 3 in. sheet asphalt on 5 in. concrete, etc., total $338,082; Spetman & Boyne, Council Bluffs, Sects. L and M, 27,593 lin. ft. concrete curb and gutter, etc. $33,996. Noted March 15.

Mo., St. Louis—Bd. Pub. Serv., City Hall, Mar. 27, repaving (1) Washington Blvd., 2,295 sq.yd. asphalt, engrs. est. $6,440 (2) Westminster Pl., 4,675 sq.yd. asphalt, $13,500 (3) McPherson Ave., 3,275 sq.yd. asphalt, $9,100 (4) Shaw Ave., 6,820 sq.yd. asphalt, $28,400 (5) Leonard Ave., 7,975 sq.yd. asphalt, $19,400 (6) Brannon Ave., 945 sq.yd. bitulithic, $4,600 (7) Neosho St., 1,620 sq.yd. bitulithic, $7,500 (8) Kingsbury Pl., 2,640 sq.yd. bitulithic, $6,050 (9) Page Blvd., 13,585 sq.yd. bitulithic, $30,800 (10) Wilmington Ave., 3,860 sq.yd. brick, $21,350 (11) Glasgow Ave., 1,275 sq.yd. brick, $8,000 (12) Blaze Ave., 1,585 sq.yd. concrete, $6,900, from Bridges Asphalt Paving Co., Arcade Bldg., (1) $5,395 (2) $10,695 (3) $7,223 (4) $23,663 (5) $18,423; W. Fuller, 812 Chestnut St., (1) $5,455 (2) $10,841 (3) $7,282 (5) $18,453; O. S. Brighton, 4115 McRee St., (1) $6,310 (2) $12,588 (3) $8,506 (4) $26,016 (5) $17,649 (6) $4,430 (7) $8,324 (8) $7,628 (9) $36,462; Trinidad Asphalt Mfg. Co., Title Guaranty Bldg., (4) $26,256; Granite Bituminous Paving Co., Ry. Exch. Bldg., (6) $4,385 (7) $7,949 (8) $7,397 (9) $35,601; Alzina Constr. Co., Arcade Bldg., (10) $23,355 (11) $8,824; G. Eyermann & Bros., 1216 South Grand St., (10) $23,551; J. E. Perkinson, 3237 Carter Ave., (10) $24,073 (11) $8,727 (12) $8,395; Skrainka Constr. Co., Security Bldg., (11) $9,240 (12) $8,837; F. A. Stiers, 4500 Enright Ave., (12) $8,919. Noted Mar. 8.

Wash., Seattle—Grading and paving 9th Ave. S., et al., (Beacon Hill regrade project), 23,050 sq.yd. 8 in. concrete, 6,950 lin.ft. concrete and 950 lin.ft. asphaltic concrete curbing, 750,000 cu.yd. earth excav., 4444 ft. 12-30 in. sewer pipe, (a) with concrete pipe, (b) with clay pipe engrs. est. $500,000, from Puget Sound Bridge & Dredging Co., Central Bldg., (a) $494,968 (b) $496,623; Independent Asphalt Paving Co., Seaboard Bldg., (a) $512,170 (b) $512,394; F. McLellan, Lyon Bldg., (a) $529,083 (b) $529,083; grading Golf Heights City Property, 646,000 cu.yd. earth excav., from Puget Sound Bridge and Dredging Co., Central Bldg., $0.109 total $74,464; F. McLellan, Lyon Bldg., $0.113 $77,263; H. Pederson, Alaska Bldg., $0.114, $77,694. Noted Mar. 22.

Calif., Hanford—Grading, curbing, guttering and paving West 6th St., etc., 168,000 sq.ft. grading, 155,400 ft. 1½ in. warrenite on 4 in. bituminous, etc., from California Constr. Co., 58 2nd St., San Francisco, $51,555; Thompson Bros., Divisadero and G Sts., Fresno, $53,828; W. F. Hanrahan, Call Bldg., San Francisco, $54,341. Noted Mar. 29.

Calif., San Diego—Common Council improving (1) A St. between 24th and 25th Sts., and C St. between 19th and 25th Sts. (a) 145,883 sq.ft. 1½ in. asphaltic concrete on 2½ in. bituminous (2) A St. between 4th St. and Kettner Blvd. and 2nd St. between A and B Sts., (b) 119,764 sq.ft. 2 in. asphalt, 1 in. binder on 4 in. concrete (c) 2,264 sq.ft. concrete sidewalk, etc., from California Constr. Co., Union Bldg., (1a) $0.179 (2b) $0.2773 (2c) $0.22; G. R. Daley, 4430 Boundary St., (1a) $0.19 (2b) $0.294 (2c) $0.22; Griffith Co., 25 14th St., (1a) $0.20 (2b) $0.27 (2c) $0.23. Noted Mar. 8.

Calif., San Rafael — Surfacing various streets, 279,000 sq.ft. 2 in. asphaltic concrete, 90,000 sq.ft. asphalt macadam, from Raisch Impvt. Co., 46 Kearny St., San Francisco, $37,440; A. J. Grier, 480 Chetwood St., Oakland, $48,870; S. P. Brownlee, San Rafael, $55,520. Noted Mar. 15.

Calif., Santa Rosa—Grading, reshaping, curbing, guttering and paving with 1½ in. warrenite bitulithic on 2½ in. bituminous concrete, portions Benton, North and 5th Sts., etc., from Warren Constr. Co., Bacon Bldg., Oakland, $54,665. Noted Mar. 15.

Streets and Roads (Continued)

CONTRACTS AWARDED

N. Y., Albany — Bd. Contr. & Supply, paving Madison Ave., dressed granite blocks on cement, to M. F. Dollard, 36 State St., $355,580. Noted Mar. 29.

N. Y., Binghamton — Broome Co. will pave 1¾ mi. highway in town of Barker, macadam top; 1 mi. in Binghamton, bituminous macadam; 15¼ mi. in Chenango, Colesville, Conklin, Union Vestal, Windsor, Sanford, Triangle, Fenton, Kirkwood and Lisle, all foregoing bituminous macadam top; 1 mi. in Maine, gravel macadam, by day labor under supervision of H. A. Williams, co. supt. $143,863. Noted Mar. 15.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, to E. J. Galway, 676 9th Ave., New York, granite paving Dumont Ave. $1,616; to Uvalde Asphalt Paving Co., 1 Bway., New York, asphalt paving Tapscott Pl. $18,545, grading curbing and asphalt paving East 9th St. $16,348, Foster Ave. $8,855, Glenwood Rd. $15,537, 17th Ave. $3,796; to Borough Asphalt Co., 1301 Metropolitan Ave., Delamere Pl. $8,689, 66th St. $7,933, 82nd St. $6,990; to Castle Bros., Inc., Johnson Pl., grading, curbing and flagging New Utrecht Ave. $9,523; to L. Mangeri, 190 31st St., Parrott Pl. $3,707; to F. Persicano, 350 Fulton St., curbing and flagging 66th St. $1,679. Noted Mar. 8 and 22.

N. Y., Elmira—G. W. Jarchow city clk., paving East Miller St., rein.-con., to E. McGreevey, 450 West 2nd St., $41,878; Railroad Ave. and West 3rd St., rein.-con., to Connors & McGreevey, $33,879; College Ave., warrenite bitulithic, to Lowman Constr. Co., 312 Railroad Ave., $16,268; Maple Ave., brick, and resurfacing South Main St., warrenite bitulithic, to Holleran Bros., 901 Linden Pl., $15,014 and $36,138 respectively. Noted Mar. 22.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., to E. Block, Woodhaven, curbing and laying sidewalks, etc., on Crescent St., $6,859, Hallett St., $9,347, grading, sidewalks, crosswalks, etc., on Sackett St. $1,851, grading, curbing and laying sidewalks on Sherwood Ave. $4,386, 156th St. $5,192; to F. J. Clancy, Corona, 44th St. $9,175; to J. J. O'Brien, Jr., William St., Jamaica, 80th St. $7,848; to Borough Asphalt Co., 1301 Metropolitan Ave., Brooklyn, paving 80th St. $17,058; to Kennedy & Smith, Inc., 93 Amity St., Flushing, sewers in Winslow Pl. $1,612, Vandeventer Ave. $2,389; to Peace Bros., Inc., 57 North Laurence St., Flushing, sewer in Madison St. $2,180; to J. Gallo, 203 Division St., Brooklyn, sewer in Tiemann Ave. $1,155, Rockaway Blvd. $1,226; to D. A. Gross, 895 Fulton St., Woodhaven, sewer in Grand St. $5,639. Noted Mar. 29.

N. Y., Mayville — S. E. Fitch, supt. Chautauqua Co., Jamestown, constructing 1.016 mi. Gerry-Barmore Corners Rd., 16 ft., to G. B. Taylor, Jamestown (street address not available) $27,021; 2.77 mi. Chautauqua-Stedman Rd., 16 ft., to E. J. Bailey, Brocton, $73,953, both dual type concrete. Noted Mar. 22.

Pa., Scranton—Asphalt pavements on 4th, Myrtle and Richmont Sts., to M. Stipp & Son, 1015 North Main St., $83,816; Orchard St., Page Pl., Evans, Kirst and Buenzil Courts, Sherman and Grandview Aves., to Sweeney Bros., Miller Bldg., $70,650; Margaret Ave., to Reese & O'Brien, Scranton, $16,534. Noted Mar. 15.

Pa., Washington—Washington Co., paving 3,400 ft. Malden Rd., 16 ft., to T. Cronin Co., South 18th St., Pittsburgh, $29,493. Noted Mar. 8.

Va., Emporia — Paving with warrenite bitulithic 35,000 sq.yd. various streets, to R. G. Lassiter Co., Oxford, N. C., $98,500.

W. Va., Wheeling — Ohio Co., concrete paving 6,100 ft. Greeksville, Clinton and Potomac Rd., 16 ft., Richland Dist., to B. H. Stringer Co., Wheeling, (street address not available), $63,831.

N. C., Burlington — Curbing, guttering and paving with asphalt on concrete, to McGuire & Rofe, Virginia Ry. & Power Bldg., Richmond, Va., $80,000. Noted Mar. 8.

S. C., Camden—For 100,000 sq. yd. asphalt, to Southern Paving Co., Camden, $300,000.

Florida—State Hy. Dept., Tallahassee, grading and concrete surfacing 5 mi. road from Nunez Ferry to Pensacola, Escambia Co., to Hancock Bros., Mobile, Ala., $138,556; bituminous macadam surfacing 3.976 mi. road between Bradentown and Sarasota Co. line, Manatee Co., to J. F. Morgan Paving Co., Woodward Bldg., Birmingham, Ala., $154,584. Noted Feb. 22.

Ohio—Dept. Highways and Pub. Wks., Columbus, grading and pacing 4.011 mi. Sect. "A" Pomeroy-Marietta Rd., Athens Co., brick, to Harness Renick, Williamsport, $197,388; 2.484 mi. Sect. "O-1" Cincinnati-Zanesville Rd. and 2.767 mi. Sect. "O-2" of same road, both Fairfield Co., rein.-con., to Radebaugh-Graham Co., Columbus (street address not available) $86,256 and $95,162 respectively; 2.274 mi. Sect. "E-2" Cincinnati-Zanesville Rd., Fairfield Co., brick, to F. E. Milligan, Sidney, $76,714. Noted Mar. 1.

O., Cleveland — Grading, curbing and paving East 129th St. and Argus Ave., vitr. brick, to Gould & Maybach, 823 East 150th St., $5,308 and $24,102 respectively; Hlavin and Hoy Aves., vitr. brick, to A. M. Pejsa Paving Co., 3161 East Derbyshire Rd., Cleveland Heights, $12,120 and $11,679 respectively; Carnegie Ave., West 116th and West 115th Sts., asphalt, to Cleveland Trinidad Paving Co., The Arcade, $89,040, $13,442 and $9,651 respectively; West 71st St., brick, to Baldwin Bros., 4500 Euclid Ave., $9,835; West 48th St., Spring and Valley Rds., vitr. brick, to Roehl Bros., West 25th St. and Clark Ave., $28,561, $64,173 and $54,512 respectively. Noted Mar. 1.

O., Cleveland—Paving Central Ave., granite block, to Rieley Bros., The Arcade, $185,309; Stardale Court, vitr. brick, to M. P. Platten, Engineers Bldg., $2,826; West 47th St., Tyler Court and Unity Ave., vitr. brick, to Roehl Bros., West 25th St. and Clark Ave., $28,553, $8,023 and $12,312 respectively; Beyerle Pl., vitr. brick, to Enterprise Paving & Constr. Co., 8444 Bway., $3,266; Lamontier Ave., concrete, to Bentley Bros., Union Bldg., $53,250. Noted Mar. 29.

O., Cleveland — Cuyahoga Co. paving Clague Rd. 3, 13,400 lin.ft. 4 in. sewer gutter, 5,300 cu.yd. earth excav., 12,800 sq.yd. concrete on concrete, to Presgrave Bros. & Burke, 4290 East 131st St., $53,466. Engrs. est. $56,006. Noted Mar. 15.

Michigan — State Hy. Dept., Lansing, grading and gravel surfacing 3.726 mi. road in Ionia and Clinton Counties, 34,757 sq.yd. gravel, 23,090 cu.yd. excav., to C. W. McCreery, Ovid, $35,442. Noted Mar. 22.

Wis., Jefferson—Jefferson Co. State Road and Bridge Com., Ixonia-Watertown Rd., to McGucken Constr. Co., 425 East Water St., Milwaukee, 21,138 cu.yd. earth excav. $0.74, 48,060 sq.yd. concrete surfacing $1.33, etc., total $95,789; Whitewater-Ft. Atkinson Rd., to J. P. Connell, Janesville, (street address not available), 26,555 cu.yd. earth excav. $0.72, 78,161 sq.yd. concrete surfacing $1.30, etc., $140,670; Ft. Atkinson-Cambridge Rd., to F. Doherty, 753 47th St., Milwaukee, 48,133 cu.yd. earth excav. $0.78, 107,808 sq.yd. concrete surfacing $1.07, etc., total $191,110. Noted Mar. 15.

Wis., La Crosse—Brick paving 25,000 sq. yd. various streets, to T. E. Woolley, 148 West Ave., S., $104,837.

Ia., Des Moines—Grading, etc., on 15 mi. Mitchellville-Farrar Rd. and Polk City-Shedahl Rds., to C. O. Mitchell, 2414 Southwest 10th St., 34,681 cu.yd. excav. $0.26, 54,000 cu.yd. $0.255 and 38,000 cu. yd. $0.239; C. Lausten, Nevada, 7,100 ft. 6 in. tile $0.124 per ft., 2,600 ft. 8 in. $0.17, etc. Noted Mar. 15.

Ia., Lamoni — Grading and paving to Cook & Stucker, Ottawa, Kan., 5,037 cu.yd. excav. $0.80, 16,310 sq.yd. vitr. brick, 5 in. base $3.45, 7,140 lin.ft. curb and gutter $1.10, etc., total $71,650. Noted Mar. 1.

Ia., Storm Lake—For 67,000 sq.yd. Class B concrete pavement and 55,000 lin.ft. concrete curb, to Moore-Young Constr. Co., Waterloo, $2.59 per sq.yd. and $0.72 per lin.ft. Noted Feb. 1.

Minn., Duluth—Paving 8th St. from 10th to 14th Aves., 5,230 sq.yd. concrete, to Nelson & Shipman, 1014 East 6th St., $23,731. Noted Feb. 8.

Minn., Granite Falls — Yellow Medicine Co., Job 2301, State Rd. 9, 97,000 cu.yd. earth and 3,000 cu.yd. loose rock excav., 160,000 cu.yd. overhaul; Job 2302 State Rd. 9, 15,000 cu.yd. earth excav., 24,000 cu.yd. overhaul, to A. B. Halvorson, Montevideo, $39,920. Noted Mar. 8.

Minn., Lakefield—For 15,284 sq.yd. vibrolithic, 1,980 lin.ft. concrete curb and gutter, 38,000 lb. reinforcing, 520 lin.ft. 18 in. and 700 lin.ft. 16 in. drain, to Hanlon & Okes, 338 Lumber Exch. Bldg., Minneapolis, $48,000. Noted Mar. 1.

Kan., Oberlin—For 11,378 sq.yd. 3-in. vitr. brick, etc., to Geiger & Rutherford, Leavenworth (street address not available) pavement $2.80, excav. $0.65, double gutter $1.10, etc., total $44,698. Noted Nov. 16.

Neb., York—Grading, curbing, guttering, laying sidewalks and vitr. brick paving Dist. 1, to Roberts Constr. Co., 404-5 1st Natl. Bldg., Lincoln, $73,450.

S. D., Sioux Falls—Grading and paving 6 streets incl. 35,000 sq.yd. concrete, to C. H. Atkinson Co., Western Surety Bldg., $95,000, 2 streets incl. 5,000 sq.yd. concrete, to S. L. Norlin, 210 French Ave., $14,500. Noted Mar. 15.

Okla., Barnsdall—Grading, concrete curb, guttering and paving Main and 5th Sts., 8,600 sq.yd. vertical fibre brick, etc., to Reinhart & Donevan, Trades Natl. Bank Bldg., Oklahoma City, $41,547. Noted Mar. 22.

Tex., Corpus Christi—Nueces Co. surfacing with 1 in. cold natural rock asphalt topping 10.97 mi. Corpus Christi-Robstown Highway, and 11.17 mi. State Highway 12, to Smith Bros., 308 Sumpter Bldg., Dallas, $332,707. Noted Mar. 8.

Tex., Eldorado—Schleicher Co., grading, gravel surfacing on crushed stone and bituminous topping 9.86 mi. State Highway 4, 16 ft., to Rice & Bates, Austin (street address not available), $112,617. Noted Mar. 1.

Colorado — State Hy. Dept., Denver, gravel surfacing 6.86 mi. road, Federal Aid Project 168 B, Prowers Co., to Standard Eng. Co., 518 E & Bldg., Denver, $41,984, engrs. est. $52,123; gravel surfacing and bridging 0.454 mi. road, Federal Aid Project 231, Pueblo Co., to A. O. McCormick & Voss, 552 South Penn Ave., Denver, $23,088, engrs. est. $26,133. Noted Mar. 15.

Wash., Seattle—Grading etc. 26th Ave. N. E., to D. H. Traphagen, Walker Bldg., $31,473. Engrs. est. $32,061. Noted Mar. 29.

Calif., San Diego—Curbing, guttering and concrete paving Silverado St., Ivanhoe Ave. and Torrey Rd., to G. R. Daley, 4430 Boundary St., $49,905. Noted Mar. 22.

Calif., Santa Barbara—Grading, paving with asphaltic concrete on 5 in. concrete, and laying 6 in. sewers in portion Islay St., to A. L. Pendola, 1709 Chapala St., $40,050.

Calif., Whittier — Grading, curbing, laying sidewalks and paving with 6 in. concrete, Pickering Ave., to E. Johnson, 268 South Coronado Ave., Los Angeles, $54,481; Howard Ave., to Independent Paving Co., 321 East 4th St., Long Beach, $12,415. Noted Mar. 15.

Ontario—Dept. Pub. Highways, 110 University Ave., concrete pavements, 5.6 mi. Contr. 794 to McNamara Bros. & Thornton, 23 Scott St., Toronto, 7.1 mi. Contr. 795 to C. Bergmann, Waterloo, 0.9 mi. Contr. 796 and 860, to D. O. Johnston, 43 Market St., Brantford, total est. $275,000; asphaltic concrete pavements, 13.2 mi. Contr. 797 and 921, to Dufferin Constr. Co., Ltd., 210 Victoria St., Toronto, 10.1 mi. Contr. 863 and 948, to Brennan Paving Co., Melrose Ave., Toronto, 7.2 mi. Contr. 864 and 918, to Provincial Paving Co., 24 Adelaide St. W., Toronto, 2.4 mi. Contr. 798 to Standard Paving Co., Central Chambers, Ottawa, 5.1 mi. Contr. 897, to D. O. Johnston, 43 Market St., Brantford, total $1,800,000; bituminous penetration pavements 5.7 mi. Contr. 908, to Dufferin Constr. Co., Ltd., 210 Victoria St., Toronto, $175,000; macadam roadway 1¼ mi. Contr. 799, to W. H. Patterson, 211 Dufferin St., Belleville, $20,000; surface treatment of macadam roads with tar, 28.7 mi. Contr. 816, 817 and 818, to W. B. Huber, Toronto, (street address not available) $45,000. Noted Jan. 18.

Industrial Works

PROPOSED WORK

Mass., Boston—Pub. Buildings Dept., 504 City Hall, plans municipal service and repair shop, brick and steel, Albany St. $150,000. Engineer and architect not announced.

Mass., Holyoke — Judd Paper Co., 168 Race St., plans mill addition, brick and steel, Race St. $75,000. G. P. B. Alderman & Bro., 316 High St., engrs. and archts.

R. I., Westerly—Clyde Mfg. Co., Main St., plans 4 story factory, brick and timber, Cross Property. $100,000. Engineer and architect not announced.

Conn., Hartford—S. Vogel & Sons, Rice Court, having plans prepared by F. C. Walz, 407 Trumbull St., 1 story, 62 x 190 ft. garage, etc., rein.-con. and brick, plain foundation, High St. $100,000.

Conn., Middletown—Frissel Fabric Co., 26 Frissel St., plans 1 story, 60 x 200 ft. factory, brick and concrete, Silver St. $60,000. Engineer and architect not selected.

N. Y., Albany—Federal Signal Co., Troy Rd., plans additions to plant. To exceed $40,000.

N. Y., Buffalo—General Castings Corp., 577 Tonawanda St., plans rebuilding foundry, recently destroyed by fire. $50,000-$60,000. Engineer and architect not announced.

N. Y., Cortland — Crescent Corset Co. plans concrete and steel factory and warehouse, South Main St. $75,000-$80,000. G. H. Croker, genl. mgr.

Industrial Works (Continued)

N. Y., Ogdensburg—C. E. Castle, Greene St., had plans prepared by G. E. Wilson, rein.-con. machine shop and garage. $40,000-$50,000.

N. Y., Potsdam—See "Miscellaneous."

N. Y., Schenectady—General Electric Co., River Rd., plans enlarging Bldg. 109, 1 story, 120 x 200 ft., steel and concrete. $50,000-$55,000.

N. Y., Stillwater — H. J. Reilly plans large fireproof plant. $100,000.

Pennsylvania—See "Miscellaneous."

Pa., Beaver Falls—T. F. Daquila, 716 11th St., having plans prepared by Carlisle & Sharrer, Jenkins Arcade, Pittsburgh, 3 story and basement, 43 x 90 ft. brick and tile garage, 7th Ave. and 14th St. $60,000.

Pa., Clearfield—W. B. Holmes, Jr., takes bids about May 1, 2 story, part basement, 50 x 100 ft. rein.-con. and brick garage and repair shop, Merrill and Williams Sts. $40,000.

Pa., Warren—Jacobson Gas Engine Co., plans to rebuild factory recently destroyed by fire, on east side. $150,000. Engineer and architect not announced.

D. C., Wash.—Potomac Electric Power Co., 231 14th St., N. W., having plans prepared by Stone & Webster, engrs., 147 Milk St., Boston, power plant, 20,000 kw., 60 cycle, 13,200 volt, turbine generators, three 1,400 hp. boilers, etc., at Bennings Sta. $1,500,000.

W. Va., Wheeling—Hazel Atlas Glass Co., Consolidated Life Insurance Bldg., having plans prepared by C. W. Bates, 77 12th St., 2 story and basement, 60 x 150 ft. machine shop, brick and concrete. $40,000.

North Carolina—See "Railways."

N. C., Concord—Hobarton Mfg. Co. having plans prepared 1 story, 182 x 220 ft., weaving and finishing mill. $400,000. Lockwood, Greene & Co., Piedmont Bldg., Charlotte, engrs.

N. C., Lexington — Elk Furniture Co. plans factory, to replace one recently destroyed by fire. $70,000.

N. C., Marshville — Marshville Mfg. Co. plans mill. $100,000. Architect and engineer not selected.

S. C., Charleston—E. P. Burton Lumber Co., Cosgrove Ave., plans to rebuild lumber mill, destroyed by fire. $400,000. Engineer and architect not announced.

S. C., Spartanburg — Acadia Mfg. Co. plans 3 story, 125 x 280 ft., textile mill. Lockwood, Greene & Co., Piedmont Bldg., Charlotte, N. C., engrs.

S. C., Spartanburg—Pacific Mills Co., 101 Milk St., Boston, Mass., plans 30,000 spindle mill and bleachery, at Grece, near here. Lockwood, Greene & Co., Piedmont Bldg., Charlotte, N. C., engrs.

Fla., Tampa—See "Miscellaneous."

Miss., Shelby—A. R. Carnes Motor Co. had plans prepared by Alsop & Callahan, 752 Randolph Bldg., Memphis, 60 x 130 ft. brick and steel garage. $40,000.

Tenn., Chattanooga—Atlantic Ice & Coal Co., 213 Fort St., plans 4 story, 80 x 140 ft., cold storage plant, 13th St., also remodel present 4 story plant. $150,000. Engineer and architect not announced.

Tenn., McKenzie — City Council making plans ice plant. $40,000-$50,000. Engineer and architect not announced.

Ky., Louisville—Klein Motor Co., 949 South 3rd St., plans 5 story, 50 x 200 ft., garage and salesroom, brick and concrete, 942-44 South 3rd St. $125,000. Engineer and architect not selected.

Ky., Owensboro—Bolger & Madley plan brick and tile factory. $60,000. Engineer and architect not announced.

O., Cleveland — Broadhead-Garrett Co., 2835 East 51st St., plans 1 and 2 story, 60 x 300 ft. timber warehouse, 40 x 40 ft. dry kiln building, brick, 40 x 50 ft. timber planing mills, brick boiler house, office and garage building, East 71st St. along tracks of Belt Line R.R. $150,000. J. C. Rash, asst. secy. Engineer and architect not selected.

O., Cleveland—Superior-49th Co., c/o G. Paul, 611 Fidelity Mortgage Bldg., had plans prepared by J. F. Steffens, 611 Fidelity Mortgage Bldg., 1 story, 182 x 203 ft., brick and steel garage, Superior Ave. and East 51st St. $75,000. Noted Apr. 27.

O., Cleveland—Indiana Oil Products Co., 7010 Harvard Ave., had plans prepared 1 story, 66 x 150 ft., brick and timber garage, 3852 West 25th St. $40,000. Private plans.

O., East Liverpool—Chevrolet Motor Co., c/o J. A. Trotter, having plans prepared by A. McHenry, c/o Potters Lumber Co., East Liverpool, 3 story and basement, 75 x 85 ft., brick, tile and stone garage, Market St. $50,000.

O., East Liverpool—Liverpool Motor Car Co., having plans prepared 2 story and basement, 50 x 135 ft., brick, tile and steel garage. $50,000. Private plans.

O., Mansfield—Standard Oil Co. of Ohio, East Ohio Gas Bldg., Cleveland, plans 1 story, brick and concrete warehouse and garage, here. $40,000. E. B. Wagoner, East Ohio Gas Bldg., Cleveland, archt.

O., Steubenville—Nash-Brandt Co., 537 Lawson Ave., soon lets contract 2 story and basement, 70 x 85 ft. garage, West Market St. $60,000. Peterson & Clark, Steubenville, archts.

O., Warren—Salzenbacher Motor Co. had plans prepared by Watson Eng. Co., 4614 Prospect Ave., 1 story, 35 x 46 ft., brick and steel garage. $40,000.

Ill., Chicago—La Salle Hotel Co. plans 6 story, 40 x 80 ft. addition to garage, rein.-con., brick and steel, 211-13 West Washington St. $150,000. Holabird & Roche, 104 South Michigan Ave., archts.

Ill., Chicago—S. G. Sheppard, 112 West Adams St., plans 1 story, 112 x 166 ft. garage, rein.-con., brick and steel, 4445 Grand Blvd. $60,000. Doerr, Lindquist & Doerr, 105 North Clark St., archts.

Wis., Fond du Lac—Combination Door and Screen Co., 188 Military St., having plans prepared by Stepnoski & Mehner, Fond du Lac (street address not available), 2 story, 45 x 110 ft. factory and warehouse, brick, rein.-con. and steel, plain foundation. $45,000.

Wis., Hammond—C. Datmyler plans 1 story, 50 x 122 ft. garage, repair and machine shops, brick, rein.-con. and steel, plain foundation. $40,000. Engineer and architect not selected.

Ia., Waterloo—Rath Packing Co., Sycamore and Elm Sts., having plans prepared by Henchien & McLaren, 37 West Van Buren St., Chicago, 5 story and basement, 90 x 100 ft., rein.-con. and brick, refrigerating plant. $150,000.

Kan., Wichita—Cooperative Power Plant, c/o D. S. Jackman, 715 East 13th St., plans 1 story, power plant, concrete, concrete foundation. $150,000. Engineer and architect not selected.

N. D., Fargo—Blue Valley Creamery Co., 700 South Clinton St., Chicago, c/o C. J. Walker, Fargo, plans 2 story, 60 x 100 ft. concrete and brick creamery, 1st Ave. N. near 11th St., here. $75,000.

Mo., Fulton — McElroy Sloan Shoe Co., 16th and Washington Sts., St. Louis, having plans prepared by A. B. Groves, Stock Exch. Bldg., St. Louis, 2 story, 40 x 78 ft., brick factory, here. $40,000.

Mo., Hannibal — Storis Ice & Coal Co. plans plant, Bridge and Ferry Sts. $50,000. W. Storis, pres. Engineer and architect not selected.

Mo., Oran—See "Waterworks."

Mo., St. Joseph—Collier-Adams Mfg. Co. having plans prepared by E. R. Meier, Lincoln Bldg., 3 story and basement, 68 x 300 ft., brick and stone factory, 4th and Mitchell Aves. $100,000.

Tex., Abilene—Wooten & Simmons plan 2 or 3 story, 500 x 500 ft. mill, concrete and steel, along tracks Abilene and Southern R.R. $200,000. Engineer and architect not announced.

Tex., Paris—Paris Textile Mills Co., c/o J. Deweese, mayor, having plans prepared by Lockwood Green Co., 101 Park Ave., New York City, 20,000 spindle cotton mill. $1,000,000.

Okla., Enid—See "Miscellaneous."

Okla., Sulphur—Colvert Ice Cream Co., Ardmore, plans creamery and ice cream plant, here. Engineer and architect not selected.

Okla., Tulsa—See "Buildings."

Wash., Seattle—Washington Iron Wks., Seattle Blvd. and Norman St., plans 126 x 572 ft. machine shop addition to structure now under way. $75,000.

Calif., Los Angeles—Pacific Sash & Door Co., 3216 South Main St., making plans group of buildings, 240 x 350 ft., incl. planing mill, storage sheds, dry kilns, etc. Private plans.

Calif., Los Angeles—Pioneer Pacific Worsted Co. having plans prepared 1st unit of woolen mill, 1 story, brick, steel and tile, 125,000 sq.ft. floor space. $250,000. Hamm & Grant, Inc., Ferguson Bldg., engrs.

Calif., San Francisco—Bekins Fireproof Storage Co., 13th and Mission Sts., had plans prepared by E. T. Flaherty, I. W. Hellman Bldg., Los Angeles, 7 story and basement storage building, rein.-con., Geary and Masonic Aves. $325,000.

Calif., San Francisco—Glidden Co. of California, 123 Hooper St., plans to remodel 4 story, rein.-con. factory, Hubbel St. To exceed $50,000.

Calif., San Francisco—Marian Realty Co., French Bank Bldg., had plans prepared by D. C. Coleman, 110 Suter St., 2 story, auto stage depot, brick, steel and terra cotta, 8th and Mission Sts. $40,000.

Calif., San Leandro—Cereal Mfg. Co., c/o C. N. Burrell, archt., American Bank Bldg., Oakland, having plans prepared 3 story, brick and concrete plant. $150,000.

Calif., San Leandro—Durant Motors Co. of California, 10910 East 14th St., Elmhurst, having plans prepared 2 story, 80 x 600 ft., brick factory, here. Private plans.

Ont., Campbellford—See "Miscellaneous."

Ont., Cedar Springs—H. Downey and H. Dewar, Cedar Springs, plan garage and repair shop. $42,000.

Ont., Hamilton—Hamilton Uniform Cap Co., 214 King William St., plans to rebuild factory recently destroyed by fire. Loss $150,000. A. Uger, mgr.

Ont., Peterboro — Pub. Utilities Comn. plans concrete, brick and steel electric light and power distribution sub-station. $75,000 bonds voted.

Sask., Yorkton—City plans power plant. $100,000.

BIDS DESIRED

Me., Rumford—B. T. Wheeler, ch. engr. of Maine Central R.R., Portland, taking bids 1 story, 100 x 110 ft. car repair shops, brick and steel, plain foundations, at freight yards, here. $50,000.

Mass., Boston—S. S. Eisenberg, archt., 46 Cornhill, taking bids and soon lets contract converting 5 story building into garage and service station, brick and steel, 27-36 Endicott St., for H. Norman, 20 Lawrence Ave., Roxbury (Boston P. O.).

Conn., Hartford—F. Stayton, 70 Freeman St., taking bids and opens same about Apr. 20, 2 story, 32 x 65 ft. storage plant, brick and steel, plain foundation, rear Buckingham St. $40,000. J. E. Marchetti, 721 Main St., archt.

Conn., Windsor Locks—C. H. Dexter & Sons, general contract 4 story and basement, 54 x 100 ft. factory, brick, plain foundation, to R. G. Bent Co., 183 Ann St. Archts. est. $75,000.

New York—See "Miscellaneous."

N. Y., New York—Apr. 13, by Transit Comn., 49 Lafayette St., inspection shed and service buildings, northeast corner Jerome Park reservoir property near Jerome Ave. and Mosholu Parkway. G. McAneny, chn.

Pa., Altoona—Apr. 16, by United Home Dressed Meat Co., 9th Ave. and 31st St., 3 story and basement, 81 x 95 ft. concrete, brick and steel addition to plant. Anders & Rimers, 430 Gary Bldg., Cleveland, O., engrs. and archts. Noted Feb. 1.

Pa., McKees Rocks—Federal Enameling & Stamping Co., Thompson Ave., will build 1 and 3 story, 90 x 150 ft., 90 x 120 ft., 130 x 300 ft. and 200 x 350 ft. factory buildings, to replace those recently destroyed by fire. Work will be done by separate contracts. F. Frimmer, 1138 Charles St., archt. Noted Nov. 23.

Pa., New Bethlehem—Lower Bros., will build 2 story and basement, 52 x 108 ft. garage. $40,000. Work will be done by separate contract. W. J. Laughlin, 1st Natl. Bank Bldg., New Kensington, archt.

Pa., Phila.—J. H. Francis, engr., Otis Bldg., taking bids 4 story and basement, 100 x 100 ft. rein.-con. and brick plant, plain foundation, Dauphin and Tulip Sts., for Pollock-Huston Co. $500,000.

Pa., Phila.—P. Kuhn, archt., 3058 North 8th St., taking bids 1 story, 69 x 100 ft. brick and steel garage, plain foundation, Front and Thompson Sts., for G. Fellman, 1253 North Front St. $60,000.

Pa., Uniontown—H. W. Altman, archt., Fayette Title & Trust Bldg., taking bids 2 story, 41 x 70 ft. brick, steel and stone garage, for Uniontown Automobile Co. $50,000. Noted Mar. 8.

D. C., Wash. — Ballinger Co., archts., 12th and Chestnut Sts., Phila., receiving bids 4 story and basement, 150 x 250 ft. warehouse and office, rein.-con., brick and steel, 4th and T Sts., here, for Sanitary Grocery Co., 52 O St., N. W. $500,000.

W. Va., Huntington—C. L. Ritter, Ritter Bldg., 3 story, 60 x 160 ft. garage, 4th Ave., to H. Perseen, 604 7th Ave. Archts. est. $70,000.

Ky., Central City — Apr. 11, by Marr & Holman, archts., Stahlman Bldg., Nashville, Tenn., 1 story and basement, 70 x 165 ft. garage, brick, for J. Barnes Auto Co. $40,000. Noted Mar. 22.

Industrial Works (Continued)

O., Cleveland—Power Impvt. Co., c/o G. E. Peterson, 15924 Euclid Ave., taking bids 5 story and basement, 109 x 135 ft., brick, steel and concrete warehouse, sales and service building, Cedar Ave. and Ashland Rd. $350,000. Private plans. Noted June 8.

O., Salem—Victor Stove Co., 208 Depot St., taking bids 1 story, 80 x 150 ft. foundry, steel, brick foundation. Private plans. Noted Mar. 15.

O., Tiffin—W. H. Roe & Associate Engineers, Tiffin, taking bids 1 story, 55 x 170 ft., brick and steel garage, for F. S. Sell, Tiffin.

Wis., Cassville — Klindt-Geiger Canning Co. taking bids 2 story, 50 x 95 ft., brick, rein.-con. and steel factory, plain foundation. $45,000. Private plans.

Wis., Green Bay—Apr. 20, by Foeller, Schober & Stephenson, archts., Nicollet Bldg., 2 story and basement, 60 x 134 ft., publishing plant, brick and concrete, plain foundation, for Green Bay Newspaper Co., 315 Cherry St. $150,000. Noted Jan. 11.

Wis., Madison—S. Sinaiko, 1968 Railroad St., taking bids 2 story, 60 x 70 ft., brick and rein.-con., mill, plain foundation. $40,000. Private plans. Noted Mar. 1.

Wis., Plymouth — E. A. Juul, archt., Security Bldg., Sheboygan, taking bids 1 story, 60 x 150 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation, for J. Mattey, Plymouth. $50,000.

Wis., Sheboygan—E. A. Juul, archt., Security Bldg., taking bids 2 story, 60 x 100 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation, Center St., for F. Hensel & Co., North 7th St. and Center Ave. $50,000. Noted Feb. 22.

Minn., St. Paul — Apr. 9, by Waldorf Paper Products Co., Myrtle St. near Hampden Ave., 5 story and basement, 84 x 193 ft., rein.-con., brick and tile, Myrtle St. near Hampden Ave. $175,000. H. A. Sullwold, 641 Endicott Bldg., engr. Noted Feb. 15.

S. D., Rapid City—Apr. 23, by A. C. Hunt, secy. South Dakota State Cement Comn., Rapid City, also Apr. 24, at Marvin Highitt Hotel, Huron, for following structures at state cement plant, near here, 1 story, 67 x 122 ft. brick shop and warehouse, 1 story and basement, 54 x 98 ft. brick, bag storage and cleaning building, rein.-con. finished storage building incl. 6 tanks, 70 ft. high, 32 ft. diam., 1 story, 62 x 80 ft. brick office, laboratory and employees locker building, rein.-con. chimney 205 ft. high, 10 ft. diam., concrete foundation 80 x 408 ft. for raw material storage building. J. C. Buckbee Co., 1st Natl. Bank Bldg., Chicago, engrs.

S. D., Rapid City—Apr. 10, by State School of Mines, concrete and brick boiler house and coal bunker, one rein.-con. chimney, induced draft fan, steam piping, etc., for heating plant. $40,000. T. W. Dwight, pres. Black Hills Eng. Co., Rapid City, engrs.

Calif., Los Angeles—See "Buildings."

BIDS RECEIVED

N. Y., Oswego—E. S. Walsh, supt. Pub. Wks., Albany, Mar. 27, terminal freight house, here, from Peter Raby Contg. Co., 26 West Cayuga St., $78,566; B. L. Gabriel, Security Bldg., Binghamton, $84,451; McHarg-Barton Co., 1328 Bway., New York, $84,655. Noted Mar. 1.

O., East Cleveland (Cleveland P. O.)—City 1 story, 52 x 88 ft. and 1 story, 37 x 80 ft. brick and steel garages, Marloes Ave. and Eddy Rd., from Forschner Co., East 10th St. and St. Clair Ave., $51,187; C. A. Carson Co., 7016 Euclid Ave., $59,000. Noted Feb. 15.

CONTRACTS AWARDED

N. H., Penacook (Concord P. O.)—Dustin Island Woolen Mills, 4 story, 55 x 80 ft. addition to main building, and 2 story, 35 x 120 ft. dyehouse addition, brick and timber, and 1 story, 40 x 65 ft. boiler plant, rein.-con., to L. H. Shattuck Inc., 208 Granite St., Manchester. Archts. est. $100,000.

Mass., Adams—Berkshire Cotton Mfg. Co., 4 story, 53 x 101 ft. mill addition, brick and timber, plain foundation, to J. R. Hampson & Co., 14 Taylor St., Pittsfield. Archts. est. $84,000.

Mass., Gardner—International Fibre Co., West St., 2 story, 90 x 90 ft. factory, brick and timber, plain foundation, West St., to Frissell Eng. Co., Main St. Archts. est. $50,000.

Mass., Somerville (Boston P. O.)—Great Atlantic & Pacific Tea Co., 150 Bay St., Jersey City, N. J., 4 story, 80 x 120 ft., bakery, here, to Turner Constr. Co., 178 Tremont St., Boston.

R. I., Cranston—Cranston Worsted Co., Bristol, 5 story, 64 x 122 ft. mill addition, brick and timber, plain foundation, to D. E. McIntire, Inc., 74 Broad St., Boston. Archts. est. $100,000.

R. I., Providence—J. F. Gibson Co., West Exchange St., 3 story, 50 x 135 ft. warehouse, brick and timber, plain foundation, West Exchange St., to Williams & Merchant Inc., Rhode Island Trust Bldg. Archts. est. $60,000.

R. I., Providence—M. W. Norton, Dorrance St., 3 story garage, brick and steel, plain foundation, to E. Radding Constr. Co., 144 Westminster St. Archts. est. $75,000. Noted Mar. 8.

Conn., Hartford — Veeder Mfg. Co., 20 Sargeant St., 1 story and basement, 80 x 150 ft. factory addition, brick and steel, plain foundation, to R. G. Bent Co., 183 Ann St. Archts. est. $50,000.

Conn., Norwich—Amer. Woolen Co., 3 story, 106 x 125 ft. warehouse with 70 x 125 ft. extension, rein.-con., to Turner Constr. Co., 178 Tremont St., Boston.

Conn., Putnam—Adams Mfg. Co., 2 story, 105 x 110 ft. weave shed, 1 additional story to present 3 story, 45 x 60 ft. mill, two 4 story toilet towers and elevator tower, brick and timber, plain foundations, to O. D. Purington & Co., 626 Industrial Trust Bldg., Providence, R. I. Archts. est. $80,000. Noted Mar. 15.

Conn., Shelton—S. Blumenthal & Co., 4 story, 53 x 100 ft. mill, rein.-con., 4 story, 16 x 50 ft. mill construction building and 60 x 75 ft. rein.-con. building, to Turner Constr. Co., 178 Tremont St., Boston.

N. Y., Mineola—Reid Ice Cream Co., 1 and 2 story, 55 x 200 ft. storage plant, to Turner Constr. Co., 244 Madison Ave., New York.

N. Y., New York—Lion Brewery of New York City, Columbus Ave. and 108th St., ice plant, brick and steel, plain foundation, Ludlow and Whitlock Aves., to Cunningham & Foley, Inc., 219 West 116th St. Archts. est. $400,000.

N. Y., New York—Wilson & Co., United Stock Yards, Chicago, 5 story, 50 x 70 ft. crackling building, 46th St. between 1st Ave. and East River, here, to Turner Constr. Co., 244 Madison Ave.

N. Y., Watertown—Northern New York Utilities, Inc., 58 Pub. Sq., remodeling retort house and constructing two vertical retorts of 800,000 cu.ft. capacity, to West Gas Impvt. Co., Inc., 150 Nassau St., New York, $200,000. Noted Feb. 1.

N. Y., Yonkers—Alexander Smith & Sons Carpet Co., Elm and Palisade Aves., 4 story, 60 x 430 ft. mill, to Turner Constr. Co., 244 Madison Ave., New York.

N. J., Paulsboro — Vacuum Oil Co., Bramells Pt., 3 story, 100 x 120 ft. export warehouse, and 2 story, 60 x 60 ft. domestic warehouse, etc., to Turner Constr. Co., 244 Madison Ave., New York City.

Pa., Altoona—M. S. Koller & Son, 1001-1003 11th St., 3 story and basement, 45 x 150 ft. brick, steel and limestone warehouse, 11th and Green Aves., to C. H. Cassidy, 2814 Broad Ave., cost plus basis. Archts. est. $150,000. Noted Mar. 22.

Pa., Etna (Pittsburgh P. O.)—Etna Buick Co., 425 Butler St., 2 story, 75 x 100 ft. concrete and brick addition to garage, Butler St., to Duquesne Constr. Co., Cypress and Aspen Sts., Pittsburgh. Archts. est. $40,000. Noted Feb. 8.

Pa., Phila.—F. A. Nardy, 3840 Spring Garden St., will build 2 story and basement, 100 x 138 ft. brick and steel garage, by day labor. $60,000. R. A. Schumann, 202 West State St., Trenton, N. J., archt. Noted Dec. 7.

Pa., Phila.—Penn Door & Sash Co., 25th and Callowhill Sts., 1 and 2 story and basement, 193 x 315 ft. and 41 x 81 ft. warehouse, factory and garage, brick and steel, plain foundation, F and Atlantic Sts., to F. W. Easby, 1814 Chestnut St. Noted Jan. 25.

Pa., Phila.—Penna Laundry Co., 32nd and Powelton Aves., 3 story and basement, 81 x 92 ft. brick and steel laundry, plain foundation, 32nd and Powelton Aves., to F. A. Havens Co., 845 North 19th St., $150,000.

Pa., Phila. — Evening Bulletin, Juniper and Arch Sts., 7 story and basement, 90 x 134 ft. publishing plant, rein.-con., brick and steel, Juniper and Arch Sts., to Doyle & Co., 1519 Sansom St. Archts. est. $750,000.

Pa., Pittsburgh — W. W. Martin, 5847 Center Ave., 1 story and basement, 60 x 190 ft. sales and service building, 5710 Penn Ave., to Inland Constr. Co., 5612 Penn Ave. Archts. est. $40,000.

Pa., Pittsburgh — Oberndorff Mfg. Co., Thomas Blvd., 1 story, 50 x 120 ft. addition to factory, Thomas Blvd., to West Bros., 635 Trenton Ave., Wilkinsburg.

Pa., Pittsburgh — Pittsburgh Vitreous Enameling Co., 720 Bessemer Bldg., 1 story, 58 x 75 ft. factory, 76-79 Cliffe St., to Walker & Curley, 106 Bridge St., Sharpsburg.

Pa., Pittsburgh—Pittsburgh Transformer Co., Columbus and Preble Aves., 1 story, 60 x 80 ft. addition to factory, to Austin Co., Union Arcade.

Pa., Pittsburgh—Seltzer Music Co., 1201 Liberty Ave., 6 story and basement, 41 x 131 ft. film exchange, 1016 Forbes St., to H. Miller & Son, 2565 5th Ave. Archts. est. $150,000.

Pa., Scranton—Wyoming Motor Car Co., 417 North 6th Ave., 1 story, 40 x 150 ft. concrete, brick and tile garage, Wyoming Ave., to M. Rosata & Son, 1145 Sloan Ave. Archts. est. $40,000.

Pa., Springdale—West Penn Power Co., West Penn Bldg., Pittsburgh, 1 story and basement, 200 x 200 ft. concrete, brick and steel power plant addition, to Sanderson & Porter, 52 William St., New York City. $6,000,000.

N. C., Lumberton — Mansfield Mill, 1 story, 177 x 280 ft., textile mill, brick and timber, to E. H. Clement Co., Commercial Bank Bldg., Charlotte, $83,000. Noted Mar. 15.

Fla., Avon Park—First Trust Co., Verona Investment Co., and S. P. Durrance, 100 x 200 ft. cold storage building, brick, to W. J. Hein, Avon Park, cost plus percentage basis. Engrs. est. $50,000.

O., Bridgeport—W. McConnaughty, Main St., 3 story and basement, 44 x 67 ft. garage and sales building, to C. Shimp, City Bldg., Martins Ferry. Archts. est. $40,000.

O., Cleveland—Central Brass Co., 6203 Cedar Ave., 1 story, 102 x 140 ft., brick and steel foundry, East 55th St. and Bragg Court, to A. A. Lane Constr. Co., 1869 East 55th St. Archts. est. $50,000.

O., Cleveland—See "Buildings."

O., East Palestine—W. S. George Pottery Co. will build 2 story, 165 x 400 ft. plant, brick, by day labor. Private plans. Noted Mar. 15.

Mich., Ionia—Ypsilanti Reed Furniture Co., 5 story and basement, 112 x 300 ft., brick and timber factory, plain foundation, to Barnes Bros., Division St., Grand Rapids, $123,565. Noted Mar. 8.

Ill., Centralia—Pfeffer Garage Co., 2 story rein.-con. and brick garage, Main St., to Murch Bros., Railway Exch. Bldg., St. Louis, Mo. Archts. est. $60,000. Noted Jan. 25.

Wis., Augusta—Ford Auto Co., 1 story, 40 x 100 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation, to W. A. Johnson, Augusta. Archts. est. $40,000.

Wis., Beloit—Gaston Scale Co., 715 2nd St., 2 story, 40 x 68 ft., brick, rein.-con. and steel factory, plain foundation, to W. J. Fitzgerald Co., 726 Central Ave. Archts. est. $40,000. Noted Feb. 1.

Wis., Milwaukee—Wisconsin Magneto Co., 528 Milwaukee St., 1 story and basement, 90 x 120 ft., service station, brick and concrete, plain foundation, Van Buren St., to A. Nuedling, 998 16th St. Archts. est. $48,000.

Wis., Milwaukee—Milwaukee Wadding & Comfort Mills, 415 3rd St., 1 story, 60 x 192 ft., brick and timber, plain foundation, Clybourn St., to J. B. Schmitz, 252 West North Ave., Wauwatosa. Archts. est. $45,000. Noted Mar. 15.

Wis., Milwaukee—M. R. Hayes, 97 Wisconsin St., 1 story, 80 x 152 ft., brick and concrete garage, plain foundation, Cambridge Ave., to F. Timm, 1279 10th St. Archts. est. $45,000. Noted Mar. 1.

Wis., Racine—Thomas Heating Co., 846 Grand Ave., 1 story and basement, 42 x 120 ft., brick and timber warehouse, plain foundation, Center St. to Racine Constr. Co., 468 College Ave. Archts. est. $45,000.

Ia., Cedar Rapids — Disbrow Sash and Door Co., 7th Ave. and South 1st St., general contract 55 x 126 ft. warehouse, 51 x 100 ft. factory, 40 x 43 ft. office, 30 x 50 ft. boiler house, all brick and tile, to Loomis Bros., 326 3rd Ave., $75,000. Noted Dec. 14.

Ia., Waterloo—J. H. Hadley, 521 Vermont St., general contract 2 story and basement, 40 x 160 ft. garage, 5th and Jefferson Sts., to J. G. Miller, 813 Black Hawk Bank Bldg. $40,000.

Industrial Works (Continued)

Ia., Waterloo — M. Parrott & Sons Co., Sycamore St. and East Park Ave., general contract 1 story and basement, 122 x 200 ft. printing plant and office, brick and tile, Bratnober St. near Bway., to Currie-Simpson Co., 180 West 1st St., $50,000.

Kan., Wichita—Wichita Beacon, 2 story, 25 x 47 ft., newspaper plant and office building, concrete and terra cotta, South Main St., to G. Siedhoff Constr. Co., Broadview Hotel. $40,000.

Neb., Columbus — Swift & Co., 1223 Leavenworth St., creamery and poultry building, rein.-con. and brick, here, general contract to E. Rokahr & Sons, 1743 South 24th St., Lincoln, $135,000. Noted Feb. 7.

Mo., Kansas City—Ralston Purina Co., 8th and Gratiot Sts., general contract 3 story and basement, 42 x 100 ft. grinding mill and 2 warehouses, 100 x 160 ft. and 100 x 128 ft., 27 ft. high, rein.-con., Nicholson and Scott Sts., to Jones-Hottelsater Constr. Co., 706 Mutual Bldg. Archts. est. $300,000.

Mo., St. Louis—Sybilline Realty Investment Co., Title Guaranty Bldg., 1 story, 150 x 152 ft., rein.-con. and brick factory, plain foundation, Duncan Ave., to C. B. McCormack & Son, Columbia Bldg. Archts. est. $60,000.

Mo., St. Louis—Superior Folding Box Co., 2207 Chestnut St., 2 story, 135 x 163 ft., rein.-con. and brick factory, plain foundation, Geraldine St., to Gamble Constr. Co., 620 Chestnut St. Archts. est. $75,000.

Tex., Dallas—W. Morris, 1017 Elm St., 2 story, 88 x 160 ft., rein.-con. garage, plain foundation, Ervay and Cadiz Sts., to Inge Constr. Co., Swiss and Hawkins Sts., $50,000.

Tex., Houston—Anderson Clayton & Co., Mason Bldg., warehouses, rein.-con. woodpile foundations, cotton compress, 600 ft. wharves, concrete construction, also dredging channel, to J. B. Townsend, Houston (street address not available), $750,000. Noted Mar. 1 under Excavation, Drainage, Irrigation.

Calif., Los Angeles—A. Flleshman, c/o Swasey & McAfee, archts., Hibernian Bldg., 4 story, 50 x 120 ft. warehouse, brick, Santa Monica Blvd., to Macdonald & Kahn, Loew State Bldg. Archts. est. $75,000.

Que., Montreal—H. Morgan & Co. Ltd., St. Catherine St., 75 x 160 ft. rein.-con. power house, Aylmer St., to H. Morgan Co., Beaver Hall Hill, $150,000.

Ont., Hamilton—R. J. Foley, engr. United Gas & Fuel Co., Sun Life Bldg., coke and byproduct ovens, to Semen Solvay Co., Room 318 Royal Connaught Hotel, $2,500,000. Noted Mar. 8.

Ont., Toronto—Toronto Carpet Mfg. Co., 1179 King St. W., 3 story and basement, 140 x 350 ft. rein.-con. and brick plant, plain foundation, to W. Steele & Sons, 219 North Broad St., Phila., Pa.

Buildings

PROPOSED WORK

Mass., Boston—Bank and Office—Old Colony Trust Co., 17 Court St., plans 9 story, brick, stone, steel and concrete addition, 28 Cornhill. $1,000,000. Coolidge & Shattuck, 122 Ames Bldg., archts.

Mass., Deerfield—High School—School Bd., Town Hall, plans 2 story and basement, brick and steel, Main St. $150,000. Engineer and architect not announced.

Mass., Hyde Park (Boston P. O.)—Police Station—Pub. Wks. Dept., Boston, having plans prepared by Maginnis & Walsh, 100 Boylston St., Boston, 3 story, rein.-con. and brick, wood pile foundation, here. $200,000.

Mass., Needham — High School — Town plans 90 x 175 ft., rein.-con. and brick, plain foundation. $280,000. W. M. Southworth, chn. school com. Engineer and architect not selected.

Conn., Hartford—Gymnasium—Connecticut Institute for Blind, c/o H. H. White, 78 North Beacon St., chn. executive com., plans 1 story and basement, 50 x 100 ft., brick and steel, plain foundation, Holcomb St. $150,000. Engineer and architect not selected.

Conn., Hartford—Office—Judd & Co., Hartford-Connecticut Trust Co. Bldg., plans 7 story, 72 x 82 ft., rein.-con., plain foundation, Pearl St. $250,000. Engineer and architect not selected.

Conn., New Britain—Society—Young Mens Temperance, Abstinence and Benevolent Society, Lafayette St., plans 60 x 100 ft., probably 4 story, brick, plain foundation, Main St. $150,000. Engineer and architect not selected.

N. Y., Albany—Hospital—Albany City Hospital plans 4 or 5 story, concrete, brick and steel addition. $600,000. C. Gibson, pres. Bd. Governors, Albany City Hospital.

N. Y., Angelica—Home—Building Com. Bd. Supervs. Allegany Co. (Belmont), plans rein.-con., brick and steel, here. To exceed $150,000. W. H. Hall, Bellmont, chn.

N. Y., Brooklyn—Schools—Bd. Educ., 500 Park Ave., New York, having sketches made by W. H. Gompert, archt. and engr., Flatbush Ave. extension and Concord St., addition to P. S. 145, Central Ave. and Noll St., $600,000; P. S. 63, Hinsdale Ave. near Liberty Ave., $750,000, 5 story high school, Classon Ave. and Union St., $2,000,000, all brick, steel and stone, plain foundations, here.

N. Y., Brooklyn—School—Bd. Educ., 500 Park Ave., New York, soon takes bids P. S. 210, brick, steel and stone, Park Pl. and Rochester Ave., here. $900,000. W. H. Gompert, Flatbush Ave. extension and Concord St., archt and engr. Noted Mar. 15.

N. Y., Brooklyn—School—Bd. Educ., 500 Park Ave., New York, having plans prepared by W. H. Gompert, archt. and engr., Flatbush Ave. extension and Concord St., P. S. 97, brick, steel and stone, plain foundation, Benson and 25th Aves. $800,000.

N. Y., Buffalo — Apartment — C. J. Fimiani, 1093 Delaware Ave., purchased 100 x 193 ft. site, Delaware Ave. and West Ferry St., and plans apartment. $300,000. Engineer and architect not selected.

N. Y., Fairport—High School—Apr. 9, to vote on $375,000 bonds 135 x 166 ft. high school. Noted Feb. 15.

N. Y., New York—Apartment—V. C. Farrar, archt. and engr., 4 East 39th St., preparing plans 6 story, 50 x 100 ft., brick, steel and stone, plain foundation, 179th St. and Walton Ave. Owner's name withheld.

N. Y., New York—Apartment—Raven Realty Co., c/o G. Miller, archt. and engr., 1482 Bway., had plans prepared 5 story, 92 x 100 ft., brick, steel and stone, plain foundation, Carlton Ave.

N. Y., New York—Apartments—C. E. Sheppard, c/o Scott & Prescott, archts., 34 East 23rd St., soon takes bids two 5-story, brick, steel and stone, plain foundations, 578 Ft. Washington Pl. $400,000 each.

N. Y., New York—Exchange—New York Telephone Co., 15 Dey St., having plans prepared by McKenzie, Voorhies & Gmelin, archts. and engrs., 342 Madison Ave., 29 story, brick, steel and rein.-con., plain foundation, West Barclay, Washington and Vesey Sts. $11,200,000.

N. Y., New York—Hotel—Fifty East 67th St. Corp., c/o Rouse & Goldstone, archts. and engrs., 512 5th Ave., having plans prepared 12 story, 80 x 100 ft., brick, steel and stone, plain foundation, 52 East 67th St. $750,000.

N. Y., New York—Office and Theatre—Fourteen Ninety Three Bway. Corp., 485 5th Ave., having plans prepared by Rapp & Rapp, 190 North State St., Chicago, 24 story, 200 x 207 ft., Bway. between 43rd and 44th Sts. $5,000,000. Noted Nov. 9.

N. Y., New York—Theatre—W. Hagedorn, c/o T. W. Lamb, archt. and engr., 644 8th Ave., soon takes bids 2 story, 110 x 160 ft., brick, steel and stone, plain foundation, Fordham Rd. $300,000. Noted Mar. 22.

N. Y., Rome—Church—Building Comn. of Rome Baptist Church, plans brick, stone and concrete addition. $190,000. C. H. Halstead, chn.

N. J., New Brunswick — Hospital — St. Peters General Hospital, Somerset St., plans new hospital. $300,000. J. Norris, 94 Somerset St., head of movement. Engineer and architect not selected.

N. J., New Brunswick—Hospital—Middlesex General Hospital plans addition. $200,000. D. Marshall, Highland Park, chn. com.

Pa., Allentown — Store — M. Rosenberg plans 4 story, 60 x 220 ft. brick and steel, South 7th St. $150,000. Engineer and architect not announced.

Pa., East Washington (Washington P. O.) —High School—Bd. Educ., c/o J. B. McMurray, Washington Trust Bldg., having plans prepared by G. W. Brugger, 29 North Central Ave., Canonsburg, 2 story and basement, brick, steel and stone. $150,000.

Pa., Ferndale (Johnstown P. O.)—School Dist. having plans prepared by J. E. Adams, archt., Nemo Bldg., Johnstown, 2 story and basement, 90 x 140 ft., brick and steel. $150,000.

Pa., Greensburg — High School — Bd. Educ. having plans prepared by M. E. Kressley & Co., 13 North 4th St., Harrisburg, 2 and 3 story and basement, 180 x 300 ft. brick, steel and stone. $250,000.

Pa., Grove City—Church—Presbyterian Congregation, c/o F. Fithian, having sketches made by J. C. Fulton & Son, Uniontown, 2 story and basement, brick or stone, on Pelton Hall site. $150,000.

N. Y., Mayville—High School—Apr. 21, by Bd. Educ., new high school, brick $160,000. D. Ingerson, clk. Beck & Tinkham, Professional Bldg., Jamestown, archts. Noted Mar. 22.

Pa., Meyersdale — Church — Church of Brethren having plans prepared by L. Kieper, Johnstown, 2 story and basement, 80 x 110 ft. concrete and brick, Main St. $150,000.

Pa., New Kensington — Bank — Logan Trust Co., New Kensington, having plans prepared by P. R. L. Hogner, c/o Aluminums Co., 5 story and basement, 50 x 120 ft. terra cotta and brick, 5th Ave. and 9th St. $250,000.

Pa., Phila.—Apartment—J. Goecher, 4116 Girard Ave., soon takes bids 4 story and basement, 63 x 115 ft. brick and steel, plain foundation. $200,000. J. F. Fieldstein, Otis Bldg., archt.

Pa., Phila.—Hotel—Kugler Bros., 15th and Ranstead Sts., having plans prepared by Ralph & White, Penna. Bldg., 26 story and basement, 85 x 132 ft. rein.-con., brick, steel and stone, 15th and Chestnut Sts. $5,000,000.

Pa., Pittsburgh—Gymnasium—Carnegie Institute of Technology, Schenley Park, having plans prepared by H. Hornbostel, archt., Century Bldg., 3 story and basement, concrete, brick and tile, Woodlawn Ave. $500,000.

Pa., Pittsburgh—Store and Apartment—Watkins Realty Co., Vandergrift Bldg., having plans prepared by J. E. Dwyer, Forbes Murray Bldg., 7 story and basement, 60 x 390 ft. concrete, brick and tile, Murray and Alderson Sts. $400,000.

Pa., Warren—Hotel—Bd. Commerce having plans prepared hotel. $250,000. Engineer and architect not announced.

W. Va., Charleston — Hotel — Federal Hotel Co., Inc., having plans prepared by B. Cunningham Co., 565 5th Ave., New York City, 13 story and basement, 135 x 147 ft., stone, brick, steel and terra cotta, Dunbar and Kanawha Sts. $2,000,000.

North Carolina — College, Institutional, etc. — State Legislature, Releigh, made following appropriations, $1,350,000 new buildings for North Carolina College for Women, at Greensboro; $326,000 new buildings for State School for Blind, at Raleigh; $415,000 new buildings and improvements for State Hospital for Insane at Morganton; $173,000 new buildings for Negro Normal School, at Elizabeth City; $173,900 new building for Negro Normal School, at Winston-Salem; $300,000 new buildings for Appalachian Training School, at Boone; $388,000 new buildings for Cullowhee Institute, Cullowhee; for all foregoing address E. C. Brooks, supt. Pub. Instruction, Raleigh; $300,000 new buildings, water lines, etc., for North Caroline State Hospital for Colored Insane, at Goldsboro; $219,000 new buildings for State Tuberculosis Sanatorium at Sanatorium; address A. M. Brayer, Supt., Sanatorium; $455,000 new buildings for Agricultural & Technical College for Colored, at Greensboro, H. M. Dudley, pres.; $232,500 new buildings for Woman's Reformatory, at Samarcand, A. McNaughton, Samarcand, supt.

N. C., Graham—Courthouse—Alamance Co. plans courthouse. $250,000. W. O. Warren, Graham, co. mgr. Engineer and architect not selected.

N. C., Raleigh — Gymnasium — North Carolina State College of Agriculture and Engineering plans gymnasium, $200,000. W. C. Riddick, pres.

Fla., West Palm Beach—Hotel—L. G. Biggers and associates, having plans prepared by W. M. King, archt., West Palm Beach, 4 story, 400 room, rein.-con., rock foundation, South Olive St. $500,000. Carr & McFadden, West Palm Beach, engrs.

Ala., Huntsville—Depot—Southern Ry. Co., 1300 Pennsylvania Ave., Wash., D. C., plans 1 story and basement, here. $150,000. J. H. Stanfield, Huntsville, div. mgr.

Miss., Aberdeen—School—Bd. Educ. plans school. $150,000. Engineer and architect not selected.

Tenn., Memphis—Bank and Office, etc.—Security Constr. Co. soon awards contract 12 story, 75 x 85 ft., stone and marble, South Front St. and Madison Ave. $1,250,000. McKim, Mead & White, 101 Park Ave., New York City, and L. Carlisle, 206 Falls Bldg., Memphis, archts. Noted Jan. 18.

Buildings (Continued)

O., Cleveland—Apartment—M. Berick, 822 Leader-News Bldg., plans 3 story and basement, brick and timber, 1924 East 93rd St. $150,000. Engineer and architect not selected.

O., Cleveland—Apartment—J. Dolinsky, 10816 Massie Ave., having plans prepared by M. Altschuld, 5116 Woodland Ave., 3 story and basement, 37 x 111 ft., brick and timber, Yale Ave. near St. Clair Ave. $150,000.

O., Cleveland — Apartment — Larkspur Apartment Co., c/o T. Sloan, 517 Sloan Bldg., had plans prepared by Grieble Co., 517 Sloan Bldg., 8 story and basement, 50 x 142 ft., brick, steel and concrete, 7338 Euclid Ave. $500,000.

O., Cleveland—Apartment—Narosny & Libhaber, 11523 Tuscora Ave., having plans prepared by M. Weis, 617 Union Bldg., 3 story and basement, 47 x 146 ft., brick and steel, East 97th St. near Lamont Ave. $150,000.

O., Cleveland—Apartment—J. Nozik, 994 Linn Dr., having plans prepared by M. Weis, 617 Union Bldg., 4 story, 47 x 123 ft., brick and steel, 1857 East 82nd St. $150,000.

O., Cleveland—Apartment—Ohio Building Finance Co., Discount Bldg., having plans prepared by W. A. Becker, 323 Union Bldg., 4 story and basement, 32 x 142 ft., brick and timber, 2052 East 90th St. $150,000.

O., Cleveland—Church—Emanuel Church, 8613 Carnegie Ave., having plans prepared by Watson Eng. Co., 4614 Prospect Ave., 2 story, brick and stone, Carnegie Ave. $150,000.

O., Cleveland—Infirmary—State Hospital Comn., Columbus, had revised plans prepared by R. S. Harsh, state archt., Columbus, 2 story, 180 x 180 ft., brick, steel and concrete, Warner Rd., here. $225,000.

O., Cleveland—Store—Bolivar-Prospect Co., c/o J. L. Free, 1004 Prospect Ave., having preliminary plans prepared 10 story, 116 x 180 ft., brick, steel and concrete, Bolivar Rd. and Prospect Ave. $750,000. Engineer and archts name withheld.

O., Cleveland—Temple—West Side Masonic Temple Co., c/o J. Cox of Cleveland Ry. Co., having plans prepared by C. W. Hopkinson, Rose Bldg., 5 story, about 80 x 120 ft., brick, steel and concrete, Franklin Circle. $350,000.

O., Zanesville—Hotel—Clarendon Hotel Co., c/o J. A. Rusk, mgr., having plans prepared by Watson Eng. Co., archts., 4614 Prospect Ave., Cleveland, 5 story and basement, 135 x 165 ft., brick, steel and concrete. $800,000.

Mich., Detroit— Apartment — Lane, Davenport & Peterson, archts., 2320 Dime Bank Bldg., preparing plans 4 story and basement, 140 x 220 ft. brick, steel and stone, plain foundation, Glendale Ave. $500,000. Owner's name withheld.

Mich., Detroit—School—St. Margarets Parish, J. A. Kolzer, pastor, Lemay and Warren Aves., had plans prepared by Donaldson & Meier, 1314 Penobscot Bldg., 2 story and basement, 65 x 190 ft. brick and steel, plain foundation, Lemay and Warren Aves. $150,000.

Mich., Ironwood—Church—St. Ambrose Congregation, J. Hollinger, pastor, having preliminary plans prepared by E. Brielmaier & Sons Co., 432 Bway., Milwaukee, Wis., 1 story, brick and tile, plain foundation. $150,000.

Ill., Chicago—Apartment—A. M. Ruttenberg, archt., 64 West Randolph St., preparing plans 3 story and basement, 100 x 104 ft., rein.-con., brick and steel, Avers St. near Hoyne Ave. $150,000. Owners name withheld.

Ill., Chicago—Apartment and Store—A. M. Ruttenberg, archt., 64 West Randolph St., preparing plans 3 story and basement, 100 x 123 ft., rein.-con., brick and steel, Devon and Newgard Sts. $150,000. Owners name withheld.

Ill., Chicago—Home—Christian Industrial League, 882 South State St., plans 5 story, rein.-con., brick and steel, Monroe St. between Green and Peoria Sts. $500,000. H. B. Wheelock, 64 West Randolph St., archt.

Ill., Evanston—Store and Office—Lowe & Bollenbacker, archts., 208 South La Salle St., Chicago, receive bids about Apr. 22, 6 story and basement, 70 x 120 ft., rein.-con., brick and steel, 517 Davis St., for Northwestern University, 522 Davis St., here. $250,000. J. G. Rogers, 367 Lexington Ave., New York City, associated archt. Noted Feb. 1.

Wis., Kenosha—Hotel—W. W. Ahlschlazer, archt., 65 East Huron St., Chicago, completing plans and soon takes bids 3 story and basement, 124 x 167 ft., brick, concrete and terra cotta, plain foundation, for Kenosha Development Co., c/o E. Dayton, Orpheum Bldg. $175,000.

Wis., Lancaster—High School—Rejected bids received Mar. 14, 2 story and basement, 100 x 200 ft., brick, tile and concrete, plain foundation. Will readvertise. Parkinson & Dockendorff, Linker Bldg., La Crosse, archts.

Wis., Milwaukee—University—State Bd. Educ., Capitol Bldg., Madison, plans brick and steel, plain foundation, here. $150,000. E. A. Fitzpatrick, secy. Engineer and architect not selected.

Wis., Sheboygan—Clubhouse, etc.—Fraternal Order of Eagles, New York Ave., plans 4 story, rein.-con., brick and steel, plain foundation, New York Ave. $150,000. A. L. Theumber, mgr. Engineer and architect not selected.

Ia., Council Bluffs—School—Voted $225,000 bonds for school. Architect not selected.

Ia., Des Moines—Schools—Voted $2,630,000 bonds for school projects as follows: 2 junior high schools $500,000 and $300,000 respectively, completion of 3 junior high schools $300,000, $200,000 and $100,000 respectively, 28 additions and completions, ranging from $7,000 to $136,000, all rein.-con., brick, tile and stone. G. L. Garton, secy. Bd. Educ. Noted Mar. 22.

Ia., Ft. Dodge—Hospital—Lutheran Congregation plans hospital. $200,000. Architect not selected.

Ia., Ft. Dodge — Hospital — St. Joseph Mercy Hospital plans hospital. $150,000. Engineer and architect not selected.

Minn., St. Paul—Store—Bannons, Inc., 7th and Minnesota Sts., plans 10 story and basement, 7th and Minnesota Sts., rein.-con., brick, tile and stone. $700,000. J. H. Todd, genl. mgr. Engineer and architect not selected.

Kan., Wichita—Apartment—T. C. Naylor, 4th Natl. Bank Bldg., making plans 3 story, 90 x 116 ft., rein.-con., brick and stone, plain foundation. $150,000. Private plans.

S. D., Deadwood—School—Bd. Educ. having plans prepared by Perkins & McWayne, Paulton Blk., Sioux Falls, and takes bids in about 2 months, 3 story, rein.-con. and brick. $250,000.

S. D., Vermilion—Administration—State University having plans prepared by Perkins & McWayne, archts., Paulton Blk., Sioux Falls, and J. Berg, state engr., Pierre, 3 or 4 story and basement, rein.-con., brick, stone and tile. $225,000.

N. D., Bismarck—Cathedral—Holy Ghost Cathedral, V. Wehrle, bishop, having plans completed by A. Dohmen, 68 Wisconsin St., Milwaukee, Wis., 1st story and basement, 94 x 190 ft. concrete and stone. $300,000.

Mo., Columbia—Hospital—Missouri University had preliminary sketches made by Jamieson & Spearl, Arcade Bldg., St. Louis, 3 and 4 story, 100 x 200 ft., rein.-con., brick and stone, plain foundation, on campus. $500,000.

Mo., Nevada—High School—Bd. Educ. having plans prepared by C. A. Smith, 601 Finance Bldg., Kansas City, 3 story and basement, 68 x 126 ft., brick, stone and terra cotta, here. To exceed $150,000. Noted Jan. 4.

Mo., St. Joseph—High Schools—Election within 60-90 days to vote on $3,000,000 bonds to purchase sites and build 2 Junior High Schools, modern construction.

Mo., St. Louis—Club—St. Louis Club, 3663 Lindell Blvd., plans probably 8 story, rein.-con., brick and steel, plain foundation, Kingshighway. $1,000,000. Engineer and architect not selected.

Mo., St. Louis — Clubhouse — Y.M.H.A., 3645 Delmar Blvd., plans probably 4 story, rein.-con. and brick, plain foundation, with athletic field adjoining. $500,000. Engineer and architect not selected.

Mo., St. Louis—Temple—United Hebrew Temple, 5000 Enright Ave., had preliminary sketches made by W. Levy, Dolph Bldg., 2 story, brick and stone, plain foundation, Delmar Blvd. $300,000.

Tex., Dallas—Church—Tyler St. Methodist Church, takes bids in summer 2 story and basement, 90 x 90 ft., brick, plain foundation. $200,000. J. W. Westbrook, 901 North Madison St., engr. and archt.

Tex., Tyler—Schools—Takes bids in summer high and grade school. $250,000 bonds voted. S. H. Bothwell, city engr. Architect not announced. Noted Mar. 1.

Okla., Tulsa — Hotel — Hotel Tulsa, 3rd and Cincinnati Sts., plans 10 story addition, incl. high pressure boiler plant, refrigerating and ice plant. B. Meyer, Box 477, engr.

Utah, Ogden—Office—Union Pacific R.R., 15th and Dodge Sts., Omaha, Neb., and Southern Pacific R.R., 65 Market St., San Francisco, Calif., having plans prepared by J. and D. B. Parkinson, archts., Title Insurance Bldg., Los Angeles, Calif., 3 story, Wall St. $150,000.

Utah, Ogden — Station — Union Pacific R.R., 15th and Dodge Sts., Omaha, and Southern Pacific R.R., 65 Market St., San Francisco, having plans prepared by J. and D. B. Parkinson, Title Insurance Bldg., Los Angeles, Calif., rebuilding station, Wall St., recently destroyed by fire. $150,000.

Wash., Seattle—Fine Arts—Metropolitan Building Co., 1301 4th St., making preliminary plans 6 story, brick and terra cotta, 5th and Union Sts. $750,000.

Wash., Seattle—Schools—May 8, to vote on $1,455,000 bond issue for new schools. Address School Bd., Central Bldg.

Wash., Mt. Vernon—Court House—Skagit Co. having plans prepared by T. F. Doan, Sunset Bldg., Bellingham, and takes bids about June 22, 5 story, 150 x 120 ft., rein.-con., plain foundation. $250,000.

Wash., Spokane—Office—Western Union Life Insurance Co., Madison St. and Riverside Ave., having plans prepared by G. H. Pehrson, 816 Riverside Ave., 3 story, 75 x 125 ft., rein.-con. and stone, plain foundation, Riverside Ave. $200,000.

Calif., Easton—High School—Washington Union High School Dist. to vote on $155,000 bonds for high school. Engineer and architect not selected.

Calif., Long Beach—Apartment—E. del Porte, et al., c/o Davies & Baume, archts., Marine Bank Bldg., had plans prepared 12-16 story, fireproof. To exceed $750,000.

Calif., Long Beach—Store and Office—W. Horne Co., 254 East Bway., representing syndicate which had plans prepared by Beelman & Curlett, Union Bank Bldg., Los Angeles, 13 story, rein.-con., 3rd and American Sts. To exceed $500,000.

Calif., Los Angeles—City Hall—Plans election to vote on $7,500,000 bonds, $2,500,000 of which will be used to purchase site, remainder for building.

Calif., Los Angeles—Hotel and Store—W. Whitecotton, c/o Russell & Alpaugh, archts., Story Bldg., plans 14 story and basement, 145 x 150 ft., rein.-con. brick and terra cotta, 9th and Hill Sts. $1,000,000.

Calif., Los Angeles—Office—Local syndicate having plans prepared by Pastle Co., Van Nuys Bldg., 13 story, 99 x 124 ft., 9th and Hill Sts. $2,000,000.

Calif., Los Angeles—Office—Sun Drug Co., having plans prepared by Curlett & Beelman, 408 Union Bank Bldg., 12 story, 61 x 150 ft., rein.-con., brick and terra cotta, 742 South Hill St. $750,000.

Calif., Los Angeles—Office and Bank—Bank of Italy, Powell and Eddy Sts., San Francisco, plans bank and office buildings at various points in southern California, 1-12 story. $5,000,000-$10,000,000.

Calif., Los Angeles—Office and Loft—Los Angeles Rubber Stamp Co., 131 South Spring St., having plans prepared by Walker & Eisen, Pacific Finance Bldg., 5 story and basement, (ultimately 8 story) 50 x 150 ft., rein.-con., Los Angeles and 15th Sts.

Calif., Los Angeles—Office and Store—C. Williams, c/o Curlett & Beelman, archts., Union Bank Bldg., having plans prepared 12 story and basement, brick and steel, 5th St. and Bway.

Calif., Los Angeles — Theatre — J. M. Bowen, Van Nuys Bldg., et al., had plans prepared by G. A. Landsburgh, Los Angeles (street address not available), 3 story, rein.-con. and tile, Highland Ave. $750,000.

Calif., Pomona—Store and Office—Southern Gas Co. having plans prepared store and office, West 2nd St. $175,000. Private plans.

Calif., San Diego—Club—Army & Navy Y.M.C.A., 341 West E St., had plans prepared by Rogers & Stevenson, Spreckles Bldg., 6 story and basement, concrete and steel. To exceed $500,000.

Calif., San Francisco—Apartment—H. M. Seigler, 110 Sutter St., having sketches made by S. Heiman, 57 Post St., 3-7 story and basement, concrete and steel, vicinity of Sutter and Leavenworth Sts. $750,000.

Calif., Stockton—Auditorium—City rejected bids opened Mar. 20, rein.-con., cement and pre-cast sandstone, memorial auditorium, steel dome, Center, Oak, Fremont and Commercial Sts. $600,000. Stone, Allen & Wright, 41 South Sutter St., archts. Noted Mar. 29.

Buildings (Continued)

Calif., San Francisco—Exchange—Pacific Telephone & Telegraph Co., 333 Grant Ave., plans telephone exchange, fireproof, Bush and Larkin Sts., $300,000.

Calif., San Francisco—Office—W. H. Sullivan, Alexander Bldg., having plans prepared by L. J. Delvin, Pacific Bldg., 6 story annex, fireproof, Montgomery and Sumner Sts. To exceed $150,000.

Calif., San Francisco — Store — Marian Realty Co., French Bank Bldg., plans 10 or 12 story, fireproof, Market and 8th Sts. To exceed $500,000. Engineer and architect not selected. May Co., 6343 Halsted St., Chicago, lessee.

Calif., Stockton — College — L. S. Stone and F. E. Warner, archts., 309 Exch. Bldg., take bids in about 2 weeks, 2 story, 60 x 160 ft., administration building, brick, concrete and terra cotta, for College of the Pacific, $100,000. Plans are being prepared by F. Mayo, 21 South San Joaquin St., 2 story, conservatory of music, $150,000; by Losekann & Clowdsley, Elks Bldg., for Weber Memorial, 2 story, $105,000. Five other buildings are planned in connection with above. Davis-Heller-Pearce, Delta Bldg., mgrs. of construction and supervising archts. Noted Jan. 4.

Que., Beauharnois—School—School Comn. plans school. $150,000. L. Lemieux, University St., Montreal, archt.

Ont., Timmins—School—Separate School Bd. having plans prepared by A. H. Cederberg, Timmins, and soon takes bids 2 story and basement, 10 room, concrete, brick and steel. $175,000.

BIDS DESIRED

Mass., West Springfield (Springfield P. O.)—High School—Apr. 10, by A. L. Pease, chn. building com., 3 story, Lathrop St. $250,000. C. G. Loring, 7 Water St., Boston, archt.

N. Y., Brooklyn — Apartment — Carvel Holding Co., c/o Mengel & Larkin, archts. and engrs., 81 Fulton St., New York, will build brick, steel and stone, plain foundation, on plot 160 x 250 ft., New York Ave. and Bergen St., here. Work will be done by separate contracts under supervision of architects.

N. Y., Brooklyn—School—Apr. 19, by Bd. Educ., 500 Park Ave., New York, P. S. 100, 5 story, 178 x 195 ft., brick, steel and stone, plain foundation, West 3rd St. near Sheepshead Bay Blvd., here. $850,000. W. H. Gompert, Flatbush Ave. extension and Concord St., archt. and engr. Noted Mar. 22.

Pa., Meadville—Hotel—Chamber of Commerce plans fireproof hotel. To exceed $250,000. Engineer and architect not announced.

N. Y., New York—Apartments—Paterno Constr. Co., 117 West 54th St. will build four 6 story, brick, steel and stone, plain foundations, Pinehurst Ave. $350,000 each. Work will be done by separate contracts. G. F. Pelham, 200 West 72nd St., archt.

N. Y., New York—Hospital—Wiseman & Taussig, archts. and engrs., 25 West 43rd St., taking bids and opens same about Apr. 9, 9 story, 100 x 175 ft., brick, steel and stone, plain foundation, 5th Ave. and 103rd St., for Physicians' Medical Hotel Corp., c/o architects. $800,000. Noted Nov. 30.

N. Y., New York—Office—Harvy, Abrons & Meluis, 15 East 40th St., will build 18 story, brick, steel and stone, plain foundation, Madison Ave. Work will be done by separate contracts. Rouse & Goldstone, 512 5th Ave., archts. and engrs.

N. Y., New York—School—Apr. 19, by Bd. Educ., 500 Park Ave., P. S. 66, brick, steel and stone, plain foundation, Jennings St. and Longfellow Ave. $750,000. W. H. Gompert, Flatbush Ave. extension and Concord St., Brooklyn, archt. and engr.

N. Y., New York—Schools—Apr. 19, by Bd. Educ., 500 Park Ave., P. S. 67, East 179th St. between Mohegan and Honeywell Aves., $850,000, also P. S. 70, 105 x 175 ft., Weeks Ave., $1,400,000, both brick, steel and stone, plain foundations. W. H. Gompert, Flatbush Ave. extension and Concord St., Brooklyn, archt. and engr. Noted Feb. 9 and Mar. 29.

N. Y., Spring Valley—Grade and High School—Apr. 10, by Bd. Educ., brick, steel and stone, plain foundation. $250,000. E. Sibley, Palisade, N. J., archt. L. C. Licht, Hacker & Hacker, Bluff Rd., Palisade, N. J., associated archts. Noted Sept. 14.

N. J., Atlantic City—Theatre and Store—Hoffman-Hennon Co., archts., Finance Bldg., Phila., taking bids 1 story, 170 x 199 ft., rein.-con., brick and steel, caisson foundation, Kentucky Ave. and Boardwalk, here, for Stanley Co., 1218 Market St., Phila. $300,000.

Pa., Phila. — Office and Store — L. B. Rothchild, archt., 215 South Broad St., taking bids 2 story and basement, 36 x 173 ft. rein.-con., brick and steel, plain foundation, 21st and Walnut Sts., for Freed & Fishman, 605 South 10th St. $150,000.

Pa., Phila. — School — F. F. Durang, archt., 1220 Locust St., taking bids 3 story and basement, 77 x 153 ft. rein.-con., brick, steel and stone, Susquehanna and Park Aves., for Lady of Mercy Roman Catholic Church, Broad and Susquehanna Aves. $200,000.

Pa., Shamokin—Bank—Apr. 10, by W. H. Lee, archt., 32 South 17th St., Phila., 1 story and basement, 50 x 95 ft. rein.-con., brick and steel, plain foundation, for Guarantee Trust & Deposit Co. $175,000. Noted Feb. 1.

Pa., Southmont—School—Apr. 9, by Bd. Educ., 2 story and basement, 142 x 156 ft. brick and tile. $200,000. P. Campbell, Park Bldg., Johnstown, archt.

D. C., Wash.—Office—See "Industrial Works."

W. Va., Williamson—Hotel—Apr. 17, by R. M. Bates, Jr., archt., Mortimor Pl., Huntington, 6 story and basement, 93 x 110 ft., for C. F. Vaughn, Vaughn Hotel. $200,000. Noted Feb. 1.

N. C., Charlotte—Office—Textile Office Bldg., c/o W. L. Stoddart, archt. and engr., 9 East 40th St., New York City, 15 story, brick, stone and steel. Work will be done by separate contracts. Noted Mar. 22.

S. C., Chester—High School—Apr. 11, at office M. E. Brockman, supt., for high school. T. H. White, chn.

Tenn., McKenzie—College—Apr. 10, by Cumberland Presbyterian Church, 2 story and basement, 85 x 120 ft., (1st unit), brick and concrete, Cherry St. along tracks Louisville & Nashville R.R. $150,000. A. F. Lindsay, Sikeston, Mo., archt.

O., Akron—Office and Theatre—Rapp & Rapp, archts., 190 North State St., Chicago, taking bids 3 story, for Akron Enterprises Co. $700,000. Noted Nov. 16.

O., Akron—School—Apr. 17, by I. M. Moses, clk. Bd. Educ., for Crosby School, 2 story, 64 x 200 ft., brick, Smith and West Sts. $200,000. M. M. Konarski, 102 South Union St., archt. Noted Feb. 15.

O., Cleveland — Apartment — A. Kraus, 2265 East 71st St., taking bids and opens same about Apr. 10, 3 story, 46 x 163 ft., brick and timber, 1913 East 70th St. $200,000. M. Altschuld, 5116 Woodland Ave., archt.

O., Cleveland—Store and Hotel—A. Horwitz, Ulmer Bldg., taking bids 2 story and basement, brick and steel, plain foundation, St. Clair Ave. and Coit Rd. $150,000. A. F. Janowitz, Permanent Bldg., archt.

O., East Cleveland (Cleveland P. O.)—Apartments — S. Newman, 10710 Drexel Ave., Cleveland, taking bids two 2 story and basement, 49 x 113 ft., brick and timber, 1745 Page Ave., here. $150,000. A. Janowitz, Permanent Bldg., Cleveland, archt.

Mich., Ann Arbor—Law—Apr. 16, by York & Sawyer, archts., 50 East 41st St., New York City, brick, steel and stone, plain foundation, South Michigan Ave., for University of Michigan. $2,000,000.

Mich., Marquette — Hotel — Apr. 16, by Schenck & Williams, archts., 908 Mutual Home, Dayton, O., 7 story and basement, 56 x 125 ft. concrete and brick, for Kawbawgan Hotel Co., Marquette. Foundation in, $300,000.

Ill., Chicago—Hotel—Harris & Jillson, archts., 190 North State St., receiving bids second unit 14 story, Winthrop and Argyle Aves., for G. K. Spoor, c/o architects. Total cost $5,000,000.

Wis., Green Bay—High School—Apr. 24, by Bd. Educ., 3 story and basement, 120 x 380 ft., brick, tile and concrete, plain foundation. $500,000. Foeller, Schober & Stephenson, Nicollet Bldg., archts. Noted Jan. 11.

Wis., Kenosha — School — Apr. 14, by Lindl-Lesser & Schutte, archts., 82 Wisconsin St., Milwaukee, 2 story and basement, 70 x 188 ft. and 60 x 60 ft., brick, tile and concrete, plain foundation, Sheridan Rd., for St. James Congregation, 305 Sheridan Rd. $150,000. Noted Mar. 15.

Wis., Manitowoc—Hotel—Apr. 9, by C. Barkhausen, archt., 79 Wisconsin St., Milwaukee, 5 story, 50 x 75 ft., brick and concrete addition, plain foundation for Hotel Williams, South 8th St. $150,000.

Wis., Mayville—High School—Apr. 18, by School Bd., 2 story, 70 x 158 ft., and 1 story, 60 x 126 ft., brick, tile and concrete, plain foundation. $200,000. Parkinson & Dockendorff, Linker Bldg., La Crosse, archts. Noted Nov. 25.

Wis., Milwaukee—Apartment-Hotel—Apr. 6, by R. Razall, archt., 330 Caswell Blk., 4 story and basement, 100 x 116 ft. and 116 x 160 ft., brick, tile and concrete, plain foundation, Eastside, for G. Adams Bldg. Co., 330 Caswell Blk. $275,000.

Wis., Milwaukee—Apartment—Apr. 12, by Rosman & Wierdsma, archts., 424 Jefferson St., 3 story and basement, 120 x 146 ft., brick, tile and concrete, plain foundation, Grand Ave. and 32nd St., for Franklin Arms Apartment Co., c/o architects. $200,000. Noted Dec. 21.

Wis., Milwaukee—Store and Office—M. Tullgren & Sons Co., archts., 425 East Water St., taking bids and opens same about Apr. 9, 3 story and basement, 100 x 100 ft., brick, tile and concrete, plain foundation, 3rd St., for Dorsen Realty Co., c/o architects. $150,000.

Wis., Milwaukee — Temple — Apr. 12, (change of date) by Milwaukee Elks Lodge, 448 Jefferson St., and R. Messmer & Bros., archts., 211 Grand Ave., 9 story and basement, 110 x 145 ft., brick and concrete, Mason and Marshall Sts. $1,000,000. Noted Mar. 15.

Wis., Racine—Auditorium—Apr. 21, by Racine Memorial Assn., W. Horlick, Jr., Horlicksville, chn. building com., 1 and 2 story, 180 x 200 ft., brick and concrete, plain foundation. $300,000. H. Shaw, 39 South State St., Chicago, archt.

Wis., Racine—Lodge and Store—Columbus Bldg. Assn., 1600 Racine St., taking bids 3 and 4 story, 60 x 114 ft., brick and concrete, plain foundation. $150,000. A. J. Weber, pres., Racine Constr. Co., 468 College Ave., archts.

Ia., Sioux City—Fire and Police Station—Apr. 18, by F. A. Garnsey, clk., general construction 3 story and basement, 133 x 140 ft., rein.-con., brick, tile and stone, 6th and Water Sts. $250,000. L. N. Hintgen, city engr. E. R. Swanson, 627 Warnock Bldg., archt. Contract for cypress piling foundation let to B. E. Short, 418 Court St. Noted Dec. 14.

Kan., Topeka—Hotel—Topeka Hotel Co. taking bids on general contract for 10 story and basement, 100 x 150 ft., rein.-con., brick, steel and stone, 7th and Jackson Sts. $600,000. T. W. Williamson & Co., 312 Central Natl. Bank Bldg., archts.

Kan., Wichita—Aparment—Apr. 10, by Eberson & Weaver, archts., Orpheum Bldg., 9 story, 100 x 140 ft., rein.-con. and brick, plain foundation, 2nd and Topeka Sts., for O. S. Shirk, 240 North Topeka St. $500,000. Noted Jan. 11.

S. D., Milbank — School Community — Apr. 9, by A. A. Blomquist, city aud., 2 story and basement, rein.-con., brick, stone and tile. $150,000. Hugill & Blatherwick, Sioux Falls, (street address not available) archts. Noted Mar. 15.

Mo., St. Louis—Store and Apartment—Apr. 12, by T. P. Barnett, archt., Arcade Bldg., 2 story, 125 x 200 ft., brick, plain foundation, Dale Ave., for T. P. Carr, Arcade Bldg. $150,000. Noted Jan. 18.

Mo., St. Louis—Store—Apr. 9, by Kleipstein & Rathmann, archts., Chemical Bldg., converting 8 story wholesale building into retail store, 1109-19 Washington Ave., for Lammert Furniture Co., 920 Washington Ave. $160,000.

Tex., Austin—Hotel—Apr. 14, by Sanguinett, Staats & Hedrick, archts., 1st National Bank Bldg., Ft. Worth, 12 story, 60 x 110 ft., rein.-con., brick and stone, for T. B. Baker Hotel Co. $500,000. Noted Mar. 1.

Tex., Houston—Hospital—City Com. taking bids City-County Hospital, 4 story with 3 story wings, 50 x 175 ft., rein.-con., brick and stone, near Grand Central Sta. $200,000. W. A. Dowdy, city archt. Noted Mar. 15.

Calif., El Centro—Court House—Imperial Co. taking bids court house. $300,000.

Calif., Los Angeles—High School—Apr. 11, by Bd. Educ., group brick buildings, Wilshire Blvd. To exceed $300,000. E. H. Cline, 1445 South San Pedro St., archt. Noted Mar. 29.

Calif., Los Angeles — Loft — Curlett & Beelman, archts., Union Bank Bldg., receiving bids 11 story and basement loft and 1 story shipping and storage building, rein.-con., Los Angeles and 9th Sts., for Cooper Dry Goods Co. To exceed $150,000.

Calif., San Francisco—Hospital—M. I. Schwartz, archt., Nevada Bank Bldg., receiving bids 9 story and basement, 56 x

Buildings (Continued)

137 ft., rein.-con., steel, granite and terra cotta, Sutter St. near Larkin St., for A. Abrams, 2151 Sacramento St. $500,000. Noted Mar. 15.

Calif., Stockton—City Hall—Taking bids city hall, fireproof, block bounded by El Dorado, Centro, Fremont and Lindsey Sts. $600,000. J. Pearce, J. Losekann and P. Sala, Delta Bldg., archts.

BIDS RECEIVED

New York, N. Y.—School—W. H. Gompert, archt., Flatbush Ave. Extension and Concord St., Brooklyn, Mar. 27, general contract P. S. 11, West 21st St. and 8th Ave., from G. Dekempe, $808,800; T. Dwyer, Bway. and 216th St., $837,000; Willets Constr. Co., $837,000; T. A. Clarke Co., 122 Livingston St., Brooklyn, $863,000. Noted Mar. 15.

Pa., Charleroi—High School—Bd. Educ., 2 story and basement, 115 x 177 ft. high school, from Charleroi Lumber Co., Charleroi, $119,600, H. A. Taylor, Keystone Bldg., Pittsburgh, $119,600. Fayette Constr. Co., Fayette City, $132,600; heating from Barnes & Clark, New Castle, $28,850, Regan & Hornell, Charleroi, $31,912. Noted Mar. 8.

O., Arcanum—School—Bd. Educ. Mar. 20, 2 story and basement, 65 x 220 ft., brick and concrete, from Dyer Constr. Co., Greenfield, $164,539; H. R. Blagg, 1229 East 3rd St., Dayton, $174,448; Anderson & Hunicutt, Fort Wayne, Ind. (street address not available), $175,819. Noted Mar. 1.

CONTRACTS AWARDED

Mass., New Bedford—Schools—St. Anthony's Roman Catholic Church, c/o W. F. Fontaine, archt., 285 Main St., Woonsocket, R. I., 3 story and basement, 130 x 150 ft., brick and steel, plain foundation, Ashley Blvd., to L. Bolduc & Son, 579 Middle St., Fall River. Archts. est. $350,000.

Conn., Bristol — Bank — Bristol Savings Bank, 244 Main St., 1 story and basement, 50 x 70 ft., brick, granite and stone, plain foundation, 174 Main St., general contract to Griswold Building Co., 101 Park Ave., New York City. Archts. est. $160,000. Noted Dec. 14.

Conn., Hartford — Church — Swedish Evangelical Lutheran Society, Capitol Ave., general contract 52 x 104 ft., brick and artificial stone, granite foundation, Capitol Ave., to Johnson-Webster Co., 50 South Main St. Archts. est. $150,000. Noted Mar. 15.

N. Y., Little Falls—Theater—Gateway Theater Syndicate, brick, concrete and steel theater, to J. P. Hallinan, 62 Salisbury St., Little Falls, $150,000.

N. Y., New York — Apartments—D. Asher, c/o J. M. Felson, archt. and engr., 1133 Bway., will build two 5 story, brick, steel and stone, plain foundation, Findlay Ave. and 170th St., by day labor. $175,000 each.

N. Y., New York—Apartment—Benenson Realty Co., c/o T. F. Price, archt. and engr., 30 Church St., will build 5 story, 90 x 90 ft., brick, steel and stone, plain foundation, Townsend Ave. and 176th St., by day labor. $150,000.

N. Y., New York—Apartment—Bway and 73rd St. Corp., c/o Springsteen & Goldhammer, archts. and engrs., 31 Union Sq., will build 6 story, 100 x 125 ft., brick, steel and stone, plain foundation, 63 West 173rd St., by day labor. $350,000.

N. Y., New York—Apartment—Crussi Constr. Co., c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build brick, steel and stone, plain foundation, Fordham Rd., by day labor. $150,000.

N. Y., New York—Apartment—L. Kiosk, c/o Springsteen & Goldhammer, archts. and engrs., 31 Union Sq., will build 5 story, 85 x 100 ft., brick, steel and stone, plain foundation, Mosholu Parkway near Bainbridge Ave., by day labor. $175,000.

N. Y., New York—Apartment—B. Jacobson, c/o G. G. Miller, archt. and engr., 1482 Bway., will build 5 story, brick, steel and stone, plain foundation, Jessup Ave., by day labor. $175,000.

N. Y., New York — Apartment — L. A. Building Co., c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 5 story, 80 x 125 ft., brick, steel and stone, plain foundation, East 182nd St., by day labor. $250,000.

N. Y., New York—Apartment—D. J. Ludens, c/o Goldner & Goldner, archts. and engrs., 47 West 42nd St., will build 6 story, 100 x 150 ft., brick, steel and stone, plain foundation, Ryer Ave., by day labor. $350,000.

N. Y., New York—Apartment—Mareliz Building Co., c/o G. F. Pelham, archt. and engr., 200 West 72nd St., will build 9 story, 50 x 100 ft., brick, steel and stone, plain foundation, 142 West 49th St., by day labor. $175,000.

N. Y., New York—Apartment—Margon & Glaser, archts. and engrs., 2804 3rd Ave., will build 5 story, 80 x 87 ft., brick, steel and stone, plain foundation, Loring Pl. near Burnside Ave., by day labor. $275,000. Owners name withheld.

N. Y., New York—Apartments—L. Minseoff, c/o C. Schaefer, Jr., archt. and engr., 394 East 150th St., will build two 5 story, 100 x 100 ft., brick, steel and stone, plain foundations, 168th St. and Findlay Ave., by day labor. $225,000 each.

N. Y., New York—Apartment—Slawson Building Corp., 350 Madison Ave., 14 story, 52 x 100 ft., brick, steel and stone, plain foundation, East 86th St., to W. L. Crow Constr. Co., Inc., 103 Park Ave.

N. Y., New York—Apartment—A. Stockinger, c/o Goldner & Goldner, archts. and engrs., 47 West 42nd St., will build 5 story, 90 x 90 ft., brick, steel and stone, plain foundation, Grand Concourse near 180th St., by day labor. $350,000.

N. Y., Far Rockaway — Apartment — Crossways Apartment Corp., c/o M. Hyde, archt. and engr., 114 East 28th St., New York, 4 story, 127 x 186 x 277 ft., brick, steel and stone, Bway. and Mott Ave., here, to Fredburn Constr. Co., 31 Union Sq., New York. Archts. est. $600,000. Noted Mar. 29.

Pa., Parnassus—High School—Bd. Educ., 2 story and basement, 96 x 100 ft., brick and tile, to Croyle & Beck, New Kensington. Archts. est. $150,000.

Pa., Phila.—Apartment—L. H. Cahan & Co., 1324 Walnut St., 4 story and basement, 108 x 120 ft. brick, steel and stone, plain foundation, Tabor and York Sts., to Penn Realty Co., 1324 Walnut St., Archts. est. $500,000. Noted Mar. 15.

Pa., Phila.—Apartment—I. W. Levine, archt., 1011 Chestnut St., 4 story and basement, 89 x 120 ft. brick and steel, plain foundation, 50th and Spruce Sts., to Arrow Constr. Co., 1627 Sansom St., $160,000. Owners name withheld.

Pa., Phila. — Apartment — C. Wunder, archt., 1415 Walnut St., 4 story and basement, brick and steel, plain foundation, 48th and Pine Sts., to Rose Constr. Co., North Amer. Bldg., $210,000. Owner's name withheld.

Pa., Phila.—Church and Rectory—G. I. Lovatt, archt., 416 Walnut St., 1 story and basement, 60 x 192 ft. and 3 story and basement, 42 x 95 ft. brick and steel, plain foundation, 21st and Snyder Aves., to McLaughlin & McNally, 813 Suffolk St., for St. Edmunds Roman Catholic Church, 21st and Snyder Aves. Archts. est. $500,000. Noted Jan. 18.

Pa., Phila.—Lodge—K. of P., c/o B. G. Collier, 415 South 19th St., 4 story and basement, 50 x 150 ft. brick and steel, plain foundation, 19th and Addison Sts., to J. F. Trent, 2041 Master St. $200,000. Lachman & Murphy, Drexel Bldg., archts.

Pa., Pittsburgh—School—Bd. Educ., Fulton Bldg., 2 story and basement, 40 x 166 ft. addition to Halls Grove School, Hall and Wardwell Sts., to Cuthbert Bros., Bessemer Bldg., $127,300, heating to J. A. Langdon & Son, 2030 5th Ave. Noted Mar. 29.

Pa., Pottstown—High School—Bd. Educ., 3 story and basement, 76 x 218 ft. and 92 x 94 ft., Chestnut and Penn Sts., to W. L. Hampton, Pottstown, $259,622; heating and ventilating, to G. A. Tabor, Pottstown, $38,053. Noted Mar. 22.

Pa., Wilkes-Barre—Apartment—H. Mailander, 167 Barney St., will build 3 story, 98 x 185 ft. brick and tile, West Ross and West River Sts., by day labor. $150,000. Noted Mar. 22.

Md., Baltimore—Church, Convent and Parish House—St. Edward's Roman Catholic Church, Poplar Grove and Lafayette Ave., church, convent and parish house, to Frainie Bros. & Haigley, 19 West Franklin St., $150,000. Noted Feb. 8.

Md., Sykesville — Hospital — Springfield State Hospital, 3 story, 38 x 96 ft. administration, 1 story, 40 x 96 ft. dining room, two 2 story, 30 x 90 ft. dormitories, brick, plain foundations, here, to North-Eastern Constr. Co., Lexington Bldg., Baltimore, $190,000.

N. C., Chapel Hill—Inn—Carolina Inn Co., 3 story, 52 room, fireproof, to H. L. Smith, Durham, $200,000.

Fla., St. Petersburg—Office—C. M. Rosser, 6 story, rein.-con. and steel, 110 5th St. S., to Dillman & Wright, St. Petersburg. Archts. est. $175,000. Noted Feb. 22.

Ala., Huntsville—Hotel—W. M. and G. W. Yarbrough, 5 story, brick, Washington St., to Baxter Bros., Huntsville, $150,000.

O., Bellaire—Store—Blum Dept. Store, 3617 Belmont St., 4 story and basement, 66 x 120 ft., 23rd and Belmont Sts., to C. D. Keyser Co., 1st National Bank. Archts. est. $150,000.

O., Cincinnati—Office—Rendigs, Panzer & Martin, archts. and engrs., 609 Southern Ohio Bank Bldg., 10 story, 100 x 200 ft., rein.-con., plain foundation, Court and Main Sts., concrete work, to Hodges & Erwin, 78 Blymyer Bldg.; brick, terra cotta and tile work, to R. Fuerst, 303 Palace Theatre Bldg.; heating to Peck, Hannaford & Peck Co., Court and Sycamore Sts.; plumbing, to T. J. Dyer Co., 317 Vine St.; electrical work, to Devere Electric Co., 418 Main St.; for Temple Bar Realty Co. Archts. est. $600,000.

O., Cleveland—Store—G. H. Schonewald, Grand Central Terminal, New York City, 6 story and basement, 75 x 132 ft., brick, steel and concrete, to Crowell & Little Constr. Co., 3575 Prospect Ave.; structural steel, to McClintic Marshall Co., Hanna Bldg. Archts. est. $400,000.

O., Cleveland—Store and Office, etc.—L. A. Skeel, 7016 Euclid Ave., 1 story and basement, 102 x 165 ft. and 2 story and basement, 85 x 120 ft., store, office, garage and service station, brick, steel and concrete, plain foundation, 7111 Euclid Ave., to Bolton-Pratt Constr. Co., Columbia Bldg., Archts. est. $150,000.

O., Greenfield—Schools—Bd. Educ., to Murch Bros. Constr. Co., Ry. Exch. Bldg., St. Louis, Mo., 2 story and basement, 149 x 163 ft. high school, $221,477, McLain Vocational School, 2 story and basement, 60 x 300 ft., $204,000, both brick and concrete, here. Noted Feb. 15.

O., Lakewood (Cleveland P. O.)—Store and Office—Detroit and Warren Road Co., c/o G. E. Conkey, pres., Century Bldg., Cleveland, 5 story and basement, 60 x 140 ft., brick, steel and concrete, Detroit Ave. and Warren Rds., to Hunkin-Conkey Constr. Co., Century Bldg., Cleveland. Archts. est. $250,000.

O., New Philadelphia—Bank—Ohio Savings & Trust Co., 3 story, 31 x 116 ft. brick, steel and concrete, to Boldt Constr. Co., 5902 Euclid Ave., Cleveland. Archts. est. $150,000.

Wis., Milwaukee—Nurses' Home—Milwaukee Hospital, 2200 Cedar St., 3 story and basement, 60 x 92 ft., brick, tile and concrete, plain foundation, Cedar St., to Dahlman Constr. Co., 456 Bway. Archts. est. $150,000. Noted Jan. 25.

Ia., De Witt—School—Bd. Educ., general contract 2 story and basement, rein.-con., brick, tile and stone, to Haring Bros., Wilson Bldg., Clinton, $92,800. Noted Mar. 1.

Minn., Duluth—Hospital, etc.—St. Lukes Hospital Assn., 903 9th Ave. E., 6 story and basement, 65 x 175 ft., 32 x 145 ft. and 35 x 162 ft., rein.-con. and brick, 1st St. and 9th Ave. E., general contract to MacLeod & Smith, 508 Sellwood Bldg., $440,000. Archts. total est. $1,000,000. Noted Mar. 15.

Minn., St. Paul—Chapel—St. Catherines College, Randolph and Cleveland Aves., rein.-con., brick and tile, Randolph and Cleveland Aves., general contract to P. Steenberg Constr. Co., 535 Endicott Bldg. Total $250,000.

Minn., Virginia—City Hall, etc.—City, 2 and 3 story and basement, 140 x 265 ft. rein.-con., brick, steel and stone, general contract to Everson & Utterberg, Lumber Exchange Bldg., Minneapolis, $280,000. Archts. est. $375,000. Noted Mar. 1.

Kan., Wichita—Office—See "Industrial Works."

Mo., Kansas City—Hotel—C. O. Jones, 308 Commerce Bldg., will build 12 story and basement, 48 x 126 ft., brick, rein.-con. and terra cotta, 911 Holmes St., by day labor. $500,000. E. Brostrom, 621 Reliance Bldg., archt. Noted Aug. 17.

Mo., Kansas City—Office—Peoples Building Co., 433 Lathrop Bldg., general contract 12 story and basement, 132 x 143 ft., rein.-con., brick and terra cotta, 10th and Oak Sts., to Cherdron Constr. Co., 603 McIntyre Bldg., Salt Lake City, Utah. Archts. est. $2,225,000. Noted Oct. 26.

Mo., St. Louis—Hotel—Forest Park Investment Co., 111 North 7th St., 6 story, 236 x 236 ft., rein.-con. and brick, plain foundation, West Pine St., to F. J. Cornwell, 111 North 7th St. Archts est. $500,000.

Mo., St. Louis—Theatre—Davis Realty Investment Co., 810 Chestnut St., 1 and 2 story, 35 x 155 ft., concrete and brick, plain foundation, Leffingwell Ave., to T. Steinmeyer, Title Guaranty Bldg. Archts. est. $150,000.

Colo., Denver—Hospital—State, general contract 3 to 5 story, East 8th Ave. and

Buildings (Continued)

Colorado Blvd. to A. Simpson, Jr., Colorado Natl. Bank Bldg., $983,730. Noted Mar. 29.

Wash., Seattle — Apartment — M. D. Carzes, Epler Blk., 4 story, 120 x 160 ft., pressed brick and terra cotta, Stewart and Yale Aves., to A. F. Mowat, Arcade Bldg. Archts. est. $185,000.

Wash., Seattle — Apartment — E. A. Roberts, archt., Burke Bldg., 6 story and basement, brick and terra cotta, Summit and Denny Sts., to William & Brady, Hoge Bldg., for J. R. Young. Archts. est. $210,000.

Calif., Fresno—Bank and Office—Pacific Southwest Trust & Savings Bank, 15 story, fireproof, Mariposa and J Sts., to Trewhitt-Shields Co., Rowell Bldg. Engrs. and archts. est. $1,000,000.

Calif., Los Angeles — Office — Medical Building Corp., c/o Dodd & Richards, archts., Brack-Shops Bldg., 8 story and basement, rein.-con. and brick, Lucas and 6th Sts., to Scofield Eng. & Constr. Co., Pacific Finance Bldg., $250,00.

Calif., Los Angeles—School—City, constructing Laurel School, rein.-con., general contract to Pozzo Constr. Co., 421 Macey St., $111,110.

Calif., Sacramento—Hotel—W. C. Crittenden, 2827 I St., et al., 10 story, rein.-con., L and 12th Sts., to Cahill Bros., 110 Sutter St., San Francisco, $1,000,000.

Calif., San Francisco—Bank—San Francisco Savings & Loan Society, 526 California St., 2 story, steel and granite addition, California and Kearny Sts., to C. W. Heyer, Mills Bldg., $200,000.

Ont., Belleville—College—H. W. Ackerman, secy. Bldg. Comn. Bd. Educ., 2 and 3 story and basement, concrete, brick, steel and stone, general contract to Dickie Constr. Co., Ryrie Bldg., Toronto, $180,000; stone work to Peerless Artificial Stone Co., Coxwell Ave., Toronto, $44,000. Noted Mar. 1.

Que., Montreal—Store—H. Morgan & Co., St. Catherine St. W., 9 story and basement, 141 x 148 x 282 ft. rein.-con., brick and stone addition, to H. Morgan & Co., Beaver Hall Hill, $1,100,000. Noted Mar. 22.

Federal Government Work

PROPOSED WORK

Del., Wilmington—Scows—U. S. Engineer, Wilmington, plans to purchase 2 wooden dump scows.

Va., Norfolk—Dredging—U. S. Engineer, Norfolk, plans dredging in Norfolk Harbor.

W. Va., Huntington—Gate Tracks—U. S. Engineer, Huntington, plans gate tracks at Dam 13, Ohio River.

Ill., Chicago—Boat—U. S. Engineer, 537 South Dearborn St., plans to purchase boat.

Calif., San Diego — Storehouse — Spec. 4770—Bureau Yards & Docks, Navy Dept., Wash., D. C., rejected bids for storehouse at Naval Base, here. Noted Mar. 22.

BIDS DESIRED

N. Y., Chelsea—Hospital Buildings—Apr. 25, by Treas. Dept., Wash., D. C., additional hospital buildings, complete except mechanical equipment, here. J. A. Wetmore, acting superv. archt.; adv. this issue.

N. Y., Chelsea—Mechanical Equipment—Apr. 25, by Treas. Dept., Wash., D. C., mechanical equipment for several hospital buildings, here. J. W. Wetmore, acting superv. archt.

Md., Baltimore—Dredging—Apr. 30 at office U. S. Engineer, Baltimore, dredging in Claiborne Harbor, Md.; adv. this issue.

Fla., Jacksonville—Barges—Apr. 30, at office U. S. Engineer, 3 steel barges for Dredge Mallery; adv. this issue. Noted March 22.

Ala., Florence—Boilers—Apr. 27, at office U. S. Engineer, Florence, installing steam boilers, etc., on U. S. Towboat General John Coffee.

Tenn., Memphis—Earthwork—Apr. 23, at office Mississippi River Comn., 1st and 2nd Dists., Custom house, earthwork in Upper and Lower St. Francis, Reelfoot and White River Levee Dists.; adv. this issue.

Tenn., Memphis—Steel Bars, etc.—Apr. 23, at office Mississippi River Comn., 1st and 2nd Dists, Customhouse, furnishing steel bars, wire fencing, machine bolts, etc.; adv. this issue.

Tenn., Nashville—Cement—Apr. 10 at office U. S. Engineer, Custom House, 4,000 bbl. cement for lock and dam construction.

Tenn., Nashville—Cement—Apr. 20 at office U. S. Engineer, Custom House, 18,000 bbl. cement for lock and dam construction.

Tenn., Nashville—Steel Gates—Apr. 25, at office of U. S. Engineer, steel gates for Lock 8, Cumberland River; adv. this issue.

Mich., Detroit—Superstructure—May 3, at office U. S. Engineer, Detroit, superstructure on west center pier, St. Marys Falls Canal; adv. this issue.

New Mexico—Road—Apr. 20, by E. S. Wheeler, dist. engr., U. S. Bureau Pub. Rds., Dept. Agriculture, 242 West Washington St., Phoenix, Ariz., grading and surfacing 11.448 mi. Canoncito-Pecos Forest Highway, Santa Fe National Forest, Santa Fe and San Miguel Counties, here, 35,138 cu.yd. crushed rock or gravel (waterbound), 87,000 cu.yd. common and 27,000 cu.yd. rock excav.

Utah, Vernal—Post Office—Apr. 30, by Treas. Dept., Wash., D. C., construction complete incl. mechanical equipment, U. S. Post Office, here. J. A. Wetmore, acting superv. archt.

Ore., Portland—Barges—Apr. 27, at office U. S. Engineer, 2nd Dist., three 4 x 18 x 48 ft. barges and one 4.5 x 22 x 70 ft. barge.

BIDS RECEIVED

Md., Annapolis—Mechanical Equipment—Spec. 4796—Bureau Yards & Docks, Navy Dept., Mar. 28, mechanical equipment for swimming pool, here. (1) work complete, from Roberts Filter Mfg. Co., 6th and Colorado Ave., Darby, Pa., (1) $20,800 (2) $20,100 (3) $18,350 (4) $16,550 (5) $600; M. B. Casey & Co., 3207 14th St., N. W., Wash., D. C., (1) $21,265 (2) $20,756 (5) $500; Boyle-Robertson Constr. Co., Evans Bldg., Wash., D. C., (1) $21,548 (2) $17,772 (3) $18,204 (4) $14,509 (5) $1,000. Noted Mar. 22.

O., Cincinnati—Gates—U. S. Engineer, lock gates for Dam 36, 38 and 44, Ohio River, from Milwaukee Bridge Co., 1400 34th St., Milwaukee, Wis., $68,345, $66,860 and $67,446 respectively; J. Eichleay Jr. Co., 45 South 20th St., Pittsburgh, Pa., $70,300, $68,900 and $69,900; Penn Bridge Co., Beaver Falls, Pa., $73,600 (Dam 36) $72,400 (Dam 38); Nashville Bridge Co., Shelby Ave., Nashville, Tenn., $56,900 (Dam 44). Noted Mar. 15.

Mich., Detroit—Dredging—U. S. Engineer, 337 Federal Bldg., dredging in Rouge River, 193,300 cu.yd. excav. with maximum allowable overdepth of 16,200 sq.yd., from Dunbar & Sullivan Dredging Co., 2212 Dime Bank Bldg., $0.427 per cu.yd.; Greiling Bros. Co., 100 Blk. E. Green Bay, Wis., $0.46; Empire Eng. Co., River Rd. and East Ave., North Tonawanda, N. Y., $0.465. Noted Mar. 8.

Mich., Detroit—Dredging—U. S. Engineer, 337 Federal Bldg., dredging below locks in St. Marys River, 134,000 cu.yd. excav., with maximum allowable overdepth 113,000 cu.yd. from Duluth-Superior Dredging Co., foot of 45th Ave., W., Duluth, Minn., $226,695; Dunbar & Sullivan Dredging Co., 2212 Dime Bank Bldg., $235,649; Great Lakes Dredge & Dock Co., 104 South Michigan Ave., Chicago, $238,125. Noted Feb. 22.

Calif., Livermore—Hospital—U. S. Veterans Bureau, Arlington Bldg., Wash., D. C., construction all buildings complete incl. mechanical equipment, (except kitchen, laundry and hospital equipment) reservoirs, septic and settling tanks, road construction etc. U. S. Veterans Hospital, here, (1) work complete, from R. E. McKee, 1918 Texas St., El Paso, Tex. (1) $1,665,700 (2) $18,900 (3) $157,600 (4) $234,900 (5) $212,800 (6) $135,100 (7) $82,100 (8) $72,400 (9) $100,800 (10) $26,250 (11) $46,750 (12) $81,600 (13) $78,400 (14) $9,300 (15) $8,700 (16) $14,800 (17) $20,400 (18) $17,100 (19) $2,150 (20) $300 (21) $6,600 (22) $6,050 (a) $0.75 (b) $11 (c) $23 (d) $82 (e) $140 (f) $43 (g) $1.20 (h) $0.24 (i) $3.65 alternate $2.30 (j) $2.80 (begin 10 days, complete 365 days); Sound Constr. and Eng. Co., 402 Lowman Bldg., Seattle, Wash., (1) $1,691,630 (2) $22,273 (3) $157,018 (4) $234,728 (5) $210,697 (6) $155,774 (7) $74,992 (8) $67,268 (9) $104,694 (10) $28,837 (11) $49,576 (12) $80,373 (13) $93,712 (14) $10,136 (15) $9,792 (16) $14,876 (17) $21,876 (18) $20,969 (19) $9,679 (20) $2,545 (21) $7,377 (22) $5,725 (a) $1.50 (b) $15 (c) $28 (d) $71 (e) $130 (f) $50 (g) $1.25 (h) $0.25 (begin 10 days complete 350 days); Mahoney Bros., 866 Flood Bldg., San Francisco, (1) $1,698,400 (2) $20,709 (3) $159,361 (4) $237,578 (5) $220,433 (6) $142,023 (7) $73,896 (8) $67,867 (9) $98,110 (10) $27,797 (11) $50,207 (12) $82,205 (13) $92,987 (14) $10,419 (15) $9,680 (16) $15,704 (17) $22,591 (18) $18,940 (19) $9,981 (20) $1,360 (21) $10,978 (22) $6,223 (a) $1.50 (b) $14 (c) $25 (d) $75 (e) $130 (f) $45 (g) $2.30 (h) $0.25 (i) $3.50 alternate $2.25 (begin 15 days complete 390 days). Noted Mar. 1.

CONTRACTS AWARDED

Mass., Boston—Bollards—Spec. 4820—Bureau Yards & Docks, Navy Dept., Wash., D. C., wharf bollards and strengthening bollard foundations at Navy Dry Dock, here, to Holbrook, Cabot & Rollins Corp., 6 Beacon St., Boston, Mass., $31,500.

Calif., San Diego—Water Softening Plant—Spec. 4768—Bureau Yards & Docks, Navy Dept., Wash., D. C., water softening plant here, to Permutit Co., 440 4th Ave., New York City, $3,835 (150 days). Noted Mar. 15.

Miscellaneous

PROPOSED WORK

Car Barns—Waterbury, Conn.—Connecticut Co., 127 Church St., New Haven, having plans prepared 1 and 2 story car barns and office, brick, concrete and steel, West Main St., here. $400,000. Private plans.

Generating Unit—Cohoes, N. Y.—Cohoes Power & Light Corp., 45 North Mohawk St., plans 10,000 hp. generating unit in power house.

Golf Course—Gowanda, N. Y.—Cattaraugus Country Club, c/o C. A. Potter, Gowanda, plans modern golf course and grounds. $50,000-$75,000.

Power Development—Herring, N. Y.—Power Corp. of New York, Northern New York Trust Co. Bldg., Watertown, plans redeveloping hydro-electric power of St. Regis Paper Co., here, to double present 3,500 hp. installation. Address W. P. Creager, c/o owner, ch. engr.

Transmission Lines—Potsdam, N. Y.—St. Lawrence Transmission Co. plans extensions and improvements to lines, works and plants. $100,000.

Gas Mains—Tonawanda, N. Y.—Republic Light, Heat & Power Co., Ellicott Sq., Buffalo, plans 5,000 ft. gas mains in River Rd., and connections to about 150 or 200 homes, here. To exceed $25,000.

Harbor Facilities—Troy, N. Y.—Harbor & Dock Comn. has $1,250,000 available for harbor facilities. Plans municipal terminal, $350,000. M. L. Murray, 16 1st St., pres.

Pennsylvania—Petroleum Telephone Co., Oil City, plans new cable line between Oil City and Franklin, and long distance line from Oil City to Titusville, also new plant at Franklin. $150,000. W. S. Paca, Oil City, supt.

White Way Lighting System—Meadville, Pa.—Plans white way lighting system through main streets. $25,000.

Gas Holder—Wash., D. C.—Washington Gas Light Co., 413 10th St., N. W., having plans prepared for gas holder, 26th St. N. W. $400,000. J. S. McIlhenney, 413 10th St., N. W., engr.

Locomotives, etc.—North Carolina—See "Railways."

Terminals—Tampa, Fla.—Swann Terminal Co., 314 Madison St., having plans prepared deep water and railway terminals, turning basins and freight warehouses. $2,000,000. J. T. Swann, mgr.

Levee Protection—Illinois—Union D.D., Wayne Co., making plans levee protection work in Wayne and Edwards Counties. $200,000. Elliott & Harmon, 144 Fredonia Ave., Peoria, engrs.

Lighting and Distribution System — Maquoketa, Ia.—Plans street lighting and distribution system. $30,000 bonds voted. Burns & McDonnell, Interstate Bldg., Kansas City, Mo., engrs.

Power Line—Grand Forks, N. D.—Red River Power Co. plans 28 mi. line. $30,000.

Levee Work — St. Charles, Mo. — See "Excavation, Drainage, Irrigation."

Lumber Yard—Enid, Okla.—Long Bell Lumber Co. had plans prepared by R. W. Shaw, Masonic Temple, 2 story and basement, 150 x 280 ft., rein.-con. and steel, lumber yard.

Dikes—Kelso, Wash.—Comrs. Cowlitz Co. approved plans for enlarged consolidated diking district planned by Long-Bell Lumber Co., to protect Longview, West Kelso and Long-Bell Lumber Company's holdings from Columbia River. $2,250,000. Extensive drainage plans are included. W. Vandercook, Kelso, ch. engr. Long-Bell Lumber Co.

Pier—San Diego, Calif.—Voted $495,500 bonds for completion of municipal pier No. 2, incl. apron wharf, transit shed, paving, trackage and equipment. F. A. Rhodes, city engr. Noted Jan. 25.

Electrolier System—Fresno, Calif.—Soon takes bids 99 electroliers, c.i. and steel, single globe, concrete foundations, 2 ft. square and 2 ft. deep, etc. $25,000. W. Stranahan, city engr.

Miscellaneous (Continued)

Transmission Line — Ontario — Hydro Electric Power Comn., 190 University Ave., Toronto, plans 100 mi. transmission line on steel towers, from Niagara Falls to St. Thomas. $1,000,000. F. A. Gaby, ch. engr.

Power Development—Campbellford, Ont.—Hydro Electric Power Comn., 190 University Ave., plans to develop 10,000 hp. at Dam 8 on Trent River, near here, incl. power house, turbines, generators, transformers, etc. $1,066,408. F. A. Gaby, 190 University Ave., ch. engr.

Grain Elevator—Goderich, Ont.—Goderich Grain Elevator & Transit Co., having plans prepared rein.-con. grain elevator, 1,000,000 bu. capacity, on harbor. $250,000. J. H. Tromanhauser, 69 Adelaide St. E., Toronto, engr.

Grain Elevator—Owen Sound, Ont.—Owen Sound Elevator Co. having plans prepared for 1,000,000 bu. rein.-con. grain elevator. $750,000. McDonald Eng. Co., 53 West Jackson Blvd., Chicago, Ill., engrs. Noted Dec. 14.

Electric Light Extensions—Toronto, Ont.—Hydro Electric Comn., Yonge and Shuter Sts., plans to expend in excess of $2,000,000 for extensions and improvements to lighting and power systems, incl. concrete poles, transformers, wire, cables, etc. E. M. Ashworth, mgr.

Electric Light Extensions—Walkerville, Ont. — Walkerville Hydro Electric Comn. plans underground conduit in Wyandotte St. between Kildare and Walker Rds. $12,000, also extensions to other parts of system, $25,000. M. J. McHenry, mgr.

Telephone Lines—Alberta—Dept. Railways & Telephones, Edmonton, plans 1,500 mi. telephone extensions. $800,000. V. W. Smith, minister.

BIDS DESIRED

Tar—Maine—Apr. 11, by State Hy. Comn., Augusta, 1,000,000 gal. refined tar for cold surface treatment on gravel roads.

Bituminous Material—Albany, N. Y.—Apr. 13, (change of date), by F. S. Greene, comr. State Hy. Dept., furnishing and delivering bituminous material "A" and "T." W. A. Patton, secy.; adv. this issue. Noted Mar. 22.

Heating and Ventilating Apparatus, etc.—Brooklyn, N. Y.—Apr. 10, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., heating, ventilating and temperature regulation apparatus in P. S. 188, Neptune Ave. between West 33rd and West 35th Sts.

Power Development—New York—Apr. 10, by Power Corp. of New York, Northern New York Trust Co. Bldg., Watertown, for additional hydro-electric development at Northern New York Utilities plant at Effley Falls. Work includes enlargement of present power house to house 2,000 hp. generating unit, etc. Address W. P. Creager, c/o owner, ch. engr.

Power Development—New York—Apr. 10, by Power Corp. of New York, Northern New York Trust Co. Bldg., Watertown, for hydro-electric development of Flat Rock site, on Oswegatchie River, to produce 4,000 hp., 24 hours, incl. 800 ft. concrete dam, 65 ft. high, rein.-con. power house, etc. Address W. P. Creager, c/o owner, ch. engr.

Broken Stone—Trenton, N. J.—Apr. 10, by Mercer Co., 7,000 tons broken stone, different sizes. A. Bray, dir. road repairs. $10,000.

Clam Shells, Washed Gravel, etc.—Louisiana.—See "Streets and Roads."

Steam Main—Cleveland, O.—Apr. 13, 2,140 ft. steam main in Carnegie Ave. To exceed $25,000. L. A. Quayle, City Hall, engr.

Piling—Brokaw, Wis.—L. A. De Guere, engr., Wisconsin Rapids, taking bids 800 tons Lackawana steel piling, for Wausau Paper Co.

Road Oil—Green Bay, Wis.—Apr. 13, by W. L. Kerr, city clk., 30,000 gal. road oil containing 50-60% asphalt.

Dock—Milwaukee, Wis.—Apr. 13, by J. H. Fowles, secy. Sewerage Comn., 508 Market St., 1,388 ft. pile and concrete dock around west river end of disposal plant. T. C. Hatton, c/o owner, engr.

Steam Shovel—Chicago, Ill.—R. L. Gear, 29 South La Salle St., in market for steam shovel.

Steel, etc.—St. Paul, Minn.—Apr. 9, by H. W. Austin, city purch. agt., 70 pieces 26 x 72 in., and 1,200 pieces 26 x 108 in. corrugated steel, painted; 10 bundles No. 24 galvanized sheet metal, 26 x 96 in., for Water Dept. G. M. Shepard, city engr.

Grand Stand—Topeka, Kan.—Apr. 10, by T. W. Williamson & Co., archts., 312 Central Natl. Bank Bldg., 385 ft. long, 89 ft. deep, with mezzanine, 40 ft. wide, rein.-con. and steel, for Kansas Free Fair Assn., Fair Grounds. $200,000. Noted Jan. 11.

Road Oil—Clayton, Mo.—Apr. 18, by St. Louis Co., 200,000 gal. more or less road oil use on roads during year. $12,000. W. Elbring, co. engr.

Electrolier System—Visalia, Calif.—W. E. Drabnick, chn. of com., receiving bids electrolier system in downtown section. To exceed $25,000.

BIDS RECEIVED

Heating and Ventilating Apparatus — Brooklyn, N. Y.—W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Mar. 23, heating, ventilating and temperature apparatus in New Utrecht High School, 79th and 80th Sts., from W. J. Olvaney, 100 Charles St., New York, $193,785; Austin Eng. Co., 124 West 42nd St., New York, $209,266; Gillis & Geoghegan, 537 West Bway., New York, $212,261. Noted Mar. 15.

Aggregate, etc.—Long Island City, N. Y.—M. E. Connolly, pres. Queens Boro. Queens Subway Bldg., Mar. 27, (1) 22,500 cu.yd. mineral aggregate (2) 11,500 cu.yd. highway sand (3) 1,000 cu.yd. sand grit (4) 550,000 gal. road oil cold application (5) 150,000 gal. road oil hot application (6) 100,000 gal. bituminous macadam (7) 40,000 wood paving blocks (8) 50,000 asphalt paving blocks (9) 900 tons asphaltic cement (10) 25,000 gal. fuel oil (11) 25,000 gal. asphalt cold patch (12) 10,000 gal. gasoline, from Rosoff Sand & Gravel Corp., 152 West 42nd St., New York, (1) $64,013 (3) $2,745; Peace Bros., Inc., 57 North Laurence St., Flushing, (1) $64,575 (2) $21,850 (3) $2,500; Tuohey & Upton, Inc., 98 Main St., Flushing, (1) $66,825; E. B. Simpson, Hempstead, Turnpike, Hollis, (2) $14,375 (3) $3,000; Texas Co., 17 Battery Pl., New York, (4) $27,445 (5) $10,050 (6) $7,220 (9) $25,839 (12) $2,350; Standard Oil Co. of New York, 26 Bway., New York, (4) $30,418 (5) $9,705 (6) $7,130 (9) $18,873 (10) $1,568 (11) $4,250 (12) $2,140; Warner Quinlan Co., 79 Wall St., New York, (4) $33,770 (5) $9,240 (6) $7,730 (9) $19,773; Amer. Creosoting Co., 17 Battery Pl., New York, (7) $5,068; Hastings Pavement Co., 25 Broad St., New York, (8) $4,700; Tidewater Oil Sales Corp., 11 Bway., New York, (12) $2,150. Noted Mar. 22.

Foundations—New York, N. Y.—E. S. O'Malley, comr. Pub. Markets, Municipal Bldg., Mar. 30, foundations for Bronx Terminal Market, from H. P. Converse Co., 440 East 142nd St., $580,000; Necaro Co., Inc., 97 Court St., Brooklyn, $583,800; P. J. Carlin Constr. Co., Grand Central Terminal, $587,000. Noted Mar. 22.

Retaining Wall—New York, N. Y.—Transit Comn., 49 Lafayette St., Mar. 29, excavation and retaining wall at Lenox Ave. Yard between 148th and 150th Sts., from Fox Reynolds Co., 81 East 125th St., $77,921; C. L. Dooley Co., 257 Adelphi St., Brooklyn, $79,883; M. Del Balso, 660 East 221st St., $81,550.

Coliseum—Syracuse, N. Y.—G. R. Lunn, pres. State Fair Comn., Albany, Mar. 29, general contract for coliseum, at New York State Fair Grounnds, here, from McCann Building Co., 68 State St., Albany, $409,700; H. W. Prahl, Erie, Pa., $419,500; A. E. Stephens Co., 145 State St., Springfield, Mass., $444,400. Noted Mar. 15.

Asphalt—Minneapolis, Minn.—For 1,200 tons asphalt for street work, from Du Ro Asphalt Co., 133 West Washington St., Chicago, $21.23 per ton; Minnesota Road Equipment Co., Plymouth Bldg., $21.40; Camden Petroleum Co., 208 South LaSalle St., Chicago, $21.43. Noted Mar. 22.

Road Oil—St. Louis, Mo.—G. Oetting, supply comr., Mar. 30, 700,000 gal. road oil, for Street Dept., from R. J. Brown Petroleum Co., Boatsmens Bank Bldg., $0.05 per gal. delivered; Standard Oil Co. of Louisiana, Whitney Central Bldg., New Orleans, La., $0.0584 delivered; Camden Petroleum Co., 208 South La Salle St., Chicago, $0.061 per Camden "B," $0.0605 per light oil. Noted Mar. 1.

Electrolier System—Los Angeles, Calif.—Lighting system in Santa Monica Blvd., etc., from Southern California Electric Co., 625 South Main St., $106,222; D. S. McEwan Electric Co., Santa Monica, $107,000; Newberry Electric Corp., 724 South Olive St., $111,216.

CONTRACTS AWARDED

Paving Sand, etc.—Brooklyn, N. Y.—E. Riegelmann, boro pres., Boro Hall, 7,000 cu.yd. paving sand and 5,000 cu.yd. 1½ in. gravel, to High Grade Builders' Supply Co., 6th St. and 2nd Ave., $7,980 and $12,700; 400 tons paving pitch, to P. J. Lewis Mfg. Co., 177th St. and Ferris Ave., New York, $10,160; 3,000 cu.yd. paving gravel, to Rosoff Sand & Gravel Co., 152 West 42nd St., New York, $7,350; 35,000 gal. asphalt road binder, to Standard Oil Co. of New York, 26 Bway., New York, $4,725. Noted Mar. 8.

Asphalt Binder—New York, N. Y.—Bd. Purch., Municipal Bldg., asphalt binder to Dept. Parks-Bronx, to C. D. Beckwith, 2875 Bway., $1,478. Noted Mar. 29.

Asphalt Wearing Sand—New York, N. Y.—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., 4,000 cu.yd. asphaltic wearing sand, to C. W. Crane, 17 Battery Pl., $4,720. Noted Mar. 29.

Foundation, etc. — Janesville, Wis.—D. Jeffris Theatre Co., 14 West Milwaukee St., plain foundation and excavation for 1 story and basement, 60 x 200 ft., brick and concrete theatre, to T. S. Willis & Co., 330 Hayes Blk. Archts. total est. $150,000.

Cypress piling — Sioux City, Ia. — See "Buildings."

Graders and Tractors—Crookston, Minn.—Polk Co., one 10 ton caterpillar tractor and 7 light graders, to Russell Grader Mfg. Co., 2005 University Ave., Minneapolis, $4,500 and $1,834 respectively. Noted Mar. 1.

Tractor—Hibbing, Minn.—One 5 ton tractor, to Mesaba Motor Co., Hibbing, $7,200. Noted Feb. 8.

Road Oil—Minneapolis, Minn.—For 1,000,000 gal. road oil for city streets, to Pure Oil Co., 1300 South 1st St., $0.063 per gal. Noted Mar. 22.

Wharves—Houston, Tex.—See "Industrial Works."

Levees—Yuba City, Calif.—Recl. Dist. 1660, State Recl. Bd., Forum Bldg., Sacramento, 13 mi. levees, varying 12-22 ft. in height, 2,600,000 cu.yd. clamshell work and 1,100,000 cu.yd. long boom dredger work here, to Callahan Constr. Co., City Natl. Bank, Wichita Falls, Tex., $915,000.

Curbstone—Montreal, Que.—Furnishing 5,000 ft. circular granite curbstone, 49,000 ft. straight curb, and 1,000 ft. circular curbstone, 4-8 ft. radius, to Westmount Constr. Co., 344 Mountain St., $47,900.

Coal and Ash Handling Equipment—Toronto, Ont.—Toronto Transportation Comn., 70 Victoria St., coal and ash handling equipment in connection with new Hillcrest shops, to McNiven Bros., 70 Victoria St., $31,000.

OFFICIAL PROPOSALS

Bids: April 19.

Vernon-Glenwood Road

Newton, N. J.

Notice is hereby given that sealed bids will be received by the County of Sussex for the Construction of the Vernon-Glenwood Road in the Township of Vernon in the County of Sussex with a gravel surface estimated amount of excavation required is 9,921 cu.yds. and estimated amount of gravel pavement required is 36,808 square yards and opened and read in public at the Freeholders Office, Newton, New Jersey, on April 19, 1923 at 11:30 a.m.

"Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by Harvey Snook, County Engineer, and are on file in the office of said engineer at Newton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to the Board of Chosen Freeholders, County of Sussex, Newton, N. J., and must be accompanied by a certified check for not less than 10 per cent of the amount bid and be delivered at the place and on the hour above named. The Standard Proposal Form is attached to the specifications, copies of which will be furnished on application to the engineer.

By order of the Board of Chosen Freeholders.

(Signed) WILLIAM S. VOUGHT, Clerk.

Bids: April 26.

Water Tube Boilers

New Orleans, La.

Sealed proposals will be received by the Sewerage and Water Board of New Orleans up to 12 o'clock noon, Thursday, April 26th, 1923, for furnishing 1,500-1,800 hp. Water Tube Boilers.

Specifications and blank forms of proposals may be obtained at Room 303, No. 526 Carondelet Street, New Orleans.

The right is reserved to reject any or all bids.

GEO. G. EARL, General Superintendent.

A. G. MOFFAT, Secretary.

CONSTRUCTION NEWS

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Apr. 15	Cameron, W. Va.	Apr. 12
Apr. 16	Totowa (Paterson P. O.), N. J.	Mar. 29
Apr. 16	Pennington, N. J.	Apr. 5
Apr. 18	Richmond, Va. Adv. Mar. 22 to Apr. 12.	Mar. 22
Apr. 18	Costa Mesa, Calif.	Apr. 12
Apr. 23	Springfield, Ill. Adv. Apr. 5 and 23.	Apr. 5
Apr. 24	Belmar, N. J. Adv. Apr. 12.	Apr. 12
Apr. 24	Locust Valley, N. Y. Adv. Apr. 12.	Apr. 12
Apr. 26	New Orleans, La. Adv. Mar. 8 to Apr. 12.	Mar. 8
May 12	Memphis, Tenn. Adv. Apr. 12.	Apr. 12

SEWERS

Apr. 16	Urbana, Ill.	Mar. 15
Apr. 16	Johnstown, Pa.	Mar. 29
Apr. 16	Akron, O.	Apr. 5
Apr. 16	Lebanon, Pa. Adv. Apr. 5 and 12.	Apr. 5
Apr. 16	Waterloo, Ia.	Apr. 5
Apr. 16	Vermilion, S. D.	Apr. 5
Apr. 16	Beloit, Wis.	Apr. 12
Apr. 17	Paterson, N. J.	Mar. 29
Apr. 17	Chicago, Ill.	Apr. 12
Apr. 17	Long Island City, N. Y.	Apr. 12
Apr. 18	Hamilton, Ont.	Apr. 5
Apr. 18	Cleveland, O.	Apr. 12
Apr. 19	Laramie, Wyo.	Apr. 5
Apr. 21	Milwaukee, Wis.	Apr. 12
Apr. 23	Marysville, Kan. Adv. Apr. 5 and 12.	Apr. 5
Apr. 24	Buffalo, N. Y.	Mar. 29
Apr. 24	Indianapolis, Ind. Adv. Apr. 5 and 12.	Apr. 5
Apr. 24	Louisville, Ky. Adv. Apr. 5 and 12.	Apr. 5
Apr. 25	Glens Falls, N. Y. Adv. Apr. 12.	Apr. 12
Apr. 27	Wash., D. C. Adv. Apr. 12.	Apr. 12
Apr. 28	Lima, O. Adv. Apr. 12.	Apr. 12
May 3	Independence, Kan.	Apr. 12
May 7	Los Angeles, Calif. Adv. Apr. 12.	Apr. 12

WASTE DISPOSAL

Apr. 26	Cleveland, O.	Apr. 5

BRIDGES

Apr. 16	Johnstown, Pa.	Mar. 29
Apr. 16	Chicago, Ill.	Apr. 5
Apr. 17	Chehalis, Wash.	Apr. 5
Apr. 18	Appleton, Wis.	Apr. 5
Apr. 19	Hot Surings, S. D.	Apr. 12
Apr. 19	Pittsburgh, Pa.	Apr. 12
Apr. 20	Sacramento, Calif.	Apr. 5
Apr. 20	Michigan	Apr. 12
Apr. 20	Florida	Apr. 12
Apr. 20	Ft. Scott, Kan.	Apr. 12
Apr. 24	Louisiana	Apr. 12
Apr. 27	Williamsport, Pa. Adv. Apr. 12.	Apr. 12
Apr. 27	Fresno, Calif.	Apr. 12
Apr. 30	San Anselmo, Calif.	Apr. 12
May 3	Alabama	Apr. 12
Sept. 1	Sydney, New South Wales, Australia	Aug. 3

RAILWAYS

Apr. 19	California	Apr. 12

EXCAVATION, DRAINAGE, IRRIGATION

Apr. 16	Oroville, Calif.	Apr. 5
Apr. 17	New York, N. Y.	Apr. 5
Apr. 19	Sebastian, Fla.	Apr. 12
Apr. 23	Audubon, Ia	Apr. 5
June 15	Albert Lea, Minn.	Apr. 12

STREETS AND ROADS

Apr. 15	Schuyler, Neb.	Apr. 12
Apr. 16	Canonsburg, Pa.	Mar. 22
Apr. 16	Kingston (Wilkes-Barre P. O.), Pa.	Mar. 29
Apr. 16	Shenandoah, Pa. Adv. Mar. 29 to Apr. 12.	Mar. 29
Apr. 16	Mitchell, S. D.	Mar. 29
Apr. 16	Glendive, Mont.	Mar. 29
Apr. 16	Olympia, Wash.	Apr. 5
Apr. 16	San Diego, Calif.	Apr. 5
Apr. 16	Akron, O.	Apr. 5
Apr. 16	Redwood City, Calif.	Apr. 5
Apr. 16	Cincinnati, O.	Apr. 12
Apr. 16	Elmhurst, Ill.	Apr. 12
Apr. 16	Akron, O.	Apr. 12
Apr. 16	Sayre, Okla.	Apr. 12
Apr. 16	Topeka, Kan.	Apr. 12
Apr. 16	St. Paul, Minn.	Apr. 12
Apr. 16	South Manchester, Conn.	Apr. 12
Apr. 16	Chicago, Ill.	Apr. 12
Apr. 17	Buffalo, N. Y.	Apr. 12
Apr. 17	Massachusetts	Apr. 12
Apr. 17	St. James, Minn.	Apr. 12
Apr. 17	Alabama	Mar. 22
Apr. 17	St. Louis, Mo.	Mar. 29
Apr. 17	Washington	Apr. 5
Apr. 17	Florida	Apr. 5
Apr. 17	Louisiana	Apr. 5
Apr. 17	West Bend, Wis.	Apr. 5
Apr. 17	Maryland Adv. Apr. 5 and 12.	Apr. 5
Apr. 17	Maryland Adv. Apr. 12.	Apr. 12
Apr. 17	Long Island City, N. Y.	Apr. 12
Apr. 17	Milwaukee, Wis.	Apr. 12
Apr. 17	Ithaca, Mich.	Apr. 12
Apr. 17	Deadwood, S. D.	Apr. 12
Apr. 17	Wilkes-Barre, Pa.	Apr. 12
Apr. 18	Delaware	Apr. 5
Apr. 18	Freehold, N. J. Adv. Apr. 5 and 12.	Apr. 5
Apr. 18	Bennington, Vt. Adv. Apr. 5 and 12.	Apr. 5
Apr. 18	Florida	Apr. 5
Apr. 18	Ebensburg, Pa.	Apr. 5
Apr. 18	Nevada	Apr. 5
Apr. 18	Havana, Ill.	Apr. 12
Apr. 18	Cleburne, Tex.	Apr. 12
Apr. 18	San Francisco, Calif.	Apr. 12
Apr. 18	Titusville, Fla.	Apr. 12
Apr. 18	Fargo, N. D.	Apr. 12
Apr. 18	Leland, Mich.	Apr. 12
Apr. 18	Dearborn, Mich.	Apr. 12
Apr. 19	Petersburg, Ind.	Apr. 5
Apr. 19	Newton, N. J.	Apr. 5
Apr. 19	Reynoldsville, Pa. Adv. Apr. 12.	Apr. 12
Apr. 19	Wisconsin	Apr. 12
Apr. 20	Sioux Falls, S. D.	Mar. 29
Apr. 20	Kentucky	Apr. 5
Apr. 20	Illinois	Apr. 5
Apr. 20	Harvey, Ill.	Apr. 5
Apr. 20	Ft. Scott, Kan.	Apr. 12
Apr. 20	Richmond, Va. Adv. Apr. 12.	Apr. 12
Apr. 20	New York Adv. Apr. 5 and 12.	Apr. 12
Apr. 20	Uvalde, Tex.	Apr. 12
Apr. 20	Columbus, Tex.	Apr. 12
Apr. 20	Chicago, Ill.	Apr. 12
Apr. 23	Sanford, Fla.	Apr. 5
Apr. 23	Cedar Grove, La.	Apr. 12
Apr. 23	Dallas, Tex.	Apr. 12
Apr. 23	Yankton, S. D.	Apr. 12
Apr. 23	Bexley (Columbus P. O.), O.	Apr. 12
Apr. 23	Hondo, Tex.	Apr. 12
Apr. 23	Redwood City, Calif.	Apr. 12
Apr. 24	Trenton, N. J. Adv. Apr. 12.	Apr. 12
Apr. 24	Columbus, O.	Apr. 12
Apr. 25	Seneca, Kan.	Apr. 5
Apr. 25	Crookston, Minn.	Apr. 5
Apr. 25	Warren, Minn.	Apr. 12
Apr. 25	Kentucky	Apr. 12
Apr. 25	Duluth, Minn.	Apr. 12
Apr. 25	Irvine, Ky.	Apr. 12
Apr. 25	Tacoma, Wash.	Apr. 12
Apr. 25	Nevada, Ia.	Apr. 12
Apr. 26	Bloomfield, Ia.	Apr. 12
Apr. 26	St. Francis, Kan.	Apr. 5
Apr. 26	Plainfield, N. J. Adv. Apr. 12.	Apr. 12
Apr. 26	Deal (Deal Beach P. O.), N. J. Adv. Apr. 12.	Apr. 12
Apr. 27	Wellington, Kan.	Apr. 5
Apr. 30	Warwick, N. Y. Adv. Apr. 12.	Apr. 12
Apr. 30	San Anselmo, Calif.	Apr. 12
May 1	Miami, Fla. Adv. Apr. 12.	Apr. 12
May 1	West Virginia	Apr. 12
May 1	Atchison, Kan. Adv. Apr. 12.	Apr. 5
May 1	Washington	Apr. 5
May 1	Pennsylvania Adv. Apr. 12.	Apr. 12
May 1	Trenton, N. J.	Apr. 12
May 3	Mobile, Ala. Adv. Apr. 12.	Apr. 12
May 4	Hiawatha, Kan.	Apr. 12

INDUSTRIAL WORK

Apr. 16	Altoona, Pa.	Apr. 5
Apr. 16	Milwaukee, Wis.	Apr. 12
Apr. 16	Norwood (Cincinnati P. O.), O.	Apr. 12
Apr. 18	Muscatine, Ia.	Mar. 29
Apr. 20	Green Bay, Wis.	Apr. 5
Apr. 23	Rapid City, S. D.	Apr. 5
Apr. 24	Huron, S. D.	Apr. 5

BUILDINGS

Apr. 16	Marquette, Mich.	Apr. 5
Apr. 16	Ann Arbor, Mich.	Apr. 5
Apr. 16	Lawrence, Mass.	Apr. 12
Apr. 16	Trenton, N. J.	Apr. 12
Apr. 16	Erie, Pa.	Apr. 12
Apr. 16	Stamford, Conn.	Apr. 12
Apr. 17	Williamson, W. Va.	Apr. 5
Apr. 17	Akron, O.	Apr. 5
Apr. 17	Lapeer, Mich.	Apr. 12
Apr. 17	Haddon Heights, N. J.	Apr. 12
Apr. 18	Mayville, Wis.	Apr. 5
Apr. 18	Marion, N. Y.	Mar. 29
Apr. 18	Sioux City, Ia.	Apr. 5
Apr. 19	Seward, Neb.	Mar. 29
Apr. 19	New York, N. Y.	Apr. 5
Apr. 19	Brooklyn, N. Y.	Apr. 5
Apr. 20	New Haven, Conn.	Mar. 29
Apr. 20	Appleton, Wis.	Apr. 12
Apr. 20	Detroit, Mich.	Apr. 12
Apr. 21	Mayville, N. Y.	Apr. 5
Apr. 21	Racine, Wis.	Apr. 5
Apr. 21	Providence, R. I.	Apr. 12
Apr. 21	Waterbury, Conn.	Apr. 12
Apr. 23	Watertown, N. Y.	Apr. 12
Apr. 24	Green Bay, Wis.	Apr. 5
Apr. 24	Lakewood (Cleveland P. O.), O.	Apr. 12
Apr. 26	Lakewood, N. J.	Apr. 12
Apr. 31	Capa, S. D.	Mar. 8
May 1	Mason City, Ia.	Mar. 22
June 1	Morgantown, W. Va. Adv. Apr. 12.	Apr. 12

FEDERAL GOVERNMENT WORK

Apr. 16	Tunnel, etc. — Mitchell, Neb.	Mar. 1
Apr. 16	Barges—Galveston, Tex. Adv. Mar. 22 to Apr. 12.	Mar. 15
Apr. 16	Ice-Making and Refrigerating Plant—Chelsea, N. Y.	Mar. 22
Apr. 17	Disposal Plant, etc.—Tobyhanna, Pa.	Mar. 29
Apr. 18	Monument — Plattsburg, N. Y. Adv. Mar. 22 to Apr. 12.	Mar. 22
Apr. 20	Dredging Pump—Jacksonville, Fla. Adv. Mar. 22 to Apr. 12.	Mar. 22
Apr. 20	Valves, etc.—Florence, Ala. Adv. Mar. 29 to Apr. 12.	Mar. 29
Apr. 20	Road—New Mexico	Apr. 5
Apr. 20	Cement—Nashville, Tenn.	Apr. 5
Apr. 23	Earthwork — Memphis, Tenn. Adv. Apr. 5 and 12.	Apr. 5
Apr. 23	Steel Bars, etc. — Memphis, Tenn. Adv. Apr. 5 and 12.	Apr. 5
Apr. 24	Road—Nevada	Apr. 12
Apr. 25	Hospital Buildings — Chelsea, N. Y.	Apr. 5
Apr. 25	Mechanical Equipment—Chelsea, N. Y.	Apr. 5
Apr. 25	Reconstructing Dike — Mare Island, Calif.	Mar. 22
Apr. 25	Steel Gates — Nashville, Tenn. Adv. Apr. 5 and 12.	Apr. 5
Apr. 25	Laboratory — Anacostia, D. C.	Apr. 12
Apr. 26	Road—Nevada	Apr. 12
Apr. 27	Barges—Portland, Ore.	Apr. 5
Apr. 27	Boilers—Florence, Ala.	Apr. 5
Apr. 30	Barges—Jacksonville, Fla. Adv. Apr. 5 and 12.	Apr. 5
Apr. 30	Dredging—Baltimore, Md. Adv. Apr. 5 and 12.	Apr. 5
Apr. 30	Post Office—Vernal, Utah.	Apr. 5
Apr. 30	Dredging—Baltimore, Md.	Apr. 5
May 3	Superstructure — Detroit, Mich. Adv. Apr. 5 and 12.	Apr. 5
May 3	Boilers—Mankato, Minn. Adv. Apr. 12.	Apr. 12
May 7	Boilers—Oteen, N. C.	Apr. 12
May 8	Boiler — Saratoga Springs, N. Y. Adv. Apr. 12.	Apr. 12
May 10	Post Office — Cordova, Alaska	Jan. 25

Bids Close		See Eng. News-Record
May 11	Dredging — New York, N. Y. Adv. Apr. 12.	Apr. 12
May 11	Bear Trap Leaves—Louisville, Ky.	Apr. 12
May 12	Metal Work—Key West, Fla. Adv. Apr. 12.	Apr. 12

MISCELLANEOUS

Apr. 13	Bituminous Material — Albany, N. Y. Adv. Apr. 5 and 12.	Apr. 5
Apr. 16	Crane—Pasadena, Calif.	Apr. 12
Apr. 16	Granite Paving Blocks — Minneapolis, Minn.	Apr. 12
Apr. 17	Cable—Hartford, Wis.	Apr. 12
Apr. 18	Road Oil—Clayton, Mo.	Apr. 5
Apr. 18	Road Oil—Nashville, Tenn.	Apr. 12
Apr. 18	Heating and Ventilating Apparatus, etc. — Brooklyn, N. Y.	Apr. 12
Apr. 19	Borings—New York, N. Y.	Apr. 12
Apr. 19	Sheet Piling—New Orleans, La.	Apr. 12
Apr. 21	Lighting System — Fairport (Fairport Harbor P. O.), O. Adv. Apr. 12.	Apr. 12
Apr. 24	Stadium—Lincoln Neb.	Apr. 12
Apr. 24	Tar and Asphalt — Trenton, N. J.	Apr. 12
Apr. 26	Ferry Boats—New York, N. Y.	Apr. 12
Apr. 30	Trap Rock, etc.—Trenton, N. J. Adv. Apr. 12.	Apr. 12

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y., Corning—Plans extending water system at Riverside. $15,000-$18,000. A. H. Hassey, village pres.

N. Y., Jamestown—Bd. Water & Light Comn., City Hall, plans to purchase 8,000 ft. 6 in. and 1,000 ft. 4 in. c.i. pipe.

N. Y., Savannah—Voted additional $15,000 bonds for new water system. (Voted $45,000 bonds Jan. 10.) J. P. Sawyer, village engr.

N. Y., Silver Creek — Plans filtration plant. $50,000. Engineer not selected.

Pa., Allentown—Plans to lay 6-8 mi. mains. $50,000. T. J. Roth, supt. Water Dept.

Pa., Harrisburg—Takes bids between May 1 and 15 at Council Chamber, Dauphin Bldg., extending and improving waterworks. Contracts E. and F. J. H. Fuertes, 140 Nassau St., New York City, consult. engr.; adv. this issue.

Pa., North East—Voted $50,000 bonds new reservoir. $50,000. Engineer not announced.

Md., Frederick — Making plans storage reservoir, 30-50 m. g. capacity, in Catoctin Mts., 18 mi. northeast of here. $100,000. E. C. Crom, city engr.

Md., Williamsport—Having preliminary surveys made waterworks. $100,000. Norton, Bird & Whitman, Munsey Bldg., Baltimore, engrs. Noted July 6.

La., Lecompte—Voted $40,000 bonds, extending waterworks plant. Swanson-McGraw Inc., United Fruit Bldg., New Orleans, consult. engrs. Noted Nov. 30.

La., Morganza—May 15 to vote on $18,000 bonds for new waterworks plant. Swanson-McGraw Inc., United Fruit Bldg., New Orleans, consult. engrs.

O., Columbus—See "Streets and Roads."

Ill., Brookfield — Soon takes bids c.i. mains. $56,000. E. Hancock, 2047 Ogden Ave., Chicago, engr.

Ill., Western Springs — Soon takes bids waterworks extension. $30,000. E. Hancock, 2047 Ogden Ave., Chicago, engr.

Ia., Walnut—Apr. 17 to vote $18,000 bonds waterworks improvements.

Kan., Cottonwood Falls — Soon takes bids waterworks improvement. $15,000 bonds voted. P. L. Grady, Crawford Bldg., Topeka, engr.

S. D., Winner—Voted $25,000 bonds to improve waterworks, incl. wells and supply tank. T. G. Councillor, city aud.

Tex., Corsicana—Voted $15,000 bonds waterworks extensions, mains, etc., also $10,000 for sewers. J. W. Harrison, city engr. Noted Mar. 15.

Tex., Dallas — Voted $5,000,000 bonds waterworks, dams, mains, etc. G. D. Fairtrace, city engr.

Tex., Granbury — Voted $47,000 bonds waterworks improvements. Municipal Eng. Co., Dallas, (street address not available), consult. engrs. Noted Mar. 15.

Okla., Broken Arrow — Voted $16,500 bonds 7,000 ft. 6-10 in. c.i. mains, etc. Wood & Witten, 246 Lynch Bldg., Tulsa, engrs.

Okla., Ft. Gibson—Voted $15,000 bonds for 8,000 ft. 4-8 in. c.i. pipe. Macintosh Co., 1st Natl. Bank Bldg., Oklahoma City, engrs.

Ariz., Chandler—Plans election to vote on $50,000 bonds for water system improvements.

Wash., Everett — Rejected bids opened Mar. 27, laying mains north and south through city, in connection with proposed $350,000 water improvements. Will readvertise at once. C. Klapp, water supt.

Wash., Millwood — See "Industrial Works."

Calif., Pomona—Consolidated Water Co. making plans 2 concrete reservoirs in San Jose Hills Dist., 500,000 gal. and 1,500,000 gal. capacity, 10,000 ft. pipe line and pumping plant will be installed later. Private plans.

Ont., Ottawa—Voted $120,000 bonds for extending mains, 30,000 ft. 6 in. c.i. pipe, etc. A. F. Macallum, city engr.

N. S., Sydney—Takes bids about Apr. 15, improvements to waterworks system. $80,000. A. Fitzgerald, mayor.

BIDS DESIRED

N. Y., Locust Valley—Apr. 24, by Bd. Water Comrs., Matinecock Neighborhood House, waterworks system. S. B. Bowne, Post Office Bldg., Mineola, engr.; adv. this issue.

N. J., Belmar—Apr. 24, 1 deep well pump; adv. this issue.

W. Va., Cameron—Apr. 15, ditching and laying 14,000 ft. 4 in. and 2,000 ft. 6 in. mains. J. S. Fish, city clk.

Tenn., Memphis—May 12, by Bd. Comrs. Memphis Artesian Water Dept., cast iron, steel and vitr. clay pipe lines, Contrs. 14 and 15. Fuller & McClintock, 206 Walsix Bldg., Kansas City, Mo., engrs.; adv. this issue.

O., Columbus—See "Streets and Roads."

Wis., Beloit—See "Sewers."

Wis., Hartford—Taking bids one steam driven, 2 stage air compressor, 500 cu.ft. fill air per minute, final gauge pressure 100 lb., to operate at 150 lb. steam pressure; one compound steam driven general service pump, 500 g.p.m., steam pressure 150 lb.; one steam turbo driven centrifugal pump, 500 g.p.m., steam pressure, 150 lb. W. Radke, city clk. Private plans.

Tex., Sweetwater—City Com. taking bids mechanical filter plant, 2 settling basins. $35,000. G. H. Sheppard, mayor. Engineer not announced.

Calif., Costa Mesa — Apr. 18, by Dirs. Newport Heights Irrigation Dist., furnishing and laying 2,575 ft. 4 in., 615 ft. 6 in., 22,993 ft. 8 in., 27,039 ft. 10 in., 9,192 ft. 12 in., 766 ft. 14 in. and 8,471 ft. 18 in. double dipped and wrapped riveted pipe, all 12 gage; 5,820 ft. 2 in. and 1,220 ft. 4 in. standard screw pipe; furnishing special fittings, gate valves, culverts, rein.-con. trestle, 734,000 gal. riveted steel stand pipe, 2 turbine pumps direct connected to motors, 500 and 800 g.p.m. respectively, 2 centrifugal pumps with belt connected electric motors, 500 and 800 g.p.m. respectively. P. E. Kressly, I. W. Hellman Bldg., Los Angeles, engr.

BIDS RECEIVED

N. Y., St. George—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, Apr. 3, mains in Midland and Maple Aves., 2nd, 3rd, 4th, 5th, 6th, 7th, 8th and 9th Sts., here, from Knight & Demicco, 448 East Tremont Ave., New York, $29,492; Paladino Contg. Co., 437 East 120th St., New York, $33,227; N. De Stefano, 257 Glenn Ave., Tompkinsville, $34,134. Noted Mar. 29.

Calif., Los Angeles — Los Angeles Co. Water Dist. No. 5, waterworks system near Compton; c.i. pipe and fittings, from United States Cast Iron Pipe & Fdry. Co., Wright & Callendar Bldg., Prop. 1, $25,136 and $25,067, Prop. 2, $26,161 and $26,080; wrought iron pipe, from Crane Co., 319 East 3rd St., $656; steel tank and tower, from Pittsburgh-Des Moines Steel Co., Rialto Bldg., San Francisco, with elliptical tank 75,000 gal. $9,160, 100,000 gal. $10,155, with hemispherical tank 75,000 gal. $8,825, 100,000 gal. $9,790; pumping equipment, from Shinn-Holtz-Lyon Co., 1604 Santa Fe St., Prop. 1, Plants A and B, $2,990; Byron-Jackson Co., 303 East 3rd St., Prop. 2, Plant A, $1,597; distributing system, from M. Mattick, 1436 West 51st St., low for trenching, excavation and pipe laying (bid not available); Prendergast Constr. Co., 311 South Spring St., low to construct pump house, pipe ducts, cleaning bed, etc. Noted Mar. 15, under Compton.

CONTRACTS AWARDED

N. Y., Niagara Falls—E. J. Fort, city mgr., Gluck Bldg., three 10 in. and sixty-three 6 in. valves, to Rensselaer Valve Co., 50 Church St., New York, $53 and $22.26 respectively; 5 hydrants, to R. D. Wood, 400 Chestnut St., Phila., $66.30; 69.51 feet c.i. pipe and 5,650 lb. specials, to J. H. Clow & Sons, 824 Walnut St., Phila., $58.70 and $0.06 respectively. Noted Mar. 15.

W. Va., Wheeling—Filtration system Contr. 2, intake pier, suction pipe and tunnel, to J. F. Casey & Co., Union Ave., Pittsburgh, Pa., $399; Contr. 4 pump station and filter plant, superstructures to Engstram & Knapp, Wheeling (street address not available), $184,130; Contr. 5, elevators for filter plant and pump station, to Otis Elevator Co., Wheeling Steel Corp. Bldg., Wheeling, $11,160; Contr. 7, boilers for heating system, to Bartley O'Neil & Co., $4,240; Contr. 8, pump station piping, to Pitt Constr. Co., Fulton Bldg., Pittsburgh, Pa., $32,000; Contr. 9, filter equipment, to M. L. Bayard & Co., Pennsylvania Bldg., Phila., Pa., $93,710; Contr. 10, steel filter wash tank, to Chicago Bridge & Iron Wks., 608 South Dearborn St., Chicago, $9,500; Contr. 11, filter plant conveyor system, to Stephens-Adamson Co., Oliver Bldg., Pittsburgh, Pa., $9,470; Contr. 12, excavations and foundations for reservoir tanks, Contr. 13, reservoir tanks, Contr. 14, force mains, Contr. 22, laying force main from Fulton to Elm Grove, Greggsville and Mt. de Chantal extensions, Contr. 23, laying mains in Warwood, to Pittsburgh-Des Moines Steel Co., Curry Bldg., Pittsburgh, Pa., $42,990, $55,380, $311,850, $125,005 and $8,400 respectively; Contr. 15, c.i. pipe, to United States Cast Iron Pipe and Fdry. Co., American Trust Bldg., Birmingham, Ala., $119,937. Contr. 16, gate valves for mains, pumping and filter plant, Contr. 18, air relief valves, Contr. 20, fire hydrants, to Ludlow Valve Mfg. Co., 1st Natl. Bank Bldg., Pittsburgh, $40,563, $1,102 and $57 respectively; Contr. 17, check valves for pumping station and Contr. 19, hydraulic plug valves for filter plant, to Michigan Valve & Fdry. Co., 3631 Parkinson St., Detroit, $4,161 and $2,072 respectively; Contr. 21, sluice gates for intake and filter plant, to Coldwell-Wilcox Co., South End, Newburgh, N. Y., $6,499. Noted Mar. 8.

Wis., Milwaukee—Laying 81,000 ft. 6-16 in. c.i. pipe, from F. E. Kaminski, Berlin, $69,180; E. O'Donnell, 1219 Clybourn St., $130,000; J. B. Forrestal Co., 215 15th St., $157,350.

Wis., Milwaukee—For Riverside Pumping Station, 130 x 240 ft. 56 ft. high, brick, concrete and steel, foot Chambers St., to P. Riesens Sons, 1018 Humboldt Ave., $434,791. Noted Apr. 5.

Wis., Waupun — Erecting 80,000 gal. steel tank on 77 ft. steel tower and 60,000 gal. steel tank on existing tower, to Pittsburg-Des Moines Steel Co., 38 South Dearborn St., Chicago, Ill., $10,100. Noted Mar. 8.

Minn., North Branch—Distribution system, to W. C. Fraser, 810 Guardian Life Bldg., St. Paul, $37,024. Noted Mar. 15.

Kan., Smith Center—Waterworks improvements, to E. K. Ladd, 3229 Harrison St., Kansas City, Mo., low service pump $1,390, low service pump house $1,150, 12 in. outlet sewer $0.83, concrete $27.80, etc., total $53,550. Noted Mar. 22.

Tex., Shamrock—Gravity pipe line and reservoir, to R. M. Irick & Son, Plainview, $98,670. Engrs. est. $100,000. Noted Mar. 1.

Wash., Everett — For 20,000,000 gal. reservoir, 400 ft. square basin, concrete lined, etc., to T. M. Morgan, Everett, $150,635. Engrs. est. $150,000. Noted Feb. 8.

Ont., Whitby—W. J. Luke, chn. Pub. Utilities Comn., slow sand filter system, general contract for concrete work, excav., etc. to J. W. Bowser Co., 136 Confederation Life Bldg., Toronto, $26,000; c.i. pipe and specials to Natl. Iron Wks., Cherry St., Toronto, $1,816; gate valves to T. McAvity & Sons, St. John, N. B., $704; sewer pipe to J. McIntyre, Whitby, $659; pumps to Turbine Equipment Co. Ltd., 73 King St. W., Toronto, $2,170; screens and structural steel, to McGregor & McIntyre, Shaw St., Toronto, $575; sand washers, to **J. Inglis Co., Strachan Ave., Toronto, $360.**

Sewers

PROPOSED WORK

Mass., Andover—Town takes bids about May 15, outfall sewer from Shawsheen Village to Merrimack River, 24 in. c.i. and 30 in. tile. $215,000. Weston & Sampson, 14 Beacon St., Boston, consult. engrs.

N. Y., Binghamton—See "Streets and Roads."

N. Y., Johnson City—Plans sanitary and storm water sewers in Wheeler Tract Dist. To exceed $25,00. F. A. Tillman, comr. Pub. Wks.

N. Y., Lake George—Delaware & Hudson R.R., foot of State St., Albany, plans sewerage system, here. $30,000-$35,000. J. MacMartin, ch. engr.

Sewers (Continued)

N. J., Bloomfield—Preparing plans sanitary sewer in Myrtle Ave., Mill and Burch Sts. $25,000. E. Baechlin, Bloomfield, engr.

Pa., Erie—See "Streets and Roads."

N. C., Henderson — See "Streets and Roads."

Fla., Bartow—Election about May 1, to vote on $85,000 bonds sanitary sewers, mains, laterals and disposal plant. Burns & McDonnell, Interstate Bldg., Kansas City, Mo., engrs. Noted Mar. 22.

Tenn., Dayton—Plans to vote on $50,000 bond issue for complete sanitary sewerage system. A. P. Haggard, chn. Bd. Comrs.

Ky., Ashland — Plans sewerage system. $200,000 bonds sold.

O., Columbus—See "Streets and Roads."

O., Columbus—Making plans 28,593 ft. 6-24 in. vitr. sewer extending from Wilson to Ohio Aves., $50,478; 5,357 ft. 8-10 in. c.i. sewer in Campbell St., $8,124. R. H. Simpson, City Hall, engr.

O., Euclid—Preparing plans sewage disposal plant. $300,000. G. B. Gascoigne, 648 Leader-News Bldg., Cleveland, engr.

Ill., West Chicago—Soon takes bids storm sewers. $45,000. E. Hancock, 2047 Ogden Ave., Chicago, engr.

Ill., Western Springs—Soon takes bids sewer extension. $35,000. E. Hancock, 2047 Ogden Ave., Chicago, engr.

Neb., Omaha—See "Streets and Roads."

Mo., University (St. Louis P. O.)—See "Buildings."

Tex., Corsicana—See "Waterworks."

Tex., Dallas—Voted $500,000 bonds for sewage disposal and $150,000 for sanitary sewers. G. D. Fairtrace, city engr. Noted Mar. 15.

Tex., Terrell—Terrell Sewerage Co. making plans 4 mi. sanitary sewer extensions. Probably do work by day labor. $25,000. M. A. Joy, engr. and supt.

Okla., Ft. Gibson—Voted $45,000 bonds for sewerage system and disposal plant, 35,000 ft. 6-12 in. vitr. clay pipe, Gant & Baker, 1st Natl. Bank Bldg., Oklahoma City, engrs.

Ariz., Chandler—Plans election to vote on $55,000 bonds for sewers.

Wash., Seattle—Received no bids Mar. 31, laying trunk sewer, 34th Ave. W., et al. Will readvertise. $87,513. J. D. Blackwell, city engr.

Calif., Eureka — Having plans prepared 1,200 ft. 30 in. and 400 ft. 42 in. precast cement iron pipe storm sewers. H. H. Hannah, city engr.

Calif., Paso Robles—Plans outfall sewerage system. To exceed $25,000. W. W. Hughes, city engr., authorized to appoint consulting engineer.

Ont., Bridgeburg—See "Ft. Erie."

Ont., Ft. Erie—Cities of Ft. Erie and Bridgeburg plan sewage plant, to exceed $50,000. Engineer not announced.

BIDS DESIRED

N. Y., Glens Falls—Apr. 25, by L. G. Boynton, city clk., furnishing sewer pipe, branches and fittings also constructing about 6¾ mi. 8-18 in. sanitary sewers, etc.; adv. this issue.

N. Y., Tonawanda—Apr. 21, by Town Bd., sewerage system, disposal plant and pumping station. G. C. Diehl, 575 Ellicott Sq., Buffalo, engr.; adv. this issue. Noted Mar. 1.

D. C., Wash.—Apr. 27, by Dist. Comrs., 509 Dist. Bldg., sewer and sewer invert. Apply at Room 427 Dist. Bldg.; adv. this issue.

Ala., Mobile—See "Streets and Roads."

O., Cleveland—Apr. 18, by Cuyahoga Co., 17,613 ft. 18-30 in. vitr. clay trunk sewer in Ridge Rd. Impvt. 9, Sect. "A." $300,000. R. F. MacDowell, Court House, engr.

O., Columbus—See "Streets and Roads."

O., Lima—Apr. 28, at office C. A. Bingham, city mgr., Main St. and Public Sq. Relief Sewers, Contr. 13. B. F. Darling, superv. engr.; adv. this issue.

Ill., Chicago — Apr. 17, by Bd. Local Impvts., 207 City Hall, sewers. $250,000. C. D. Hill, ch. engr.

Wis., Beloit—Apr. 16, at office Pub. Wks. Com., 270 sewer services, 280 water services and 230 gas services in various streets; 4,321 ft. 4-12 ft. cut for 8 in. sewer and 918 ft. 8-12 ft. cut for 10 in. sanitary sewers in various streets. G. E. Hebbink, city engr.

Wis., Milwaukee — Apr. 21, by J. H. Fowles, secy., Metropolitan Sewerage Comn., 508 Market St., main sewer from end Contr. 1 on State St. to county institutional buildings, 3,720 lin.ft. 36 in. concrete and 4,924 lin.ft. 24 in. terra cotta pipe. T. C. Hatton, c/o owner, engr.

Kan., Independence—May 3, by G. H. Krienhagen, city clk., sewage disposal plant, 9,540 cu.yd. earth and 500 cu.yd. rock excav., 943 cu.yd. rein.-con., 62,000 lb. reinforcing, etc. H. H. Crawford, city engr. Noted Mar. 1.

Calif., Los Angeles—May 7, by Bd. Pub. Wks., furnishing machinery in connection with Hyperion Sewage Treatment Plant (south plant), incl. 8 sewage screens; bucket elevators and appurtenant machinery.

BIDS RECEIVED

N. Y., Blasdell—Village Trustees, sewage disposal plant, from G. W. Moore, 82 Richfield Ave., Buffalo, $69,557, Crooker & Carpenter, Niagara Life Bldg., Buffalo, $73,973, W. A. Lose, Tonawanda, $76,900; sewerage system, from M. Heltz, 960 Ridge Rd., Lackawanna, $82,582, W. J. Erwin & Sons, Greenville, O., $89,391, Fahning Bros., 460 Leroy Ave., Buffalo, $103,632. Noted Mar. 15.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, Apr. 4, sewers in (1) Schenectady Ave., engrs. est. $14,151 (2) 84th St., $6,906 (3) Highlawn Ave., $4,510 (4) Empire Blvd., $3,554 (5) Troy Ave., $3,179 (6) Lott Ave., $1,001 (7) Maple St., $892, from B. Peconi & Sons (1) 88% engineer's estimate (4) 110% (6) 120%; M. Paino, 32 Court St., (1) 92% (2) 104.4%; J. Jennings, Belle Harbor, (1) 97% (4) 107%; M. Tozzi, (2) 93% (3) 97% (5) 103% (7) 109%; G. L. Schrade, 693 Flatbush Ave., (2) 98.62%; Tomasetti & Co., Inc., 1133 60th St., (3) 88.5% (5) 88%; Nazzaro & Querriero, (3) 98%; D. Bonnacci, (4) 114%; Manmill Constr. Co., (5) 100% (6) 109½% (7) 125%; P. Muscio, (6) 98% (7) 114%. Noted Mar. 29.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., Apr. 9, sewers in (1) Goodrich St. (2) 77th St. (3) 101st Ave. (4) 78th St. (5) 89th St. (6) 117th St. (7) 130th St., from Green Contg. Co., 734 Vernon Ave., Brooklyn, (1) $9,869 (6) $13,105; E. J. Kelly, Jr., Flushing, (1) $14,839 (2) $4,250 (3) $4,586 (4) $2,664 (5) $2,683 (6) $11,653 (7) $8,669; Kennedy & Smith, Inc., 93 Amity St., Flushing, (1) $15,762 (2) $7,053 (3) $6,477 (4) $3,600 (5) $3,217 (6) $11,786 (7) $10,352; Seaside Contg. Co., 193 Beach 108th St., Rockaway Beach, (2) $4,643 (3) $4,871 (4) $2,714 (5) $2,949 (7) $8,138. Noted Apr. 5.

O., Cleveland—For 3,450 ft. 18-24 in. vitr. clay sewer in Euclid Ave., from D. Zullo, 10614 Frank Ave., $31,214. Noted Mar. 15.

CONTRACTS AWARDED

Pa., Altoona—See "Streets and Roads."

Mich., Detroit—Lateral sewer 3820, to W. Blanck & Co., 827 Ford Bldg., $21,512; Blaine Ave. Arm West, to J. Wagner, 859 West Boston Blvd., $28,530; Blaine Ave. Arm East and McGraw Ave. Arm, to R. D. Baker, 1631 Elmhurst Ave., $78,370 and $127,846 respectively. Noted Mar. 29.

Ill., Park Ridge—Rein.-con. and tile pipe sewerage system, to J. L. Walker, 231 Court St., Hamilton, O. Engrs. est. $300,000. Noted Feb. 8.

Minn., Hutchinson — See "Streets and Roads."

Tex., Nocona—For 36,800 ft. 6-10 in. sewer pipe, 58 manholes, 24 lamp holes, 3 disposal plants, to Winslett-Eldridge Co., Nocona, $47,851. Engrs. est. $50,000. Noted Mar. 1.

Calif., Los Angeles—Temporary outfall sewer from Higeura St. to Overland Ave., brick concrete pipe, to C. E. Green, Grosse Bldg., $84,000. Noted Mar. 29.

Waste Disposal

PROPOSED WORK

Mo., Kansas City — Will sell $250,000 bonds for garbage incinerator plant. Total cost $300,000. R. Waddell, 800 Graphic Arts Bldg., city engr.

Bridges

PROPOSED WORK

Mass., Boston—State and city plan Cottage Farm Bridge. Cost to exceed $1,000,000. Engineer not announced. Noted Oct. 27, 1921.

Pa., Oil City—City, Venango Co. (Franklin), and State plan large suspension bridge, modern design, steel and other materials, over Allegheny River, here. Engineer not announced.

N. C., Murfreesboro—State Hy. Comn., Raleigh, plans bridge over Meherrin River, here, C. M. Upham, state highway engr.

Alabama—State Hy. Dept., Montgomery, plans concrete and steel bridges on Jasper-Marion Co. line Rd., Walker Co., $100,000; 1,600 lin.ft. bridges on Demopolis-Linden Rd., Marengo Co., one 102 ft. steel span, remainder treated timber on pile bents. W. S. Keller, state highway engr.

Tenn., Chattanooga—City and Southern Ry., 1010 Market St., plan viaduct on 11th St. $325,000. R. Hooke, city engr.

O., Dayton—Montgomery Co. plans 1 span, 150 ft. steel truss highway bridge, 18 ft., over Miami River. $75,000. W. O. Pease, co. surv.

Indiana—State Hy. Comn., Indianapolis, plans 240 ft. steel span, State Project 17 A, Lake Co., $80,000; steel truss, five 150 ft. spans, State Project 21 A, Jackson Co. W. T. Titus, State Hy. Comn., bridge engr.

Ind., Bedford—State Hy. Comn., Indianapolis, had plans prepared 1,175 ft. steel truss bridge, four 200 ft. and three 125 ft. spans, rein.-con. footings on piling, 2 mi. south of here over east fork of White River. $300,000. W. J. Titus, c/o State Hy. Comn., Indianapolis, bridge engr.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, plans 325 ft. bridge, one 125 ft. steel truss span and five 40 ft. rein.-con. deck girder spans, over Little Muddy Creek, 685 ft. bridge, one 125 ft. steel truss and fourteen 40 ft. rein.-con. girder spans over Big Muddy Creek, 840 ft. bridge, twenty-one 40 ft. rein.-con. deck girder spans, over overflow channel of Little Wabash River, all in Clay Co. G. F. Burch, state bridge engr.

Minnesota—State Legislature authorized Minneapolis and St. Paul to issue up to $800,000 bonds each, for rein.-con. bridge over Mississippi River at Federal high dam. $1,500,000. C. M. Babcock, 1246 University Ave., St. Paul, chn. construction com. Engineer not selected.

Minnesota—See "Streets and Roads."

Arkansas—State Legislature, Little Rock, passed bill for viaduct at west terminus of Harahan Bridge out of Memphis. $1,000,000. Tennessee will contribute $250,000 and Government about $500,000.

Texas—See "Railways."

Colorado—State Hy. Comn., Denver, appropriated $245,300 for bridges, etc., in Summit, Delta, Archuletta, Jefferson and Adams Counties. L. D. Blauvelt, Denver, ch. engr.

BIDS DESIRED

Pa., Blossburg—Tioga Co. (Wellsboro) taking bids new rein.-con. bridge over Tioga River on Williamson Rd., to exceed $25,000.

Pa., Jersey Shore—Apr. 27, by Comrs. Lycoming and Clinton Counties, at office Comrs. Lycoming Co., (Williamsport) bridge over Pine Creek, near here. M. C. Krause, Susquehanna Trust Bldg., engr.; adv. this issue.

Pa., Pittsburgh—Apr. 19, by Allegheny Co., 770 ft. rein.-con. bridge, 30 ft. roadway, 11 ft. sidewalk, over Jacks Run on California Ave., to connect city with Bellevue. $400,000.

West Virginia—See "Streets and Roads."

Florida—Apr. 20, by State Rd. Dept., Tallahassee, 3,315 ft. timber bridge over Popes Lake, Project 568, being west approach to Victory Bridge, Jackson Co. W. F. Cocke, state highway engr.

Alabama—May 3, by W. S. Keller, state highway engr., Montgomery, 914 ft. bridge over Tallapoosa River between Alexander City and Jacksons Gap, Tallapoosa Co., six 150 ft. steel spans on concrete piers.

Louisiana—Apr. 24, by State Hy. Dept., Reymond Bldg., Baton Rouge, following bridges on highways in Tangipahoa Parish, two 95 ft. and one 114 ft. creosoted timber trestles, one 409 ft. bridges over Tangipahoa River, incl. one 140 ft. steel truss span on concrete piers and 269 ft. creosoted timber approaches, also grading, gravel surfacing, etc., Hammond Covington Highway, Federal Aid Project 128, Tangipahoa Parish, J. M. Fourmy, ch. engr.

Indiana—State Hy. Comn., Indianapolis, taking bids one 198 ft. through truss span over Pigeon Creek, 2 mi. north of Evansville, Vanderburgh Co., Federal Aid Project 36-1; one 198 and one 150 ft. through truss spans over Eel River, 5 mi. south of Clay City, Clay Co., Federal Aid Project 53-1; also number smaller bridges. W. J. Titus, bridge engr.

Michigan—Apr. 20, by State Hy. Dept., Lansing, 85 ft. 9 in. pony truss, 27 ft. roadway, Bridge 820,303, near Dearborn, 724 cu.yd. rein.-con., 190,170 lb. steel, 27,300 lb. reinforcing, also two 43 ft. 8 in. T beams, 28 ft. roadway, Bridge 821,604 near Redford, 700 cu.yd. rein.-con., 132 cu.yd. concrete, 45,575 lb. reinforcing. F. F. Rogers, comr.

Wisconsin—See "Streets and Roads."

Kan., Ft. Scott—Apr. 20, by C. Culbertson, clk. Bourbon Co., 2 rein.-con. deck

Bridges (Continued)

girder span bridges, one to have two 35 ft. spans and other two 45 ft. spans, on Ft. Scott Wichita Rd., Sect. A, Federal Rd. Project 33. B. Boyle, co. engr.

S. D., Hot Springs—Apr. 19, at office Auditor Fall River Co., three 94 ft. Howe trusses and fourteen 15 ft. standard trestles spans over Cheyenne River, 201.6 cu.yd. Class A concrete, 6,240 lb. structural and 13,075 lb. reinforcing steel, 98,858 ft. lumber, etc.

Tex., Hondo—See "Streets and Roads."

Calif., Fresno—Apr. 27, by Supervs. Fresno Co., 4 rein.-con. bridges on Sierra to Sea Highway. To exceed $25,000. C. P. Jensen, Cory Bldg., co. surv.

Calif., San Anselmo—Apr. 30, by A. W. Studley, town clk., bridges in various sections of town, 1,224 cu.yd. foundation excav., 50,550 cu.yd. concrete, 125,300 lb. reinforcing and 8,900 structural steel, 864 sq.ft. macadam, etc. To exceed $50,000.

BIDS RECEIVED

O., Painesville — Lake Co., 450 ft. concrete bridge, to have two 90 ft. spans, over Grand River, from N. R. Porterfield, 411 Federal Bldg., Youngstown, $130,000; Rice Jones Co., Union Bldg., Cleveland, $132,000. Engrs. est. $155,000.

Colorado—See "Streets and Roads."

CONTRACTS AWARDED

Pa., Curwensville—Buffalo, Rochester & Pittsburgh R.R., 155 West Main St., Rochester, N. Y., 65 ft. span single track steel bridge with concrete abutments, near here, to Miller Constr. Co., Lock Haven. Engrs. est. $75,000.

Alabama—State Hy. Dept., Montgomery, treated timber bridges on treated timber piles, on road from Tuscaloosa Co. line to Carrolton, Pickens Co., to E. Pettus, Montgomery, (street address not available), $59,676. Noted Mar. 29, under "Streets and Roads."

Indiana—State Hy. Comn., Indianapolis, substructure for one 60 ft. steel truss over Otter Creek, Warrick Co., to B. H. Hawkins, Zionsville, $4,935, engrs. est. $5,128; rein.-con. arch, Orange Co., to R. H. King, Danville, $33,205, engrs. est. $33,820; rein.-con. slab and rein.-con. arch, Orange Co., to Cleary, Hailey & Barry, Lyric Bldg., Cincinnati, O., $6,953 and $15,356 respectively, engrs. est. $7,726 and $15,904 respectively; one 28 ft. rein.-con. girder, one 40 ft. steel truss and one 30 ft. arch extension, Vanderburg Co., one 60 ft., one 55 ft., and one 72 ft. steel truss, and one 28 ft. rein.-con. girder, Gibson Co., to M. & P. Contg. Co., Rockport, $44,008, engrs. est. $45,131; one 84 ft. steel truss and one rein.-con. box, Morgan Co., 2 rein.-con. slabs, Greene Co., and rein.-con. slab, Gibson Co., to Vincennes Bridge Co., Vincennes, $14,438, $5,357 and $2,161 respectively, engrs. est. $14,495, $5,374 and $2,190 respectively; 1 rein.-con. girder and 1 rein.-con. box, Daviess Co., to J. F. Hopkin & Son, Loogootee, $5,689, engrs. est. $6,429; rein.-con. girder, Morgan Co., to W. E. Potter, Paragon, $3,120, engrs. est. $4,194; 3 rein.-con. slabs, Delaware Co., to J. Heitzman, Union City, $5,985, engrs. est. $6,832; 3 rein.-con. slabs, Owen Co., to D. Y. Stout, 1006 West Main St., Crawfordsville, $4,929, engrs. est. $6,240. Noted Mar. 15.

Mich., Detroit—Two 120 ft. steel pony truss bridges on Five Mile Rd. and Warren Ave., 628,293 lb. steel, to Amer. Bridge Co., 2273 Beecher Ave., $43,092. Noted Mar. 29.

Ia., Clarion—To Iowa Bridge Co., 1263 East 19th St., Des Moines, 10 I beams and 1 pier, $21,669; A. J. Carpenter, Woolstock, 27 box culverts and extensions, $8,705.

Ia., Montezuma — Poweshiek Co., to Wickes Eng. and Constr. Co., 418 Polk Bldg., Des Moines, 6 concrete box culverts, one 16 x 24 ft. I beam span, one 18 x 40 ft. and one 16 x 70 ft. pony truss, re-erecting one truss, $17,950; J. T. Grose, Decorah, 5 concrete box culverts and one 16 x 30 ft. I beam span, $7,677; C. L. Schouboe, 1543 33rd St., Des Moines, 2 concrete box culverts, one 16x20 ft. and one 18 x 32 ft. I beam span, one 18 x 70 ft. pony truss, $15,800. Noted Mar. 15.

South Dakota—State Hy. Dept., Pierre, concrete and steel bridge, Charles Mix Co., to Diamond Eng. & Constr. Co., Grand Island, Neb., 4,101; bridge in Bon Homme and Hutchinson Counties, to Federal Bridge Co., 1002 Bd. Trade Bldg., Des Moines, Ia., $8,119 and $51,241 respectively; bridge in Moody Co., to J. C. Sorensen, Trent, $4,417; bridge in Brookings Co., to Great Northern Bridge Co., 225 Kasota Bldg., Minneapolis, Minn., $8,015; two bridges in Beadle Co., one on Project 91 and other on Project 121, to Schreiber Eng. Co., Watertown, $23,558 and $7,723 respectively; bridge in Lyman Co., to Mobridge Constr. Co., Mobridge, $16,200; bridge in Potter Co., to M. A. Stump, Mobridge, $3,862. Noted Mar. 15.

Oregon—See "Streets and Roads."

Ore., Klamath Falls—State and Klamath Co., 160 ft. concrete bridge, four 40 ft. spans, over Klamath River, at Spenders, to Union Bridge Co., foot of Fenwick St., Portland, $51,510.

Ont., London—Ontario Hy. Comn., 27 culverts and cement bridges on Longwoods Rd., to A. Kirkpatrick, Petrolea. Engrs. est. $45,000.

Dams

PROPOSED WORK

N. C., Carthage—See "Miscellaneous."

Wis., Port Wing—See "Industrial Works."

Minn., Little Falls—See "Miscellaneous."

Tex., Dallas—See "Waterworks."

Wash., Millwood — See "Industrial Works."

California—See "Miscellaneous."

Railways

PROPOSED WORK

New York—Erie R.R., 50 Church St., New York City, plans improvements to its Cuba-Hunts cut-off line, incl. construction and extensions of sidings, etc. To exceed $25,000. Engineer not announced.

New York—New York State Rys. plan track extensions on North Madison St., Rome. To exceed $25,000. B. E. Tilton, 1901 Sunset Ave., Utica, genl. mgr.

Missouri — Missouri Supreme Court ordered Missouri Pacific R.R., Ry. Exch., St. Louis, to build viaduct to carry tracks of Oak Hill branch, over tracks of St. Louis & San Francisco R.R., west of Tower Grove Ave. $208,000-$400,000. Missouri Pacific R.R. will pay ¾ of cost and St. Louis & San Francisco R.R. balance. E. A. Hadley, ch. engr. of former.

Texas—International & Great Northern R.R., Mason Bldg., Houston, plans to expend $3,500,000 as follows; new steel $1,400,000, ballast $310,000, rebuilding bridges $280,000, fuel oil storage $100,000, shop and tools $250,000, passenger engines $310,000, freight rolling stock $490,000, work trains $100,000, miscellaneous work $260,000. F. S. Schwinn, ch. engr.

Oklahoma — Ponca City Oil Field R.R. (recently organized), c/o Marland Oil Co., Ponca City, plans railroad from Ponca City to connect with Rock Island System at Billings. $600,000.

Nevada—See "Eureka, Nev. under Industrial Work."

California — See "Miscellaneous" under San Diego.

Canada—Canadian Pacific Ry., Windsor St. Sta., Montreal, Que., plans 100 mi. new railroad in provinces of Saskatchewan and Alberta as follows:—22 mi. from Kipp to Bow River, 25 mi. from Archive to Wymark Ranch, 50 mi. from Tuffnell to Prince Albert. $4,000,000 to $5,000,000. J. M. R. Fairbairn, ch. engr.

Ontario—Hydro Electric Power Comn., 190 University Ave., Toronto, plans single track electric railway in Windsor along Parent Ave., Ottawa and Erie Sts., to Ouellette Ave. $132,000. F. A. Gaby, ch. engr.

Ontario—Hyde Electric Power Comn., 190 University Ave., Toronto, plans 10 mi. track from Humber Bay to Port Credit, 60 or 80 lb. rails. $150,000. F. A. Gaby, ch. engr.

British Columbia—Kettle Valley R.R. c/o Canadian Pacific R.R., Winnipeg, Man., plans ballasting 20 mi. road, erecting telegraph line, small station and 2 section houses at Oliver, also 4 wooden spans to be replaced by steel ones on Nicola Branch, new coaling plant at Princeton. $70,000. J. M. R. Fairbairn, Montreal, Que., ch. engr.

BIDS DESIRED

California — Apr. 19, by F. W. Taylor, purch. agt. Southern Pacific R.R., 65 Market St., San Francisco, furnishing 1,100 gross ton first class No. 1, 50 lb. relaying rail with second hand angle bars, delivered f.o.b. Sisson, at rate of 250 gross ton per month.

CONTRACTS AWARDED

Massachusetts—Boston & Albany R.R., South Sta., Boston, laying 1 mi. new tracks, moving and raising 2 mi. track, 20,000 cu.yd. excav., 1,000 cu.yd. rein.-con. retaining walls, at freight yards, Springfield, to New England Constr. Co., 274 Main St., Springfield, $75,000. Engrs. est. $100,000.

Pennsylvania — Buffalo, Rochester & Pittsburgh R.R., 155 West Main St., Rochester, N. Y., 2 mi. single track, one steel and one wooden bridge, 50,000 cu.yd. excav., to Miller Constr. Co., Lock Haven.

Excavation, Drainage, Irrigation

PROPOSED WORK

North Carolina — State Fish Comn., Raleigh, plans to dredge and deepen various inlets to sounds in North Carolina. $500,000. J. K. Dixon, Trenton, ch. engr. Comn.

Ark., Blytheville—D.D. 7, Poinsette Co., soon takes bids flood gates and navigation lock, $200,000, also plans complete flood protection and river control system, ultimate cost $5,000,000. Pride & Farley, Blytheville, engrs.

California—See "Miscellaneous."

Calif., Monterey—See "Miscellaneous."

BIDS DESIRED

Fla., Sebastian—Apr. 15, by Sebastian Inlet Dist., 66,000 cu.yd. earth and 500 cu.yd. rock excav., 2,700 cu.yd. riprap, 600 tons jetty capping, etc.

Minn., Albert Lea—June 15 (change of date), by Freeborn Co., Judicial Ditch 2 Sects. O, T, L, L-1 and L-2, $64,394; H. Severson, Albert Lea, engr. Noted Mar. 22.

Calif., Costa Mesa—See "Waterworks."

BIDS RECEIVED

Mo., Winfield—Cap-au-Gris Drainage & Levee Dist., Mar. 31, levee and drainage ditches, 180,000 cu.yd. earth excav., etc., from Sternberg Dredging Co., Arcade Bldg., St. Louis, $25,486; McWilliams Dredging Co., McCormick Bldg., Chicago, $26,276; W. E. Callahan Constr. Co., Great Southwestern Life Bldg., Dallas, Tex., $27,745.

CONTRACTS AWARDED

N. Y., Buffalo—Dredging Buffalo Inner Harbor to completed contract depth for maintenance of channel, to Empire Eng. Co., Inc., North Tonawanda, $0.345 per cu.yd. Noted Apr. 5.

Fla., Lakeland—Lake Parker D.D., canal between Lake Parker and Lake Bonny, 50,000 cu.yd. earth and 40,000 cu.yd. rock excav., 200 cu.yd. rein.-con., to S. T. Buchannan & Son, Lakeland, $0.334 earth and rock.

Tex., Houston—Harris Co. D. D. 1, Court House, 500,000 cu.yd. earth excav., etc., to A. V. Hineman, Greenville, $30 per acre, etc., total $60,000. Noted March 15.

Ontario—Draining 15,000 acres in Rosaquet, Stephens, West Williams and McGillivray Twps., incl. dredging, deep trench work, cement and tile, to Broderick Bros., c/o G. McCubbin, 135 King St., Chatham. $60,000.

Streets and Roads

PROPOSED WORK

Massachusetts—State Hy. Dept., Boston, making plans 1 mi. highway in Adams, 20 ft., concrete, $70,000; 3 mi. in Sheffield, 18 ft., concrete, $200,000; 1 mi. from Hinsdale to Washington, 18 ft., bituminous concrete, $35,000; 7 mi. from Hinsdale to Peru, 18 ft., bituminous macadam on concrete, $270,000. All foregoing in Berkshire Co. G. E. Curtis, 51 North St., Pittsfield, div. engr.

Mass., Dorchester (Boston P. O.)—See "Miscellaneous."

Connecticut—State Hy. Comn., Hartford, plans 40,000 sq.yd. 7 in. concrete paving in towns of Kent and Cornwall $150,000; 36,000 sq.yd. 8 in. concrete in Gilford, $200,000; 30,000 sq.yd. 8 in. concrete in Madison, $200,000; 8.5 mi., 20 ft., in Clinton and Old Saybrook, 8 in. concrete, $400,000; 7.6 mi., 20 ft., in Old Lyme, EastLyme and Waterford, 8 in. concrete, $350,000; 42,000 sq.yd. waterbound macadam on River Rd., in Sharon, $200,000; 50,000 sq.yd. waterbound macadam in Sharon and Salisbury, $330,000. State Hy. Comn., Hartford, engrs.

Conn., Easton—Bridgeport Hydraulic Co., Main and Gilbert Sts., Bridgeport, plans new layout of portion of North Park Ave. at Bucks Hill, and building new waterbound macadam roadway, $60,000. Work will be done by day labor. Private plans.

Conn., Manchester—Bd. Selectmen plans laying sidewalks and curbs, $30,000. J. H. Hyde, secy.

Conn., Meriden—Plans widening and paving portion East Main and State Sts., $60,000. J. A. Toner, City Hall, engr.

Conn., Rockville—Plans 4,000 lin.ft. sidewalk, concrete curbs and gutters, $25,000.

Conn., Winsted — Plans widening and paving 2,000 ft. South Main St., 32 ft., concrete, $35,000. W. C. Kemp, Winchester (Winsted P. O.) selectman.

N. Y., Binghamton—Plans paving Chenango, Center and State Sts., sandstone block and concrete, also 1,375 ft. sanitary sewer in State St. $75,000. W. E. Weller, city engr.

Streets and Roads (Continued)

N. Y., Lowville—Lewis Co. voted about $25,000 bonds for highway and rein.-con. Jyke on westerly side of Beeches Bridge. Address L. P. M. Gaylord, co. supt. highways.

N. Y., Rochester—C. A. Poole, city engr. and City Planning Comn. prepared plans widening Main St., 20 ft., between York St. and old canal. $1,100,000.

N. Y., Salamanca—Plans paving various streets, brick. $40,000.

N. Y., Syracuse — Bd. Pub. Wks. had plans paving Fellows Ave. and Eloise Terrace, bituminous macadam, asphalt and asphaltic concrete. To exceed $25,000. T. H. Mather, city engr.

Pa., Ebensburg—Comrs. Cambria Co., H. T. Jones, controller, opens bids about Apr. 25, 17,902 ft. Ebensburg-Cresson Highway, brick on concrete. O. P. Thomas, Park Bldg., Johnstown, engr.

Pa., Erie—Plans asphalt pavements on Cherry St. $25,000, also East Side State St. sewer $7,000. West Side State St. sewer $5,700. F. G. Lynch, city engr.

Pa., Greenville — Mercer Co. (Mercer) plans resurfacing 1,800 ft. South Mercer St. through here. $25,000. F. P. Graham, Grove City, co. engr.

Pa., Sharon — Plans paving 3,500 ft. Cedar Ave., asphalt, bitulithic or brick. $35,000. L. E. Burnside, city engr.

W. Va., Logan—Logan Co. voted $600,000 bonds constructing Holden, Pigeon Creek and other roads. J. W. McClaren, co. engr.

North Carolina—State Hy. Dept., Raleigh plans grading and concrete or asphaltic paving 132.25 mi. roads in Rockingham, Moore, Montgomery, Cleveland, Wilkes, Forsyth, Davie, Richmond, Mecklenburg, Anson, Rockingham, New Hanover, Columbus, Brunswick, Wilson, Craven and Duplin Counties, $3,722,000; grading and topsoiling 123.8 mi. roads in Surry, Stokes, Hertford, Wilkes, Caldwell, Yancey, Polk and Davidson Counties, $709,000; grading and paving with penetration macadam 12 mi. roads Henderson Co., $120,000; grading and hard surfacing, probably sand asphalt, 29.1 mi. road in Pender, Onslow and Moore Counties, $291,000; penetration macadam paving 11.1 mi. roads in Alamance and Montgomery Counties, $170,000; hardsurfacing 14 mi. road Yadkin Co., $400,000; grading and hardsurfacing 2 mi. road Davidson Co., $60,000; grading, sand-clay surfacing or topsoiling 8 mi. road Rutherford Co., $48,000; asphaltic surface treating 4 mi. road Guilford Co., $25,000; grading 14 mi. road Madison Co., $40,000; grading and hardsurfacing, probably penetration macadam 4 mi. road Lee Co., $40,000, improving 13 mi. road, Union Co., $390,000. C. M. Upham, state highway engr.

N. C., Durham—Durham Co. plans grading and paving road from here to Chapel Hill Rd., 32,500-65,000 sq.yd. concrete or asphaltic paving. $100,000-$200,000. J. D. Spinks, Winston-Salem, engr.

N. C., Henderson—Plans street and sidewalk paving, and sewer extensions. $200,000.

N. C., Lincolnton—Lincoln Co. plans hard surfacing 7 mi. road from here to Reepsville $200,000. R. C. Goode, Lincolnton, chn. Bd. Co. Comrs.

Alabama—State Hy. Dept., Montgomery, plans grading and gravel surfacing 25 mi. road from Jasper to Marion Co. line, Walker Co., $350,000; 23 mi. Demopolis-Linden Rd., Marengo Co. W. S. Keller, state highway engr.

Tenn., Dayton—Plans to vote on $25,000 bond issue paving various streets. A. P. Haggard, chn. Bd. Comrs.

Kentucky — State Hy. Dept., Frankfort, plans waterbound macadam surfacing 20 mi. Mayo Trail from Louisa to Lawrence Co. line, Lawrence Co. J. S. Boggs, state highway engr.

Kentucky—State Hy. Dept., Frankfort, plans surfacing with waterbound macadam on prepared subgrade 9 mi. Western Dixie Highway, Hardin Co. J. S. Boggs, state highway engr.

Ky., Ashland — Plans paving various streets. $250,000.

Ky., Whitley City—McCreary Co. voted $200,000 bonds for road construction.

Ky., Winchester—Clark Co. plans constructing Louis Spriestersbach, Harry Bean and James Helzer Rds. $46,500 bonds sold.

O., Columbus—Making plans grading, curbing, laying necessary water services and sewer connections and paving 10,059 ft. Park, 18th and Hanford Sts., alley west of Hamlet St., alley west of 20th St., 2nd alley west of 4th St., alley west of Indiana Ave., alley north of Hanford St., alley north of Fulton St., from Parsons to Monroe Aves. and alley north of Fulton St. from 18th St., to east line of Lot 28, brick, concrete and asphalt. R. H. Simpson, city engr.

O., Dayton — Plans paving 7,500 sq.yd. Pursell Ave., vitr. brick or concrete, 4,500 lin.ft. cement curb and gutter. $39,084. I. E. Houk, city engr.

O., Grandview Heights (Columbus P. O.)—E. Gross, clk., soon takes bids grading and asphaltic concrete paving 13,232 ft. Northwest Blvd., Parkway N., Parkway Dr., Timberman Rd., Ridgeway Pl., Mulford, Thomas, Holley, Norton, Dover and Glenn Aves. $249,155. Burgess & Niple, 223 East Broad St., Columbus, engrs.

O., Steubenville—Jefferson Co. plans repairing and resurfacing Dillondale-Adena, Yellow Creek-Irondale and Croxtons Rds. $80,000. J. Leech, co. engr.

Ind., Indianapolis—Marion Co. plans grading and graveling 7 mi. Schafer Rd., 18 ft., $78,489; stone and gravel surfacing 2.9 mi. Chris Schilling Rd., 30 ft., $32,636. J. J. Griffith, co. engr.

Ill., Brookfield—Soon takes bids 25,000 sq.yd. concrete, $117,000. E. Hancock, 2047 Ogden Ave., Chicago, engr.

Ill., Elmhurst—Soon takes bids 25,000 sq.yd. concrete paving $120,000, 35,000 sq. yd. resurfacing, various types $125,000, concrete sidewalks $50,000. E. Hancock, 2047 Ogden Ave., Chicago, engr.

Ill., Harvey — Plans concrete paving Centre Ave. $36,000. A. W. Hersey, city engr.

Ill., Johnston City—Voted $62,000 bonds for hard surfaced roads.

Ill., La Grange—Soon takes bids 20,000 sq.yd. concrete paving. $75,000. E. Hancock, 2047 Ogden Ave., Chicago, engr.

Ill., Posen (Harvey P. O.)—Soon takes bids concrete sidewalks. $100,000. E. Hancock, 2047 Ogden Ave., Chicago, engr.

Wis., Edgerton — Making plans paving with 1 course concrete, concrete curb and gutter, Victoria Rd., Albion, Blaine, North 3rd, Head, Catlin, Rollin, High and Perry Sts. $25,000. A. E. Ely, 29 West Milwaukee St., Janesville, engr.

Ia., Greenfield—Adair Co. plans grading and necessary bridge work on approximately 7.7 mi. primary road east of here. Iowa Hy. Comn., Ames, engrs.

Ia., Waukon—Allamakee Co. plans grading and necessary bridge work on 1 mi. Primary Rd. 51, about 10 mi. north of here, and 8 mi. on Primary Rd. 9 from county line east to here. Iowa Hy. Comn., Ames, engrs.

Minnesota—Following are county appropriations for road and bridge construction during 1923: Traverse Co. $40,000, H. Hanson, Wheaton, engr.; Lake Co., $40,000, H. C. Hanson, Two Harbors, engr.; Red Lake Co., $26,000, H. E. Palmer, Red Lake Falls, engr.; Todd Co., $64,600, A. M. Graves, Long Prairie, engr.; Steele Co., $60,000, R. W. Hosfield, Owatonna, engr.; Martin Co., $100,410, C. N. Krosch, Fairmont, engr.

Minn., Red Wing—Plans paving 39,133 sq.yd. various streets, 13,923 cu.yd. excav. $145,000. W. Geisheker, city engr.

Kan., Topeka—Soon takes bids paving 32 blocks, asphaltic concrete, and 8 blocks, brick. W. E. Baldry, city engr.

Neb., Omaha — City Clerk takes bids between May 1 and 15, 14,000 lin.ft. curb and gutter, 54,500 yd. vitr. brick, wood block, asphalt, concrete or bituminous concrete paving. $100,000. Prince & Nixon Eng. Co., 501 Peters Trust Bldg., engrs.

Neb., Omaha—George & Co., 901 City Natl. Bank Bldg., having plans prepared 50,000 yd. grading, curbing, guttering, sidewalks, sewers and paving. $100,000-$150,000. Rohrbough Eng. Co., 929 City Natl. Bank Bldg., engrs.

Mo., St. Louis—Soon takes bids paving 3,235 sq.yd. Smiley Ave. from Leola to Ivanhoe Sts., asphaltic concrete on concrete, $15,000; 16,505 sq.yd. Nebraska Ave., warrenite on concrete, $60,900; 3,630 sq.yd. Smiley Ave. from Ivanhoe Ave. to St. Louis & San Francisco Ry. right-of-way, 6 in. concrete, $16,800. W. W. Horner, City Hall, engr.

Mo., University (St. Louis, P. O.)—See "Buildings."

Tex., Corsicana — Voted $75,000 bonds street improvements permanent paving. J. W. Harrison, city engr. Noted Mar. 29.

Tex., Dallas — Voted $1,250,000 bonds street paving. G. D. Fairtrace, city engr.

Tex., Edinburg—Hidalgo Co. making plans grading and surfacing 1 in. asphalt topping on 6 in. concrete 13.8 mi. State Highway 12 from Donna to Cameron Co. line, 18 ft., $50,000, 9.61 mi. State Highway 12 from Pharr to Mamie, 18 ft., $425,000; grading and gravel surfacing 14.8 mi. State Highway 12 from Mamie to Starr, 18 ft., $173,000. P. S. Devine, co. engr.

Tex., Galveston—Galveston Co. authorized issuance $335,000 warrants to fill and pave back seawall extension. E. B. Holman, co. judge.

Tex., Jasper—State Hy. Comn., Austin, granted $30,000 aid to Jasper Co. 6 mi State Highway 45. C. P. Hunter, co engr.

Tex., Sonora—Sutton Co. making plans grading 22.7 mi. 24 ft., and gravel surfacing 1.4 mi. 16 ft., State Highway 4. $145,500. J. W. Alger, co. engr.

Okla., Muskogee—Having plans prepared 12,000 yd. paving, various types. J. E. Marsh, Muskogee, engr.

Colorado — State Hy. Comn., Denver, made following appropriations for Federal aid projects: $678,900 gravel surfacing in Gunnison, Rio Blanco, Mesa, La Plata, Fremont, Bend, Prowers, Chaffee and Grand Counties; $1,329,000 concrete pavement Las Animas, Pueblo, Otero, Douglas, Jefferson, Boulder, Larimer, Logan, Morgan and Weld Counties; $113,000 crushed rock surfacing Eagle and Jefferson Counties; $50,000 sand clay surfacing Elbert Co. L. D. Blauvelt, Denver, ch. engr.

Colo., Denver — Making plans asphaltic paving 11 blocks Washington Park Impvt. Dist. 2, 30-56 ft., $62,056; North Denver Dist. 32, 107,000 sq.yd. surfacing, 11,000 lin.ft. curb, $146,084; asphalt paving 14 blocks North Denver Paving Dist. 3, 30-40 ft., $31,560. A. K. Vickery, City Hall, engr.

Wash., Wenatchee — Chelan and King Counties plan 30 mi. highway between Gold Bar and Merrit, crossing Cascade Mts.

Calif., Napa—Plans paving with 2 course asphalt macadam Bell, Evans and Willow Aves. To exceed $25,000. H. A. Harrold, city engr.

Calif., San Bernardino—Soon takes bids curbing, sidewalks and 4 in. concrete paving 13th St.; 4 in. concrete paving Wallace St.; guttering and 4 in. macadam paving Hanson St. To exceed $25,000.

Calif., San Diego—Had plans prepared paving Julian and Macy Sts., 23,908 sq.yd. asphaltic concrete, 2½ in. base, 1½ in. surface. F. A. Rhodes, city engr.

Calif., San Francisco — City and San Francisco Co. plan highway down Peninsula in San Mateo Co. $250,000. Will be financed through joint highway district. M. M. O'Shaughnessy, city engr.

Calif., Whittier — Had plans prepared curbing, guttering, sidewalks and paving with 6 in. concrete portions Havaland, Orange and Palm Aves. To exceed $25,000. P. E. Todd, city engr.

Ontario—Dept. Highways, Toronto, takes bids in spring, asphalt surfacing 10 mi. road and treating 24 mi. road. S. M. McClenaghan, Bank and Sparks Sts., Ottawa, pres.

Ontario—Dept. Pub. Highways, 110 University Ave., Toronto, plans 6 mi. highway between Elmira and Alma, probably concrete. $100,000-$200,000. G. Hogarth, ch. engr.

Ont., Toronto—Plans paving 2,500 ft. Cairns Ave. and Glebeholme Blvd., 20 to 24 ft., 6,000 sq.yd. asphalt, brick block gutters, 6 in. concrete base. $33,000. R. C. Harris, city engr.

BIDS DESIRED

Massachusetts—Apr. 17, by W. F. Williams, state highway comr., Boston, paving 19,219 ft. bituminous macadam road in Rutland, to exceed $60,000. 33,658 ft. in Wrentham, Norfolk and Walpole, to exceed $110,000.

Conn., South Manchester—Apr. 16, by Bd. Selectmen, Hall of Records, concrete walks also concrete and granite curbs on 2.5 mi. various streets. $30,000. J. H. Hyde, secy.

New York—Apr. 20, by F. S. Greene, comr. State Hy. Dept., Albany, improving highways in Columbia, Greene, Orleans, Schoharie and Suffolk Counties; reconstructing highways in Broome, Erie, Fulton, Greene, Herkimer, Oneida, Ontario, Onondaga, Rockland and Ulster Counties. W. A. Patton, Secy.; adv. this issue.

N. Y., Buffalo—Apr. 17, by Bd. Supervs. Erie Co. paving Sharp St., Webster Corners, Jones, Grover, Shadagee, 13th Twp. and Military Rds., concrete, waterbound macadam, etc. To exceed $50,000. G. C. Diehl, Ellicott Sq. Bldg., engr.

N. Y., Long Island City—Apr. 17, by M. E. Connolly, pres. Queens Boro., Queens Subway Bldg., asphalt paving Alburtis Ave. and Woodbine St.; grading sidewalk space and laying sidewalks where necessary on southerly side of 109th Ave.

N. Y., Long Island City—Apr. 17, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sewers in 147th, Darrow, Pulaski, Wayne, Steuben, Ankener, Pullis, Ford, Brush, Summit and 131st Sts., Metropolitan, Weisse, Cooper and Mt. Olivet Aves., Varian, Hanson, Agnes and Bertha Places; temporary drain in 190th St., Jamaica and Hollis Aves.; temporary con-

Streets and Roads (Continued)

nection to sewer in Cooper and Myrtle Aves. together with an automatic electric pumping station at Weisse Ave. and Varian Pl., etc.

N. Y., Warwick—Apr. 30, by President and Village Trustees, 22,000 sq.yd. pavement. H. Eltinge Breed, 507 5th Ave., New York City, engr.; adv. this issue.

N. J., Deal (Deal Beach P. O.)—Apr. 26, by Boro Comrs., 8 in. rein.-con. pavement. J. Strollo, Brent Good Bldg., Long Branch, boro engr.; adv. this issue.

N. J., Plainfield—Apr. 26, by Common Council, sheet asphalt and granite block paving. J. J. Carroll, city clk.; adv. this issue.

N. J., Trenton—Apr. 24, by Mercer Co., furnishing and applying asphaltic oil and tar. H. F. Harris, co. engr.; adv. this issue.

N. J., Trenton—May 1, by Freeholders Mercer Co. paving 1 mi. East State St., granite block on concrete. $36,000. H. F. Harris, Court House, engr.

Pennsylvania — May 1, by State Hy. Dept., Harrisburg, reconstructing 47 mi. highways. P. D. Wright, state comr.; adv. this issue.

Pa., Reynoldsville — Apr. 19, by Boro. Council, grading, paving and curbing various streets. E. E. Deible, clk.; adv. this issue.

Pa., Wilkes Barre—Apr. 17, by F. H. Gates, city clk., repaving South Main St., sheet asphalt on 9 in. concrete, to exceed $30,000. M. Murray, supt. Dept. Streets.

Maryland—Apr. 17, by State Rds. Comn., Baltimore, paving 2.92 mi. highway, Contr. BC-44. J. N. Mackall, chn.; adv. this issue.

Va., Richmond—Apr. 20, at office of Dept. Pub. Wks., paving various streets, $400,000. A. J. Saville, dir. Pub. Wks.; adv. this issue.

West Virginia — May 1, by State Rd. Comn., Charleston, grading, paving, surfacing and bridges in various counties. F. B. Carskadon, secy.; adv. this issue.

Fla., Miami—May 1, by City Comn., bituminous macadam and sheet asphalt paving. F. H. Wharton, city mgr.; adv. this issue.

Fla., Titusville — Apr. 18, by N. T. Froscher, clk. Brevard Co., surfacing 12 mi. road, 8 in. rock base, Project 534. $26,000.

Ala., Mobile—May 3, by City Comrs., one course concrete, asphaltic concrete and sheet asphalt paving, also storm sewers. W. Smith, city engr.; adv. this issue.

Louisiana—See "Bridges."

La., Cedar Grove — Apr. 23, by E. T. Archer & Co., engrs., 609 New England Bank Bldg., Kansas City, Mo., 50,000 sq.yd. pavement, various types, for city. $197,000.

Kentucky—Apr. 25, by State Hy. Comn., Frankfort, surfacing with waterbound macadam on prepared sub-grade 15 mi. Western Dixie Highway, Hardin Co., 28,224 tons crushed stone, 9,407 tons screenings; shaping and grading 34.951 mi. roads in Webster, Harlan, Muhlenberg and Morgan Counties, 286,911 cu.yd. earth, 48,498 cu. yd. solid rock and 36,187 cu.yd. borrow excav.; shaping and surfacing to width 16 ft. with rein.-con. or rock asphalt on concrete or bituminous concrete on concrete 10.282 mi. Covington-Falmouth Rd., Kenton Co.; shaping and surfacing to width 9 ft. with creek gravel or waterbound macadam or waterbound macadam surface treated 4.282 mi. Albany-Monticello Rd., Clinton Co.; shaping and surfacing to width of 14 ft. with waterbound macadam and waterbound macadam surface treated 3.917 mi. New Castle Shelbyville Rd., Henry Co. J. S. Boggs, state highway engr.

Ky., Irvine—Apr. 25, by S. S. Noble, mayor, constructing Bway., Main, Short and Upper Sts. $25,000. M. L. McKinney, city clk.

O., Akron—Apr. 16, by S. Porter, clk. Summit Co., grading and paving 1.31 mi. Granger-Ghent Rd., Sect. A-2, 16 ft., bituminous macadam $39,690, rein.-con. $50,675, bituminous concrete $50,975. Former bids rejected. J. Weaver, Court House, engr. Noted Apr. 5.

O., Bexley (Columbus P. O.)—Apr. 23, by S. W. Roderick, village clk., grading, curbing and asphalt paving 3,900 ft. Roche Ave. and Remington Rd. $73,000. Jennings-Lawrence Co., Hartman Bldg., Columbus, engrs.

O., Cincinnati—Apr. 16, by C. F. Hornberger, dir. Pub. Serv., City Hall, repaving 6,500 sq.yd. Gilbert Ave. viaduct, granite block. $59,285. F. Krug, City Hall, engr. Noted Mar. 29.

O., Columbus—Apr. 24, by W. H. Duffy, dir. Pub. Serv., grading, laying necessary water services and sewer connections and paving 1,300 ft. Moberly St., alley north of Bryden St., alley north of Broad St. and alley west of Winner Ave., brick, concrete or asphalt.

O., Marion—Apr. 17, by E. A. Schultz, dir. Pub. Serv., grading, curbing, guttering and paving 23,173 sq.yd. Fairground and Forest Sts., Uncapher, Merchant and Courtland Aves. T. S. Cathers, city engr.

Mich., Dearborn—Apr. 18, by H. B. Knauff, village clk., 19,015 sq.yd. 8 in. concrete, 8,012 cu.yd. excav., 11,408 lin.ft. concrete curb.

Mich., Ithaca—Apr. 17, by Gratiot Co. Rd. Comn., grading and gravel surfacing 11½ mi. road.

Mich., Leland—Apr. 18, by Leelanau Co. Rd. Comn., grading and gravel surfacing 6 mi. road, 9 ft.

Ill., Chicago—Apr. 16, by Comrs. Cook Co., paving. $50,000.

Ill., Chicago — Apr. 20, by Bd. Local Impvts., 207 City Hall, paving various streets and alleys. Approximately $1,000,000. C. D. Hill, ch. engr.

Ill., Elmhurst—Apr. 16 for 35,000 sq.yd. macadam pavement. $135,000. E. Hancock, 2047 Ogden Ave., Chicago, engr.

Ill., Havana — Apr. 18, by Bd. Local Impvts., grading, curbing and paving various streets in Dist. E, 22,138 sq.yd. single course 6 in. concrete, etc.; Dist. F, 16,366 sq.yd. concrete, etc.; Dist. G, 16,940 sq.yd. concrete, etc. G. Coleman, chn.

Wisconsin—Apr. 19, by State Hy. Comn., at div. office 1, State Capitol Annex, Madison, grading and cement concrete surfacing, etc., 15,673 sq.yd. Watertown-Hubbleton Rd., Federal Aid Project 316, and 15,760 sq.yd. Watertown-Hubbleton Rd., Project 314, both in Dodge and Jefferson Counties. A. R. Hirst, state highway engr.

Wis., Milwaukee—Apr. 17, by Dept. Pub. Wks., concrete paving 34,186 sq.yd. various alleys. $90,000. G. Staal, city engr.

Ia., Bloomfield — Apr. 26, by Auditor Davis Co., grading 14.361 mi. road from here southeast, 163,346 cu. yd. excav., etc. Iowa Hy. Comn., Ames, engrs.

Ia., Nevada—Apr. 25 grading and paving East and West "L" Ave. to city limits, 9,086 sq.yd. concrete, etc. J. G. Dean, city engr.

Minn., Duluth—Apr. 25, by W. H. Fischer, city comr., concrete paving 18,100 sq.yd. 24th Ave. W. $64,079. E. K. Coe, city engr.

Minn., St. James—Apr. 17, by A. G. Countryman, aud. Watowan Co., gravel surfacing 10 mi. Road 5, 16,000 cu.yd. screening, 16,000 cu.yd. load and haul to mile point, 44,000 cu.yd. beyond mile point. T. J. Buhl, St. James, engr.

Minn., St. Paul—Apr. 16, by H. W. Austin, city purch. agt., cement sidewalks required by city during 1923. G. M. Shepard, city engr.

Minn., Warren—Apr. 25, by A. G. Lundgren, aud. Marshall Co., grading 6½ mi. Div. 1, and 7 mi. Div. 2, Job 2302, State Aid Rd. A; 13 mi. Job 2304, State Aid Rd. J. $45,000. J. E. Dishington, Warren, engr.

Kan., Ft. Scott—Apr. 20, by B. Boyle, co. engr., tar surfacing 16 mi. Federal Aid Project 34 Sect. A, Project 33 Sect. A, Hornaday, Coleman and High Dive Rds. Noted Mar. 1.

Kan., Hiawatha—May 4, by Brown Co., grading and culverts on 9.784 mi. Federal Aid Project 151, 26 ft. $75,000. E. C. L. Wagner, Kemper Bldg., Kansas City, Mo., engrs.

Kan., Topeka—Apr. 16, at office of E. M. Covell, city clk., concrete paving 24,173 sq.yd. various streets. W. E. Baldry, city engr.

Kan., Topeka—Apr. 16, by City Comrs. and Comrs. Shawnee Co., concrete paving 8,067 sq.yd. various roads. E. M. Covell, city clk.

Neb., Schuyler—Apr. 15, by Prince-Nixon Eng. Co., 501 Peters Bldg., Omaha, 20,000 ft. curb and gutter, 55,000 yd. paving, different types. Noted Apr. 5.

S. D., Deadwood—Apr. 17, by State Hy. Comn. at office Auditor Mead and Lawrence Counties, grading and surfacing 16.068 mi. road in Mead and Lawrence Counties, 79,844 cu.d. excav., 78,007 lb. reinforcing, 795.86 cu.yd. concrete, 13,950 cu.yd. stone to be quarried and crushed, 13,287 cu.yd. broken stone surface, 1,106 cu.yd. clay, also 34 ft. span concrete viaduct.

S. D., Yankton—Apr. 23, paving Locust St., concrete or vibrolithic concrete. $26,000. C. H. Conrick, city engr.

N. D., Fargo—Apr. 18, paving 34 blocks, asphaltic concrete, vitr. brick or vibrolithic. $160,000. R. T. Jacobson, city engr.

Tex., Breckenridge—Stephens Co. taking blds gravel surfacing, grading, etc., 11 mi. Breckenridge-Crystal Falls Rd., 18 ft. $60,000. Nagle Witt & Rollins, Breckenridge, engrs.

Tex., Cleburne—Apr. 18, by O. B. McPherson, judge Johnson Co., grading and gravel surfacing 14.98 mi. State Highway 2, Federal Aid Project 20 B, 18 ft., $202,362; 10.86 mi. State Highway 2-B, Federal Aid Project 330, 18 ft., $117,250. R. E. Keller, co. engr.

Tex., Columbus—Apr. 20, by E. B. Mayes, judge Colorado Co. gravel surfacing 8,812 cu.yd. State Highway 3. $26,000. R. H. Faber, co. engr.

Tex., Dallas—Apr. 23, by A. C. Allen, judge Dallas Co. grading and macadam surfacing 8.8 mi. Belt Line Rd. 1, 16 ft. Nagle Witt Rollins Eng. Co., Court House, co. engrs.

Tex., Ft. Worth—Tarrant Co. taking bids grading, gravel surfacing, etc., 9.93 mi. Ft. Worth Haslet Rd., 14 ft. $65,000. R. V. Glenn, Court House, engr.

Tex., Hondo—Apr. 23, by R. J. Noonan, judge, Medina Co., grading, gravel surfacing and bridging 7.58 mi. State Highway 3, 18 ft. $71,400. Walton & Arneson, Gunter Bldg., San Antonio, engrs.

Tex., Uvalde—Apr. 20, by H. C. King, judge Uvalde Co., grading and gravel surfacing 14.11 mi. San Antonio-Del Rio Highway, Federal Aid Project 289, 18 ft. $137,330. M. B. Hodges, co. engr.

Okla., Sayre—Apr. 16, by W. F. Sides, city clk., grading and paving Bway. Ave., 14,700 sq.yd. 6 in. concrete. $64,500. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Wash., Tacoma—Apr. 25, by Comrs. Pierce Co., paving 2.8 mi. Pioneer Way, 6½ in. concrete. C. H. Votaw, Tacoma, engr.

Calif., Oakland — City Council receiving bids grading, curbing, guttering and paving 96th Ave., 227,350 sq.ft. grading, 116,850 sq.ft. oil macadam paving, etc. W. W. Harmon, city engr. Noted Apr. 5.

Calif., Redwood City—Apr. 23, by W. A. Price, city clk., grading and paving streets in Oak Knoll Manor, 17,500 cu.yd. grading, 24,575 lin.ft. concrete curb and gutter, 413,747 sq.ft. oil macadam, etc., $95,000; streets in Redwood Highlands, 5,055 cu.yd. grading, 11,513 lin.ft. concrete curb and gutter, 154,445 sq.ft. oil macadam, to exceed $30,000. C. L. Dimmitt, city engr.

Calif., San Anselmo—Apr. 30, by A. W. Studley, town clk., grading and paving Sequoia Dr., 44,060 sq.ft. grading surface and asphaltic macadam, 3,050 lin.ft. concrete curb, 7,080 sq.ft. concrete gutter and valley, etc.

Calif., San Francisco—Apr. 18, by Bd. Pub. Wks., grading, retaining wall, etc. on Telegraph Hill Blvd., for City and San Francisco Co. $30,000. M. M. O'Shaughnessy, city engr. Noted Oct. 19.

Quebec — Minister Dept. Colonization Mines and Forests, Quebec, taking bids constructing and gravelling 112 mi. roads, 16 ft. M. Nectkar, ch. engr.

BIDS RECEIVED

Mass., Newton (Boston P. O.)—Street Comn., Apr. 2, 1,500 ft. curbing, 75,000 sq.ft. concrete sidewalks, 25,000 sq.ft. concrete driveways, 50,000 cu.yd. excav., from Mosaic Constr. Co., Central Sq., East Boston (Boston P. O.), $37,071, Simpson Bros. Corp., 77 Summer St., Boston, $38,326, O. A. Thurston, Watertown, $38,333. Noted Mar. 22.

Connecticut—State Hy. Dept., Hartford, Apr. 3, paving highway in Stafford, 8,500 sq.yd. 7 in. native stone macadam, from L. J. Wilcox, Norwich (street address not available) $13,901, J. Arborio, 82 Church St., New Haven $14,686, D. P. and H. Ahern, Willimantic (street address not available) $16,209, engrs. est. $14,400; 1,550 cu.yd. plain concrete, in Bristol, from A. DeMarko, Bristol (street address not available) $14,825, Waterbury Constr. Co., 65 Jefferson St., Waterbury $18,908, Osborne & Barnes, 20 West St., Danbury, $19,500, engrs. est. $17,988; 6,900 cu.yd. concrete paving in Plainville and New Britain, from Osborne & Barnes, 20 West St., Danbury, $71,700, C. W. Blakeslee & Sons, 58 Waverly St., New Haven, $74,021 for concrete and $114,485 for asphalt, A. DeMarko, Bristol (street address not available) $79,857 for concrete and $121,285 for asphalt, engrs. est. $115,000 and $154,000; 4,670 cu.yd. concrete, in West Haven, from W. D. Blakeslee, 58 Waverly St., New Haven, $37,685, Connecticut Hassan Paving Co., 340 North Quinnpiac Ave., New Haven $42,767, Bridgeport Constr. Co., 983 Broad St., Bridgeport, $45,760, engrs. est. $63,240; 29,306 sq.yd. 6 in. sheet asphalt in town of Stratford, from Warren Bros., 142 Beckley St., Boston, Mass., $89,969, Hudson Paving Co., $92,021, S. Godfrey, Stafford (street address not available), $94,365, engrs. est. $102,814; 28,300 sq.yd. bituminous macadam, in East Hartford and Manchester,

Streets and Roads (Continued)

from Miller Bros. Co., Bloomfield, $56,117, L. J. Wilcox, Middletown, $58,100, Immick Co., State St., Meridan, $63,988, engrs. est. $61,000. Noted Mar. 29.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, Apr. 4, curbing and asphalt paving (1) East 7th St. (2) East 19th St. (3) East 22nd St. (4) Louisiana Ave. (5) 8th Ave., grading and flagging (6) 13th Ave. (7) 40th St., asphalt paving (8) 56th St. (9) 58th St. (10) 82nd St. (11) 85th St. (12) Bedford Ave., grading, curbing and flagging (13) East 15th St. (14) Utica Ave. (15) West 12th St., from Borough Asphalt Co., 1301 Metropolitan Ave., (1) $6,409 (2) $14,066 (3) $10,622 (4) $5,954 (5) $23,180 (6) $8,864 (9) $17,356 (10) $8,959 (11) $8,196 (12) $4,951; Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., (1) $6,688 (2) $14,566 (3) $11,021 (4) $6,211 (5) $22,703 (8) $9,053 (9) $17,110 (10) $8,777 (11) $8,441 (12) $5,115; Cranford Co., 52 9th St., (1) $6,732 (2) $14,508 (3) $10,954 (5) $24,253 (8) $8,763 (9) $17,475 (10) $8,677 (11) $8,174 (12) $5,297; Cleveland Trinidad Paving Co., Flushing, (4) $6,237 (12) $5,272; F. Persicano, 350 Fulton St., (6) $12,938 (7) $4,011 (14) $2,778 (15) $4,709; T. B. Scott, 671 Halsey St., (7) $3,699 (13) $19,942 (14) $2,183 (15) $3,856; B. M. Mandatto, 139 29th St., (13) $16,747; Roslyn Constr. Co., (13) $18,011. Noted Mar. 29.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., Apr. 2, grading, curbing and laying sidewalks on (1) Alburtis Ave. (2) Lent Ave. (3) Trimble Ave. (4) 41st St. (5) 88th St. (6) 108th St., asphalt paving (7) Alburtis Ave. (8) Crescent St. (9) 41st St. (10) 88th St., grading portion of (11) Beach Channel Dr., etc., recurbing and sheet asphalt paving (12) Centre St., curbing, laying sidewalks and asphalt paving (13) Hull Ave., grading and bituminous macadam paving (14) 100th St., repaving (15) within railroad area in State St., from Peace Bros., Inc., 15 Lawrence St., Flushing, (1) $31,503 (2) $14,228 (3) $10,335 (4) $7,815 (14) $14,229 (15) $6,005; Welsh Bros. Contg. Co., 32 Queens St., (2) $14,578 (3) $8,330 (4) $7,952; J. J. O'Brien, Jr., William St., Jamaica, (5) $9,530; W. J. Fitzgerald, 547 West 45th St., New York, (6) $14,698 (7) $45,135 (8) $13,975 (9) $13,861 (10) $26,468 (12) $11,080; Cranford Co., 52 9th St., Brooklyn, (6) $16,133 (12) $11,693 (13) $8,208; W. P. McDonald Constr. Co., 17 West 42nd St., New York, (6) $16,190 (7) $47,250 (8) $14,442 (9) $14,140; Cleveland Trinidad Paving Co., Flushing, (7) $46,418 (13) $8,376; Sicilian Asphalt Paving Co., 41 Park Row, New York, (8) $14,448 (10) $27,365; Borough Asphalt Co., 1301 Metropolitan Ave., Brooklyn, (9) $14,520 (10) $26,195 (12) $11,050 (13) $7,490; W. H. Geoghegan Realty Co., Inc., (11) $21,282; Frederick W. Cranford, Inc., (11) $23,816; H. J. Mullin Contg. Co., Inc., Jamaica Ave. and 144th St., Jamaica, (14) $14,589 (15) $4,753; Tuohy & Upton, Inc., 129 Bway., Flushing, (14) $16,029 (15) $5,436. Noted Mar. 29.

N. Y., New York — H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., Apr. 3, paving (1) White Plains Rd. (2) Fulton Ave., both granite blocks (3) Rae St., sheet asphalt (4) Ryer Ave., asphalt blocks (5) West 179th St. (6) West 170th St., both bituminous macadam, grading, building inlets, etc., on (7) Taylor Ave., grading, curbing and laying sidewalks, etc., on (8) Knox Pl. (9) Bryant Ave. (10) Liebig Ave., sewer in (11) Crosby Ave., from Casper Helbock Co., Harlem River and 150th St., (1) $259,883; J. Meehan & Sons, 74 Cortlandt St., (1) $259,928; Regan Towers Co., 124 West 121st St., (1) $275,447; C. D. Beckwith, Inc., 2875 Bway., (2) $41,634 (3) $6,683 (4) $60,786 (5) $18,017 (6) $21,942; Asphalt Constr. Co., 208 Bway., (2) $44,119 (3) $7,254 (4) $59,774 (5) $19,461 (6) $23,537; P. J. Kearns Contg. Co., 2306 Creston Ave., (2) $47,832 (4) $63,239; Brusstar Constr. Co., Harlem River and 150th St., (3) $8,195 (5) $21,080; Interboro Asphalt Co., 2306 Creston Ave., (6) $26,011; Spadero Contg. Co., 827 East 217th St., (7) $32,406 (8) $9,146 (9) $24,525 (10) $11,910; J. Paladino, (7) $34,192; Burnside Contg. Co., 270 Burnside Ave., (7) $36,933 (8) $8,917; C. De Blasio, (8) $8,095; F. Henretti, (9) $21,682; Gregorio & Gabriele, 1129 8th Ave., (9) $22,287. Noted Mar. 29.

N. J., Newark—Purchasing Agent Essex Co., Apr. 5, grading and paving Chancellor Ave., 900 lin.ft. bluestone and 100 lin.ft. granite curbing, 31,500 sq.yd. asphalt on concrete, from J. B. Gilligan-Casey Co., 919 Broad St., $100,945; Northern Constr. Co., 432 Amherst St., East Orange, $104,701; Standard Bitulithic Co., 50 Church St., New York City, $109,235. Engrs. est. $110,213. Noted Mar. 29.

Pennsylvania—State. Hy. Dept., Harrisburg, Apr. 3 (1) 7,979 ft. Route 204, Application 1942, Patterson and Chippewa Twps., Beaver Co. (2) 11,322 ft. Route 214, Application 1973, Fairview Twp., Butler Co. (3) 14,636 ft. Route 214, Application 2233, Clarion and Monroe Twps., Clarion Co. (4) 5,187 ft. Routes 214 and 311, Application 1940, Sligo Boro., Clarion Co. (5) 12,867 ft. Route 66, Applications 1939 and 2168, Clarion Tpw. and Boro., Clarion Co. (6) 12,698 ft. Route 91, Application 2217, Washington Twp., Clarion Co. (7) 34,462 ft. Route 200, Application 2124, Blooming Valley Boro. and Richmond Twp., Crawford Co. (8) 22,845 ft. Route 271, Applications 2182 and 2183, Oil Creek Twp. and Hydetown Boro., Crawford Co. (9) 33,552 ft. Route 85, Application 2245, Spring Twp. and Springboro Boro., Crawford Co. (10) 6,389 ft. Application 2246, Springboro Boro., Crawford Co. (11) 2,727 ft. Route 68, White Twp., Indiana Co. (12) 18189 ft. Route 233, Application 2271, Scott and Plain Grove Twps., Lawrence Co. (13) 3,275 ft., Application 1985, Stoneboro Boro., Mercer Co. (14) 28,563 ft. Applications 2106 and 2010, Perry Twp., Mercer Co. (15) 10,952 ft. Application 2141, Smithfield Twp., Monroe Co. (16) 7,051 ft. Application 1963, Pocono and Paradise Twps., Monroe Co. (17) 22,330 ft. Applications 2105 and 2167, Hellerton Boro. and Lower Saucon Twp., Northampton Co. (18) 3,844 ft. Application 2225, North Catasauqua Boro., Northampton Co. (19) 4,834 ft. Application 2252, Wilson Boro., Northampton Co. (20) 4,985 ft. Applications 2128 and 2166, Bethlehem Twp. and Freemansburg Boro., Northampton Co. (21) 7,930 ft. Application 2149, Stockerton Boro. and Palmer Twp., Northampton Co. (22) 7,522 ft. Application 2145, Tatamy Boro. and Palmer Twp., Northampton Co. (23) 26,252 ft. Route 216, Application 2175, Chanceford and Lower Chanceford Twps., York Co. (24) 25,208 ft. Route 332, Application 2179, East Prospect Boro. and Windsor and Lower Windsor Twps., York Co. (25) 14,787 ft. Route 333, Application 2180, Sect. 3, Hopewell Twp., York Co. (26) 25,234 ft. Route 333, Application 2180, Sect. 2, Winterstown Boro. and North Hopewell Twp., York Co., from T. J. Strickler, 508 Church St., Huntingdon, (1) $68,338; W. S. Morrison, New Brighton, (1) $78,323; H. V. Kirker Co., 3223 5th Ave., Beaver Falls, (1) $78,914; C. E. Walter, Butler, (2) $117,741; C. E. Walter, Clarion, (3) $178,793 (5) $132,575; Burns Bros., 343 East Washing St., New Castle, (2) $130,870; Jones Constr. Co., Salem, O., (3) $182,546 (12) $216,657 (14) $248,343; F. S. Wilson, Kittanning, (3) $162,067 (4) $57,780; R. V. Baldwin, 1361 4th Ave., Coraopolis, (4) $55,961; J. Weisner, St. Marys, (5) $127,455 (6) $127,342; L. H. Hileman Constr. Co., 217 1st National Bank Bldg., New Kensington, (5) $119,199; Ft. Pitt Constr. Co., 207-208 Martin Bldg., Pittsburgh, (7) $328,978; C. H. Fry Constr. Co., 609 West 19th St., Erie, (7) $329,999 (9) $253,027 (10) $47,639; W. C. Guncheon & Co., Smethport, (7) $349,102 (8) $186,966 (11) $35,859 (23) $233,065 (25) $114,355; Smethport Constr. Co., Carlton, (8) $170,402 (14) $238,286; H. W. Horst Co., Horst Bldg., Rock Island, Ill., (8) $188,165 (9) $242,154 (14) $236,016; R. D. Baker Co., 1454 Penobscot Bldg., Detroit, Mich., (10) $52,744; S. Gamble Co., Glass St., Carnegie, (9) $254,112 (10) $47,508; Torquato Bros. Co., 1317 Midway Ave., Windber (11) $36,160; M. Bennett & Sons, Indiana, (11) $34,448; Kavanagh Bros., 417 Terminal Bldg., Youngstown, O., (12) $218,723; Matthew Bros. Constr. Co., Inc., 28 Hastings St., Pittsburgh, (12) $215,380; McQuiston Paving & Constr. Co., Farrell (13) $51,978; Avery & Bailey, Philipsburg, (13) $52,132; Strange & Payne, Stoneboro, (13) $64,520; J. F. Gill Co., Inc., West Naples St., Wayland, N. Y., (15) $92,995 (16) $44,255; Freeland Constr. Co., Freeland, (15) $95,665 (16) $47,921 (17) $266,476 (21) $83,989; B. Foster Co., 20th and Venango Sts., Phila., (15) $115,810; E. P. Arbogast, Stroudsburg, (16) $47,050; Souder Constr. Co., 349 Woolworth Bldg., Lancaster, (17) $270,096 (24) $215,329; W. C. Evans, Ambler, (17) $253,614 (21) $75,296 (22) $61,758; J. M. Hutchinson, Altoona, (18) $28,631; M. Miller & Sons, 246 9th St., Northampton, (18) $26,614; General Paving Co., B. & B. Bldg., Allentown, (18) $31,388; J. E. and J. H. Miles, 325 Drake Bldg., Easton, (19) $38,656; Neumeyer Bros., 1416 East 4th St., Bethlehem, (19) $42,297 (20) $56,992; McInerney & McNeal, Inc., 702 Northampton National Bank Bldg., Easton, (19) $46,037; R. D. Richardson Constr. Co., 828 Connell Bldg., Scranton, (20) $49,291 (22) $68,369; Baton Constr. Co., 1713 Sansom St., Phila., (20) $53,815; Ambler-Davis Co., Harrison Bldg., Phila., (21) $75,409 (22) $63,191; Warren Bros. Co., 9 Cambridge St., Boston, (23) $215,146 (24) $224,200 (26) $194,400; Comerford Constr. Co., 125 South 5th St., Phila., (23) $214,897 (25) $116,948; W. G. Raub, Red Lion, (24) $214,572 (25) $109,690 (26) $183,951; W. E. Supples Co., Wayne, (26) $188,935. Noted Mar. 15.

Florida—State Hy. Dept., Tallahassee, constructing 8 in. rock base on (1) 5 mi. road between Sharps and Titusville, Project 546, Brevard Co. (2) 14.4 mi. Bunnell-Volusia Co. line Rd., Project 507, Flagler Co. (3) 5 mi. road between Bonaventure and Eau Gallie, Project 554, Brevard Co., from Barber-Fortin Co., Gainesville, (1) $89,326 (2) $186,900 (3) $87,930; Adams-Evans & Co., 410 Atlantic Natl. Bank Bldg., Jacksonville, (1) $96,546 (3) $93,526; J. F. Morgan Paving Co., Woodward Bldg., Birmingham, Ala., (1) $107,729 (3) $107,325; C. F. Lytle, Jacksonville (street address not available), (2) $198,597; Wills & Sons and McCarthy & Adams-Evans & Co., 410 Atlantic Natl. Bank Bldg., Jacksonville, (2) $206,626. Noted Mar. 22.

O., Akron—W. F. Peters, dir. Pub. Serv., Apr. 2, grading and paving (1) 4,000 ft. Bellows, Crozier and Washington Sts., 26 ft. (a) vitr. brick, engrs. est. $93,042 (b) asphalt, $91,967 (2) 2,200 ft. West North St., 30 ft., (a) vitr. brick, engrs. est. $50,801 (b) asphalt, $50,911, from V. Olson Constr. Co., 501 Herberich Bldg., (1a) $95,458 (2a) $54,144 (2b) $52,587; W. and P. T. McCourt, 365 South Main St., (1a) $96,146 (1b) $87,293; T. E. McShaffrey Constr. Co., 171 South Forge St., (1a) $100,370 (1b) $93,040 (2a) $55,483 (2b) $54,167; Hollinger & Davidson, 435 South Bway., (2a) $56,378. Noted Mar. 8.

O., Cleveland—Grading, curbing and paving (1) Glenside Rd. from East 138th to East 140th Sts. (2) Glenside Rd. from St. Clair Ave. to East 140th St. (3) West 34th St. (4) West 24th St. (5) East 119th St. (6) Damon Ave. (1-6 inclusive) involve 6,660 lin.ft. stone curb and 4 in. tile drain gutter, 4,290 cu.yd. earth excav., (a) 8,035 sq.yd. vitr. brick on concrete, (b) 7,725 sq.yd. asphalt, (7) Svec Ave. (8) Windsor Ave. (9) Public Sq. (7-9 inclusive) involve 3,310 lin.ft. stone curb and 4 in. tile drain gutter, 2,050 cu.yd. earth excav., (a) 5,130 sq.yd. vitr. brick (b) 14,750 sq.yd. asphalt on concrete, from Gould & Maybach, 823 East 150th St., (1a) $6,456 (1b) $5,431 (2a) $10,213 (2b) $8,658; River Constr. Co., 2402 Mapleside Rd., (1a) $6,651 (2a) $11,140 (6a) $16,910; Roehl Bros., West 25th St. and Clark Ave., (3a) $4,568 (4a) $1,069; Rieley Bros., The Arcade, (4a) $4,891 (7a) $31,625 (7b) $26,021 (8b) $22,041; Bentley Bros., Union Bldg., (5a) $9,305; A. M. Pejsa Paving Co., Euclid Heights Blvd., (5a) $9,320 (7a) $30,572 (7b) $25,562; H. G. Herring, Pavers Exch., Society for Savings Bldg., (6b) $14,140; Cleveland Trinidad Paving Co., The Arcade, (8b) $20,746 (9) $11,122.

Ind., Greensburg—Decatur Co., Apr. 4, paving 60,718 sq.yd. John McCoy Rd., concrete, from Freeland & Brown, Greensburg, 172,434; McCowan Constr. Co., Noblesville, $174,446; Timberlake Constr. Co., 236 Amer. Central Life Bldg., Indianapolis, $189,720. Engrs. est. $228,090.

Michigan — State Hy. Dept., Lansing, grading and surfacing 3.489 mi. road St. Clair Co., 11,542 cu.yd. excav., 40,988 sq. yd. concrete, from J. Porath, 35 McGraw Bldg., Detroit, $81,081; J. A. McKay & Sons, Detroit, (street address not available) $81,653; J. H. Baber & Sons, Port Huron, $85,673; 4.009 mi. road Muskegon Co., 8,298 cu.yd. excav., 42,444 sq.yd. concrete, from J. R. Edelman, Muskegon, $64,842; G. P. Schail, Muskegon, $69,415; New Era Road Bldg. Co., New Era, $71,092; 1.342 mi. road Oceana Co., 8,024 cu.yd. excav., 14,303 sq.yd. concrete, from New Era Road Bldg. Co., New Era, $28,513; O. M. Whitlaw, Grand Rapids, (street address not available) $30,264; C. Marsman, Grand Rapids, (street address not available) $32,369.

Wis., West Allis—Paving 48,381 sq.yd. various streets, from Schaefer-Thompson Constr. Co., Central Ave., Marshfield, rein.-con., $2.47, vibrolithic concrete, $2.54; Western Impvt. Co., 840 9th St., Racine, sheet asphalt, $3.30. Noted Mar. 15.

Missouri—State Hy. Dept., Jefferson City, Mar. 27, (1) 1.155 mi. State Project Route 10, Sect. 36, Randolph Co. (2) 0.488 mi. State Project Route 3, Sect. 5, Mercer Co. (3) 2.727 mi. State Project Route 18, Sect. 6, Nodaway Co. (4) 4.115 mi. State Project Route 7, Sect. 6, Schuyler Co. (5) 3.83 mi. State Project Route 1, Sect. 20, Holt Co. (6) 2.26 mi. State Project Route 18, Sect. 11, Nodaway Co. (7) 4.996 mi. State Project Route 9, Sect. 97, Madison Co. (8) 2.476 mi. State Project Route 3, Sect. 1, Mercer Co. (9) 3.284 mi. State Project Route 14, Sect. 47, Phelps Co. (10) 4.973 mi. State Project Route 2, Sect. 18, Saline Co. (11) 1.526 mi. State Project Route 24, Sect. 13, St. Clair Co. (12) 4.561 mi. State Project Route 9,

Streets and Roads (Continued)

Sect. 35, Carroll Co. (13) 2.55 mi. State Project Route 1, Sect. 22, Andrew Co. (14) 0.848 mi. State Project Route 4, Sect. 18 A, Gentry Co. (15) 0.489 mi. State Project Route 4 A, Sect. 2, Gentry Co. (16) 4.761 mi. State Project Route 14, Sect. 37, Laclede Co. (17) 3.846 mi. State Project Route 21, Sect. 4, Washington Co. (18) 3.158 mi. State Project Route 1, Sect. 108, McDonald Co. (19) 3.1 mi. State Project Route 9, Sect. 73, Jefferson Co. (20) 4.559 mi. State Project Route 9, Sect. 101, Bollinger Co. (21) 5 mi. State Project Route 2, Sect. 20, Saline Co. (22) 4.997 mi. State Project Route 14, Sect. 49, Phelps Co. (23) 0.36 mi. State Project Route 36, Sect. 6, Barton Co. (24) 3.159 mi. State Project Route 10, Sect. 1, Clay Co. (25) 3.161 mi. State Project Route 14, Sect. 48, Phelps Co. (26) 3.551 mi. State Project Route 14, Sect. 11, Greene Co. (27) 4.955 mi. State Project Route 9, Sect. 102, Bollinger Co. (28) 4.89 mi. State Project Route 9, Sect. 100, Bollinger Co. (29) 4.6 mi. State Project Route 9, Sect. 71, Jefferson Co. (30) 4.7 mi. State Project Route 2, Sect. 22, Saline Co. (31) 4.8 mi. State Project Route 14, Sect. 9, Lawrence Co. (32) 5 mi. State Project Route 9, Sect. 112, Cape Girardeau Co. (33) 4.95 mi. State Project Route 9, Sect. 99, Madison Co. (34) 5 mi. State Project Route 9, Sect. 11, Cape Girardeau Co. (35) 4.037 mi. State Project Route 14, Sect. 12, Greene Co. (36) 2.032 mi. State Project Route 14, Sect. 44, Pulaski Co. (37) road west of Salem State Aid Project Route 32, Sect. 5, Dent Co. (38) 5 mi. State Project Route 7, Sect. 85, Texas Co. (39) 5 mi. State Project Route 15, Sect. 49, Callaway Co. (40) 2.4 mi. State Project Route 14, Sect. 10, Lawrence Co. (41) 5 mi. State Project Route 15, Sect. 48, Callaway Co. (42) 0.636 mi. State Project Route 3, Sect. 97, Greene Co. (43) 1.398 mi. State Project Route 3, Sect. 94, Greene Co. (44) 1.827 mi. State Project Route 7, Sect. 43, Callaway Co. (45) 2.338 mi. State Project Route 14, Sect. 38 A, Laclede Co. (46) 4.779 mi. State Project Route 2, Sect. 19, Saline Co. (47) 4.82 mi. State Project Route 12, Sect. 52, Franklin Co. (48) 4.856 mi. State Project Route 2, Sect. 6, Dent Co. (49) 4.033 mi. State Project Route 14, Sect. 46, Pulaski Co. (50) 4.7 mi. State Project Route 9, Sect. 72, Jefferson Co., from Lynch & McDonald Constr. Co., Moberly, (1) $4,512; Cook-O'Brien Constr. Co., 305 Ry. Exch. Bldg., Kansas City, (1) $4,517 (10) $37,712 (21) $83,334 (30) $19,017 (46) $29,630; M. Haase, Trenton, (2) $6,103 (8) $8,191 (14) $17,585 (15) $6,937; J. L. Simmons, La Plata, (2) $7,440 (4) $13,306; Cameron, Joyce & Co., Keokuk, Ia., (2) $7,784 (4) $12,874 (8) $9,036 (12) $38,174 (21) $100,202 (27) $29,630; A. L. Cook, Ottawa, Kan., (3) $17,616 (6) $11,834 (8) $9,027 (39) $13,761 (41) $23,077; Ziegler & Dalton, Junction City, (3) $19,756 (6) $13,077 (15) $6,446; L. W. Spangler, Edinburg, Ill., (4) $1,257; I. J. Morris, Savannah, (5) $34,670 (13) $22,667; Somers Hall Constr. Co., Newton Kan., (5) $34,870 (13) $23,437; Allison Dillingham Constr. Co., St. Joseph (street address not available) (5) $37,139; Hogan & Humphreys, Fredericktown, (7) $41,409 (20) $55,608 (27) $28,099 (28) $21,392 (33) $37,495; J. H. Hewitt, Little Rock, Ark. (street address not available) (7) $46,767 (33) $39,727; M. E. Gillioz, Monett, (7) $51,496 (9) $14,654 (16) $54,319 (18) $30,412 (19) $38,302 (20) $59,946 (22) $31,273 (26) $29,178 (28) $22,859 (31) $52,501 (33) $43,261 (35) $50,173 (36) $47,127 (40) $31,302 (45) $27,289 (46) $35,154 (49) $69,748; S. J. Groves & Sons, Globe Bldg., Minneapolis, Minn., (9) $14,703 (22) $33,074; Hughes-McCandliss Constr. Co., Topeka, Kan. (street address not available), (9) $15,033 (22) $32,442 (25) $92,985 (36) $49,118 (49) $66,799; A. A. Davis & Co., Oklahoma City, Okla. (street address not available) (10) 39,438; Haller & Davis, Boonville, (10) $40,171 (21) $86,758 (30) $20,074 (46) $31,452; V. E. Koch, Box 604, Joplin, (11) $8,483 (26) $29,018 (42) $10,754 (43) $4,334; E. G. Johnson, Carrollton, (11) $8,542 (24) $11,280; W. E. Hall, Clinton, (11) $8,797; Campbell Bros., 603 Kemper Bldg., Kansas City, (12) $33,587; Buis & Olson, St. Joseph (street address not available) (12) $38,205 (13) $26,374 (14) $17,665; W. J. Welch, Genoa, Neb., (14) $15,940 (15) $6,094; Davis Constr. Co., Mamouth Spring, Ark., (16) $48,885; Pioneer Constr. Co., 101 New York Life Bldg., Kansas City, (16) $52,221 (44) $21,489 (45) $27,754; St. Louis Constr. Co., 743 Frisco Bldg., St. Louis, (17) $31,597; Muskogee Contg. Co., Tulsa, Okla. (street address not available) (17) $33,126 (32) $30,090 (34) $34,896; General Constr. Co., Syndicate Trust Bldg., St. Louis, (17) $34,356 (32) $39,025; J. M. Roach & Co., Anderson, (18) $28,113; C. J. Williams, Monett, (18) $29,142 (23) $9,427; Louis Rich Constr. Co., East St. Louis, Ill., (19) $36,916 (29) $46,556 (50) $54,268; Frazier Davis Constr. Co., Arcade Bldg., St. Louis, (19) $38,422 (50) $59,115; C. P. O'Reilley, Wainwright Bldg., St. Louis, (20) $66,236; J. W. Clack, Nevada, (23) $12,453; Highway Constr. Co., Webb City, (23) $13,676 (34) $8,876 (43) $43,718; Anderson & Menefee, Sedalia, (24) $8,516; J. B. Ramsey and E. L. Davis, Caruthersville, (25) $78,486; Dolman & Kanade, Topeka, Kan. (street address not available) (25) $94,129; Carterville Constr. Co., Carterville, (26) $30,136 (31) $36,248 (40) $31,201; W. A. Reynolds, Marble Hill, (27) $31,459; Maloney & Whalen, St. Louis (street address not available) (29) $50,116 (50) $55,300; Coopers Constr. Serv. Co., Federal Reserve Bank Bldg., St. Louis, (29) $52,784; Woodsmall & Woodsmall, Marshall, (30) $20,643; Baker & Coontz, Carthage, (31) $47,635 (40) $28,543; Tritt Bros., Belleville, Ill. (street address not available) (32) $37,023 (34) $43,921; Missouri Bridge & Iron Co., Fullerton Bldg., St. Louis, (34) $44,977; Republic Concrete Constr. Co., Republic, (35) $48,711; Short & Bramer, Monett, (35) $48,853; Miller Constr. Co., Springfield (street address not available) (36) $46,647 (42) $10,786 (45) $31,429 (49) $68,041; Allhands & Davis, 705-6 Frisco Bldg., Joplin, (37) $13,571 (47) 28,134; Clay-Gregory, Newport, Ark., (37) $15,233 (38) $17,066 (48) $24,989; A. C. Ellis, 2630 West Okmulgee St., Muskogee, Okla., (37) $16,030 (38) $18,263 (48) $27,268; Summerfield-Jones Co., Springfield (street address not available) (38) $14,541; T. Ryan & Sons, Missouri Valley, Ia., (39) $13,363 (41) $22,572; L. J. Keiser, Columbia City, Ind., (39) (39) $14,599 (41) $24,215; Kerr & Logan, Ozark, (42) $11,804; Springfield Constr. Co., Springfield (street address not available) (43) $40,025; Kansas City Bridge Co., 510 Orear-Leslie Bldg., Kansas City, (44) $20,538; Pittsburgh-Des Moines Steel Co., Tuttle and Southwest 10th St., Des Moines, Ia., (44) $21,573; Powell & Gaven Co., Collinsville, Ill., (47) $28,787; Vedder & Kasmann, Union, (47) $29,719. Noted Mar. 15.

Colorado—State Hy. Dept., Denver, gravel surfacing (1) 2.881 mi. Kremmling-Muddy Pass Rd., Federal Aid Project 223 A, Grand Co., (2) 1.853 mi. Meeker-Craig Rd., Federal Aid Project 211, Rio Blanco Co.; crushed rock surfacing (3) 3.505 mi. Denver-Idaho Springs Rd., Federal Aid Project 81 A, Jefferson Co.; grading (4) 2.776 mi. Norwood-Naturita Rd., State Project 705, Montrose Co.; (5) 950 ft. timber bridge and approaches over Cherry Creek near Melvin, Araphoe Co. Bond Project; (6) 0.775 mi. timber trestle bridge over Box Elder Creek, Adams Co., from H. Shore, Steamboat Springs, (1) $27,627; H. C. Lallier Constr. Co., Hudson, (1) $35,194 (2) $34,628 (3) $33,878; Hinman Bros., Kremmling, (1) $35,303 (2) $31,314; Northwestern Constr. Co., Craig, (2) $42,176; M. J. Kenney, 512 Mack Blk., Denver, (3) $35,731; J. V. Stryker, 3662 Blake St., Denver, (3) $32,216; G. F. Wear & Co., Delta, (4) $10,089; B. Walters, Redvale, (4) $10,379; Colorado Bridge & Constr. Co., Gas & Electric Bldg., Denver, (5) $12,088 (6) $16,191; A. R. Mackey, Sterling, (5) $12,730 (6) $14,782; J. A. Osuer, 1516 Blake St., Denver (5) $15,111; W. O. Morrison, 409 Cooper Bldg., Denver, (6) $17,533.

Colo., Pueblo — Concrete paving 47,400 sq.yds. Fountain Ave. Paving Dist., from J. F. Roberts Constr. Co., Tramway Bldg., Denver, $140,244; P. J. Driscoll, Pueblo, $144,326; L. F. Williams, Pueblo, $144,502. Engrs. est. $205,200.

Oregon—State Hy. Dept., Salem, 4.5 mi. resurfacing and 0.43 mi. paving, bituminous concrete, Pacific Highway, Eugene-Goshen, Lane Co., from Force & Currigan, 33rd and Halsey Sts., Portland, $100,610; G. F. Pyle, Eugene, $102,226, Warren Constr. Co., 289 East Salmon St., Portland, $113,580; clearing and grading 5.75 mi. Roosevelt Highway, Otter Rock, Lincoln Co., from Hetrick, Klein & Gardner, Portland (street address not available), $181,081, A. D. Kern, Exch. Bldg., Portland $226,998, G. F. Atkinson, Chamber of Commerce Bldg., Portland, $228,563.

Calif., Los Angeles—Improving (1) Highland Ave. (2) 12th St. (3) Rowena St., etc., (a) 434,174 sq.ft. (b) 23,605 lin.ft. concrete curb (c) 1,152 sq.ft. concrete gutter (d) sanitary sewer, lump sum (e) 78,322 sq.ft. cement walks (f) grading, lump sum (g) 15,739 sq.ft. oiling (4) 1st St., etc., (h) grade, lump sum (i) 260,700 sq.ft. asphalt (j) 190,443 sq.ft. concrete, from Griffith Co., Los Angeles Ry. Bldg., (1) $77,552 (2) $43,027 (3a) $0.30 (3b) $0.70 (3c) $0.30 (3d) $50,000 (3e) $0.21 (3f) $50,000 (3g) $0.07 (4h) $120,000 (4i) $0.30 (4j) $0.30; G. H. Oswald, 366 East 58th St., (1) $83,317 (2) $42,634 (4h) $110,000 (4i) $0.30 (4j) $0.29; G. R. Curtis, 2440 East 26th St., (1) $83,399 (2) $44,207 (3a) $0.25 (3b) $0.75 (3c) $0.25 (3d) $55,000 (3e) $0.25 (3f) $75,000 (3g) $0.08 (4h) $150,000 (4i) $0.32 (4j) $0.28; Jahn & Bressi, Ambassador Hotel, (3a) $0.245 (3b) $0.65 (3c) $0.30 (3d) $48,500 (3e) $0.20 (3f) $44,000 (3g) $0.07; Croatian-American Investment Co., 208 West 2nd St., (3a) $0.245 (3b) $0.70 (3c) $0.30 (3d) $55,000 (3e) $0.20 (3f) $45,000 (3g) $0.07; Hill Constr. Co., 1380 Shatto St., (3a) $0.27 (3b) $0.83 (3c) $0.25 (3d) $60,000 (3e) $0.23 (3f) $52,400 (3g) $0.09; W. D. McCray, Amer. Bank Bldg., (3a) $0.255 (3b) $0.70 (3c) $0.30 (3d) $57,000 (3e) $0.21 (3f) $16,000 (3g) $0.07; T. E. Shafer, 222 West 33rd St., (4h) $130,000 (4i) $0.28 (4j) $0.25.

Calif., Santa Ana—Orange Co., paving with 6 and 8 in. concrete portions Westminster Rd., from Wells & Bressler, California Bank Bldg., $51,940; H. H. Peterson, Loma Portal, $52,873; Independent Paving Co., 321 East 4th St., Long Beach, $56,161.

Calif., Santa Monica—Grading, sidewalks and paving Colorado Ave., 225,576 sq.ft. warrenite bitulithic on 3½ in. asphaltic concrete, from Kneen Paving Co., Dudley Blk., $65,778; Warren Constr. Co., 5444 Hollywood Blvd., Los Angeles, $73,631; G. R. Curtis, 2440 East 26th St., Los Angeles, $73,651.

CONTRACTS AWARDED

N. Y., Canandaigua—Ontario Co. will build gravel and bituminous macadam highways in towns of Bristol, Canadice, Canandaigua, Farmington, Geneva, Hopewell, Manchester, Naples, Phelps, Richmond, South Bristol, Seneca, East Bloomfield, Victor and West Bloomfield, by day labor, under supervision county superintendent. $97,000. Noted Apr. 5.

N. Y., Geneva—Bd. Pub. Wks., 21,000 sq.yd. sheet asphalt pavement, to J. H. Gallup, Union Bldg., Syracuse, $116,820. Noted Mar. 22.

N. Y., Lowville—Lewis Co. will construct 19.3 mi. highways in towns of Croghan, Denmark, Diana, Harrisburg, Highmarket, Lewis, Lowville, Lyonsdale, Martinsburg, New Bremen, Osceola, Pinckney, Turin, Watson, West Turin, and Greig, bituminous material, penetration method, by day labor, under supervision of L. P. M. Gaylord, co. supt. Cost to exceed $150,000.

N. Y., St. George—J. A. Lynch, pres. Richmond Boro, Boro Hall, grading and bituminous concrete paving Saterlee Rd., to Cornelius Vanderbilt, 24 Elizabeth St., West New Brighton, $51,122; grading and bituminous macadam paving Livermore Ave., to J. Johnson Sons, 455 Bway., West New Brighton, $4,681. Noted Mar. 29.

Pa., Altoona — City Council paving 16 streets and avenues, 22,847.7 sq.yd. concrete, to L. A. Brua, Jr., 304 Penn St., Holldaysburg, $2.70 and $2.75 per sq.yd., $0.85-$1 for curbing; total $54,000; 1,345.4 sy.yd. brick pavement on Pine Ave., to Vipond & Stapleton, Altoona, (street address not available) $4.20 per sq.pd.; 413 lin.ft. sewer in Beech Ave., to W. W. Saupp Co., 2102 West Chestnut Ave., $569. Noted Mar. 22.

W. Va., Clarksburg — Concrete curbing and paving 1,900 ft. West Main St., 30 ft., brick on 5 in. concrete, to W. F. Allen, Clarksburg, $56,334.

W. Va., Morgantown—Paving 14 streets, 24,000 yd. asphalt on 6 in. gravel, to Willite Road Constr. Co., Morgantown, $159,170. Noted Mar. 29.

S. C., Sumter—Sumter Co. paving with sheet asphalt 8.1 mi. Wedgfield Rd., to Slattery & Henry, Mills Bldg., Greenville, $230,683; 7.8 mi. Oswego Rd., to Pritchard, Raines & Hazelhurst, Savings Bank & Trust Bldg., Savannah, Ga., $231,529; 4.1 mi. Paxville Rd., to Powell Paving & Contg. Co., Palmetto Bank Bldg., Columbus, $129,302.

Fla., Arcadia—De Soto Co. will pave with 6 in. rock, tarvia or asphalt surface treatment 18 mi. State Rd. 7; 20 mi. Hardee Co. line-Charlotte Co. line Rd.; 6 mi. road from Nocatee via Owen to Arcadia; 13 mi. road from Arcadia, Nocatee, Ft. Ogden to Charlotte Co. line; 26 mi. Manatee Co.-Highlands Co. line Rd., by day labor. Former bids rejected.

Alabama—State Hy. Dept., Montgomery, grading and gravel surfacing 23.649 mi. road from Tuscaloosa Co. line to Reform and Carrolton, Pickens Co., to W. M. Thompson & Co., Tuscaloosa, $313,992. Noted Mar. 29.

O., Akron—Summit Co. grading and paving 1.069 mi. South Main St. No. 50, Sect. C-1, 17 ft., bituminous concrete, to T. E. McShaffrey Constr. Co., 171 South Forge St., $38,748, engrs. est. $46,355; 2.64 mi. Vaughn-Twinsburg Rd., 17 ft., bituminous macadam, to Metropolitan Constr. Co., 228 Ohio Bldg., $81,948, engrs. est. $82,876. Noted Apr. 5.

Streets and Roads (Continued)

O., Cleveland—Cuyahoga Co. grading and paving Noble Rd., brick, to Gould & Maybach, 823 East 150th St., $305,117. Noted Apr. 5.

O., Columbus—W. H. Duffy, dir. Pub. Serv., grading and asphalt paving 1,096 ft. 5th Ave., 60 ft., to B. F. Patterson, 1214 Neil Ave., $113,461; 2,728 ft. Grubb St., 49½ ft., to Franklin Asphalt Paving Co., 269 South High St., $36,335. Noted Mar. 29.

O., Ironton — Paving 14 streets, 51,000 sq.yd. sheet asphalt on 6 in. concrete, to Federal Asphalt Paving Co., Hamilton, $166,728.

O., Martins Ferry—Dept. Pub. Serv., paving North 7th St. and alleys, vitr. brick, to Stringer & Springer, Martins Ferry, $45,000. Noted Mar. 29.

O., Rocky River—Paving Argyle Oval, Beach Cliff Blvd., Parkside and Frazier Drs., Oak. Colver, Arundel and Kensington Rds., vitr. brick on concrete, to Ohio Eng. Co., Lorain, $80,000. Noted June 15.

Ind., Brazil — Clay Co., paving 13,650 sq.yd. National Ave. Rd., vitr. brick on concrete, to Carpenter Constr. Co., Terre Haute (street address not available), $65,951. Engrs. est. $65,726. Noted Mar. 8.

Ind., Brookville — Franklin Co., grading and graveling 15,800 ft. Lew Davis Rd., 18 ft., to Gates, Arbuckle & Brown, Rays Crossing, $25,999. Engrs. est. $26,500.

Ind., Goshen—Elkhart Co., grading and graveling 18,040 ft. Rd. 8, 18 ft., to J. R. Stump, New Paris, $27,982, engrs. est. $29,120; paving 12,672 ft. A-1 Rd., 18 ft., vibrolithic on concrete, to Miller & Miller, Elkhart, $49,447, engrs. est. $53,760; 19,596 sq.yd. Gurner Rd., concrete, to McClintic, Colwell & Gordy, Syracuse, $74,367, engrs. est. $74,460.

Ind., Jasper—Dubois Co., paving 26,840 sq.yd. A. H. Manntel Rd., bituminous macadam on concrete, to Fritch Constr. Co., Jasper, $56,887. Engrs. est. $53,860. Noted Mar. 1.

Ind., Lagrange—For 10,664 sq.yd. concrete paving and 4 mi. concrete curbing, to C. D. Traxler, Kendallville, $29,955. Engrs. est. $33,001.

Ind., Indianapolis—Marion Co., paving 84,914 sq.yd. Crawfordsville Pike, concrete, to S. S. Palma, Lafayette (street address not available), $173,000. Engrs. est. $191,-659. Noted Feb. 15.

Ind., Lawrenceburg—Dearborn Co., concrete paving 17,235 sq.yd. Charles Haag Rd., to McIntyre, Hopping & Rininger, Cleves, $57,356, engrs. est. $62,278; grading and graveling 31,498 ft. Hoffmeier Rd., 16 ft., to Nolin & Woods, Harrison, O., $45,-500; engrs. est. $53,000.

Ind., Logansport—Cass Co., concrete paving 25,303 sq.yd. J. C. Tettig Rd., to Andrews Asphalt Co., Logansport, $80,313, engrs. est. $81,046.

Ind., Petersburg—Pike Co., grading and graveling 2 mi. County Rd. 6, Sect. 2, and 4 mi. County Rd. 6, Sect. 1, to English & Lemasters, Petersburg, $25,500 and $37,500 respectively, engrs. est. $27,431 and $42,300 respectively.

Ind., Portland — Concrete paving 9,352 sq.yd. East Walnut St., 6,983 lin.ft. concrete curbing, to Shivier & Davis, Portland, $25,-500. Engrs. est. $30,000.

Ind., Portland — Jay Co., grading and graveling 15,833 ft. Purley Snyder Rd., 18 ft., to A. Zehr, Berne, $26,475. Engrs. est. $29,200.

Ind., South Bend—St. Joseph Co., grading and graveling 18,200 ft. Bentler Rd., 16 ft., to McGreevy Bros. & Justice, Logansport, $25,765, engrs. est. $27,309; paving 52,076 sq.yd. Thornton Rd., concrete, to W. J. Nees & Co., 1152 East Walnut St., Frankfort, $135,400, engrs. est. $179,106. Noted Mar. 8.

Ind., Washington—Daviess Co., concrete paving 29,804 sq.yd. James A. Colbert Rd., to Musselman & Patterson, Washington, $59,950, engrs. est. $68,250; 27,600 sq.yd. Lawrence Lee Rd., to Singer, Campbell & Co., Sanborn, $50,480, engrs. est. $57,960. Noted Mar. 1.

Ill., Libertyville — Grading, paving and building sewers to J. Cape & Sons, 468 Water St., Racine, Wis., 5,217 cu.yd. excav. $0.80, 9,660 lin.ft. concrete curb and gutter $0.90, 11,092 sq.yd. concrete $2.90, 36 catch basins $80, etc., total $50,688. Noted Nov. 23.

Wisconsin — State Hy. Comn., Madison, surfacing Argyle-Darlington Rd., Lafayette Co., to J. Udelhofen, Potosi, 8,480 cu.yd. earth excav. $0.60, 3,546 cu.yd. loose rock $0.90, 2,319 cu.yd. solid rock $2, 2,085 cu.yd. broken stone surfacing $2.45, etc., total $27,216.

Wis., Ashland—Concrete paving 33,000 sq.yd. various streets, to Woodrick Constr. Co., 837 Metropolitan Life Bldg., Minneapolis, Minn., $70,479. Noted Mar. 22.

Wis., Juneau—For 18,230 sq.yd. concrete paving, to Cast Stone Constr. Co., 318½ South Barstow St., Eau Claire, $41,449. Noted Mar. 22.

Wis., Mayville — Paving, curbing and guttering Horicon St., 1 course concrete, to F. Doherty & Co., 4419 North Ave., Milwaukee, $43,314. Engrs. est. $43,000. Noted Mar. 29.

Wis., New Richmond—Paving, curbing and guttering 15,000 sq.d. various streets, 3 in. brick asphalt filler on macadam, to Roice Constr. Co., 251 Hennepin Ave., Minneapolis, Minn., $49,980. Noted Mar. 1.

Wis., Prairie du Chien—Paving North Main and South Church Sts., vibrolithic concrete, to Gund, Graham & Co., 304 Crum & Forster Bldg., Freeport, Ill., $53,834. Noted Mar. 15.

Ia., Belle Plaine—For 16,303 sq.yd. concrete paving, to Pickus Eng. and Constr. Co., 309 Massachusetts Bldg., Sioux City, $47,316.

Ia., Clarion—Paving 60 blocks, sheet asphalt on 5 in. concrete, to Western Asphalt Co., Sioux City, (street address not available) $2.35 per sq.yd., etc., total $176,000.

Ia., Clinton—Clinton Co., grading and concrete paving 1.606 mi. primary roads in De Witt, 11,556 cu.yd. excav., 16,967 sq.yd. concrete pavement, and 2.689 mi. road from Lyons west, 20,880 cu.yd. excav., 29,480 sq.yd. concrete, 9,010 ft. 6 in. and 3,150 ft. 10 in. tile, etc., to Layton Constr. Co., Muscatine, $50,433 and $93,359 respectively; 2.78 mi. primary road from De Witt south, 29,425 sq.yd. concrete, to Wright Constr. Co., 211 Flynn Blk., Des Moines, $80,674.

Ia., Tipton—Cedar Co., grading 18.814 mi. road south from Jones Co. line, to G. W. Condon, Brandeis Theater Bldg., Omaha, Neb., 299,638 cu.yd. excav. $0.234 per cu.yd.; L. M. Cjsco, Mason City, 79,806 ft. 6 in tile $0.12, 1,200 ft. 8 in. $0.20 and 320 ft. 12 in. $0.26, etc.

Minn., Albert Lea—For 5.5 mi. Job 23-23, State Rd. 23, 3 mi. Job 23-07, State Rd. 7 and 1 mi. Job 22-07B, 91,725 cu.yd. excav., 1,881 lin.ft. portable culverts, 59,860 cu.yd. overhaul, to O'Malley & Trybom, Albert Lea, $30,046. Noted Mar. 15.

Minn., Duluth—Paving Gladstone St. from 40th Ave. E. to Superior St., 8,230 sq.yd. concrete, 6,420 lin.ft. 6 in. plain and 400 lin.ft. armoured concrete curbing, to Nelson & Hafner, 118 Parkland Ave., $43,-312. Noted Mar. 8.

Minn., Hutchinson—For 40,526 sq.yd. asphaltic concrete pavement, etc., to Schruth-Welsh Co., 704 1st National Soo Line Bldg., Minneapolis, $2.78, total $122,955; 7,801 lin.ft. 10-20 in. storm sewer, 4,215 lin.ft. storm water inlet pipe, to Hutchinson Constr. Co., Hutchinson, $16,021. Noted Mar. 22.

Kan., Independence — Montgomery Co. paving 5.4 mi. Federal Aid Project 121 Sect. B, 18 ft., to Cornelison & Kelley, 224 West Main St., earth and borrow $0.60, rock excav. $1.20, bituminous macadam $1.20, etc., total $119,232. Noted Mar. 8.

South Dakota—State Hy. Dept., Pierre, grading 15.14 mi. road in Hutchison Co. and graveling 7.83 mi. road in Moody Co., to W. R. Larson Constr. Co., 519 Secy. Natl. Bank Bldg., Sioux Falls, $66,413 and $13,495 respectively; grading 14.14 mi. road in Beadle Co. and 8.95 mi. road in Potter Co., to C. J. Wheelock, Pierre, (street address not available), $48,455 and $28,199 respectively; grading 7.86 mi. road Charles Mix Co., to Bradley Grading Co., Wagner, $28,511; grading 12.5 mi. road Bon Homme Co., to Tobin & Maloney, Madison, $48,845; grading 9.04 mi. Moody Co., to D. D. Bidwell, Egan, $37,681; grading 15.92 mi. Brookings Co., to Enke Constr. Co., Lake Benton, Minn., $54,343; grading 8.9 mi. Beadle Co., to Schaefer Constr. Co., Winfred, $44,433; grading 5.65 mi. Todd Co., to E. B. Davis, Kadoka, $54,-560; grading 6.85 mi. Haakon Co., to England & England, Murdo, $35,302. Noted Mar. 15.

S. D., Aberdeen—Paving 78 blocks, 109,-000 sq.yd. vibrolithic concrete, to V. W. O'Connor, Hamm Bldg., St. Paul, Minn., $299,672. Noted Mar. 15.

Mo., St. Louis—Bd. Pub. Serv., City Hall, to I. S. Brighton, 4115 McRee Ave., improving 7,975 sq.yd. Leonard Ave., asphalt over brick $17,649; to Granite Bituminous Paving Co., Ry. Exch. Bldg., 945 sq.yd. Brannon Ave. $4,385, 1,620 sq.yd. Neosho St. $7,949, 2,640 sq.yd. Kingsbury Pl. $7,397, 13,585 sq.yd. Page Ave. $35,601, all warrenite bitulithic; to Alzina Constr. Co., Arcade Bldg., 3,860 sq.yd. Wilmington Rd., brick on 6 in. concrete, $23,355; to J. E. Perkinson, 3237 Carter Ave., 1,275 sq.yd. Glasgow Ave., brick on 5 in. concrete, $8,727, 1,585 sq.yd. Blase Ave. concrete, $8,395. Noted Apr. 5.

Tex., Bryan—Resurfacing 25,000 sq.yd. various streets, 2 in. bituminous topping, to Smith Bros. Constr. Co., 311 Central State Bank, Dallas, $40,000. Noted Apr. 5.

Tex., Clarksville—Red River Co., grading and gravel surfacing 7.59 mi. Highway 5, Detroit Rd. Dist., 12 ft., to McGuire & Cavender, Clarksville, $53,411; 11,579 cu.yd. shipped gravel to be furnished by county $28,997. Noted Mar. 8.

Tex., Greenville—For 118,738 sq.yd. bituminous paving, 194,196 lin.ft. curb and gutter, etc., to Janes Contg. Co., Southwestern Life Bldg., Dallas, $481,309. Engrs. est. $400,000.

Tex., Rockwall—Rockwall Co., surfacing 57,000 sq.yd. Rockwall Chisholm Rd., concrete, to McCollum Constr. Co., 1507 F. & M. Bank Bldg., Ft. Worth, $2.36 per sq.yd., total $143,772. Noted Mar. 22.

Okla., Pawhuska — Grading and paving various streets in Grandview Addition, 6,800 lin.ft. concrete curbing, 5,000 cu.yd. earth excav., 17,100 sq.yd. asphalt and 2,900 cu.yd. concrete, to Hamilton Constr. Co., Bartlesville, asphalt $3.42 per sq.yd., concrete $2.90, total $83,360.

Wash., Seattle—Grading and paving 9th Ave. S., et al. (Beacon Hill Project), 23,050 sq.yd. 8 in. concrete, 750,000 sq.yd. excav., etc., also grading Golf Heights, 646,000 cu.yd. earth excav., to Puget Sound Bridge & Dredging Co., Central Bldg., $496,623 and $74,464 respectively; engrs. est. $500,-000 and $75,000. Noted Apr. 4.

Wash., Spokane — Spokane Co. grading and paving 9,300 cu.yd. Valley Chapel-Mt. Hope Rd., waterbound macadam, to Mohr Constr. Co., Waterville, $62,548; 24,000 cu. yd. Elk Rd. from Pend Oreille Highway to Elk, to J. E. Edwards, Realty Bldg., $98,-769. Noted Mar. 8.

Oregon—State Hy. Dept., Salem, grading, building bridges and concrete culverts on 7.75 mi. Roosevelt Highway, Fat Elk Creek, Coos Co., to J. Hampshire, Grants Pass, $220,250; 4.78 mi. McKinzie Highway, Redmond Cline Falls, Deschutes Co., to G. K. March, 1126 2nd St., Spokane, Wash., $36,830, (concrete pipe).

Calif., Fresno—Grading, concrete curbing, guttering, sidewalks and asphalt paving Home and Woodward Aves., to Thompson Bros., G and Divisadero Sts., $21,105 and $5,620 respectively. Noted Mar. 29.

Calif., Glendale—Paving Doran and Pacific Aves., 140,000 sq.ft. macadam, etc., to Ducey & Breitenstein, 151 South Hill Ave., Pasadena, $27,710. Noted Mar. 22.

Calif., Hanford—Grading, curbing, guttering and paving West 6th and Phillips Sts., etc., to California Constr. Co., 58 2nd St., San Francisco, $51,553. Noted Apr. 5.

Calif., Los Angeles — Grading, curbing and paving Alexandria Ave., to G. H. Oswald, 366 East 58th St., $38,997; Wilcox St., to W. Liddington, 420 East 60th St., $14,950. Noted Mar. 22.

Calif., Santa Rosa — Grading, reshaping, curbing, guttering and paving with 1½ in. warrenite bitulithic on 2½ in. bituminous concrete, 5th, North and Benton Sts., etc., to Warren Constr. Co., Bacon Bldg., Oakland, $54,665. Noted Apr. 5.

Calif., Sanger—To California Constr. Co., Mattei Bldg., Fresno, grading, curbing, guttering and paving 5th, 8th and O Sts., $70,433, L St. $7,129. Noted Mar. 8.

Ont., Kitchener—Paving 1 mi. Petersburg Rd., concrete, to C. Damman, 21 Albert St. S., Kitchener. Engrs. est. $60,000.

British Columbia — Minister Dept. Pub. Wks., Victoria, paving 8.46 mi. Pacific Highway from Cloverdale to Blaine, Wash., 7½ in. concrete, to A. B. Palmer Co., Ltd., 736 Granville St., Vancouver, $248,000. Noted Mar. 1

Industrial Works

PROPOSED WORK

Mass., Springfield—Metallic Drawing Roll Co. plans 1 story, factory, brick and steel, plain foundation, in East Springfield Dist. $50,000. H. C. Spence, 111 Myrtle St., Indian Orchard, pres.

Conn., East Hartford (Hartford P. O.)—Economy Grocery Co., 5 Watertown Ave., Waterbury, plans 6 story, 60 x 110 ft., brick and steel warehouse, plain foundation, Park Ave., here. $200,000. Engineer and architect not selected.

Conn., Georgetown—Greenwood & Noerr, archts. and engrs., 847 Main St., Hartford, rejected bids 3 story, 50 x 135 ft. mill,

Industrial Works (Continued)

rein.-con. and brick, for Gilbert & Bennett Mfg. Co. Noted Mar. 15.

Conn., Hartford—A. H. Carpenter, Bloomfield, having revised plans prepared by I. A. Allen, 100 Farmington Ave., 7 story, 50 x 112 ft. industrial building, steel frame, plain foundation, Asylum St. $200,000.

N. Y., Elmira Heights—Amer. Bridge Co., Frick Bldg., Pittsburgh, Pa., having revised plans prepared 1 story and basement, 50 x 210 ft., templet shop. Private plans.

N. Y., Jamestown—W. H. Edson, Falconer, interested in company now being formed, which plans to take over present lines, plants and system of Pennsylvania Gas Co., 312 Cherry St., here, and build and operate complete artificial gas plant. To exceed $300,000.

N. Y., Malone—H. S. Day, East Main St., plans 1 story, 40 x 80 ft., concrete service station. $100,000.

N. Y., Newark—Newark Cold Storage Co. plans rein.-con. cold storage warehouse, 65,000 bbl. capacity. $250,000. E. V. Pierson, c/o 1st National Bank, secy.

N. Y., Rochester—Rochester Realty Corp. plans 2 story, 135 x 445 ft., brick garage, storage and office building, 433 St. Paul St. $150,000.

N. Y., Utica—Schiller Electric Co., 1402 Francis St., plans brick and concrete repair and machine shop, and office building, Genesee and Warren Sts. $65,000.

N. Y., Watertown—Northern New York Utilities, Inc., 58 Public Sq., plans 2 story, rein.-con. garage and machine shop, Front St. $40,000. S. D. Gilbert, Light & Power Bldg., mgr.

Pa., Jeannette—Pittsburgh Eng. Co. plans 3 additions to plant. $200,000. Engineer and architect not announced.

Pa., Jersey Shore—Amer. Air Stand Mfg. Co. plans 2 story and part basement, 50 x 150 ft. concrete, steel and tile factory, Main St. $50,000.

Pa., Lewistown—Penna. Wire Glass Co., Dunbar, plans 3 story, 100 x 500 ft. plant, here. F. A. Hayes, Dunbar, engr. and archt.

Pa., Phila.—Viscose Co., Marcus Hook, plans factory buildings at Holmesburg Junction and Delaware River. $4,000,000. Private plans.

Pa., Phila.—Brandle & Smith Co., 8th and Dauphin Sts., soon takes bids 4 story, rein.-con. and brick plant, plain foundation, 5th and Bristol Sts. $1,000,000. Private plans.

D. C., Wash.—See "Buildings."

N. C., Greenville—Pitt Lumber Co., plans to rebuild lumber mill, destroyed by fire. $50,000. Engineer and architect not announced.

N. C., Oakboro — Oakboro Cotton Mill plans 6,000 spindle cotton mill. $250,000. J. A. Groves, Albemarle, pres.

N. C., Waco—Rhodes Cotton Mills plan mill, probably 4 story. $200,000. Engineer and architect not selected.

Tenn., Chattanooga—Burdett Oxygen Co., Alton Park, plans mill. $50,000. W. K. Hendricks, mgr.

Tenn., Chattanooga — Dixie Spinning Mills plan 2nd unit of mill, Hixon Pike. $1,000,000. Ultimate cost $9,000,000. J. T. Lupton, Volunteer State Life Bldg., pres.

Tenn., Chattanooga — Dixie Mercerizing Co., 813 Watkins St., plans mill, Rossville St. $500,000. T. H. McKinney, genl. mgr.

Ky., Ashland—Kentucky Clay Products Co. plans brick and tile manufacturing plant. $150,000. W. B. Elswick, pres.

Ky., Louisville—Louisville Gas & Electric Co., 311 West Chestnut St., plans 66 x 200 ft. power substation, brick, 13th and Magazine Sts. $150,000. L. F. Strang, c/o owner, engr.

Ky., Louisville — Perkins Laundry Co., 209 East Market St., plans laundry, 634-38 South 6th St. $60,000. Engineer and architect not selected.

Ky., Louisville — Gibbs-Inman Co., 325 West Bway., having plans prepared by A. Loomis, 51 Todd Bldg., 5 story, 99 x 218 ft. printery, 9th St. and Bway. $300,000.

Ky., Louisville—Louisville Gas and Electric Co., 311 West Chestnut St., plans gas plant. $750,000. M. W. Walsh, c/o owner, engr.

O., Cleveland—Armature Coil Equipment Co., c/o A. J. Fathauer, 3202 Scranton Rd., had plans prepared 1 story, 40 x 113 ft., brick and steel factory, 2411 Forestdale Ave. $40,000. Private plans.

O., Cleveland—J. J. Klein and G. B. Harris, Engineers Bldg., having plans prepared by W. S. Lougee, 500 Marshall Bldg., 2 story, 75 x 100 ft. and 80 x 110 ft., brick, steel and concrete auto sales and service building additions, 6604 Euclid Ave. $125,000.

O., Cleveland—J. C. Kearns, c/o T. Cerny, archt., 4025 East 52nd St., had plans prepared 1 story, 40 x 65 ft., brick and steel garage, West 11th St. and Clark Ave. $40,000.

O., Cleveland—Beckman Co., 3167 Fulton Rd., had plans prepared by H. Eisele, archt. and engr., Engineers Bldg., 1 story, 43 x 110 ft., brick and steel factory, plain foundation, 3167 Fulton Rd. $40,000.

O., Middletown—Frank Smith Paper Co. plans 2 story, 200 x 500 ft., brick and steel plant, plain foundation, 1st St. Private plans.

O., Youngstown—Van Baalen Auto Co., 239 Wick Ave., soon takes bids 2 story, garage, Wick Ave. and Maple St. $75,000. Owsely Co., 1301 Mahoning Bank Bldg., archts.

Inc., South Whitley—A. D. White plans factory. $50,000. Engineer and architect not announced.

Mich., Detroit—Wolverine Auto Painting & Trimming Co., 5203 Martin Ave., having plans prepared by Smith, Hinchman & Grylls, 800 Marquette Bldg., 1 story, rein.-con., brick and steel factory, plain foundation, Martin Ave. $50,000.

Wis., Fox Lake — Fox Lake Auto Co. having plans prepared by Peacock & Frank, 445 Milwaukee St., Milwaukee, 1 story and basement, 66 x 87 ft., concrete garage, plain foundation, for Fox Lake Auto Co. $40,000.

Mich., Iron Mountain — Michigan Iron Land & Lumber Co. had plans prepared by A. Kahn, 1000 Marquette Bldg., Detroit, 1 story, 51 x 261 ft. concrete, brick and steel distilling plant, and 1 story, 115 x 145 ft. rein.-con., brick and steel storage building, with conveyor system.

Wis., Madison — See "Buildings" under store.

Wis., Merrill—Peterson & Juul, Lawson Bldg., had plans prepared by J. Bauman, Genesee St., remodeling and constructing 2 story, 40 x 70 ft., brick and concrete addition to garage, plain foundation. $40,000.

Wis., Oconto Falls—Falls Canning Co. plans to rebuild 1 and 2 story canning plant, incl. main building and warehouse, brick and concrete, plain foundations, recently destroyed by fire. $75,000. C. F. Meyer, pres. Engineer or architect not selected.

Wis., Port Wing — Northern Wisconsin Hydro Electric Power Co., c/o T. N. Okustrom, mgr., making plans 1 story, 60 x 90 ft. power plant, rein.-con. and brick, also power dam, 42 ft. head, on Iron River. Private plans.

Wis., Sheboygan—Commercial Furniture Co., 2739 West Chicago Ave., Chicago, plans 2 story, rein.-con., brick and steel plant, plain foundation, here. $50,000. A. H. and H. W. Strinje, mgrs. Engineer and architect not selected.

Wis., Sheboygan—J. Van der Voort, 533 Pennsylvania Ave., plans 4 story, 60 x 120 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation. $70,000. Engineer and architect not selected.

Wis., South Milwaukee—Bucyrus Co. having preliminary plans prepared by F. D. Chase, Inc., engrs., 645 North Michigan Ave., Chicago, 1 and 2 story additions to plant, brick and steel, plain foundations.

Ia., Cedar Rapids—Economy Advertising Co., c/o S. W. Mercer, Johnson and Van Buren Sts., Iowa City, plans 2 story and basement, 100 x 135 ft. printing plant, brick and stone, here. $65,000. N. Hatton, 822 Wellington St., archt.

Minn., Little Falls—See "Miscellaneous."

Kan., Phillipsburg—Phillipsburg Ice & Cold Storage Co. making plans 1 story, 50 x 100 ft. plant. $50,000.

Kan., Wichita—Derby Oil Co., 203 North Handley St., having plans prepared by E. Sapp, engr., 21st and Washington Sts., 1 story addition to oil refinery, steel. $400,000.

Mo., Monett—St. Louis & San Francisco R.R., St. Louis, had plans prepared by R. C. Stephens, c/o owner, rebuilding 15 stall roundhouse, repair shops, etc., brick and concrete, here, to replace those destroyed by fire. $500,000.

Mo., St. Louis—N. Abraham, archt., Chemical Bldg., prepared plans 3 story, 85 x 120 ft., rein.-con. and brick warehouse, plain foundation, Chouteau Ave. $100,000. Owners name withheld.

Texas—See "Railways."

Tex., Dallas — Lacy Oak Flooring Co., c/o R. Lacy, pres., Longview, soon takes bids plant, 3 units, 100,000 ft. bm. daily. $150,000. Private plans.

Tex., Ft. Worth—World Publishing Co., 606 Commerce St., having plans prepared 2 story and basement, 150 x [illegible] ft., printing plant, rein.-con. and brick, plain foundation, Jones Ave. between 2nd and 3rd Sts. $500,000. Engineer and Architect not announced.

Okla., Ponca City—Voted $140,000 bonds 1 story, 46 x 70 ft., addition to municipal light plant, brick, Railroad Ave. A. M. Stainaher, city engr. Noted Mar. 29.

Nev., Eureka—Eureka Croesus Mines c/o F. L. Torres, 103 Park Ave., New York City, plans smelter, 2,500 tons daily capacity, here, $1,250,000, also narrow gauge railroad from here to Hamilton, approx. 40 mi., and broad gauge between Palisade and smelter site. Bradley, Gruff & Labarthe, 85 2nd St., San Francisco, Calif., engrs.

Wash., Millwood—Inland Empire Paper Co. plans to increase storage capacity of plant, build 10 houses for employees, dam Spokane River, develop power required to operate plant, concrete tanks to replace wooden ones, construct 75,000 gal. water storage tank, new pipe lines and fire protection system. $150,000. Address Manager. Private plans.

Wash., Spokane—Spokane Refinery Co., c/o J. P. Graves, Old Natl. Bldg., plans refinery. $200,000.

Wash., Tacoma—Wheeler-Osgood Sash & Door Co., Tide Flats, plans 3 story addition, rein.-con. $250,000. G. J. Osgood, vice pres. and genl. mgr.

California—See "Miscellaneous."

Calif., Long Beach—Milton Realty Co., 114 Locust St., Los Angeles (representing owner), having plans prepared by Curlett & Beelman, Union Bank Bldg., Los Angeles, 5 story, 150 x 150 ft., rein.-con. garage, Atlantic St.

Calif., Los Angeles—Home Service Laundry Co., c/o W. Saunders, archt., Laughlin Bldg., had plans prepared 3 story, 110 x 115 ft., rein.-con. laundry, Crocker St.

Calif., Los Angeles — Los Angeles Ry. Corp., 11th St. and Bway., making plans 1 story, 40 x 45 ft., automatic power station, also plans 1 story, 28 x 280 ft. administration building, both brick. Private plans.

Calif., Newman—Associated Milk Products Co., 53 Clay St., San Francisco, plans rein.-con. creamery, here. $170,000. Engineer and architect not selected.

Calif., Riverside — Snowolene Refinery Co., Pacific Mutual Bldg., Los Angeles, plans refinery, daily capacity 1,000 bbl. crude oil and 12,500 bbl. gasoline. $250,000.

Calif., San Francisco—J. Graham Mfg. Co., 531 Mission St., having plans prepared by H. P. Hoyt, engr., Monadnock Bldg., 3 story, rein.-con., warehouse, 5th and Bryant Sts. To exceed $40,000. Engineer will handle construction. R. W. Kinney Co., 586 Howard St., lessee.

Calif., Santa Barbara—See "Buildings."

Calif., Yuba City—Earl Fruit Co., California Fruit Bldg., Sacramento, plans cold storage and fruit packing plant. To exceed $100,000.

Ont., Port Arthur—Hydro Electric Power Comn. of Ontario, 190 University Ave., Toronto, plans to install another 12,500 unit in plant on Nipigon River at Cameron Falls, 78 ft. head, vertical turbine connected to generator, 120 r.p.m., 10,600 k.v.a., 12,000 volts, 3 phase, 60 cycles, etc. $1,500,000. F. A. Gaby, ch. engr.

Ont., Port Stanley—Hydro Electric Power Comn., 190 University Ave., Toronto, plans steam power plant here, 1,000,000 hp. capacity. F. A. Gaby, ch. engr.

Ont., Toronto—Yolles & Rottenberg Ltd., 366 Adelaide St. W., plan 10 story and basement, 100 x 150 ft. concrete, brick, steel and tile factory, York and Front Sts. $1,000,000. Private plans.

Ont., Walters Falls—W. Bonnell plans to rebuild plant recently destroyed by fire. $50,000.

Man., Fort Alexander—Manitoba Pulp & Paper Co. plans pulp mill. $4,000,000.

BIDS DESIRED

Pa., Phila.—M. W. Easby, engr., 1615 Chestnut St., taking bids 3 story, 80 x 100 ft. brick and steel plant, plain foundation, 68th and Greenway Sts., for Beswick & Clay, 25th and Callowhill Sts. $85,000.

Pa., Pittsburgh—Dusenberry Baking Co., 2138 Lusten St., taking bids 3 story and basement, 50 x 100 ft. bakery, concrete, brick, steel and tile, Forbes St. Rubin & VeShancy, Union Arcade, archts.

O., Cleveland—Kronheim Furniture Mfg. Co., 2043 East 55th St., taking bids and opens same about Apr. 20, 4 story, 56 x 120

Industrial Works (Continued)

ft. factory and warehouse, brick and steel, plain foundation, $75,000. Steffens & Steffens, Williamson Bldg., archts. Noted June 29.

O., Norwood (Cincinnati P. O.)—Apr. 16, by S. Hannaford & Sons, archts., 1024 Dixie Terminal Bldg., Cincinnati, 2 story, 60 x 240 ft., rein.-con. factory, plain foundation, Park Ave., here, for Kemper-Thomas Co., Park Ave. To exceed $150,000. Noted Dec. 14.

Ill., Chicago — Fox & Fox, archts., 38 South Dearborn St., receiving bids 1 story, 105 x 300 ft. factory, rein.-con., brick and steel, South Kedzie Ave. near drainage canal, for N. T. Brenner of Amer. Insulated Wire & Cable Co., 954 West 21st St., $200,000.

Ill., Chicago—H. A. Mulder, archt., 140 South Dearborn St., receiving bids 1 story, 100 x 125 ft. auto sales and service station, rein.-con., brick and steel, 4143-53 Milwaukee Ave., for Cooper & Kirk, c/o architect. $40,000.

Wis., Green Bay—Sheboygan Dairy Products Co., 134 South Adams St., taking bids 1 story, 50 x 57 ft. dairy, brick, rein.-con. and steel, plain foundation. $40,000. E. H. Regal, mgr. Private plans.

Wis., Madison—C. B. Fritz, 138 North Frances St., taking bids 1 story, 50 x 110 ft. planing mill, brick, rein.-con. and steel, plain foundation. $50,000. Claude & Starck, Badger Annex, archts. Noted Mar. 29.

Wis., Milwaukee—Apr. 16, by Salvation Army, c/o P. B. Fynn, adjutant, 43 Juneau Ave., 2 and 3 story, 34 x 76 ft., brick and concrete warehouse, plain and wood pile foundation, Juneau Ave. $55,000. Noted March 8.

Wis., West Allis—Hunt & Grassold, engrs. and archts., 445 Milwaukee St., Milwaukee, taking bids 2 story, 60 x 87 ft., brick, tile and concrete garage, plain foundation, 53rd Ave., for Burbach Auto Service Co., 5225 Greenfield Ave. $40,000. Noted Feb. 1.

Minn., Plainview — Wisconsin Pea Canners Co., c/o H. L. Wedertz, mgr., South 6th and Franklin Sts., Manitowoc, Wis., taking bids 4 story, 50 x 60 ft. factory, brick and rein.-con., plain foundation, here. $40,000. Smith & Reynolds, Dempsey Bldg., Manitowoc, archts. Noted Mar. 22.

Calif., San Francisco—J. Reid, Jr., archt., 1st Natl. Bank Bldg., receiving bids 1 and 2 story, garage and dairy, concrete and steel, McAllister St. near Octavia St., for Millbrae Dairy, 834 Octavia St. To exceed $40,000. Structural steel and cast iron work let to Foundation Co., 58 Sutter St., San Francisco, $23,194.

BIDS RECEIVED

O., Marysville—Dept. Pub. Welfare, 9th and Oak Sts., Columbus, Apr. 4, 48 x 60 ft. brick power plant, 2 story and basement, 28 x 150 ft. brick and concrete cottage and 2 story and basement, 22 x 24 ft. superintendent's cottage, here, from E. Elford, 207 East Gay St., Columbus, $217,900.

CONTRACTS AWARDED

R. I., Woonsocket—River Spinning Mills, 3 story, 108 x 110 ft. mill addition, brick and timber, plain foundation, to Bouvier-Brien Constr. Co., Sayles St. Archts. est. $75,000.

Conn., New Haven—Connecticut Co., 127 Church St., 1 story, 36 x 72 ft. power plant addition, brick, steel and concrete, Grand Ave., to Sperry Eng. Co., 136 Chapel St. Archts. est. $40,000. Noted Nov. 30.

Conn., South Norwalk—Gabbe Mole Wks., Inc., 24 Raymond St., 3 story, 60 x 170 ft. factory, 30 x 40 ft. boiler house, circular stack, 110 ft. high, all brick to L. A. Miller, 22 Church St., Meriden, $100,000. Noted Dec. 14.

N. Y., Brooklyn—M. Koppel, c/o E. M. Adelsohn, archt .and engr., 1778 Pitkin Ave., will build brick, steel and concrete factory, plain foundation, Belmont St., by day labor. $50,000.

N. Y., Long Island City—H. J. Leverich, c/o J. DeHart, archt. and engr., 1039 Fox St., New York, will build 1 story, 100 x 120 ft., brick, steel and concrete garage, plain foundation, 2nd Ave., here, by day labor. $50,000.

N. Y., Newburgh—Hudson River Woolen Mills, North Windsor St., rein.-con. and steel mill addition, plain foundation, to Barney-Ahlers Constr. Corp., 110 West 40th St., New York. Archts. est. $50,000.

N. Y., New Rochelle—J. A. Mahlstedt & Co., Columbia Pl., 4 story, 60 x 120 ft., steel and rein.-con. warehouse, plain foundation, to Barney-Ahlers Constr. Corp., 110 West 40th St., New York. Archts. est. $100,000.

N. Y., New York — Handry Bros., c/o Vitalo & Calhane, archts. and engrs., 56 West 45th St., will build 1 story, 185 x 500 ft., brick, steel and concrete garage, plain foundation, Webster Ave. near 202nd St., by day labor. $125,000.

N. Y., Schenectady — General Electric Co., River Rd., 1 story, 46 x 428 ft. concrete, brick and steel addition to Bldg. 60, to Brown & Lowe, 361 Foster Ave., $70,000; 1 story, 120 x 203 ft., brick and steel addition to Bldg. 109, to Austin Co., 16112 Euclid Ave., Cleveland, O., $52,000; 100 x 850 ft. concrete, brick and steel addition to Bldg. 85, to H. K. Ferguson Co., 6523 Euclid Ave., Cleveland, O., $250,000. Noted Mar. 22 and Apr. 5.

N. Y., Syracuse—Oak Knitting Co., West Division St., masonry contract for 4 story, 50 x 100 ft., brick and steel factory, to Henry Funda Constr. Co., 201 Edison St.; steel, to Syracuse Eng. Co., Everson Bldg.

N. Y., Yonkers—Alexander Smith & Sons Carpet Co., Elm and Palisade Aves., 2 carding mills, rein.-con. and steel, plain foundations, Sawmill River Rd., to Barney-Ahlers Constr. Co., 110 West 40th St., New York City. Archts. est. $500,000.

Pa., Phila. — Ketterlinus Lithographic Mfg. Co., 4th and Arch Sts., 8 story and basement, 55 x 140 ft. rein.-con. and brick plant, 4th and Arch Sts., to Turner Constr. Co., 1613 Sansom St. $300,000. Noted Dec. 7.

D. C., Wash.—Peoples Drug Store, 503 7th St., N. W., rebuilding warehouse, 1422 1st St., W. E., to C. Tompkins, 1612 Park Rd., $50,000.

N. C., Duke—Erwin Cotton Mill Co., Durham, large cotton mill, 40,000 spindles, here, to J. Sirrine & Co., South Main St., Greenville, S. C.

W. Va., Glenville—Hall—Smith & Hall, 1 story and basement, 66 x 110 ft. garage, brick, tile and stone, to Garrett Bldg. Co., Glenville. Archts. est. $40,000.

O., Cleveland—See "Buildings."

O., Cleveland — H. F. Neighbors, 1156 Hanna Bldg., 1 story garage and service building, brick, steel and concrete, plain foundation, East 23rd St. near Chester Ave., to W. I. Thompson & Son Co., 5103 Euclid Ave. Archts. est. $50,000.

O., Cleveland — Sands Mfg. Co., 5307 Sweeney Ave., 2 story, 85 x 91 ft., brick, steel and concrete factory addition, 5407 Sweeney Ave., to Dresser-Minton Co., 880 The Arcade. Archts. est. $60,000.

O., Columbus—Pfeifer Show Print Co., Noble and Pearl Sts., 2 story and basement, 60 x 187 ft., brick and concrete plant, Fulton St., to J. W. Heckalb, 79 Ruggery Bldg., $75,000.

Mich., Detroit — Birmingham Sand & Gravel Co., 2690 East Atwater St., 2 story, rein.-con. warehouse, Jos. Campau Ave., to Natl. Constr. Co., 1031 Dime Bank Bldg. Archts. est. $50,000.

Ill., Chicago — Geib & Schaeffer, 1751 North Central Park Ave., 3 story, 85 x 165 ft., rein.-con., brick and steel factory addition, to M. Raun, c/o owner. Archts. est. $200,000. Noted Feb. 22.

Wis., Madison—F. L. Kronenberg, archt., Carroll Blk., taking bids 2 story, 66 x 165 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation, Washington St. for Capitol City Garage Co., South Pickney St. $60,000. Noted Dec. 28.

Wis., Milwaukee—Fried, Ostermann Co., 623 Reed St., 3 story and basement, 73 x 115 ft., brick and timber factory, plain foundation, to Universal Constr. Co., 915 Chestnut St. Engrs. est. $70,000.

Wis., Milwaukee—C. Thomsen, 237 Cambridge Ave., 1 story and basement, 50 x 78 ft., concrete, garage, plain foundation, Farwell Ave., to Madson, Christenson & Ingbretson, 1289 National Ave. Archts. est. $40,000.

Wis., Plymouth—Peter Welling Co. will build 2 story, 75 x 100 ft., carpenter and woodworking shop, rein.-con. and brick, plain foundation, by day labor. $40,000. Private plans.

Wis., Two Rivers—Aluminum Goods Mfg. Co., 15th and Franklin Sts., Manitowoc, 1 story, boiler house, brick and concrete, plain foundation, also 125 ft. brick stack, here, to W. W. Oeflein, 86 Michigan St., Milwaukee. Engrs. est. $40,000.

Tex., Greenville—Greenville Mill & Elevator Co., addition to present mill and elevator, rein.-con., plain foundation, to Reyburn Eng. & Constr. Co., 609 Waldheim Bldg., Kansas City, Mo., $100,000. Noted Jan. 4.

Okla., Muskogee — Oklahoma General Power Co., will build 2 story and basement, power plant, rein.-con., brick and steel, incl. six 1,000 hp. boilers, one 20,000 hp. generator and one 10,000 hp. generator, by day labor. $3,000,000. G. F. Pythian, supt.

Ore., Hillsboro — Ray-Mailing Canning Co., will build 2 story, 80 x 85 ft. factory, concrete and brick, by day labor. $50,000. C. F. Noak, Hillsboro, archt. and engr.

Calif., Los Angeles — Los Angeles Soap Co., 633 East 1st St., 5 story, 60 x 270 ft., warehouse and office, rein.-con., to Weymouth-Crowell Co., 2026 West 9th St. Archts. est. $173,800. Noted Mar. 22.

Calif., Los Angeles—Union Pacific R.R., 15th and Dodge Sts., roundhouse and engine house, freight car repair shops, locomotive, and coach shops, loading docks, wood and steel, etc., to Lynch-Cannon Co., 840 Alameda St. Engrs. est. $1,500,000-$1,750,000. Noted Jan. 4.

Calif., Los Angeles—See "Buildings."

Calif., San Francisco—M. Stulsaft Co., 647 Mission St., will build 3 story, rein.-con., warehouse, show rooms and office, 5th and Bryant Sts., by day labor, under supervision of H. P. Hoyt, engr., Monadnock Bldg. To exceed $50,000.

Calif., San Francisco — See "Bids Desired."

Calif., San Francisco — New Method Laundry, 435 Sanchez St., 2 story, laundry, rein.-con., 17th and Sanchez Sts., to R. McLeran & Co., Hearst Bldg., $75,000.

Calif., Santa Rosa—Natl. Ice and Cold Storage Co., Postal Telegraph Bldg., San Francisco, addition to ice plant, here, to E. Hildebrand, Santa Rosa, $50,000. Noted Jan. 18.

Calif., San Pedro—Pacific Coast Borax Co., 3 story factory, 1 and 2 story machine shop and boiler house, rein.-con., to Davidson Constr. Co., 1445 East 16th St., Los Angeles, $415,000. Noted Feb. 22.

B. C., Ocean Falls—Pacific Mills Ltd., 510 Hastings St. W., Vancouver, 35 x 75 ft. rein.-con. plant, 90 ft. high, to Robertson & Rendell, 850 Hastings St. W., Vancouver, $60,000.

Buildings

PROPOSED WORK

Mass., Boston—Dormitories, etc.—Massachusetts Institute of Technology preparing plans new dormitories and gymnasium. $2,500,000. S. W. Stratton, pres.

Mass., Boston—Fire Signal Station—Dept. Pub. Wks. had plans prepared by J. T. Ball, engr. and archt., c/o Pub. Wks. Dept., 1 story and basement, 75 x 120 ft., limestone, woodpile foundation, Boyleston St.; also changing fire alarm signal system throughout city. $500,000.

Mass., Dorchester (Boston P. O.)—Bath Houses—Plans concrete bath houses on Strandway. $200,000. J. A. Rourke, comr. pub. wks.

Conn., Hartford—Church—South Baptist and First Baptist Churches, plan church, Main and Elm Sts. $500,000. Address H. S. Spencer, 280 Sigourney St., secy. G. E. Merill, c/o Amer. Home Mission Society, consult. archt.

N. Y., Albany—School—Bd. Educ. takes bids latter part of month for school, Western Ave. $250,000.

N. Y., New York—Apartment Hotel—Six-Twenty Park Ave. Corp., c/o J. E. R. Carpenter, archt. and engr., 598 Madison Ave., having plans prepared 50 x 100 ft., brick, steel and stone, plain foundation, Park Ave. and 65th St. $800,000.

N. Y., New York—Exchange—New York Telephone Co., 15 Dey St., had plans prepared by McKenzie Voorhies & Gmelin, archts. and engrs., 342 Madison Ave., brick, steel and stone, plain foundation, 193 Manhattan Ave. $400,000.

N. Y., New York—Synagogue and School—Buchman & Kahn, archts. and engrs., 49 West 45th St., soon let contract 4 story, brick, steel and stone, plain foundation, Simpson St., for Huntspoint Talmud Torah, c/o architects. $300,000.

N. Y., Rochester—Office—See "Industrial Works."

N. Y., Saranac Lake—Infirmary—Scopes & Feustmann, archts., Saranac Lake, soon take bids 2 story, 40 x 190 ft., brick and stone, at Trudeau Sanitorium, here, for C. H. Ludington, Phila. (street address not available). $150,000.

N. Y., Sydney—City Hall, etc.—Takes bids about Apr. 15, new city hall and juvenile detention house, $200,000. A. Fitzgerald, mayor.

N. Y., Utica — Office — See "Industrial Works."

Pa., Lancaster — Passenger Station — Pennsylvania R.R., Broad St. Sta., Phila., soon takes bids 1 and 2 story, 55 x 200 ft. brick, steel and stone, plain foundation, here. $300,000. W. H. Cooksman, Broad St. Sta., Phila., archt.

Buildings (Continued)

Pa., Nanticoke — Orphanage — Scranton Diocese Polish Catholics having plans prepared by A. I. Prawdzik, archt., Scranton (street address not available), brick, concrete blocks and steel, at Sheatown near here. $150,000.

Pa., Phila.—Hospital—A. H. Brockie, archt., 254 South 15th St., soon takes bids 3 story, stone, Penn and Chelten Aves., for Germantown Hospital, Penn and Chew Sts. $250,000.

Pa., Phila.—Office and Store—S. T. Freeman, 1519 Chestnut St., soon takes bids 6 story and basement, rein.-con., brick, steel and stone, 1808-10 Chestnut St. $750,000. Tilden & Register, 1525 Locust St. archts.

D. C., Wash.—Apartment—M. Cafritz, 913 15th St., N.W., having plans prepared by H. E. Warwick, archt., 1108 16th St., apartment and garage, 19th and N Sts., N.W. $1,000,000.

D. C., Wash.—Apartment-Hotel—William Penn Hotel Co. plans apartment-hotel, 13th St. and Massachusetts Ave. $1,000,000. M. G. Lepley, 1402 H St., N.W., archt.

Ky., Louisville—Club—Pendennis Club, 324 West Winter St., plans 5 or 9 story, brick and steel. $1,000,000. B. B. Davis, Norton Bldg., archt. and engr.

Ky., Louisville—Temple—Kosairs having plans prepared by Joseph & Joseph, archts. and engrs., Francis Bldg., 6 story, 200 x 250 ft., East Bway. $1,250,000.

O., Akron—Bank and Office—Akron Saving & Loan Co., c/o A. Hopkins, archt. and engr., 101 Park Ave., New York City, having plans prepared 21 story, brick, steel and stone, plain foundation, here.

O., Akron—High School—Bd. Educ. having plans prepared by M. M. Karnoski, 102 South Union St., 2 story and basement, brick, steel and concrete, Brown and Archwood Aves. $750,000.

O., Cincinnati—Office—Western & Southern Life Insurance Co., 4th St. and Bway., having plans prepared by H. Hake, Telephone Bldg., 12 story, 90 x 94 ft., rein.-con., plain foundation. $600,000.

O., Cleveland—Theatre and Dance Hall—Miles Theatre Co., East 9th St. and Prospect Ave., plans 2 story, brick, steel and concrete. $500,000. C. H. Miles, pres. C. Howard Crane, 542 Griswold St., Detroit, Mich., archt.

O., Cleveland Heights (Warrensville P. O.)—Apartment—Heights-Fairmount Co., c/o G. W. Hale, 627 Hanna Annex, Cleveland, having plans prepared by H. T. Jeffrey, 627 Hanna Bldg., Cleveland, 6 story and basement, 120,000 sq.ft. floor space, brick, steel and concrete, Cedar Rd. and Fairmount Blvd., here. $750,000.

O., Dayton—Bank—Third National Bank, East 3rd St., having revised plans prepared by Schenck & Williams, Mutual Home Bldg., 2 story and basement, steel, stone and tile, plain foundation, North Main St. $500,000.

O., Marysville—Cottages—See "Industrial Works."

O., Mt. Vernon—Memorial and Auditorium—Memorial Comn. had plans prepared by Richards, McCarty & Bulford, 584 East Broad St., Columbus, and soon takes bids 3 story and basement, 38 x 91 ft. memorial and 64 x 122 ft. auditorium. $200,000. Noted Nov. 2.

Mich., Detroit—Community—R. F. Darnell, 4505 Seebaldt Ave., having plans prepared by Beckett & Akitt, 73 Monroe Ave., 4 story and basement, 100 x 200 ft. rein.-con., brick and steel, plain foundation, Grand River Ave. $500,000.

Mich., East Lansing—Church—W. E. N. Hunter, archt., Washington Blvd., Detroit, takes bids about July 1, 2 story and basement, 120 x 140 ft., rein.-con., brick and stone, plain foundation, for Peoples Church. $200,000.

Ill., Chicago—Apartment—W. H. McKillip, c/o R. [illegible] Hyde, archt., 8 South Dearborn St., plans 10 story, 100 x 150 ft., rein.-con., brick and steel, Sheridan Ave. and Berwyn St. $1,250,000.

Wis., Mt. Horeb—Theatre and Store—A. J. Bakken having plans prepared 2 story and basement, 48 x 125 ft., brick, rein.-con and steel, plain foundation. Private plans.

Ia., Des Moines — Schools — Bd. Educ. plans several grade schools, $500,000, Vorse, Kraetsch & Kraetsch, S. and L. Bldg., archts.; 1 grade school, $75,000, B. Higgins, 420 Securities Bldg., archt.; one grade school, $75,000, R. Liebsle, 1270 East 9th St., archt.; 1 junior high, East 14th and University Ave., $500,000, Proudfoot, Bird & Rawson, Hubbell Bldg., archts.; 1 junior high, Ovid and Cornell Sts., $200,000, Boyd & Moore, Fine Arts Bldg., archts. G. L. Garton, secy. Noted Apr. 5.

Kan., Ottawa — High School — Election soon to vote for $546,000 bond issue for high school and miscellaneous improvements. Engineer and architect not selected.

Kan., Sabetha—Hospital—St. Anthony Hospital had plans prepared by C. A. Smith, 109½ Santa Fe Ave., Salina, 3 story and basement, 44 x 140 ft., rein.-con. and brick addition. $150,000.

Kan., Topeka — Auditorium — City had plans prepared by T. W. Williamson & Co., 312 Central National Bank Bldg., 2 story and basement, rein.-con. and brick. $175,000.

Kan., Wichita — Home — Sisters of St. Joseph, 530 North Market St., plan 4 story, 40 x 120 ft. $150,000. Engineer and architect not selected.

Kan., Wichita—Temple—Scottish Rite Masonic Assn. having plans prepared by Eberson & Weaver, Orpheum Bldg., 6 story and basement, 75 x 140 ft., rein.-con., brick and terra cotta, Market and William Sts., $400,000.

Mo., Hillcrest (Rill P. O.)—Seminary—Concordio Seminary Assn., South Jefferson Ave., St. Louis, had plans prepared by Day & Klauder, Franklin Bank Bldg., Phila., twenty 2 and 3 story buildings on 71 acre tract, near here. To exceed $2,000,000.

Mo., Kansas City—Theatre and Store—Watson-Roth Building & Investment Co., c/o Iris Theatre Bldg., 31st St. and Troost Ave., having preliminary plans prepared by C. Boller & Bro., 508 Ridge Bldg., 2 story, basement and balcony, 133 x 250 ft., rein.-con., brick, steel and terra cotta, Troost Ave. near 47th St. $400,000.

Mo., St. Louis—Office—Syndicate, c/o Hewson Realty Co., archts., Wainwright Bldg., had plans prepared 6 story, 54 x 152 ft., rein.-con. and brick, plain foundation, Olive St. $250,000.

Mo., St. Louis—School—St. Anthony Catholic Parish, Meramec St. near Compton St., soon lets contract 3 story, 75 x 140 ft., rein.-con. and brick, plain foundation, incl. athletic field, Meramec St. $200,000. Private plans.

Tex., Dallas—School—Voted $1,000,000 bond issue for schools. G. D. Fairtrace, city engr.

Tex., Galveston—Club and Office—Y. W. C. A., 707 23rd St., takes bids between Apr. 25 and May 10, 3 story, 150 ft. front, concrete and tile, 21st St. and Ave. G. $150,000. W. W. Watkins, Scanlan Bldg., Houston, archt. and engr.

Tex., San Antonio — Hospital — Baptist Church having plans prepared by W. H. Noonan, Moore Bldg., and takes bids within 80 days, 3 story wing. $250,000. Noted Sept. 7.

Tex., San Antonio—Office—Travis & St. Mary Co. having plans prepared by W. E. Simpson, engr., National Bank Commerce Bldg., and Phelps & Dewees, archts. Gunter Bldg., 10 story, 70 x 110 ft., rein.-con. and brick, Travis and St. Marys Sts. $250,000.

Okla., Chickasha — School — Bd. Educ. having preliminary plans prepared by Hawk & Parr, 101 Magnolia Bldg., Oklahoma City, rein.-con., stone and brick addition. $175,000. Noted Feb. 22.

Okla., Shawnee—Temple—Masonic Lodge plans 5 story and basement, 100 x 140 ft., rein.-con., brick and stone. $300,000. U. S. Hart, member building com. Engineer and architect not selected.

Wash., Seattle—Apartment—H. Reinerstein, University Commercial Club, plans 4 story, brick and terra cotta, East 42nd and Brooklyn Sts. $160,000.

Wash., Tacoma—School—Election May 8, to vote on $2,400,000 bonds for new school buildings. Address School Bd.

Ore., Astoria — Club — C. T. Diamond, archt., Astoria, takes bids about June 3, 4 story and basement, rein.-con., 11th and Exchange Sts., for Elks' Club, F. C. Clinton, secy. $200,000.

Calif., Alameda—High School—Alameda High School Dist. to vote on $750,000 bonds high school, 74 classrooms, auditorium and gymnasium. Engineer and architect not selected.

Calif., Fresno—Hotel and Store—Shepherd & Teague, c/o B. G. McDougall, archt., 381 Bush St., San Francisco, having plans prepared 5 story, rein.-con., Inyo and J Sts. $350,000.

Calif., Huntington Park — Hotel—W. M. Brooks, 1315 South Flower St., (representing owner) plans 225 rooms, probably 6 story and basement, rein.-con. To exceed $150,000. Engineer and architect not selected.

Calif., Los Angeles—Administration—See "Industrial Works."

Calif., Los Angeles—Hall and Hospital—Los Angeles Co. plans to vote on $2,000,000 bonds for hall of justice, which will include county jail; $5,000,000 bonds for additions to county hospital group.

Calif., Los Angeles—Office—R. Garvey, et al., c/o E. Bergstrom, archt., Citizens' Natl. Bank Bldg., having plans prepared 14 story and basement, brick and steel, Bway. near 2nd St.

Calif., Los Angeles—Store and Office—R. Stern, c/o E. M. Frazier, archt., 2401 West 6th St., had plans prepared 18 story and basement, rein.-con., Hollywood and Vine Sts. To exceed $500,000.

Calif., Marysville—Hotel—W. C. Lowe, archt., Monadnock Bldg., San Francisco, preparing preliminary plans 6 story and basement, rein.-con. $300,000. Owner's name withheld.

Calif., Oakland—Apartment—R. F. Bancroft and F. H. Slocombe, archts., St. Marks Hotel, preparing plans 8 story and basement, rein.-con. $150,000. Owner's name withheld.

Calif., Oakland—Store and Office—Franklin Investment Co., c/o E. T. Foulkes, archt., Crocker Bldg., San Francisco, having plans prepared 3 story and basement, rein.-con., Franklin St. near 15th St. $150,000.

Calif., Palms—Sanitarium—Porter Milk Diet Sanitarium, 767 Sunrise Blvd., Long Beach, had plans prepared group of buildings, incl. main sanitarium, cottage, etc., mostly frame construction, here. To exceed $150,000.

Calif., Pasadena—Theatre and Store—Community Theatre Assn. having plans prepared by E. Grey, Bank of Italy Bldg., Los Angeles, and Littleton Co., 608 East Colorado St., Pasadena, rein.-con. To exceed $150,000.

Calif., Riverside—School—Soon takes bids 2 story and basement, home economics building, brick Terracina Dr. $150,000. G. S. Wilson, 646 West 9th St., archt. Noted Mar. 1.

Calif., Sacramento—Office—C. Leroy, et al., 908 7th St., plans 7 story, fireproof, 7th St. near J St. $250,000. Engineer and architect not selected.

Calif., San Diego—Convention Hall, etc.—See "Miscellaneous."

Calif., San Francisco — Church — St. Domonics Church soon takes bids rein.-con., steel and terra cotta, Bush and Steiner Sts. $500,000. L. Beezer, 1915 Steiner St., archt. P. Zucco, 166 Geary St., engr.

Calif., San Pedro—Hotel—R. Falkenrath, archt., 412 Baker-Detwiler Bldg., Los Angeles, preparing plans rein.-con., 400 rooms, probably 4 story. Owners name withheld.

Calif., Santa Barbara—Orphanage—St. Vincent's Orphanage, having plans prepared by Soule, Murphy & Hastings, 1206 State St., orphanage, power house and laundry. To exceed $250,000.

Calif., Santa Barbara — Schools — Bd. Educ. soon takes bids Washington and Franklin Schools, $200,000 available. Soule, Hastings and Murphy, 1206 South State St., archts.

Ont., Brantford — Mausoleum — Canada Mausoleum Co., Brantford, plans 400 crypt mausoleum, concrete and stone, in Mount Hope Cemetery. $150,000.

Ont., Kitchener—Hospital—Sisters of St. Joseph, A. L. Zinger, 57 Duke St., chn. building com., raising $300,000 for 3 story and basement, brick. Engineer and architect not appointed.

Ont., St. Thomas—Hospital—City having plans prepared by Darrach & Findlay, 430 Talbot St., and soon takes bids 2 or 3 story and basement, concrete, brick and steel memorial hospital. $150,000. W. B. Doherty, city clk.

Ont., Toronto—Church—Danforth Ave. Methodist Church having plans prepared by G. H. Miller & Co., 93 Yonge St., 1 story, brick, steel and stone. $150,000.

Ont., Toronto—Church—Church of the Holy Name, M. Cline, rector, 9 Morcow Ave., having plans prepared by A. W. Holmes, 79 St. Joseph St., 1 story and basement, brick, or brick and stone. $200,000.

Ont., Toronto—Church—St. Peters Roman Catholic Church, 643 Markham St., having plans prepared by J. P. Hynes, 73 King St. W., 1 story and basement, brick and stone. $500,000.

Ont., Toronto—Hospital—City having plans prepared by W. Price, city archt., and will soon take bids 3 story, concrete, brick and steel, Surrey Pl. $400,000.

Ont., Toronto—Hospital—Salvation Army, 20 Albert St., plans brick hospital, concrete foundation, probably 3 story. $200,000. Engineer and architect not selected.

Ont., Toronto—Office—Canadian National Rys., New Union Sta., plans 25 or more stories and basement, 100 x 140 ft., rein.-con., brick, steel and stone, King and Yonge Sts. $2,000,000. A. F. Stewart, 407 Old Union Sta., ch. engr.

Ont., Toronto—School—Bd. Educ., 155 College St., having sketches made by C. Dyson, 155 College St., 2 or 3 story, concrete, brick and steel, in Ward 4. $500,000.

Ont., Toronto—School—Separate School Bd., 477 Jarvis St., had plans prepared by J. M. Cowan, 911 Bay St., 2 story and basement, 8 room, concrete and brick. $150,000.

Buildings (Continued)

BIDS DESIRED

Mass., Lawrence—City Hall—Apr. 16, by Pub. Wks. Dept., concrete and brick. $300,000. Adams & Brown, engrs., Lawrence, Mass. Noted Feb. 1.

Conn., Stamford — Bank — Apr. 16, by Fidelity Title & Trust Co., 3 story, 45 x 111 ft., brick, plain foundation,, Atlantic St. $150,000. H. L. Walker, 144 East 54th St., New York City, engr.

Conn., Waterbury—Church—Apr. 21, by S. Blojejowski, pastor St. Stanislaus Roman Catholic Church, 80 x 120 ft., brick and artificial stone, plain foundation, East Farms. $150,000. L. A. Walsh, 51 Leavenworth St., archt.

N. Y., Newburgh—Bank and Office—Weary & Alford, archts, 1923 Calumet Ave., Chicago, taking bids 3 story, 60 x 160 ft., rein.-con., brick and steel, here, for Newburgh Savings Bank, 38 Smith St. $500,000.

N. Y., New York—Apartment Hotel—E. Margolies, 19 East 33rd St., will build 12 story, brick, steel and stone, plain foundation, 47th St. and 5th Ave. $1,000,000. Work will be done by separate contracts. Private plans.

N. Y., New York—Loft—G. Backer, Inc., 295 5th Ave., will build 12 story, brick, steel and stone, plain foundation, West 47th St. Work will be done by separate contracts. Private plans.

N. Y., Watertown—Business—Apr. 23, by D. D. Kieff, archt., Flower Bldg., brick, concrete and steel, Public Sq., for F. A. Empsall, 126 Flower Ave. To exceed $200,000.

N. J., Haddon Heights—High School—Apr. 17, by Bd. Educ., 3 story, 75 x 236 ft. and 55 x 77 ft., rein.-con., brick and steel, plain foundation. $550,000. C. R. Peddle, 129 South 4th St., Phila., archt. Noted Dec. 7.

N. J., Lakewood—School—Apr. 26, by Bd. Educ., 2 story and basement, 140 x 180 ft. school. Guilbert & Betelle, 546 Broad St., Newark, engrs.

N. J., Newark — Church — Apr. 16, by N. J. Convery, archt., 942 Broad St., brick and stone, plain foundation, Abington Ave. and 7th St., for St. Francis Xavier Church, c/o architect. $400,000.

N. J., Trenton—Bank—Apr. 16, by A. C. Bossom, archt., 680 5th Ave., New York City, 14 story, 76 x 149 ft., brick, steel and concrete, West State St., here, for Trenton Trust Co., State St. and Chancery Lane. $800,000. Noted Jan. 11.

Pa., Erie—Apr. 16, by Y.W.C.A., 134 East 44th St., New York City, 3 story, brick, steel and stone, plain foundation, West 8th St., here. $200,000. W. F. Thompson, 342 Madison Ave., New York City, archt. and engr. Noted Mar. 29.

Pa., Indiana—Church—First Methodist Episcopal Church taking bids 1 story, 80 x 110 ft. with 40 x 40 ft. wing. $250,000. J. T. Simpson, 620 Essex Bldg., Newark, N. J., archt.

Pa., Phila.—Church—Lachman & Murphy, archts., Drexel Bldg., taking bids 2 story and basement, brick, steel and stone, plain foundation, 70th and Woodland Aves., for Siloam Methodist Church. $170,000.

Pa., Phila. — Clubhouse — T. B. Epps, archt., 101 Tremont St., Boston, taking bids 3 and 4 story, 21 x 103 ft. and 24 x 36 ft. brick, steel and stone, plain foundation, 3706 Locust St., here, for Kappa Sigma Fraternity, c/o W. L. Blithe, 608 Chestnut St. $250,000.

Pa., Swarthmore — High School — Bd. Educ. taking bids 2½ story and basement, 66 x 106 ft. and 60 x 98 ft. rein.-con., brick and steel, plain foundation. $250,000. Simon & Simon, 249 South Juniper St., Phila., archts.

W. Va., Morgantown—Chemistry—June 1, by State Bd. Control, Charleston, 4 story and basement, here. J. S. Lakin, Charleston, pres. P. A. Davis, 3rd and Dunlap Sts., Phila., archts.; adv. this issue.

La., Baton Rouge—Administration—Apr. 20, by Building Comn. Louisiana State University, two 1 story, 50 x 100 ft. administration buildings, also Boyd Memorial Hall and Academic Law Building, both 2 story, 54 x 103 ft. $500,000. T. Link, Baton Rouge, state archt.

O., Canton—Store—Stern-Mann Co., Market Ave. N, taking bids and opens same about Apr. 20, 2 and 3 story, 33 x 200 ft., brick, steel and concrete addition. $150,000. A. Garfield, National City Bldg., Cleveland, archt. Noted Jan. 18.

O., Cleveland Heights (Warrensville, P. O.)—Apartment—F. Koslen, 2857 Mayfield Rd., taking bids 3 story and basement, 88 x 97 ft., brick and timber, plain foundation, 2104 Lennox Rd. $160,000. M. Weis, 617 Union Bldg., Cleveland, archt. Noted Feb. 22.

O., Lakewood (Cleveland P. O.)—Library—Apr. 24, by Lakewood Library Bd., c/o G. W. Grill, secy., 15425 Detroit Ave., 2 story, brick, steel and concrete addition. $150,000. C. W. Hopkinson, Rose Bldg., Cleveland, archt. Noted Nov. 30.

Mich., Detroit—Apartment—Apr. 20, by F. E. Hill, archt., 711 Empire Bldg., 4 story and basement, 85 x 106 ft. brick, steel and stone, plain foundation, East Grand Blvd., for C. French, c/o archt. $175,000.

Mich., Lapeer—School—Apr. 17, by A. C. Holland, secy. Bd. Educ., 2 story and basement, rein.-con., brick and steel. $150,000. R. A. Leroy, Pratt Bldg., Kalamazoo, archt.

Ill., Chicago—Apartment—P. Ferrone, c/o Consolidated Builders, 10 South Waller Ave., receiving bids 3 story, 75 x 120 ft., rein.-con., brick and steel, 5300-06 West Van Buren St. $150,000. A. V. Capraro, 64 West Randolph St., archt.

Ill., Chicago—Apartment—Lindstrom & Johnson, 30 North Dearborn St., receiving bids 3 story, 130 x 225 ft., rein.-con., brick and steel, 4627-37 Drexel Blvd. $500,000. A. Sandegren, 116 East Oak St., archt.

Ill., Chicago—Apartment—P. F. Olsen, archt., 720 Cass St., receiving bids 3 story and basement, 103 x 192 ft., rein.-con., brick and steel, Talman St. and Blaine Pl. $250,000. Owner's name withheld.

Ill., Chicago—Apartment—C. J. Ringbloom, 1110 West 8th St., receiving bids 3 story, 106 x 124 ft., rein.-con., brick and steel, 2208-16 East 70th St. $150,000. P. F. Olsen, 720 Cass St., archt.

Wis., Appleton — Temple — Apr. 20, by Appleton Masonic Temple Assn., and Leenhouts & Guthrie, archts., 424 Jefferson St., Milwaukee, 2 and 3 story, 62 x 100 ft. and 46 x 50 ft., stone and concrete, plain foundation. $15,000. Noted Feb. 8.

Wis., Madison—Store and Apartment—M. A. Allison, 315 Beaver Bldg., taking bids 4 story, 75 x 190 ft., brick, rein.-con. and steel, plain foundation. $150,000. R. A. Phillips, 315 Beaver Bldg., archt. Noted Dec. 28.

Wis., Madison—Store—F. Riley, archt., Conklin Bldg., taking bids 4 story, 60 x 155 ft., brick, rein.-con. and steel, plain foundation, State and Fairchild Sts. for Kessinicks Co., 26 North Carroll St. Noted Feb. 1.

Wis., Madison—Temple—Masonic Lodge, c/o J. S. Mack, Capitol Bldg. and J. R. and E. J. Law, archts., First Central Bldg., taking bids 3 story, 110 x 132 ft., brick, rein.-con. and steel. $400,000.

Ia., West Union—Court House—Apr. 26, by Fayette Co., 3 story and basement, 90 x 116 ft., rein.-con., brick, tile and stone. $250,000. C. F. Chambers, aud. J. G. Ralston, L. and J. Bldg., Waterloo, archt. Former bids rejected. Noted Mar. 22.

Calif., San Francisco—Apartment—F. W. Quandt, archt., Monadnock Bldg., receiving bids 10 story and basement, rein.-con., Bway. near Octavia St., for The Heights, Inc., c/o R. Whitney, Monadnock Bldg. $200,000.

BIDS RECEIVED

N. Y., Penn Yan—Hospital—Building Com. of Soldiers' & Sailors' Hospital, 39 x 117 ft., brick, concrete and steel, from Marshall & Co., Syracuse (street address not available) $145,000; Williamson & Co., 357 East 5th St., Elmira, $147,000; B. H. Rogers, Penn Yan, $149,264; A. Friederich & Sons Co., 710 Lake Ave., Rochester, $113,598, not incl. steam heating, plumbing and electrical work. Noted Feb. 8.

N. J., Morris Plains—Dining Hall and Kitchen—B. G. Lewis, comr. Institutions and Agencies, State House, Trenton, Apr. 2, general contract 4 story, 45 x 170 ft., brick, concrete and steel, here, from Gibbs-Mueller Co., Heyman Bldg., Phila., $274,277; Wills-Bill Co., 1708 Samson St., Phila., $274,947, for State Hospital for Insane. Archts. est. $216,000. Noted Mar. 15.

Pa., Phila.—School—Bd. Educ., 19th and Chestnut Sts., Apr. 5, 3 story, rein.-con., brick and steel, plain foundation, 17th and Moyamensing Aves., from W. R. Dougherty & Co., 1516 Sansom St., $486,471; Cramp & Co., Denckla Bldg., $493,600; Sinclair & Griggs, Medical Arts Bldg., $497,774.

O., Lakewood (Cleveland P. O.)—Schools—Bd. Educ., Mar. 31, 2 story and basement, 48 x 123 ft., brick, steel and concrete addition to Roosevelt School, Athens Ave., from J. Grant & Son, 4500 Euclid Ave., Cleveland, $106,270, Schrader Constr. Co., 1640 East 40th St., Cleveland, $109,200, G. H. Moehlman, Norwalk, $110,710; 2 story and basement, 68 x 123 ft., brick, steel and concrete addition, to Harrison School, plain foundation, 2079 Dowd Ave., from Schirmer O'Hara Co., 2031 Euclid Ave., Cleveland, $147,785; J. Grant & Son, 4500 Euclid Ave., Cleveland, $150,963, H. F. Juergens Co., Lake Dr., $154,800. Noted Mar. 22.

O., Medina—High School—Bd. Educ., Mar. 31, 2 story and basement, 99 x 183 ft., brick, steel and concrete, from C. C. Hursh, Kenmore, $231,000; V. W. Surber, 314 Everett Bldg., Akron, $233,000. Archts. est. $210,000. Noted Mar. 29.

Wis., Bend—High School—Bd. Educ., brick, rein.-con. and steel, from B. Beauregard, 3rd St., De Pere, $198,840; A. Nielson Co., Neenah, $199,700; H. J. Sellmer Co., McCartney Bank Bldg., Green Bay, $205,100. Archts. est. $200,000.

Wis., West Bend—High School—School Bd., Mar. 27, 2 story and basement, brick, tile and concrete, plain foundation, from B. Beauregard, 3rd St., De Pere, $198,840; H. J. Sellmer Co., McCartney National Bank Bldg., Green Bay $205,100; A. Nielson Co., 702 South Commercial, Neenah, $199,700. Noted Mar. 8.

Calif., Alameda—Apartment—L. Kalisky, c/o A. A. Cantin, archt., 68 Post St., San Francisco, 3 story, rein.-con., Grand and Central Aves., general contract from J. Morton, Balboa Bldg., San Francisco, $151,582; H. P. Nelson, 1947 Blake St., Oakland, $153,650; Larsen-Siegrist Co., 180 Jessie St., San Francisco, $153,697. Noted Mar. 15.

Calif., Los Angeles—Office and Store—Owl Drug Co., 601 South Bway., 2 story, 71 x 172 ft., with 65 x 72 ft. wing, 7th and Alvarado Sts., from Barrett & Hilp, 918 Harrison St., San Francisco, $150,000.

Calif., Torrance—High School—Torrance High School Dist., 1 story, 56 x 116 ft. auditorium, 1 story, 62 x 123 ft. shop and 9 room addition to high school, from Darrell-Condley Co., Marsh-Strong Bldg., Los Angeles, $152,000; Clark & Libby, 5117 Hollywood Blvd., Los Angeles, $162,500; J. Simpson Co., 701 Antonio Ave., Los Angeles, $164,800. Noted Mar. 22, under "Los Angeles."

CONTRACTS AWARDED

N. Y., Brooklyn—School—W. H. Gompert, archt. and engr., Flatbush Ave. extension and Concord St., P. S. 190, brick, steel and stone, plain foundation, Sheffield Ave., to T. A. Clarke Co., Livingston St., $637,300. Noted Mar. 29.

N. Y., New York—Apartment—K. Acker, c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 5 story, 70 x 100 ft., brick, steel and stone, plain foundation, Burnside and Grand Aves., by day labor. $225,000.

N. Y., New York—Apartment—W. E. Bergen, c/o C. S. Clark, archt., 443 East Tremont Ave., will build 6 story, 100 x 135 ft., brick, steel and stone, plain foundation, Andrews Ave., by day labor.

N. Y., New York — Apartment — Concourse Impvt. Co., c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 5 story, 95 x 101 ft., brick, steel and stone, plain foundation, 168th St. and Grand Concourse, by day labor.

N. Y., New York—Apartment—J. Kovacs, c/o C. Kreymberg, archt. and engr., 2534 Marion Ave., will build 5 story, 90 x 105 ft. brick, steel and stone, plain foundation, Sedgwick Ave. near Townsend Ave., by day labor. $225,000.

N. Y., New York—Apartment—Dunca Realty Co., c/o J. J. Runnigan, archt. and engr., 394 East 150th St., will build 5 story, 90 x 115 ft., brick, steel and stone, plain foundation, Andrews and Burnside Aves., by day labor. $200,000.

N. Y., New York—Apartments—A. Stockinger, c/o Goldner & Goldner, archts. and engrs., 47 West 42nd St., two 6 story, brick, steel and stone, plain foundations, Grand Concourse, by day labor. $175,000 each.

N. Y., New York—Apartment—Universal Finance Co., Inc., c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 100 x 125 ft., brick, steel and stone, plain foundation, Grand Concourse near 199th St., by day labor. $250,000.

N. Y., New York — Office — Syndicate headed by A. Pottier, c/o Buchman & Kahn, archts. and engrs., 49 West 45th St., brick, steel and stone, plain foundation, 489-491 5th Ave., to G. Richard Davis, 30 East 42nd St. Archts. est. $500,000.

N. Y., New York — Schools — W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, P. S. 72, East 104th St., to Blenton Building Corp., 342 Madison Ave., $616,200; P. S. 121, East 103rd St. and 2nd Ave., to M. F. Kelly Co., Inc., 51 East 42nd St., $438,945; P. S. 6, East Tremont Ave., to C. Meads & Co., 217 West 14th St., $171,100; P. S. 11, West 21st St. and 8th Ave., to G. Dekempe, $808,800, all brick, steel and stone, plain foundations. Noted Mar. 29 and Apr. 5.

Pa., Braddock—Bank—W. L. Stoddart, archt. and engr., 9 East 40th St., New York City, 4 story and basement, 50 x 120 ft. concrete, brick and steel, to Hunkin-Conkey Constr. Co., Century Bldg., Cleveland, O., for 1st Natl. Bank. Archts. est. $250,000. Noted Feb. 15.

Pa., Chester—Bank and Office—Cambridge Trust Co., 5th and Market Sts., 3 story and basement, 75 x 75 ft. brick and steel, plain foundation, to Chester Contg. & Constr. Co., Chester. Archts. est. $275,000. Noted Aug. 24.

Pa., Jeanette—Church—C. G. Strong, archt., Union Bank Bldg., Pittsburgh, 1

Buildings (Continued)

story and basement, 86 x 156 ft., 7th St., to E. Wehr, Hiland Bldg., Pittsburgh, for Sacred Heart Catholic Congregation. Archts. est. $150,000. Noted Mar. 8.

Pa., Johnstown—Church and Parsonage—Trinity Evangelical Church, Willow St., concrete, brick and foundation work for 2 story and basement, 90 x 100 ft. church and parsonage, to Thiele Constr. Co., 823-32 Pine St.; plumbing and heating to Paul Plumbing & Heating Co., Johnstown. Archts. est. $150,000. Noted Mar. 8.

Pa., New Castle—School—Bd. Educ., 2 story and basement, 111 x 138 ft. brick and steel, Rose and Ryan Sts., general contract to A. Wishart & Sons Co., 20 Silver St., Sharon, $145,748. Noted Dec. 14.

Pa., Phila.—City Hall—F. H. Caven, dir. pub. wks., City Hall, 3 story and basement, 87 x 122 ft. concrete, brick and steel, plain foundation, Germantown Ave. and Haines St., to Mitchell-Houseworth Co. Inc., 2512 North 27th St., $323,413. Noted Mar. 8.

Pa., Philadelphia — Clubhouse — Girard Craftsmen Club, 2102 Chestnut St., 7 story and basement, 60x161 ft. rein.-con., brick and steel, 2025-2029 Chestnut St., to J. B. Hallahan, 2315 Walnut St., $800,000. Noted March 22.

Pa., Philadelphia—Loft—Kraftstow & Titleman, Juniper and Vine Sts., 7 story and basement, 74x190 ft. and 45x73 ft. rein-con., brick and steel, plain foundation, 33rd and Arch Sts., to W. R. Dougherty & Co., 1610 Sansom St., $300,000.

Pa., Philadelphia.—Store and Office—Oppenheim, Collins Co., 1207 Chestnut St., 6 story, basement and sub basement, 48x 230 ft. rein. con., brick and steel, 1126 Chestnut St., to C. A. Cowen & Co., 30 East 42nd St., New York City. Noted Jan. 18.

Pa., Susquehanna—School—Bldg. Com. St. Johns Parish, 71-157 ft. concrete, brick and steel, to A. E. Badgley, Stone O. P. H. Bldg., Binghamton, N. Y., $138,000.

Va., Roanoke—High School—Bd. Educ., 2 story and basement, 151 x 294 ft., to E. M. Herringdon & Co., Roanoke, $476,011.

W. Va., Charleston — Hotel — Federal Hotel Co. Inc., 13 story and basement, 135 x 147 ft., stone, brick, steel and terra cotta, Dunbar and Kanawha Sts., to Ring-Hartman Co. Inc., 304-6 Pearson Bldg. Archts. est. $2,000,000. Noted Apr. 5.

O., Arcanum—School—Bd. Educ., 2 story and basement, 65 x 220 ft., brick and concrete, to Dwyer Bros. Constr. Co., Greenville, $164,539. Noted Apr. 5.

O., Cleveland — Sales — W. S. Ferguson Co., archts., 1900 Euclid Ave., 3 story, 62 x 160 ft., brick and rein.-con., salesroom and auto service building, 2,000 Euclid Ave., to M. B. Parker Constr. Co., Union Bldg., for Studebaker Sales Co. of America, 2020 Euclid Ave. Archts. est. $200,000. Noted Mar. 1.

O., Lorain — Clubhouse — P. Rissman, archt., Lorain, 6 story, 65 x 130 ft., brick, steel and concrete addition, Bway., to L. A. Burgett Co., Lorain, for F.O.E., c/o P. Cook, chn. building com. Archts. est. $200,000. Noted Feb. 15.

O., Toledo—Church—St. Pauls Lutheran Church, 1 story and basement, brick, steel and stone, to Bierkebiele & Sons, 528 South St. Clair St. Archts. est. $300,000. Noted Feb. 8.

Mich., Detroit—Apartment—Homer Warren & Co., 1227 Detroit Savings Bank Bldg., 4 story and basement, 130 x 150 ft. rein.-con., brick and steel, plain foundation, Dumbarton Rd., to K. Palman, 4712 West Warren Ave. Archts. est. $450,000.

Mich., Hamtramck (Detroit P. O.)—School—Bd. Educ., 2 story and basement, 70 x 200 ft. rein.-con., brick and steel, plain foundation, to W. H. Mueller, 1711 Ford Bldg., Detroit, $250,000.

Mich., Pontiac—Temple—Masonic Temple Assn., 3 story and basement, rein.-con., brick and steel, plain foundation, to Natl. Constr. Co., 1031 Dime Bank Bldg., Detroit. Archts. est. $350,000. Noted Dec. 21.

Ill., Chicago—Apartment—W. Goldblatt, 127 North Dearborn St., 2 story and basement, 80 x 133 ft., rein.-con., brick and steel, 7332-44 Jeffery Ave., to J. McHugh, 7033 South Morgan St. Archts. est. $200,000.

Ill., Chicago—Apartment—F. A. Johnson, 14 North Mayfield St., 3 story, 96 x 124 ft., rein.-con., brick and steel, 4812-22 West Monroe St., to D. M. Reid, 140 South Dearborn St. Archts. est. $150,000.

Ill., Chicago—Church—First Austrian Congregation, 1913 Potomac Ave., 2 story, 65 x 125 ft., rein.-con., brick and steel, 1353-59 North California Ave., to Chicago Building Constr. Co., 447 North Kedzie Ave. Archts. est. $150,000. Noted Nov. 2.

Ill., Crystal Lake—School—Bd. Educ., 2 story, 200 x 200 ft., rein.-con., brick and steel, to Skoglund & Webberg, De Kalb, Archts. est. $200,000. Noted Feb. 8.

Ill., Evanston—Apartment—S. Johanson, c/o A. H. Quitsow, archt., 11 South La Salle St., Chicago, 3 story and basement, 94 x 156 ft., rein.-con., brick and steel, Sheridan Sq. and Keeney Ave., here, to J. Traff, 3960 North Robey St., Chicago. Archts. est. $215,000. Noted Mar. 22.

Wis., Milwaukee—Apartment—M. Routt, 265 25th St., 3 story and basement, 55 x 188 ft., brick, tile and concrete, plain foundation, Stowell Ave., to R. L. Reisinger & Co., 464 Oakland Ave. Archts. est. $150,000.

Wis., Milwaukee — Office — West Side Realty Co., 90 Mason St., 9 story and basement, 50 x 150 ft., 2nd St., to R. L. Riesinger & Co., 464 Oakland Ave. Archts. est. $300,000.

Wis., Milwaukee—School and Convent—St. Rose of Lima Congregation, 3007 Sycamore St., 3 story and basement, 100 x 180 ft. and 40 x 70 ft., brick, tile and concrete, plain foundation, Clybourn St., to Hutter Constr. Co., 128 Western Ave., Fond du Lac. Archts. est. $350,000. Noted Mar. 8.

Kan., Pittsburg—Temple—Mirza Temple A.A.O.N.M.S., 3 story and basement, 142 x 150 ft., rein.-con. and brick, to A. E. Todd & Son, Independence, $262,450. Noted Mar. 29.

Okla., Oklahoma City—Sales—A. C. Bennett, Criterion Theatre, 2 story, 100 x 140 ft., brick, 5th and Robinson Sts., to Gross Constr. Co., 619 West Main St., $150,000.

Calif., Los Angeles—Office—See "Industrial Works."

Calif., Los Angeles—Office—L. A. Morgan, c/o Walls & Morgan, archts., Van Nuys Bldg., 5 story and basement, rein.-con., office and warehouse, East 1st St., to Weymouth-Crowell Co., 2026 West 9th St., $175,000.

Calif., Los Angeles—Office—Southern California Telephone Co., 716 South Olive St., 4 story and basement, brick and steel, Adams and Hobart Sts., to K. R. Bradley, 1925 East 16th St., $175,000.

Calif., Los Angeles—Store—Bway. Dept. Store, 4th St. and Bway., 11 story and basement, concrete, brick and steel annex, 4th St. near Bway., to Weaver Constr. Co., Wright-Callendar Bldg., cost plus percentage basis.

Calif., Palo Alto—Dormitory—L. Stanford, Jr., University Junction (Palo Alto, P. O.), 2 and 3 story, rein.-con., here, to G. Wagner, 251 Kearny St., San Francisco, $450,000.

Calif., San Francisco—Apartment—D. J. Clancy, 2884 Folsom St., will build 6 story and basement, rein.-con., Jones St., by day labor, under supervision of Baumann & Jose, archts., 251 Kearny St. $150,000. Noted Dec. 21.

Calif., San Francisco—Office—See "Industrial Works."

Ont., Weston—School—Bd. Educ., 2-story and basement, concrete, brick and steel, to N. McLeod, Ltd., Kent Bldg., Toronto. Archts. est. $150,000. Noted Jan. 18.

Federal Government Work

PROPOSED WORK

Del., Wilmington—Bridges—U. S. Engineer, Wilmington, takes bids in May, six 115 ft. steel drawbridges, concrete foundations, over Delaware and Chesapeake Canal, between Delaware City, Del., and Chesapeake City, Md. E. I. Brown, dist. engr. Harrington, Howard & Ash, 1012 Baltimore Ave., Kansas City, Mo., consult. engrs. Noted Jan. 4.

Minn., St. Cloud — Tank — Spec. 4829—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans tank at U. S. Veterans' Hospital, here.

Minn., St. Cloud—Water System, etc.—Spec. 4830—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans water and sewerage system at U. S. Veterans' Hospital, here.

BIDS DESIRED

N. Y., New York—Dredging—May 11 at office U. S. Engineer, 2nd Dist., Army Bldg., dredging and rock removal in New York and New Jersey Channels; adv. this issue. Noted Mar. 15.

N. Y., Saratoga Springs—Boiler—May 8 by Treas. Dept., Wash., D. C., removing present boiler and installing new one in U. S. Post Office, here. J. A. Wetmore, acting superv. archt.; adv. this issue.

D. C., Anacostia — Laboratory — Spec. 4824—Apr. 25, by Bureau Yards & Docks, Navy Dept., Wash., D. C., photographic laboratory, here. Noted Mar. 29.

N. C., Oteen—Boilers—May 7, by Treas. Dept., Wash., D. C., removing 2 boilers, furnishing and installing 2 new horizontal return tubular boilers in U. S. Veterans Hospital, here. J. A. Wetmore, acting superv. archt.

Fla., Key West—Metal Work—May 12, by Superintendent of Lighthouses, Key West, metal work for repairing Sand Key Light Station; adv. this issue.

Ky., Louisville—Bear Trap Leaves—May 11, at office U. S. Engineer, bear trap leaves for Dam 44, Ohio River. Noted Mar. 22.

Minn., Mankato — Boilers — May 3, by Treas. Dept., Wash., D. C., horizontal smokeless boilers in U. S. Post Office and Court House, here; adv. this issue.

Nevada — Road — Apr. 24, by C. H. Sweetser, dist. engr. Bureau Pub. Rds., Mills Bldg., San Francisco, Calif., grading, surfacings, etc. 13.6 mi. Currant Creek Forest Rd., 36 mi. southwest Ely, Nye and White Pine Counties, 76,000 cu.yd. excav., 3,200 cu.yd. surfacing, etc.

Nevada — Road — Apr. 26, by C. H. Sweetser, dist. engr., U. S. Bureau Pub. Rds., Mills Bldg., San Francisco, Calif., grading and surfacing 16.5 mi. Austin East National Forest Highway, Lander Co., 80,000 cu.yd. excav., 17,150 cu.yd. surfacing, etc.

BIDS RECEIVED

N. Y., Ft. Lafayette (Brooklyn P. O.)—Roof—Spec. 4791—Bureau Yards & Docks, Navy Dept., Wash., D. C., magazine roof at Naval Ammunition depot, here, (1) work complete, from G. H. Cooper, 1674 Bway., New York (1) $9,340 (75 days) (2) add $700 (3) add $500; Donnell-Zane Co., 233 Bway., New York (1) $9,774 (120 days) (3) add $135 (outside only) add $260 (both sides); R. J. Mansfield, 53 Park Pl., New York (1) $11,342 (75 days) (2) add $500 (15 days) (3) add $250 (20 days).

Ky., Louisville—Piling—U. S. Engineer, P. O. Box 72, delivering 309 tons steel sheet piling for Dam 44, Ohio River, from Carnegie Steel Co., Carnegie Bldg., Pittsburgh, Pa., $0.0299 per lb. f.o.b. Pilcher (delayed delivery); Bethlehem Steel Co., Bethlehem, Pa., $0.03095 per lb. f.o.b. Pilcher. Noted Mar. 8.

Mo., Kansas City — Extension — Treas. Dept., Wash., D. C., extension 3, incl. mechanical equipment, U. S. Post Office and Court House, here, from W. R. Thurston Co., Merchants Natl. Bank Bldg., Richmond, Va., stone $323,000, granite $407,000; J. R. Vansant Constr. Co., 417 Dwight Bldg., granite $497,000; A. Blair, 11 South Lawrence St., Montgomery, Ala., stone $393,000, granite $506,000. Noted Mar. 1.

Calif., San Diego — Storehouse — Spec. 4770—Bureau Yards & Docks, Navy Dept., Wash., D. C., storehouse for paint and oil at Naval Base, here, (1) work complete, from De Waard & Cobham, 208 Grainger Bldg., (1) $21,700 (100 days) (2) $500 (3) $450 (4) $4,000 (5) $800; Union Constr. Co., foot of 14th St., Oakland, (1) $23,700 (90 days) (2) $600 (3) $400 (4) $3,760 (5) $900 alternate on concrete floors $0.30; Gutleben & Bros., 609 I. W. Hellman Bldg., Los Angeles (1) $24,000 (90 days) (2) $480 (3) $400 (4) $3,000 (5) $800, alternate $210 deduction for omitting second coat of paint on steel. Noted Apr. 5.

CONTRACTS AWARDED

R. I., Providence—Dredging—U. S. Engineer, Providence, maintenance dredging in Connecticut River, 70,000 cu.yd. scow measurement, to Hartford and New York Transportation Co., New Haven, Conn. (street address not available), $13,650. Noted Mar. 22.

N. Y., New York—Dredging, etc.—U. S. Engineer, Army Bldg., 39 Whitehall St., dredging and rock removal in East River, to Arundel Corp., 2 Pratt St., Baltimore, Md., $704,387. Noted Mar. 1.

Pa., Phila.—Fuel Oil—U. S. Engineer, 815 Witherspoon Bldg., furnishing 40,000 bbl. fuel oil for vessels in Phila., to Crew Levick Co., 111 North Broad St., $73,750. Noted Mar. 15.

Ind., Leavenworth—Gates—U. S. Engineer, Cincinnati, furnishing, delivering and erecting lock gates for Dam 44, Ohio River, here, to Nashville Bridge Co., Shelby Ave., Nashville, Tenn., $56,900. Noted Apr. 5 under "Cincinnati, O."

Tenn., Memphis—Tank and Tower—Mississippi River Dredging Dist. P. O. Box 1017, water tank and tower at U. S. Dredge Depot, here, to Dunbar & Sullivan Dredging Co., 2212 Dime Bank Bldg., Detroit, Mich., $90,311. Noted Mar. 1.

Mich., Detroit—Dredging—U. S. Engineer, 337 Federal Bldg., dredging in Rouge River, 193,300 cu.yd. excav., with miximum allowable overdepth of 18,200 sq.yd., to Dunbar & Sullivan Dredging Co., 2212 Dime Bank Bldg., $90,311. Noted Apr. 5.

Cuba, Guantanamo—Distilling Apparatus, etc.—Spec. 4769—Bureau Yards & Docks, Navy Dept., Wash., D. C., distilling apparatus and heater at Naval Station, here, to Wheeler Condenser and Eng. Co., Woodbridge Rd., Carteret, N. J. $25,657 (150 days). Noted Mar. 22.

Miscellaneous

PROPOSED WORK

Fire Alarm Signal System—Boston, Mass.—See "Buildings."

Beautifying Strandway—Dorchester (Boston P. O.), **Mass.**—Plans extending and beautifying Strandway, (waterfront boulevard). $500,000. J. A. Rourke, comr. pub. wks.

Park—Wallingford, Conn.—State Park & Reservation Comn., State House, Hartford, plans to buy land on Mt. Tom, here, and convert same into memorial park. $75,000. L. Robinson, 45 Forest St., Hartford, member of comn. Engineer not selected.

Transmission Line—New York—Adirondack Power & Light Corp., 511 State St., Schenectady, plans additional 18 mi. 3 phase high tension transmission line from Rotterdam distribution station to North Albany sub-station. $23,500 per mi.

Oil Storage Plant—Carthage, N. Y.—Northern Oil & Fuel Corp., 469 Coffeen St., Watertown, plans oil storage plant, incl. steel tanks, here. $25,000-$30,000. G. W. Lane, pres.

Steel—Flushing, N. Y.—Transit Comn., 49 Lafayette St., New York, withdrew bids, Apr. 2, furnishing and erecting structural steel for part of Rapid Transit R.R., Flushing Route. Noted Mar. 22.

Dyke—Lowville, N. Y.—See "Streets and Roads."

Elimination of Grade Crossings—Erie, Pa.—Plans to vote on $55,000 bonds (city's share), for eliminating grade crossings. F. G. Lynch, city engr.

Power Development—Carthage, N. C.—Smitherman Power Co., Troy, having surveys made power development and dams on Drowning Creek, Moore Co. Will ultimately build cotton mill along creek and its tributaries.

Granite Quarry—Rolesville (Wake Forest, P. O.), **N. C.**—Public Service Co., Terminal Bldg., Newark, N. J. plans development of large granite quarry, here, also several miles of railroad, stone crushers with output of 25 cars per day, etc. $1,000,000. T. N. McCarter, pres.

Transmission Line—Riverton (R. D. New Lebanon), **Ind.**—Indiana Power Co., 327 South La Salle St., Chicago, plans 3-phase 33,000-volt power transmission line across Wabash River at point near here, connecting Indiana Power Co. with Central Illinois Public Service Co., heavy design steel towers, concrete foundations, wires span 545 ft. J. N. Carnacan, secy. and managing engr.

Parks, etc.—Chicago, Ill.—Voted $2,000,000 to improve Grant Park, $2,000,000 for new parks and improving existing parks, $15,000,000 for lake front development, and $1,000,000 for lighting system on boulevards and parks. Address South Park Comrs., 57th St. and Cottage Grove Ave.

Hydro-Electric Development—Little Falls, Minn.—Little Falls Water Power Co. had plans prepared hydro-electric development, 2 dams in Mississippi River, and power house. $100,000. H. G. Stevens, secy.

Park Improvements—Dallas, Tex.—Voted $325,000 bonds park improvements. G. D. Fairtrace, city engr.

Grade Separation—Colorado—State Hy. Comn., Denver, appropriated $355,000 for grade separation, etc., in El Paso and Boulder Counties. L. D. Blauvelt, Denver, ch. engr.

Lighting System—Chandler, Ariz.—Plans election to vote on $40,000 bonds for lighting system.

Power Development—Millwood, Wash.—See "Industrial Works."

Power Development—California—H. L. Shannon, engr., 2730 Sacramento St., San Francisco, preparing preliminary plans power development in Tehama Co., incl. small concrete diversion dam, water to be carried through flume and ditch about 10 mi. to power house, developing 10,200 hp. $600,000. Owners name withheld.

Harbor Improvements—Monterey, Calif.—Plans election to vote on $200,000 bonds harbor improvements, dredging, fill, etc.

Amusement Resort—San Diego, Calif.—J. D. Spreckels, Union Bldg., plans amusement resort at Mission Beach, here, incl. large convention hall, pleasure pier, civic center, bath house, and electric car line from center of city. $2,000,000.

Telephone and Telegraph Extensions, etc.—Canada—Dominion Government, Parliament Bldg., Ottawa, Ont., voted $37,425 bonds for telephone and telegraph construction in Saskatchewan, Alberta and British Columbia, also $921,950 for miscellaneous public works. A. St. Laurent, Parliament Bldg., Ottawa, Ont., ch. pub. wks.

Grain Elevator—Goderich, Ont.—Western Canada Flour Mills, 293 McPherson Ave., Toronto, plans 750,000 bu. addition to grain elevator, rein.-con. $250,000.

BIDS DESIRED

Heating and Ventilating Systems—Albany, N. Y.—Bd. Contr. & Supply taking bids heating and ventilating systems in Schools 1, 3, 5, 6, 7, 8, 13, 22 and 24. To exceed $100,000.

Heating and Ventilating Apparatus, etc.—Brooklyn, N. Y.—Apr. 18, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., heating, ventilating and temperature regulation apparatus in P. S. 189, easterly side of East New York Ave. between Rockaway Parkway and East 96th St.

Borings—New York, N. Y.—Apr. 19, by Transit Comn., 49 Lafayette St., borings on sites of proposed Coney Island Yard, Boro of Brooklyn, proposed Westchester Ave. Yard, Boro of Bronx, along proposed extension to Bway.-4th Ave. Rapid Transit R.R. in Central Park between 7th Ave. and Central Park W, Boro of Manhattan, Agreement "CI". G. McAneny, chn.

Ferry Boats—New York, N. Y.—Apr. 26, by G. A. Whalen, comr. Plant & Structures, Municipal Bldg., building steel screw ferryboats.

Tar and Asphalt—Trenton, N. J.—Apr. 24, by Freeholders Mercer Co., 100,000 gal. tar and asphalt. H. F. Harris, Court House, engr.

Trap Rock, etc.—Trenton, N. J.—Apr. 30, by State Hy. Comn., furnishing crushed trap rock, limestone, dolomite or gneiss. A. W. Muir, 517 Broad St. Bank Bldg., supt. of maintenance; adv. this issue.

Coal Bins and Trestle—Lancaster, Pa.—Phila. & Reading R.R., Reading Terminal, Phila., taking bids 9 coal bins, trestle and storage, concrete and steel, size 22 x 284 ft. $200,000. A. Wagner, Reading Terminal, engr.

Sheet Piling—New Orleans, La.—Apr. 19, by Bd. Port Comrs., New Court Bldg., 520,000 ft. untreated Martinez sheet piling.

Road Oil—Nashville, Tenn—Apr. 18, by Davidson Co. Purchasing Com. 150,000-250,000 gal. road oil.

Lighting System — Fairport (Fairport Harbor P. O.)—**O.**—Apr. 21, by J. Markko, village clk., street lighting system; adv. this issue.

Gas Laterals — Beloit, Wis. — See "Sewers."

Cable—Hartford, Wis.—Apr. 17, 45,000 ft. standard No. 8 single conductor, solid copper, 600 volt or 2,500 volt Parkway cable f.o.b. Hartford. W. Radke, city clk. Private plans.

Foundation—Milwaukee, Wis.—Kirchhoff & Rose, archts., 211 Grand Ave., taking bids and open same about Apr. 16, excavating and wood piling for 4 story and basement, 68 x 100 ft., brick and concrete bank, Grand Ave., for Amer. Exch. Bank, Plankinton Arcade. Noted Feb. 15 under "Buildings."

Granite Paving Blocks — Minneapolis, Minn.—Apr. 16, by F. S. Cram, city purch. agt., 9,000 sq.yd. granite paving blocks. N. W. Elsberg city engr.

Stadium—Lincoln, Neb.—Apr. 24, by Nebraska Memorial Assn., c/o University of Nebraska, rein.-con. and steel stadium, moon shaped, 40,000 seating capacity. $430,000. Davis & Wilson, 515 Securities Bldg., Lincoln, and J. Latenser & Sons, 732 Peters Trust Bldg., Omaha, archts.

Elevator—Dallas, Tex.—See "Industrial Works."

Relaying Rail—California—See "Railways."

Crane—Pasadena, Calif.—Apr. 16, by B. Chamberlain, city clk., item 1, furnishing electrically driven crane with 50 ton and 10 ton auxiliary hooks; item 2, same as item 1, only delivering and installing.

Retaining Wall—San Francisco, Calif.—See "Streets and Roads."

Crushers, Motors, etc.—Vernon (Watts P. O.), **Calif.**—See "Contracts Awarded."

BIDS RECEIVED

Lumber—Brooklyn, N. Y.—E. Riegelmann, boro pres., Boro Hall, 56800 ft. lumber, delivered to Ave. U bridge over Gerritsens Creek, from Johnson Bros., 45 Classon Ave., $4,470. Noted Mar. 29.

Tunnel — Seattle, Wash. — Constructing tunnel and sinking shaft, 1st Ave. S., (a) 404 ft. tunnel excav. (b) 400 cu.yd. shaft lining (c) 500 cu.yd. tunnel lining (d) sinking shaft, 137.5 ft., from J. A. McEachern, Colman Bldg., (a) $142 (b) $26 (c) $30 (d) $250, etc., total $123,668; Puget Sound Bridge & Dredging Co., Central Bldg., (a) $112 (b) $27 (c) $44 (d) $350, etc., total $133,788. Engrs. est. $80,000.

CONTRACTS AWARDED

Brick—Binghamton, N. Y.—Bd. Contr. & Supply, 20,000 yellow brick, to Amer. Clay & Cement Corp., Insurance Bldg., Rochester, $46 per M; 80,000 red brick, to Binghamton Brick Co., Broad St., $33.50 per M.

Heating and Ventilating Apparatus—Brooklyn, N. Y.—W. H. Gompert, archt., Flatbush Ave. extension and Concord St., heating, ventilating and temperature regulation apparatus in New Utrecht High School, 79th and 80th Sts., to W. J. Olvany, 100 Charles St., New York, $193,785. Noted Apr. 5.

Aggregate—Long Island City, N. Y.—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., 22,500 cu.yd. mineral aggregate, to Rosoff Sand & Gravel Corp., 152 West 42nd St., New York, $64,013; 11,500 cu.yd. highway sand, to E. B. Simpson, Hempstead Turnpike, Hollis, $14,375; 1,000 cu.yd. sand grit, to Peace Bros., Inc., 57 North Laurence St., Flushing, $2,500; 550,000 gal. road oil, cold application, to Texas Co., 17 Battery Pl., New York, $27,445; 150,000 gal. road oil, hot application, to Warner Quinlan Co., 79 Wall St., New York, $9,240; 100,000 gal. bituminous macadam, 900 tons asphaltic cement, 25,000 gal. fuel oil, 25,000 gal. asphalt cold patch and 10,000 gal. gasoline, to Standard Oil Co., of New York, 26 Bway., New York, $7,130, $18,873, $1,568, $4,250 and $2,140 respectively; 40,000 wood paving blocks, to Amer. Creosoting Co., 17 Battery Pl., New York, $5,068; 50,000 asphalt paving blocks, to Hastings Pavement Co., 25 Broad St., New York, $4,700. Noted Apr. 5.

Foundations—New York, N. Y.—E. S. O'Malley, comr. Pub. Markets, Municipal Bldg., foundations for Bronx Terminal Market, to H. P. Converse Co., 440 East 142nd St., $580,000. Noted Apr. 5.

Ties and Timber—New York, N. Y.—Transit Comn., 49 Lafayette St., ties and timber for use in construction of Rapid Transit R.R., to A. R. Sax Lumber Co., 143 West 33rd St., $18,603. Noted Mar. 22.

Asphaltic Oil, etc.—Newton, N. J.—Sussex Co. furnishing asphaltic oil, Grade HK, to Atlantic Refining Co., 1211 Chestnut St., Phila., $2,832; asphalt, to Franklin Contg. Co., 20 Washington Pl., Newark, $4,212; tar, Grade B, to Barrett Co., 40 Rector St., New York City, $13,750. Noted Mar. 22.

Levees — Monroe, La. — G. B. Lambert Co., 1,000,000 cu.yd. levee work on Mississippi River, near here, to W. E. Callahan Constr. Co., Great Southern Life Bldg., Dallas, Tex., $250,000.

Coke and Gas Ovens—Warren, O.—Trumbull Cliffs Furnace Co., 47 improved type coke and gas ovens with byproduct and motor fuel plant to carbonize 429,000 tons coal annually, to Koppers Co., Farmers Bank Bldg., Pittsburgh, Pa.

Bulkhead, etc. — Chicago, Ill. — South Park Comrs., 57th St. and Cottage Grove Ave., to Great Lakes Dredge & Dock Co., 104 South Michigan Ave., bulkhead from 12th to 20th Sts., $1,164,310; 1,000 ft. extension to bulkhead at 23rd St., $95,000.

Fill—Chicago, Ill.—South Park Comrs., 57th St. and Cottage Grove Ave., to Great Lakes Dredge & Dock Co., 104 South Michigan Ave., filling in 1,000,000 cu.yd. opposite Grant Park on Lake Michigan, $330,000, filling in 2,000,000 cu.yd. along lake front from 12th to 18th Sts., $955,000.

Stack—Two Rivers, Wis.—See "Industrial Works."

Transmission Line — Kanorado, Kan. — Electrical transmission line, 16½ mi. long from here to Goodland, to E. O. Brown, 802 Linwood Blvd., Kansas City, Mo., $21,588; transformers, to Western Electrical Co., 608 Wyandotte St., Kansas City, Mo., $1,967. Noted Mar. 15.

Road Oil—St. Louis, Mo. — G. Oetting, supply comr., 700,000 gal. road oil, to R. J. Brown Petroleum Co., Boatsmen Bank Bldg., $0.05 per gal. delivered. Noted Apr. 5.

Rock Crushing Plant — Vernon (Watts P. O.), **Calif.**—Consumers' Rock & Gravel Co., 26th St. and Vernon Ave., reconstructing rock crushing plant, recently destroyed by fire, to Farley & Farley, Burbank, $25,000. Will purchase new equipment incl. crushers, motors, etc.

Cement, Stone, Pipe, etc.—Chatham, Ont.—Furnishing 5,400 bbl. cement to Canada Cement Co., Bank of Hamilton Bldg., Toronto, $3.20 per bbl. without sacks, less 10 per cent discount, 3,600 bbl. to A. Rogers, Ltd., 56 Church St., Toronto, $3.20 per bbl. without sacks, less 10 per cent discount; binder stone to Hagersville Crushed Stone Co., Hagersville, $2.25 per ton, f.o.b. Chatham; castings to McKeough & Trotter Ltd., Dover St., $0.035 per lb.; sewer pipe, to J. H. Oldershaw & Son, 122 Thames Ave.; asphalt filler dust, to Chatham Sand & Gravel Co., Chatham, $7.30 per ton without sacks, f.o.b. Chatham.

Underground Cable Work—Toronto, Ont.—Bell Telephone Co., of Canada, 76 Adelaide St. W., will expend $175,000 for lead cable underground conduits work in North Exchange District. Work will be done by day labor.

OFFICIAL PROPOSALS

Bids: April 25.

Pipe

Glens Falls, N. Y.

Sealed proposals will be received by the City Clerk of Glens Falls, N. Y., until 8 p.m. of April 25, 1923, for the furnishing of sewer pipe, branches and fittings of the various dimensions and in the approximate quantities shown in the proposal sheet.

A complete description of the various items of the work will be found on the plans and in the specifications.

All proposals must be on the blank form attached to the contract and specifications and enclosed in an envelope, endorsed with the following words: "Proposal for furnishing the City of Glens Falls, with sewer pipe, branches and fittings under the 1922 Sewer Bond," sealed and addressed to the Common Council of the City of Glens Falls, N. Y.

Forms must be completely filled in and all amounts must be stated in writing as well as in figures.

All proposals shall be open for acceptance for thirty days from advertised date for receiving same.

All bids will be compared on the basis of the Engineer's estimate of the quantities of pipe, branches and fittings to be furnished as given on proposal blank for the work to be done under the sewer contract. The quantities referred to for the various items of work, stated on the proposal blanks, are only approximate and are to be used only as a basis for the comparison of the bids received.

Each bid must be accompanied by a certified check, payable to the order of the City, equal to five per cent (5%) of the amount of the proposal, as evidence of the good faith of the bidder, and to the effect that if the proposal of the bidder is accepted, the bidder will enter into a contract and furnish a satisfactory contract bond for the faithful performance of the work.

The contract bond will be in an amount equal to twenty-five per cent (25%) of the total amount of the bid. The check will be forfeited if the bidder whose proposal is accepted fails to execute a contract and to furnish a surety company contract bond acceptable to the Common Council within fourteen days from the date of notice of award of contract. Checks of unsuccessful bidders will be returned.

Plans and specifications for the work and the proposed contract may be procured from the Engineer, or will be mailed to prospective bidders at their request. A deposit of $25.00 for each set thereof will be required, which amount will be refunded upon the return of such plans and specifications in good condition.

Persons or firms submitting bids must be regularly engaged in the manufacture of or dealing in the materials required to be furnished by the specifications and shall, if required, furnish references of work of a similar character heretofore performed by them.

The right is reserved to reject any and all bids.

Dated, April 5, 1923.

LEON G. BOYNTON, City Clerk.

Bids: May 1.

Paving Construction

Miami, Fla.

Sealed proposals will be received by "The Commission of the City of Miami, Florida," at the City Hall in Miami, Florida, until 9:30 a.m., at the regular meeting of the Commission, Tuesday, May 1, 1923, for the construction of bituminous macadam paving.

The work will consist of approximately 158,268 sq.yd. of bituminous macadam paving and will be divided into two contracts. The bidder can bid on any or all of these contracts.

The improvements are to be constructed and payment therefor is to be made under Section 56 of the City Charter.

All bids must be upon blank forms provided in the proposal, specifications and contract.

Each bid must be accompanied by a certified check for 2½ per cent of the amount of the bid to insure the execution of the contract as provided by Section 56 of the City Charter.

The City reserves the right to reject any or all bids.

Plans and specifications will be on file at the City Hall in the office of the City Manager.

Copies of proposals, specifications and contract can be obtained from the office of Chas. W. Murray, Director of Public Service, on deposit of $10, which will be refunded to those who submit bona fide bids.

F. H. WHARTON, City Manager.

OFFICIAL PROPOSALS

Bids: April 25.

Sewer

Glens Falls, N. Y.

Sealed proposals will be received by the Clerk of the City of Glens Falls, N. Y., until 8 p.m. of April 25, 1923, for the construction of about six and three-quarters miles of sanitary pipe-sewers ranging in size from eight to eighteen inches in diameter, including necessary manholes, house service connections and force mains; about ten miles of storm water pipe sewers ranging in size from eight to twenty-four inches in diameter including all necessary catch basins, manholes, etc., and the installation of two sewage pumping stations, with all accessories and connections.

A complete description of the various items of the work will be found on the plans and in the specifications.

All proposals must be on the blank form attached to the contract and specifications and enclosed in an envelope, endorsed with the following words: "Proposal for the construction of sanitary and storm-pipe sewers and pumping stations under the 1922 Sewer Bonds," and sealed and addressed to the Common Council of the City of Glens Falls, N. Y.

Forms must be completely filled in and all amounts must be stated in writing as well as in figures.

All proposals shall be open for acceptance for thirty days from the advertised date for receiving same.

All bids will be compared on the basis of the Engineer's estimate of quantities of work to be done as given on proposal blank. The quantities referred to in the various items of work, stated on the proposal blanks, are only approximate and are to be used only as a basis for the comparison of the bids received.

Each bid must be accompanied by a certified check, payable to the order of the City, equal to five per cent (5%) of the amount of the proposal, as evidence of the good faith of the bidder, and to the effect that if the proposal of the bidder is accepted, the bidder will enter into a contract and furnish a satisfactory contract bond for the faithful performance of the work. The contract bond will be in an amount equal to twenty-five per cent (25%) of the total amount of the bid. The check will be forfeited if the bidder whose proposal is accepted fails to execute a contract and to furnish a surety company contract bond acceptable to the Common Council, within fourteen days from the date of notice of award. Checks of unsuccessful bidders will be returned.

Plans and specifications for the work and the proposed contract may be procured from the Engineer, or will be mailed to prospective bidders at their request. A deposit of $25.00 for each set thereof will be required, which amount will be refunded upon the return of such plans and specifications in good condition.

Bidders must also submit bids for furnishing both salt-glazed vitrified and machine-made concrete sewer pipe, branches and fittings for which separate proposals have been prepared, but the right is reserved to award the construction and pipe contracts to different bidders.

Persons or firms submitting bids must be regularly engaged in the lines or work required by the specifications and shall, if required, furnish references of work of a similar character heretofore performed by them.

The right is reserved to reject any and all bids.

Dated, April 5, 1923.

LEON G. BOYNTON, City Clerk.

Bids: April 26.

Reinforced Concrete Pavement

Deal, N. J.

Notice is hereby given that sealed bids will be received by the Board of Commissioners of the Borough of Deal for an 8-in. reinforced concrete pavement, and opened and read in public at the rooms of said board at the Borough Hall, Deal, N. J., April 26th, 1923, at 2:15 p.m., Eastern Standard Time.

Drawings and specifications for the proposed work, prepared by James Strollo, Borough Engineer, have been filed in the office of said engineer at Brent Good Bldg., Long Branch, N. J., and may be inspected by prospective bidders during business hours. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the engineer.

Plans and specifications will be furnished to prospective bidders upon payment of ten dollars ($10.00), which amount will be refunded upon return of plans and specifications before the time specified for the opening of bids.

OFFICIAL PROPOSALS

Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and name of proposed work on the outside, addressed to the Board of Commissioners of the Borough of Deal and must be accompanied by a certified check for a sum of not less than ten (10%) per cent of the amount bid on the work, payable to the order of the Borough Treasurer and a surety company certificate stating that said surety company will provide the bidder with the required bond, and must be delivered at the place and before the hour above named.

The Board of Commissioners of the Borough of Deal reserves the right to reject any or all bids if deemed to the best interest of the Borough so to do.

By order of the Board of Commissioners of the Borough of Deal.

Attest: AARON J. BACH, Mayor.
CLEM CONOVER, Clerk.

Deal, N. J., April 5th, 1923.

Bids: April 24.

Water Works System

Locust Valley, N. Y.

Sealed proposals will be received by the Board of Water Commissioners, Locust Valley, New York, until eight o'clock P.M. April 24th, 1923, then publicly opened and read in the Matinecock Neighborhood House, for the construction of a system of Water Works for the Locust Valley District in accordance with plans and specifications prepared by Sidney B. Bowne, Engineer.

WORK INCLUDED IN CONTRACT UNDER CONTRACT NO. 1

There will be furnished and laid about 18 miles of 6 in., 8 in., 10 in. and 12 in cast iron mains, with about 150 hydrants and 110 valves.

UNDER CONTRACT NO. 2

There will be furnished and installed two (2) complete units consisting of driven well, motor driven well turbines, etc.

UNDER CONTRACT NO. 3

There will be constructed two brick pumping stations, one about 12 ft. x 12 ft. and the other about 12 ft. x 24 ft. in plan.

UNDER CONTRACT NO. 4

There will be built a Stand Pipe 42 ft. in diameter and 75 ft. high of 770,000 gal. capacity, with ornamental balcony and roof and surrounding an existing elevated tank.

Plans and specifications are on file and may be seen at the office of Sidney B. Bowne, Engineer, Post Office Building, Mineola, New York, and will be forwarded on receipt of five ($5.00) dollars. (Same not to be refunded.)

All inquiries must be addressed to the Engineer.

Each bidder must accompany his proposal with a certified check or its equivalent for five (5%) per cent of the amount of his proposal made payable to E. Mortimer Ward, Treasurer, which will be returned to the unsuccessful bidders immediately following the award of the contract.

The successful bidder will be required to enter into a contract for the performance of the work as may be awarded him or them with a bond of an approved Surety Company for not less than one-half (50%) of the total amount of the awarded contract price.

The right is reserved to reject any or all bids, or accept any bid, or bids, or any portion of any bid.

BOARD OF WATER COMMISSIONERS.
BENJ. W. DOWNING, Chairman.
E. MORTIMER WARD, Treasurer.
EDWIN A. SCHLOTZHAUER, Secretary.
Engineer.
SIDNEY B. BOWNE.
Mineala, New York.

Bids: April 24.

Improvements and Additions to the Borough Water System

Belmar, N. J.

Sealed bids are requested for the installation of one (1) deep well pump, equipped with motor and starter, fully installed, together with piping connections. This pump is to be installed in an existing well now located upon the property of the Borough. Detailed specifications may be obtained upon application to the Borough Clerk, Belmar, New Jersey. Such bids will be received by the Mayor and Council at a Council meeting to be held in Council Chambers, Borough Hall on Tuesday evening, April 24th, 1923, at eight o'clock p.m. The Council reserves the right to reject any and all bids.

CONSTRUCTION NEWS

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Apr. 23	Springfield, Ill.	Apr. 5
Apr. 23	Altamont, Ill.	Apr. 19
Apr. 24	Belmar, N. J.	Apr. 12
Apr. 24	Locust Valley, N. Y. Adv. Apr. 12 and 19.	Apr. 12
Apr. 26	Keeseville, N. Y. Adv. Apr. 19.	Apr. 19
Apr. 26	Ft. Smith, Ark.	Apr. 19
Apr. 26	New Orleans, La. Adv. Mar. 8 to Apr. 19.	Mar. 8
Apr. 26	Buffalo, N. Y.	Apr. 19
Apr. 27	Tulare, S. D.	Apr. 19
Apr. 27	Brooklyn, N. Y.	Apr. 19
Apr. 28	Conde, S. D.	Apr. 19
Apr. 30	Oconomowoc, Wis.	Apr. 19
Apr. 30	North East, Pa.	Apr. 19
May 1	Freehold, N. J. Adv. Apr. 19.	Apr. 19
May 1	Macedon, N. Y. Adv. Apr. 12 and 19.	Apr. 19
May 12	Memphis, Tenn. Adv. Apr. 12 and 19.	Apr. 12
May 16	San Francisco, Calif. Adv. Apr. 19.	Apr. 19
May 15	Harrisburg, Pa. Adv. Apr. 19	Apr. 19

SEWERS

Apr. 20	Boston, Mass.	Apr. 19
Apr. 23	Marysville, Kan.	Apr. 5
Apr. 23	Boston, Mass.	Apr. 19
Apr 23	Long Island City, N. Y.	Apr. 19
Apr. 24	Buffalo, N. Y.	Mar. 29
Apr. 24	Indianapolis, Ind.	Apr. 5
Apr. 24	Louisville, Ky.	Apr. 5
Apr. 24	Boston, Mass.	Apr. 19
Apr. 24	Riverside, Calif.	Apr. 19
Apr. 25	Glens Falls, N. Y.	Apr. 12
Apr. 25	Phila., Pa.	Apr. 19
Apr. 27	Wash., D. C.	Apr. 12
Apr. 28	Lima, O. Adv. Apr. 12 and 19.	Apr. 12
Apr. 28	Cleveland, O.	Apr. 19
Apr. 30	Morris Plains, N. J.	Apr. 19
Apr. 30	Waldwick, N. J. Adv. Apr. 19.	Apr. 19
Apr. 30	Waterloo, N. Y.	Apr. 19
Apr. 30	Falls City, Neb.	Apr. 19
May 1	New Jersey Adv. Apr. 19.	Apr. 19
May 1	Avon, S. D.	Apr. 19
May 3	Independence, Kan.	Apr. 12
May 7	Los Angeles, Calif.	Apr. 12
May 15	St. Petersburg, Fla. Adv. Apr. 19.	Apr. 19

WASTE DISPOSAL

Apr. 26	Cleveland, O.	Apr. 5
Apr. 28	Harrisburg, Pa. Adv. Apr. 19.	Apr. 19

BRIDGES

Apr. 24	Louisiana	Apr. 12
Apr. 26	Paola, Kan.	Apr. 19
Apr. 27	Williamsport, Pa.	Apr. 12
Apr. 27	Fresno, Calif.	Apr. 12
Apr. 28	Dayton, O.	Apr. 19
Apr. 30	San Anselmo, Calif.	Apr. 12
Apr. 30	Lansing, Mich. Adv. Apr. 19.	Apr. 19
Apr. 30	Milwaukee, Wis.	Apr. 19
May 1	Alabama	Apr. 19
May 1	Indiana	Apr. 19
May 1	Washington	Apr. 19
May 3	Alabama	Apr. 12
May 7	Wentworth, N. C.	Apr. 13
May 8	Ludington, Mich.	Apr. 19
May 10	Haverhill, Mass. Adv. Apr. 19.	Apr. 19
Nov. 30	Sydney, Australia Adv. Apr. 19.	Apr. 19

EXCAVATION, DRAINAGE, IRRIGATION

Apr. 23	Audubon, Ia	Apr. 5
Apr. 23	North Milwaukee, Wis.	Apr. 19
Apr. 28	Brownsville, Tex.	Apr. 19
May 1	Des Moines, Ia.	Apr. 19
May 1	Manitowoc, Wis.	Apr. 19
May 2	Houston, Tex.	Apr. 19
June 15	Albert Lea, Minn.	Apr. 12

STREETS AND ROADS

Bids Close		See Eng. News-Record
Apr. 20	New York Adv. Apr. 5 to 19.	Apr. 12
Apr. 23	Sanford, Fla.	Apr. 5
Apr. 23	Cedar Grove, La.	Apr. 12
Apr. 23	Dallas, Tex.	Apr. 12
Apr. 23	Yankton, S. D.	Apr. 12
Apr. 23	Bexley (Columbus P. O.), O.	Apr. 12
Apr. 23	Hondo, Tex.	Apr. 12
Apr. 23	Redwood City, Calif.	Apr. 12
Apr. 23	Fredonia, N. Y.	Apr. 19
Apr. 23	Carroll, Ia.	Apr. 19
Apr. 23	Madera, Calif.	Apr. 19
Apr. 23	St. Paul, Minn.	Apr. 19
Apr. 24	Trenton, N. J.	Apr. 12
Apr. 24	Columbus, O.	Apr. 12
Apr. 24	Allenhurst, N. J. Adv. Apr. 19.	Apr. 19
Apr. 24	Hartford, Conn.	Apr. 19
Apr. 24	Wyoming	Apr. 19
Apr. 24	Stockton, Calif.	Apr. 19
Apr. 24	Wisconsin	Apr. 19
Apr. 24	Hartford, Conn.	Apr. 19
Apr. 24	Hagerstown, Md.	Apr. 19
Apr. 24	Redwood Falls, Minn.	Apr. 19
Apr. 24	Port Huron, Mich.	Apr. 19
Apr. 24	Marshall, Wis.	Apr. 19
Apr. 24	Lincolnton, N. C.	Apr. 19
Apr. 24	Phila., Pa.	Apr. 19
Apr. 25	Rockville, Conn.	Apr. 19
Apr. 25	Seneca, Kan.	Apr. 5
Apr. 25	Crookston, Minn.	Apr. 5
Apr. 25	Warren, Minn.	Apr. 12
Apr. 25	Kentucky	Apr. 12
Apr. 25	Duluth, Minn.	Apr. 12
Apr. 25	Irvine, Ky.	Apr. 12
Apr. 25	Tacoma, Wash.	Apr. 12
Apr. 25	Nevada, Ia.	Apr. 12
Apr. 25	Monticello, Ind.	Apr. 19
Apr. 25	Logansport, Ind.	Apr. 19
Apr. 25	Wisconsin	Apr. 19
Apr. 25	Cedargrove, N. J.	Apr. 19
Apr. 25	Sigourney, Ia	Apr. 19
Apr. 25	New York, N. Y.	Apr. 19
Apr. 25	Hayward, Calif.	Apr. 19
Apr. 26	Bloomfield, Ia.	Apr. 12
Apr. 26	St. Francis, Kan.	Apr. 5
Apr. 26	Plainfield, N. J. Adv. Apr. 12 and 19.	Apr. 12
Apr. 26	Deal (Deal Beach P. O.), N. J.	Apr. 12
Apr. 26	Lynbrook, N. Y. Adv. Apr. 12 and 19.	Apr. 19
Apr. 26	Ft. Wayne, Ind.	Apr. 19
Apr. 26	Towson, Md.	Apr. 19
Apr. 26	Biloxi, Miss.	Apr. 19
Apr. 27	Wellington, Kan.	Apr. 5
Apr. 27	Pringle (Wilkes-Barre P. O.), Pa.	Apr. 19
Apr. 27	Wisconsin	Apr. 19
Apr. 27	Manchester, Tenn. Adv. Apr. 19.	Apr. 19
Apr. 27	Michigan	Apr. 19
Apr. 27	Devils Lake, N. D.	Apr. 19
Apr. 27	Clear Lake, Ia.	Apr. 19
Apr. 28	Greencastle, Ind.	Apr. 19
Apr. 28	Muncie, Ind.	Apr. 19
Apr. 28	Alpena, Mich.	Apr. 19
Apr. 30	Warwick, N. Y. Adv. Apr. 12 and 19.	Apr. 12
Apr. 30	San Anselmo, Calif.	Apr. 12
Apr. 30	Elkpoint, S. D	Apr. 19
Apr. 30	Norfolk, Va. Adv. Apr. 19.	Apr. 19
Apr. 30	Sebring, Fla.	Apr. 19
Apr. 30	Seattle, Wash.	Apr. 19
Apr. 30	Indianapolis, Ind.	Apr. 19
Apr. 30	Mitchell, S. D	Apr 19
Apr. 30	Akron, O.	Apr. 19
Apr. 30	Ontario	Apr. 19
Apr. 30	Pointe a la Hache, La.	Apr. 19
May 1	Miami, Fla. Adv. Apr. 12 and 19.	Apr. 12
May 1	West Virginia Adv. Apr. 12 and 19.	Apr. 12
May 1	Atchison, Kan.	Apr. 5
May 1	Washington	Apr. 5
May 1	Pennsylvania Adv. Apr. 12 and 19.	Apr. 12
May 1	Trenton, N. J.	Apr. 12
May 1	Alabama	Apr. 19
May 1	Washington	Apr. 19
May 1	Centralia, Wash.	Apr. 19
May 1	Maryland Adv. Apr. 19.	Apr. 19
May 1	Auburn, N. Y. Adv. Apr. 19.	Apr. 19
May 1	Wisconsin	Apr. 19
May 1	Towner, N. D.	Apr. 19
May 1	Linton, N. D.	Apr. 19
May 1	Ortonville, Minn.	Apr. 19
May 2	Morristown, N. J. Adv. Apr. 19.	Apr. 19
May 2	Mankato, Minn.	Apr. 19
May 3	Iola, Kan.	Apr. 19
May 3	Mobile, Ala. Adv. Apr. 12 and 19.	Apr. 12
May 3	Quebec	Apr. 19
May 4	Hiawatha, Kan.	Apr. 12
May 4	Winchester, Ky. Adv. Apr. 19.	Apr. 19
May 5	Finley, N. D.	Apr. 19
May 7	Warsaw, Ind.	Apr. 19
May 9	Ashland, R. I.	Apr. 19
May 11	Westfield, N. Y. Adv. Apr. 19.	Apr. 19
May 15	Starke, Fla.	Apr. 19
May 15	Onawa, Ia.	Apr. 19
May 15	St. Petersburg, Fla. Adv. Apr. 19.	Apr. 19

INDUSTRIAL WORK

Apr. 23	Rapid City, S. D.	Apr. 5
Apr. 23	La Crosse, Wis.	Apr. 19
Apr. 23	Wauwatosa, Wis.	Apr. 19
Apr. 24	Huron, S. D.	Apr. 5
Apr. 25	Muscatine, Ia.	Apr. 19
May 15	Bethlehem, Pa.	Apr. 19

BUILDINGS

Apr. 21	Providence, R. I.	Apr. 19
Apr. 23	Watertown, N. Y.	Apr. 12
Apr. 23	Trenton, N. J.	Apr. 19
Apr. 23	Milwaukee, Wis.	Apr. 19
Apr. 23	Bristol, Conn.	Apr. 19
Apr. 24	Green Bay, Wis.	Apr. 5
Apr. 24	Lakewood (Cleveland P. O.), O.	Apr. 12
Apr. 24	Piedmont, Calif.	Apr. 19
Apr. 24	Modesto, Calif.	Apr. 19
Apr. 26	Lakewood, N. J.	Apr. 12
Apr. 26	Sacramento, Calif.	Apr. 19
Apr. 27	Lima, O.	Apr. 19
Apr. 30	Norwalk, Calif.	Apr. 19
Apr. 30	Raleigh, N. C.	Apr. 19
Apr. 30	Milwaukee, Wis.	Apr. 19
Apr. 30	Grand Island, Neb.	Apr. 19
Apr. 30	Capa, S. D.	Mar. 8
May 1	Mason City, Ia.	Mar. 22
June 1	Morgantown, W. Va. Adv. Apr. 12 and 19.	Apr. 12
May 1	Albuquerque, N. M.	Apr. 19
May 1	Kansas City, Mo.	Apr. 19
May 2	Baltimore, Md.	Apr. 19
May 4	Cleveland, O.	Apr. 19
May 5	Hartford, Conn.	Apr. 19
May 8	Olympia, Wash.	Apr. 19
May 10	Pleasantville, O.	Apr. 19
May 10	Mt. Vernon, O.	Apr. 19

FEDERAL GOVERNMENT WORK

Apr. 23	Earthwork — Memphis, Tenn. Adv. Apr. 5 to 19.	Apr. 5
Apr. 23	Steel Bars, etc. — Memphis, Tenn. Adv. Apr. 5 to 19.	Apr. 5
Apr. 23	Water and Sewer Lines — Edgewood, Md. Adv. Apr. 19.	Apr. 19
Apr. 23	Sewers—Ft. Benjamin Harrison, Ind. Adv. Apr. 12 and 19.	Apr. 19
Apr. 24	Roads—Washington	Apr. 19
Apr. 24	Road—Nevada	Apr. 12
Apr. 25	Hospital Buildings — Chelsea, N. Y.	Apr. 5
Apr. 25	Mechanical Equipment—Chelsea, N. Y.	Apr. 5
Apr. 25	Reconstructing Dike — Mare Island, Calif.	Mar. 22
Apr. 25	Steel Gates — Nashville, Tenn. Adv. Apr. 5 to 19.	Apr. 5
Apr. 25	Laboratory — Anacostia, D. C.	Apr. 12
Apr. 25	Dismantling—St. Cloud, Minn. Adv. Apr. 19.	Apr. 19
Apr. 26	Road—Nevada	Apr. 12
Apr. 26	Coal—Memphis, Tenn. Adv. Apr. 12 and 19.	Apr. 19
Apr. 27	Barges—Portland, Ore.	Apr. 5
Apr. 27	Boilers—Florence, Ala.	Apr. 5
Apr. 30	Barges—Jacksonville, Fla. Adv. Apr. 5 to 19.	Apr. 5
Apr. 30	Dredging—Baltimore, Md. Adv. Apr. 5 to 19.	Apr. 5
Apr. 30	Post Office—Vernal, Utah.	Apr. 5
Apr. 30	Dredging—Baltimore, Md.	Apr. 5
May 1	Hangars, etc. — Columbus, O. Adv. Apr. 19.	Apr. 19

Bids Close		See Eng. News-Record
May 2	Re-roofing—Mare Island, Calif.	Apr. 19
May 2	Standpipe—Lake Denmark, N. J.	Apr. 19
May 2	Pump House, etc.—Pensacola, Fla.	Apr. 19
May 3	Superstructure — Detroit, Mich.	Apr. 5
	Adv. Apr. 5 to 19.	
May 3	Boilers—Mankato, Minn.	Apr. 12
	Adv. Apr. 12 and 19.	
May 7	Boilers—Oteen, N. C.	Apr. 12
May 8	Boiler — Saratoga Springs, N. Y.	Apr. 12
	Adv. Apr. 12 and 19.	
May 9	Underpinning Chimney—Phila., Pa.	Apr. 19
May 9	Water Supply, etc. — St. Cloud, Minn.	Apr. 19
May 10	Post Office — Cordova, Alaska	Jan. 25
May 10	Mailing Platform — Detroit, Mich.	Apr. 19
	Adv. Apr. 19.	
May 11	Dredging — New York, N. Y.	Apr. 12
	Adv. Apr. 19.	
May 11	Bear Trap Leaves—Louisville, Ky.	Apr. 12
	Adv. Apr. 12 and 19.	
May 11	Quarters—Mobile, Ala.	Apr. 19
	Adv. Apr. 19.	
May 11	Boilers—Binghamton, N. Y.	Apr. 19
	Adv. Apr. 19.	
May 12	Metal Work—Key West, Fla.	Apr. 12
	Adv. Apr. 19.	
May 14	Dredging — Wilmington, Del.	Apr. 19
	Adv. Apr. 19.	

MISCELLANEOUS

Apr. 23	Bituminous Dressing — Buffalo, N. Y.	Apr. 19
Apr. 23	Road Oil—Adrian, Mich.	Apr. 19
	Adv. Apr. 19.	
May 23	Steel Penstock and Accessories —San Francisco, Calif.	Apr. 19
	Adv. Apr. 19.	
Apr. 23	Fire Hydrants—Edmonds, B. C.	Apr. 19
Apr. 24	Stadium—Lincoln Neb.	Apr. 12
Apr. 24	Tar and Asphalt — Trenton, N. J.	Apr. 12
Apr. 25	Culverts and Extensions — Sigourney, Ia.	Apr. 19
Apr. 26	Ferry Boats—New York, N. Y.	Apr. 12
Apr. 30	Trap Rock, etc.—Trenton, N. J.	Apr. 12
	Adv. Apr. 12 and 19.	
Apr. 30	Bridge Materials — Bison, S. D.	Apr. 19
Apr. 30	Scarifier—Newton, N. J.	Apr. 19
	Adv. Apr. 19.	
May 1	Pavilion—Sea Girt, N. J.	Apr. 19
	Adv. Apr. 19.	
May 1	Road Oil—Hartford, Conn.	Apr. 19
	Adv. Apr. 19.	
May 2	Road Oil—Rhode Island	Apr. 19
	Adv. Apr. 19.	
May 8	Road Oil—Fresno, Calif.	Apr. 19

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y., Batavia—Voted $30,000 bonds new c.i. mains.

N. Y., Orchard Park—Making surveys and plans new water system. $50,000. White & Getman, Mutual Life Bldg., Buffalo, engrs.

N. C., Winston-Salem—See "Streets and Roads."

O., Cleveland—Cuyahoga Co. takes bids in summer 4.2 mi. c.i. mains in Ridge Rd. from Bean to Pleasant Valley Rds., and York Rd. from Parma Heights Village limits to Sprague Rd., etc. $140,000. R. F. MacDowell, Court House, engr.

O., Columbus—See "Streets and Roads."

O., Middletown — Plans water mains, curbing, guttering and laying sidewalks on Park Dr., Monroe, Jefferson, Belmont, Philadelphia, McGee, Clayton, Superior, Grand, Highland, Alameda and Webster Sts. To exceed $25,000.

O., Oakwood (Dayton P .O.)—Voted $50,000 bonds for water pumping plant and laying additional c.i. mains. A. C. Stolz, mayor.

Ill., Oblong—Plans waterworks system $75,000. E. F. Mail, Robinson, engr. Kelker, De Leuw & Co., Conway Bldg., Chicago, consult. engrs.

Wis., Manitowoc—Soon takes bids on approximately 3 car loads 6-8 in. c.i. pipe for Water Dept. F. H. Alter, City Hall, engr.

Kan., Gaylord — Making plans waterworks. $35,000 bonds voted. Black & Veatch, 701 Mutual Bldg., Kansas City, Mo., engrs. Noted Apr. 5.

Mo., Burlington Junction—Election early in May to vote on $70,000 bonds for water mains and sewers. A. T. Archer & Co., 609 New England Bank Bldg., Kansas City, engrs.

Tex., Edgewood—Apr. 28, to vote on $40,000 bond issue, new mains, etc. Address J. R. Greer, mayor. Engineer not announced.

Tex., Galveston—May 8, to vote on $125,000 bond issue for rehabilitation of Alta Loma waterworks on mainland. C. A. Holt, Jr., city engr.

Tex., Marshall—Election early in May to vote on $80,000 bond issue for waterworks, and $20,000 for sanitary sewerage system.

Tex., Wolfe City—Election in May to vote on $100,000 bond issue general waterworks construction. Engineer not selected.

Idaho, Lewiston—Election early next month to vote on $380,000 bonds for rebuilding and extending waterworks, incl. 6,000,000 gal. filtration plant, rein.-con. reservoir, larger mains, etc. Burns & McDonnell, 401 Interstate Bldg., Kansas City, Mo., engrs. Noted Mar. 29.

Ariz., Flatstaff — Election early next month to vote on $350,000 bonds for waterworks improvements, incl. 50,000,000 gal. rein.-con. reservoir, etc. Burns & McDonnell, 401 Interstate Bldg., Kansas City, Mo., engrs. Noted Sept. 28.

Calif., Napa—City soon takes bids, pipe line between city and Milliken Creek Storage Dam, 25,000 lin.ft. 14 and 16 in. riveted steel pipe, alternative bids on various thicknesses and various types of joints, etc. $45,000. A. Kempkey, Hobart Bldg., San Francisco, engr. Noted Feb. 15.

Calif., San Diego—Voted $400,000 bonds for second main conduit from Lower Otay reservoir to Bonita Wye. H. N. Savage, McNeece Bldg., hydraulic engr. Noted Feb. 8.

Ont., Oshawa—Plans 500,000 imp. gal. elevated steel waterworks tank, 120 ft. high. $45,000. W. C. Smith, city engr.

Ont., South Porcupine — Tisdale Twp. plans pumping plant and distribution system. $250,000. W. H. Wilson, twp. clk. J. F. Henderson, Timmins, engr.

BIDS DESIRED

N. Y., Brooklyn — Apr. 27, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Saratoga Ave., Ave. R, Mansfield Pl., Douglass, Herzl, West 5th, 48th and 78th Sts., here.

N. Y., Buffalo—Apr. 26, by A. W. Kreinheder, comr. Pub. Wks., Municipal Bldg., two thousand eight twenty-five ¾ to 2 in. corporation cocks and three hundred 5 to 8 in. couplings and tail pieces, to Bureau of Water.

N. Y., Keeseville—Apr. 26, by Bd. Water Comrs. improving waterworks. J. P. Wells, 249 Cutler Bldg., Rochester, engr.; adv. this issue.

N. Y., Macedon—May 1, by Bd. Water Comrs. waterworks system. Hopkins & Field, 349 Cutler Bldg., Rochester, engrs.; adv. this issue.

N. J., Freehold—May 1, by Mayor and Boro Council, fuel oil engines, pumps, compressors, fuel oil tanks, and deepening several wells, Contrs. A, B and C. C. A. Niles, boro engr.; adv. this issue.

N. J., Waldwick—Apr. 30, by W. R. Evans, Jr., boro clk., Council Chamber, 6.7 mi. water pipe, concrete reservoir, dykes, etc. J. L. Collins, engr.; adv. this issue.

Pa., Harrisburg — May 15, at Council Chamber, Dauphin Bldg., extending and improving waterworks. Contracts E and F. J. H. Fuertes, 140 Nassau St., New York City, consult. engr.; adv. this issue. Noted Apr. 12.

Pa., North East—Apr. 30, by Boro Council, 30 m.g. storage reservoir, earth dam and spillway, 2,000 ft. 8 in. sanitary sewer and paving 450 sq.yd. alley with rein.-con. Hill & Hill, North East, engrs. Noted Apr. 12.

Ill., Altamont—Apr. 23, for 24,485 ft. 4 in., 5,520 ft. 6 in. and 60 ft. 8 in. Class B, c. i. pipe, 14,912 lb. special castings, etc. W. A. Fuller, 1917 Railway Exch., St. Louis, Mo., engrs. Noted Oct. 19.

Wis., Clinton Junction—Taking bids 3 g.p.m. centrifugal pump and accessories for city water supply. W. G. Kirchoffer, Dean Bldg., Madison, engr.

Wis., Milton—Apr. 24, 8 in. drilled well, 860 ft. deep, 22,380 ft. 4-8 in. main, 555 ft. 1 in. extra heavy lead pipe, etc., one pump house and reservoir, 30 ft. diameter, 15 ft. deep, 21,479 ft. 6-12 in. vitr. sewer, 1 sewage disposal plant, tanks, filters and aeration equipment, two 300 g.p.m. centrifugal pumps, motor and engine driven, etc. W. G. Kirchoffer, Vroman Blk., Madison, engr. Noted Nov. 2.

Wis., Oconomowoc—Apr. 30, by T. S. Johnson, city clk., for mains, separate bids will be received on furnishing material. $25,000. J. A. Stemper, City Hall, engr.

S. D., Avon—See "Sewers."

S. D., Conde—Apr. 28, by waterworks system incl. 2 mi. 4-8 in. c.i. pipe, 60,000 gal. elevated tank, 75,000 gal. rein.-con. reservoir, 6 x 8 triplex pump, etc. Dakota Eng. Co., 309 Western Natl. Bank Bldg., Mitchell, engrs.

S. D., Tulare—Apr. 27, by City Auditor, 1¼ mi. 4 in c. i. water mains and 2 mi. 8-12 in. sewers. $30,000. Dakota Eng. Co., 309 Western Natl. Bank Bldg., Mitchell, engrs.

Ark., Ft. Smith — Apr. 26, by W. L. Winters, engr., Ft. Smith, pump house, filtration plant, well, filters, electric motors, valves, hydrant, also repairing reservoir and miscellaneous work, for city.

Calif., San Francisco—May 16, at office of Bd. Pub. Wks., of city and San Francisco Co., constructing Bay Crossing pipe line in Bay Crossing Div. of Hetch Hetchy Aqueduct, Contr. 90, Hetch Hetchy Water Supply. W. J. Fitzgerald, secy.; adv. this issue.

BIDS RECEIVED

N. Y., Buffalo—Commissioner Pub. Wks., Municipal Bldg., Apr. 9, 33,000 lb. c.i. manhole frames and covers, etc., from Victory Fdry. & Machine Co., Inc., 419 Ilway., $0.0745, United States C. I. Pipe & Fdry. Co., 957 East Ferry St., $0.0975 per lb., Howard Iron Wks., Chicago and Granger Sts., $0.0975; 12,000 lb. steel manhole frames and covers, etc., from G. Schautz Eng. Co., 860 Seneca St., $0.115. Noted Mar. 29.

N. Y., New York—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., Apr. 10, mains in Atkins and Banner Aves., etc., from Carter Constr. Co., 22 Beaver St., $43,000, Watega Contg. Co., $46,000, Paladino Contg. Co., 437 East 120th St., $47,117; Marginal and East 26th Sts., etc., from C. De Blasio, $24,700, Beaver Eng. & Contg. Co., 51 Chambers St., $27,000, Melrose Constr. Co., 230 East 162nd St., $29,000. Noted Apr. 5.

N. Y., Poughkeepsie—Bd. Pub. Wks., Eastman Park Mansion, reconstructing pumping station, from L. Chevalier, Inc., 207 East 43rd St., New York, $34,882; W. W. Kingston, 1 Washington St., $34,995; L. M. Neckerman, 103 Park Ave., New York, $36,590. Noted Mar. 29.

Minn., St. Paul—H. W. Austin, city purch. agt., Mar. 26, 18,000 bbl. portland cement for Water Dept., from Thompson Yards, Inc., 2694 University Ave., P. G. Speakes Co., 2845 2nd Ave. S., Minneapolis, and St. Paul Builders Materials Co., 605 Ryan Bldg., all bid $2.54 net, f.o.b. cars. Noted Mar. 22.

CONTRACTS AWARDED

Mass., Boston—For 9,565 ft. 8-16 in. c.i. mains in Bedford, Boylston, South, Franklin, Broad, High, Hawley, Oliver and Beach Sts., to C. & R. Constr. Co., 3 Tremont Row, $133,248.

Conn., Wallingford — Bd. Water Comrs. 4,000 ft. ditching, laying and carting 18 in. c.i. water main, also 7,000 ft. ditching and filling water pipe trench, to J. E. Driscoll, 499 Prospect St., Torrington, $17,010. Noted Mar. 8.

N. Y., Savannah—Bd. Village Trustees, c.i. mains, reservoir and building for pumping station, to A. Petrosino, Savannah, $21,938. Noted Mar. 22.

O., Garfield Heights (Cleveland P. O.)—See "Sewers."

Ind., Mishawaka — Rein.-con. reservoir, 1,500,000 gal. capacity, to J. W. Martin, 420 Bd. of Trade Bldg., Indianapolis, $28,793; pump to Alberger Pump & Condenser Co., 140 Cedar St., New York City, $2,496. Noted Feb. 8.

Mont., Shelby—For 15,000 ft. 6 in. and 4,000 ft. 4 in. c. i. mains, to Two Miracle Co., Ford Bldg., Great Falls, $62,185.

Sewers

PROPOSED WORK

Mo., Burlington Junction—See "Waterworks."

N. Y., Albany—Preparing plans trunk sewer in Delaware Ave. section. To exceed $25,000. J. G. Brennan, city engr.

N. Y., Liverpool—Plans storm water and sanitary sewerage system in various streets. $25,000-$30,000.

N. Y., Wanakah (Hamburg P. O.)—Town of Hamburg plans sewage disposal plant and 2 mi. sewerage system along Lake Front, here. $75,000. J. E. Leach, Hamburg, town clk. L. Elias, Hamburg, sewer comr.

Sewers (Continued)

N. J., Totowa (Paterson P. O.)—Making plans sanitary sewerage system. H. J. Harder, 129 Market St., Paterson, engr.

N. C., Winston-Salem—See "Streets and Roads."

Fla., Lakeland — Having surveys made sewerage system, vitr. clay pipe, and disposal plant, in Lake Parker D. D. $150,000. D. G. and H. D. Mendenhall, Lakeland, engrs.

O., Columbus—See "Streets and Roads."

O., Middletown—Plans sewers in Park Dr., Monroe, Jefferson, Belmont, Philadelphia, McGee, Clayton, Superior, Grand, Highland, Alameda and Webster Sts. To exceed $25,000.

Ind., Mishawaka—Had plans prepared and soon takes bids sewers in Russell and 6th Sts., 33 in. and smaller, $75,000; North Main St., 24 in. and smaller, $30,000; lateral sewers throughout city, 6-15 in., $50,000. J. L. Stevens, City Hall, engr.

Mich., Springwells—Having plans prepared 60,000 to 80,000 lin.ft. 8-42 in. crock lateral sewers. A. Roth, 2348 Penobscot Bldg., Detroit, engr.

Ill., Chicago—Bd. Local Impvts., 207 City Hall, soon takes bids sewers in South Park Ave. $174,000. C. D. Hill, City Hall, ch. engr.

Ill., Taylorville — Plans intercepting sewers and sewage disposal plant. $150,000. Kelker, De Leuw & Co., Conway Bldg., Chicago, engrs.

Kan., Herrington — Making plans sewer improvements. $250,000 bonds voted. Black & Veatch, 701 Mutual Bldg., Kansas City, Mo., engrs.

Tex., Marshall—See "Waterworks."

Calif., Corning—Had plans prepared 16,200 lin.ft. 12 in. sewers, etc. W. F. Luning, Red Bluff, engr.

Calif., Palo Alto—Had plans prepared sewers in Southgate Sub-Division Block J, 23,352 lin.ft. 6 in. and 9,287 lin.ft. 8 in. pipe, etc. $25,000. J. F. Bxybee, Jr., city engr.

Calif., Ukiah—Soon takes bids 1¼ mi. sewers in various streets. E. H. Donohoe, city engr.

Ont., Niagara Falls — Stamford Twp. plans 15½ mi. sanitary sewerage system, vitr. pipe, 8 in. up. $12,000-$14,000 per mile. M. Kerr, twp. engr. James, Proctor & Redfern, 36 Toronto St., Toronto, consult. engrs.

BIDS DESIRED

Mass., Boston—Apr. 23, by J. A. Rourke, Comr. Pub. Wks., 2,130 ft. 8-15 in. concrete sewer pipe, etc., Ashland St. To exceed $50,000. T. F. Bower, City Hall, engr.

Mass., Boston—Apr. 24, by J. A. Rourke, Comr. Public Wks., City Hall, 150 ft. 8 in., 615 ft. 10 in. and 56 ft. 30 in. concrete sewer pipe, surface drain, manholes, boxes, catch basins, etc., Prospect and Maloney Sts. To exceed $30,000. T. F. Bowes, City Hall, engr.

Mass., Boston—Apr. 20, by J. A. Rourke, Comr. Pub. Wks., 352 ft. 8 ft. 10 in. x 9 ft. 10 in., and 235 ft. 6 ft. 1 in. x 6 ft. 8 in. concrete sewer, East Cottage and Humphreys Sts., to exceed $100,000; 365 ft. 6 x 6 ft. concrete sewer, Farragut Rd. extension, $48,000. T. F. Bowes, City Hall, engr.

N. Y., Long Island City—Apr. 23, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sewers in Mitchell Ave., Lawson, Milliard, Norwood, Ormond, Pinford, Quaker and State Sts.

N. Y., Waterloo — Apr. 30, sewers in various streets. To exceed $25,000. A. R. Moore, village clk.

New Jersey—May 1, by Bd. Comrs. of Jersey City, City Hall, constructing trunk sewers and sewage disposal works, Sects. 1 and 3. Clyde Potts, 30 Church St., New York City, consult. engr.; adv. this issue.

N. J., Morris Plains—April 30, by A. B. Mills, state archt., State Office Bldg., Trenton, sewage disposal plant 160 x 220 ft. concrete tank, 6 ft. high to contain 6, 8 and 10 in. terra cotta pipes, 4 sand filters 60 x 205 ft. and 17 x 26 ft. brick building, at Hospital for Insane, here. $70,000.

Pa., Phila.—Apr. 25, by F. H. Caven, dir. Pub. Wks., concrete, brick and terra cotta branch sewers in various streets, $45,000; 740 ft. 4 ft. rein.-con. sewer in Johnson St. from Marvine to 13th Sts., $30,000. J. A. Vogelson, City Hall, engr.

Fla., St. Petersburg—May 15, at office of H. T. Davis, Dir. of Finance, 8,025 ft. 11 in. and 1,643 ft. 10 in. sanitary sewers; 67,939 ft. 10-84 in. storm water drains; adv. this issue.

Miss., Biloxi—See "Streets and Roads."

O., Cleveland—Apr. 28, by Cuyahoga Co., 8,200 ft. 12-18 in. vitr. clay sewer in Sect. "3-B" Co. Sewer Dist. 1. To exceed $25,000. R. F. MacDowell, Court House, engr.

Wis., Milton—See "Waterworks."

S. D., Avon—May 1, constructing 2½ mi. sewer and 1½ mi. watermains. Dakota Eng. Co., Western Natl. Bank Bldg., Mitchell, engrs.

S. D., Tulare—See "Waterworks."

Calif., Riverside—April 24, by City Trustees, sewers in various streets, incl. 48,151 ft. 6-24 in. vitr. and 7,930 ft. 18-22 in. rein.-con. pipe 18,702 lb. reinforcing, etc. L. Nafager, city engr. Noted March 22.

BIDS RECEIVED

N. Y., Buffalo—See "Miscellaneous."

O., Cleveland—Morgan Run sewer, concrete pipe, from W. McDowell & Son, 10319 Miles Ave., $78,609 and $83,894; sewer in East 117th, East 143rd and East 147th Sts., from Salem & George Bros., 3645 East 140th St., $26,120; East 118th St., from Hadded & Karial Constr. Co., 314 Eagle Ave., $6,185, W. McDowell & Son, 10319 Miles Ave., $6,470.

Mich., Detroit—Building following lateral sewers (1) 3826, (2) 3829, (3) 3830, (4) 3833, (5) 3835, (6) 3841, (7) 3845, (8) 3846, (9) 3847, (10) 3850, (11) 3894, (12) 3895, from Hammen & Co., 4612 Woodward Ave., (1) $9,530, (2) $3,900, (3) $11,500, (8) $9,630, (9) $11,000, (10) $11,200 (11) $11,900, (12) $9,915; Western Constr. Co., 1208 Ford Bldg., (1) $11,449; (2) $3,416, (3) $10,783, (12) $9,368; T. D. Nolan, 22 Highland Ave., (1) $13,500, (2) $2,990, (10) $8,645, (11) $14,000, (12) $9,975; W. Blanck & Co., 827 Ford Bldg., (3) $12,471, (11) $18,524; J. Zuccola, 2808 St. Joseph Ave., (4) $2,295, (5) $1,810, (7) $8,652, (8) $8,796; Liberty Constr. Co., 1026 Detroit Savings Bank Bldg., (4) $3,485, (5) $2,890; P. Cappello, Detroit (street address not available), (4) $2,400, (5) $2,100, (7) $7,440; S. Fattore, Detroit, street address not available), (6) $5,500; A. Rossi, 3447 St. Aubin Ave., (7) $7,000; S. Healy, Detroit(street address not available), (8) $7,029, (9) $7,460, (10) $8,135; Corrick Bros., 507 Owen Bldg., (9) $9,264.

Calif., Turlock—Sanitary sewerage system, concrete pipe, from W. H. Graham, Lodi, $28,206; M. Murphy, 1321 Milvia St., Berkeley, $31,900. Noted Apr. 5.

CONTRACTS AWARDED

N. Y., Blasdell—Sewage disposal plant, to G. Moore, 82 Ridgefield Ave., Buffalo, $63,557; sewerage system, to J. W. Erwin, Greenville, O., $89,391. Noted Apr. 12.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, to Necaro Co., Inc., 97 Court St., sewer in Ocean Ave., 94.45% engrs. est. ($39,925); to M. Paino, 32 Court St., 41st St. 105% ($4,669), Crown St. 95% ($3,695); to S. Ambrosio, 1016 60th St., Rutherford Pl., 92% ($2,370); to Roslyn Constr. Co., 915 New York Ave., Barrett St. 97% ($400), Flushing Ave. 97% ($450), 81st St. 97% ($350), 86th St., 97% ($350), 19th Ave. 97% ($350). Noted Mar. 29.

N. Y., New York — H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., sewer in Crosby and Waterbury Aves., to J. L. Sigretto, Woodhaven, $21,819. Noted Mar. 29.

N. J., Glen Rock (Ridgewood P. O.)—Sewerage system, 3 sections to E. B. Edgar, Scotia, N. Y., and 1 section to Alberto & Co., 208 Hamburgh Ave., Paterson; sewage disposal plant and pumping station to M. Averill, 196 Woodside Ave., Newark, total cost approximately $290,000. Noted Mar. 15.

N. J., Matawan—To Seaman & Letzkus Co., Stone Harbor, 6.5 mi. 6-12 in. sewers, $84,423, and sewage disposal works, $16,998. Noted Mar. 22.

N. C., Fayetteville—Sewerage system, to Tucker & Laxton, Realty Bldg., Charlotte, $150,000. Noted Mar. 15, under "Waterworks."

Ky., Paducah—For 14,833 ft. 6-42 in. rein.-con. and vitr. clay sewers, to E. R. Harding Co., 400 Robinson Bldg., Racine, Wis., $62,861. Engrs. est. $50,000. Noted Mar. 8.

O., Cleveland — For 6,125 ft. 12-20 in. vitr. clay sewers in East 117th, East 143rd, East 146th and East 147th Sts., to Salem & George, 3645 East 140th St., $43,349.

O., Garfield Heights (Cleveland P. O.)—Vitr. clay and c.i. sewers and water mains in East 139th St., Neltrove, Alvin and Rexwood Aves., to A. Lanese Co., Columbia Bldg., Cleveland, $33,349; Saybrook Ave., East 126th and 139th Sts., to D. Rossi & Marcelleti Co., 13701 Benwood Ave., $12,205.

O., Toledo—W. T. Jackson, dir. Pub. Serv., monolithic concrete West Side and Swan Creek intercepting sewer, Contr. 6, to Harris & Tansey, 504 Nasby Bldg., $500,253. Noted Mar. 15.

Ia., Bedford—Sanitary sewerage system to Royer-Craig Co., 1322 32nd St., Des Moines, $31,932.

Mo., Sugar Creek—C. E. Deland, city clk., 11,042 lin.ft. 10-15 in. vitr., 96 lin.ft. 10-14 in. c.i. and 280 lin.ft. 12-16 in. wrought steel sewers, etc., to James & Anderson, Wood River, Ill., $24,134. Noted Mar. 22.

Waste Disposal

BIDS DESIRED

Pa., Harrisburg—Apr. 28, at office S. F. Hassler, supt. Pub. Safety, Room 406, Dauphin Bldg., 2 incinerator plants; adv. this issue.

CONTRACTS AWARDED

Fla., Tampa—Incinerator plant, to Ny Oderless Incinerator Co., Georgia Life Bldg. Macon, Ga., $38,000. Noted Mar. 8.

Bridges

PROPOSED WORK

Conn., Newington — New York, New Haven & Hartford R.R., Union Station, Hartford, plans 144 ft. 3 span bridge, 10,000 cu.yd. earth approach and fill, Clayton Crossing, here. $60,000. E. Gagel, ch. engr.

N. Y., Niagara Falls — Niagara Falls Power Co., plans replacing present iron bridge, 30 ft. wide, with new and modern concrete structure, 60 ft. wide, over Hydraulic Canal. To exceed $50,000. Engineer not announced. This corrects report in Mar. 8 issue.

Pa., Johnstown — Plans 409 ft. bridge over Stoney Creek on Napoleon St., two 33 ft. roadways, and two 8 ft sidewalks. $100,000. M. L. Wilson, city engr. J. E. Greiner & Co., Union Arcade, Pittsburgh, structural engrs.

North Carolina — State Hy. Comn., Raleigh, rejected bids constructing rein.-con. bridges and culverts on State Project 213, Craven Co., $49,000; on State Project 293, Wilson Co., $32,000. Will readvertise. C. M. Upham, state highway engr.

N. C., Monroe—See "Streets and Roads."

N. C., Winston-Salem—See "Streets and Roads."

S. C., Charleston—State Hy. Dept., Columbia, takes bids in June, 1,740 ft. bridge over Ashley River, here, 20 spans, 20,000 yd. concrete. $850,000. J. L. Parker, State Highway Dept., Columbia, engr. Noted June 15.

Fla., Palatka—Putnam Co election May 1, to vote on $29,230 bonds for 7 concrete bridges on Alachua Rd. and 6 on Rice Creek Rd.

Tenn., Jacksboro — Campbell Co. plans bridges over Clinch and Powell Rivers. Engineer not selected.

Tenn., Nashville—State Legislature authorized $300,000 bond issue for strengthening and repairing Jefferson St. and Sparkman St. bridges over Cumberland River. W. W. Southgate, City Hall., engr.

Ky., Irvine—See "Streets and Roads."

Ky., Louisville—Louisville & Jeffersonville Bridge and R.R. Co., Crescent and Main Sts., plans 6 span, steel truss, superstructure on old piers, about 2,200 ft. long, over Ohio River. $4,500,000. C. A. Pennington, supt.

Mo., Youngstown—Plans bridge in Mill Creek Sewer Dist. $40,000. G. Turner, city engr.

Indiana—State Hy. Comn., Indianapolis, plans two 300 ft. steel truss bridges, each to have two 150 ft. spans, one over Mutton Creek, other over Dredge Ditch, Jackson Co., $45,000 each. W. J. Titus, state bridge engr.

S. D., Sioux Falls—Chicago, Milwaukee & St. Paul Ry. Co., 80 East Jackson Blvd., Chicago, Ill., C. F. Loweth, ch. engr., Chicago, St. Paul, Minneapolis & Omaha Ry. Co., 226 West Jackson Blvd., Chicago, Ill., H. E. Barlow, ch. eng., and Great Northern Ry. Co., 175 East 4th St., St. Paul, Minn., A. H. Hogeland, ch. engr., plan concrete and steel viaduct, over tracks at 10th St. Blvd., here. $140,000. J. E. Kirkman, Pierre, state hy. engr.

Mo., St. Louis—Missouri Pub. Serv. Comn. ordered construction of concrete and steel viaduct over Wabash R.R. tracks on Delmar Blvd. and Roselake Ave., $538,000; also depression of grade of Wabash R.R. from point north of Delmar Blvd. to point east of Union Elvd. in Forest Park. City to pay 40% of cost and railroad 60%.

Colo., Denver—Making plans takes bids about June 4, 90 ft. steel or concrete span over Cherry Creek, on 11th Ave. $35,000. A. K. Vickery, City Hall, engr.

Wash., Everett—Snohomish Co. having plans prepared one 210 ft. and one 220 ft. bridge at Arlington, and 200 ft. bridge at Monroe, steel, concrete floors and piers, 20 ft. concrete roadways. $100,000. Union Bridge Co., Central Bldg., Seattle, engrs.

Bridges (Continued)

Ont., Guelph—Wellington Co. plans several new concrete and steel bridges also retaining wall. $50,000. Prices wanted on materials. J. Beattie, St. Andrew St., Fergus, engr.

BIDS DESIRED

Mass., Haverhill—May 10, by Haverhill Lower Bridge Rebuilding Comn. at Essex Co. Commissioners office, Court House, Salem, rebuilding Haverhill Lower Bridge, over Merrimack River, here. R. R. Evans, engr.; adv. this issue.

N. C., Wentworth—May 7, by Bd. Comrs. Rockingham Co., rein.-con. or steel bridge over Dan River, at point where Fishing Creek empties into Dan River, 18 ft. roadway. W. H. Gentry, co. clk.

Alabama—May 1, by W. S. Keller, state highway engr., Montgomery, 343 ft. treated timber bridges on road from Dale Co. line to Florida State Line, Houston Co.; 719 ft. bridges on Evergreen-Belleville Rd., Conecuh Co., one 65 ft., steel span, remainder treated timber; 638 ft. bridges on Floralo Opp Rd., Covington Co., one 80 ft. steel span, remainder treated timber.

O., Dayton—Apr. 28, by Comrs. Montgomery Co., for Bridge No. 171, known as Rip Rap Bridge, 300 ft. long, 20 ft. wide, over Miami River in Wayne Twp., 1 steel truss span, 800 cu.yd. concrete. $75,000. W. O. Pease, co. surv.

Indiana—May 1, by J. D. Williams, dir. State Hy. Comn., Indianapolis, steel truss bridge, one 150 ft. and one 198 ft. steel truss spans, over Eel River, on State Rd. 9-I, Clay Co., $75,000; 198 ft. steel truss bridge over Pigeon Creek, on State Rd. 10-A, Vanderburgh Co., $45,000. W. J. Titus, bridge engr. Noted Apr. 12.

Mich., Lansing—Apr. 30, by City Clerk, 3 span rein.-con. bridge over Grand River, Seymour St. W. Bintz, city engr.; adv. this issue.

Mich., Ludington—May 8, by State Hy. Dept., Lansing, Bridges 531001 and 531002, each to have 75 ft. concrete girder span, 22 ft. roadways, near here.

Wis., Milwaukee—Apr. 30, by Dept. Pub. Wks. widening Folsom St. Bridge, 21 ft. $150,000. G. Staal, city engr.

Kan., Iola—See "Streets and Roads."

Kan., Paola—April 26, by H. Stockwell, engr., Paola, two 70-ft. and one 130-ft. steel truss spans, 526 yd. concrete, 37,940 lb. reinforcing and 178,400 lb. structural steel, for Miami Co.

Wyoming—See "Streets and Roads."

Washington—May 1, State Hy. Comn., Olympia, rein.-con. bridge over Touchet River, Columbia Co.; steel bridge with concrete approaches, over Koch Slough, near Silvana, Snohomish Co. J. Allen, Olympia, state highway engr.

Australia, New South Wales, Sydney—Nov. 30 (change of date), by New South Wales Government, superstructure and substructure of (a) cantilever or (b) arch bridge across Sydney Harbor from Dawes to Milson's Points; adv. this issue.

BIDS RECEIVED

N. Y., Fonda—E. S. Walsh, Supt. Pub. Wks., Albany, Apr. 10, bridge across Mohawk River between here and Fultonville, Barge Canal Contr., 213, from E. P. Lupfer Corp., 694 Ellicott Sq., Buffalo, $175,635; M. Vrooman, Gloversville, $177,560; M. Fitzgerald, Hudson Falls, $181,788. Noted Mar. 15.

Mich., Galesburg — State Hy. Dept., Lansing, Bridge 390304, one 90 ft. and two 60 ft. concrete girders, from Ferguson & MacDonald, Vernon, $25,656; W. Willets, Olivet, $30,762; W. Marshall & Son, Bridgeman, $31,495. Cement furnished by state. Noted Mar. 22.

CONTRACTS AWARDED

Pa., Trafford — Altering viaduct over tracks of Pennsylvania R.R., at West End and 5th St., to Farris Eng. Co., Empire Bldg., Pittsburgh, $25,732; structural steel to McClintic-Marshall Co., Oliver Bldg., Pittsburgh. Engrs. est. $30,000.

North Carolina — State Hy. Comn., Raleigh, constructing rein.-con. bridges and culverts on State Project 392, Robeson Co., to E. T. Gerathmey, Norfolk, Va. (street address not available), $54,648; State Project 971, Madison Co., to W. T. Moore Concrete Products Co., Andrews, $62,785; State Project 485A, Wake Co. and State Project 437, Harnett Co., to T. J. Newell, Clinton, $47,706 and $40,647 respectively; State Project 616, Mecklenburg Co., to W. M. Lefler, Wadeville, $67,490. Noted Mar. 15.

Okla., Pauls Valley—For 3 rein.-con. I-beam bridges, concrete foundations, to replace present wooden bridges, to Ajax Constr. Co., 1824 West Main St., Oklahoma City, $38,261. Noted April 5.

Missouri—State Hy. Dept., Jefferson City, March 24, bridges as follows:

Location	Low Bidder	Price
Cape Girardeau Creek	Vincennes Bridge Co., Vincennes, Ind	
Castor River	Vincennes Bridge Co., Vincennes, Ind	$30,010
St. Francis River, Mule and Mingo Ditches	Service Construction Co., Poplar Bluff	$39,467
Glaize and Rock Creeks	Maloney & Whalen, St. Louis, (street address not available)	$36,462
Cedar Creek	Pittsburgh, Des Moines Steel Co., Tuttle and Southwest 10th St., Des Moines, Ia.	$36,166
Tom and Mud Creeks	Maloney & Whalen, St. Louis, (street address not available)	$34,421
Nodaway River	Western Bridge & Construction Co., 748 Peters Trust Bldg., Omaha, Neb.	$24,992
Big White Water Creek	Tritt Bros., Belleville, Ill	$36,945
Black Water River	Haller & Davis, Boonville	$29,458
Bawdry Lake	Ziegler & Dalton Constr. Co., Junction City, Kan.	$39,965
Byrds and Cain Creeks	Tritt Bros., Belleville, Ill	$27,256
Johnson and Turnback Creeks	Baker & Koontz, Carthage	$27,019
Little Piney River	Vincennes Bridge Co., Vincennes, Ind	$37,668
Davis Creek	Haller & Davis, Boonville	$65,475
Billies Creek	Carterville Construction Co., Carterville	$16,648
Loter Hollow Branch	Vincennes Bridge Co., Vincennes, Ind	$9,935
Saline Creek	Hogan & Humphreys, Fredericktown	$10,374
Nodaway River	R. D. Harper Construction Co., Leona, Kan.	$10,787
Little Muddy Creek	W. A. Reynolds, Marble Hill	$22,463
Old Mines and Salt Pine Creeks	St. Louis Constr. Co., 743 Frisco Bldg., St. Louis	$9,353
Branch of Fabius River	Abell Co., Linnens	$18,695
Dicks Creek	C. I. Williams, Monett	$6,184
Saline Creek	Hogan & Humphreys, Fredericktown	$4,460
Hookers Branch	Miller Constr. Co., Springfield (street address not available)	$10,787
Drainage Ditch	Highway Construction Co., Webb City	$8,310
Salt River	Abell Co., Linnens	$7,767
Sycamore Hollow	V. E. Koch, Box 604, Joplin	$7,269
Buckskin and Little White Water Creeks	Hogan & Humphreys, Fredericktown	$5,596
Drainage Ditches, 27, 28 and 8	W. D. Lenergan Construction Co., New Madrid	$19,708
Sta. 10 plus 00 and Sta. 160 plus 75	J. M. Roach & Co., Anderson	$18,356
Sta. 226 plus 07	Du Bois & Co., Pittsburg, Kan.	$7,223
Sta. 528 plus 17	Haller & Davis, Boonville	$6,495
Sta. 279 plus 65, Sta. 370 plus 44 and Sta. 377 plus 55	Cook & O'Brien Constr. Co., 305 Ry. Exch. Bldg., Kansas City	$9,298
		$27,797

Dams

PROPOSED WORK

Mass., New Boston—Farmington River Hydro-Electric Co. plans dam, 20 ft. high, 200 ft. long, 600,000,000 gal. capacity, here. $500,000. R. P. Ward, 170 Hinsdale Ave., Winsted, Conn., secy. and treas.

Conn., Colebrook River (Colebrook P. O.)—Framington River Hydro-Electric Co. plans hydro-electric station, at Colebrook River Cotton Mills. Cost to exceed $150,000. R. P. Ward, 170 Hinsdale Ave., Winsted, secy. and treas. Private plans.

Tenn., Lawrenceburg—Plans hydro electric power dam over Shoal Creek, near here, dam and plant to be designed for additional 1,000 hp. Engineer not selected.

Calif., Corning—See "Miscellaneous."

BIDS DESIRED

Pa., Spruce Creek—K. L. McClain, secy. Mid-State Sunday School Training Camp Assn., 105 East 10th St., Tyrone, taking bids dam across Warriors Mark Run, Franklin Twp., Huntingdon Co., 365 ft. long, 17 ft. high, 10 m. g. storage capacity.

Pa., North East—See "Waterworks."

Railways

PROPOSED WORK

Kentucky — Kentucky & Indiana Terminal R.R. Co., 29th and High Sts., Louisville, plans tracks for new switches and enlargement of shops and yards, 30th St. and Alford Ave. $2,000,000. W. S. Campbell, ch. engr.

Kentucky—See "Buildings, under Bowling Green."

Minnesota — Chicago, Milwaukee & St. Paul Ry., Railway Exch. Bldg., Chicago, plans 4.5 mi. spur through St. Paul to Ford plant, near High Dam. $700,000. C. F. Loweth, ch. engr.

Kansas—Chicago, Rock Island & Pacific Ry., La Salle St. Station, Chicago, plans following program 7.18 mi. second track from Latimer to Herrington, 17.64 mi. from Patico to Bishop, 4 mi. passing tracks converted to new main track, 3.5 mi. new sidetracks and passing track extensions on double track. $1,770,000. C. A. Morse, Chicago, ch. engr.

Oregon—F. Herrick Co. (being incorporated), St. Maries, Idaho, plans railroad from Crane to Seneca by way of Burns, Harney and Grant Counties. $1,000,000. Engineer not selected.

CONTRACTS AWARDED

Washington — Longview, Portland & Northern R.R., Kelso, grading 30 mi. railway from Longview to point west of Vader, to Twohy Bros., L. C. Smith Bldg., Seattle. Cost to exceed $1,000,000. Noted Mar. 15.

Washington—Spokane, International Ry., Old National Bank Bldg., Spokane, will ballast and surface various sections of road in Washington and Idaho. $75,000. Work will be done by day labor. E. G. Taber, ch. engr.

Excavation, Drainage Irrigation

PROPOSED WORK

Mo., Creve Coeur—Creve Coeur D. D. had plans prepared ditches to drain 7,000 acres land. $500,000. T. N. Jacob, 1900 Ry. Exch., St. Louis, engr.

Wash., Mt. Vernon—Comrs. Skagit Co. granted petition of 200 landowners in Padilla Bay Dist. to establish diking district embracing 9,000 acres with 7 mi. diking, 20 ft. high, 20 ft. wide at top and 100 ft. wide at bottom. $1,000,000.

Wash., Wenatchee — Douglass-Wenatchee Irrigation Dist. plans ditches and siphons to irrigate over 50,000 acres in Chelan and Douglass Counties. $6,000,000 bonds will be authorized for project. E. Gensinger, Wenatchee, member Bd. Dirs.

Calif., Corning—See "Miscellaneous."

Ont., Lambton — Having plans prepared and takes bids about Apr. 21, for dredge cut from St. Clair River to the Snye in connection with Marshy Creek Drain. $30,000. W. A. Scott, Wilkesport, engr.

B. C., Grand Forks -Having surveys made for 2nd unit of irrigation system. $40,000. D. A. Graham, city engr.

BIDS DESIRED

Pa., Phila.—See "Streets and Roads."

Wis., North Milwaukee—Apr. 23, by H. C. Webster, engr., 216 West Water St., Milwaukee, draining Sects. 1 and 2 west of here, 70,000 cu.yd. dry earth and 2,550 cu. yd. rock excav., for Milwaukee Co. Drainage Bd. $25,000.

Wis., Manitowoc—May 1, dredging Manitowoc River, incl. 23,000 cu.yd. hard pan, 70,000 cu.yd. softer material or mud. $25,000. F. H. Alter, City Hall, engr.

Ia., Des Moines—May 1 at office of C. W. Rhoads, aud. Polk Co., D.D. 38, Franklin Co., Sect. 1, 12,400 ft. main ditch, 58,400 cu.yd. excav., Sect. 2, 11,100 ft. main ditch, 57,380 cu.yd. excav., Lateral 1, 7,070 ft. long, 13,450 cu.yd. excav., Lateral 2, 5,220 ft. long, 9,690 cu.yd. excav., Lateral 3, 6,160 ft. long, 11,920 cu.yd. excav. and East Levee Ditch, 4,000 ft. long, 7,160 cu.yd. excav., etc.

Tex., Brownsville—Apr. 28, by Cameron Co. Water Impvt. Dist. 1, 15 mi. drainage ditch through northern part of district, 300,000 cu.yd. earth excav., etc. $40,000. W. O. Washington, Brownsville, engr.

Tex., Houston—May 2, by H. L. Washburn, aud. Harris Co., D.D. 12, Court House, ditch work on Brays Bayou, 27,000,000 cu.yd. earth excav., $325,000. J. S. Burke, 1818 Walker Ave., engr.

Excavation, Drainage and Irrigation
(Continued)

BIDS RECEIVED

Calif., Oroville — Thermalito Irrigation Dist., furnishing 50,900 lin.ft. 4-24 in. riveted slip joint pipe, from Montague Pipe & Steel Co., Hobart Bldg., San Francisco, (regular bid) $71,790; Western Pipe & Steel Co., 444 Market St., San Francisco, (alternate type of pipe) $60,781. Noted Jan. 18.

CONTRACTS AWARDED

Ia., Carroll—Carroll Co., tile for drainage work to Lake View Concrete Tile Co., Lake View, $33,711. Noted Mar. 22.

Ia., Nevada—Story Co., Marshall-Story D. D. 3, 47,086 lin.ft. 8-39 in. and 6,636 lin.ft. 6 in. tile, 1,400 lin.ft. 30 in., 1,050 lin.ft .32 in. and 2,800 lin.ft. 36 in. double strength pipe, 108 lin.ft. 8 in., rein.-con. pipe, etc., in Marshall and Story Counties, to Blakemore & Jacobson, Nevada, $56,300. Noted Mar. 29.

Mo., Corning—Mill Creek Dyke & Drainage Dist., about 14 mi. open ditch, incl. main and lateral ditches, 430,000 cu.yd. dry earth excav., on part of work, excavated earth will be used as levees on each side of ditch, to Reese Constr. Co., Hamburg, Ia., $0.0966 per cu.yd. Engrs. est. $51,600. Noted Mar. 15.

Mo., Winfield—Cap-au-Gris Drainage & Levee Dist., levee and drainage ditches, 180,000 cu.yd. earth excav., to Sternberg Dredging Co., Arcade Bldg., St. Louis, $25,486. Engrs. est. $25,000. Noted Apr. 12.

Streets and Roads

PROPOSED WORK

Conn., Hartford—Plans paving various streets, 3,000 lin.ft. granite and 600 lin.ft. curved curbing, 30,000 lin.ft. flag sidewalk. $25,000. R. N. Clark, city engr.

N. Y., Lockport—Plans paving Mill St., various materials to be used. $25,000. R. Smith, city engr.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro., Queens Subway Bldg., rejected bids Apr. 2, grading, curbing, laying sidewalks and asphalt paving Alburtis Ave.; also asphalt paving 88th St. Will readvertise. Noted Apr. 12.

N. Y., Rome—City Eng. Dept. and Bd. Estimate & Contr. prepared plans paving various streets. To exceed $25,000.

New Jersey—State Hy. Dept., Trenton, plans 50 mi. new road construction during 1923, incl. Morris Turnpike from Farmers Hotel to Seven Bridges Rd., Seven Bridges Rd. from Morris Turnpike to Springfield Ave., Smith Mills to westerly line of Morris Co. near Newfoundland; also build Musconetcong River Bridge, overhead bridge from Netcong to Landing, etc. W. G. Sloan, state highway engr. See Business Side of Construction. Noted Nov. 16.

N. J., Trenton — City and Mercer Co. plans paving portions Hamilton Ave., Scotch Rd., Lalor and Spruce Sts., asphalt. A. Swan, city engr. H. F. Harris, Court House, co. engr.

N. J., Trenton—Soon takes bids asphalt paving various streets. $300,000. A. Swan, City Hall, engr.

Pa., Allentown—Plans to expend $50,000 for pavements.

Pa., Catasauqua—Plans paving various streets. $60,000.

Pa., Erie—Plans asphalt pavements on 21st St., $12,350, Schley St., $12,300, Cascade St., $10,750, Cranberry St., $17,000. F. G. Lynch, city engr.

Pa., Oil City—Plans resurfacing West 3rd St. $50,000. M. Weber, city engr.

Pa., Olyphant—Plans to pave Church and Lincoln Sts. $25,000. Engineer not announced.

Pa., Palmerton—Plans to pave Harvard Rd. and Delaware Ave. $60,000. Engineer not announced.

Pa., Sayre — Plans election to vote on $30,000 bonds asphalt pavements on Lincoln, West Lockhart and Stevenson Sts.

Pa., Scranton—Plans paving Vine St., sheet asphalt on stone and concrete. $45,-010. W. A. Shunk, city engr.

Pa., Scranton—Plans to resurface Market St. with asphalt and Washburn St. with brick. $50,000. W. A. Shunk, city engr.

Pa., Warren—Plans to pave Carver St. $25,000. Engineer not announced.

W. Va., Clarksburg—Elk Dist., Harrison Co., election May 1, to vote on $120,800 bonds part hard surfacing 10½ mi. Clarksburg-Buckhannon Pike. If bonds are voted state will appropriate balance. Total cost $480,000. G. F. Coyle, co. engr.

North Carolina—State Hy. Dept., Raleigh, received no bids Apr. 3, grading and waterbound or bituminous macadam paving 8.37 mi. State Project 961 A, Macon Co. Will readvertise. C. M. Upham, state highway engr. Noted Mar. 15.

North Carolina — State Hy. Comn., Raleigh, rejected bids Apr. 4, grading and concrete or asphaltic paving 9 mi. State Project 293, Wilson Co., $268,000, 4.4 mi. State Project 151 B, Hyde Co., $72,000, 8.27 mi. State Project 961 A, Macon Co., $175,000, 10.43 mi. State Project 213, Craven Co., $350,000; grading and waterbound or penetration macadam paving 2.92 mi. State Project 930 A, Graham Co., $34,000. Will readvertise. C. M. Upham, state highway engr.

N. C., Lincolnton—Lincoln Co. plans hard surfacing 15 mi. Shelby Highway. $250,-000. R. C. Goode, chn. Bd. Co. Comrs.

N. C., Monroe—Union Co. to vote on $500,000 bonds June 9, constructing roads and bridges. A. A. Secrest, co. comr.

N. C., Winston-Salem—Plans grading, paving, curbing, bridges, water and sewer extensions. $1,501,900.

Fla., Clearwater—Pinellas Co. had plans prepared reconstructing to width of 18 ft. and vitr. paving 10 mi. Rd. 5, $100,000; paving 5.75 mi. Rd. 7, 30 ft., $250,000; paving on 4-6 in. compacted rock 76.55 mi. Rds. 1, 2, 3, 4 and 6, 16 ft., $993,000. Alternate proposals on vitr. brick, asphalt block, sheet asphalt, concrete and bituminous macadam. C. E. Burleson, Clearwater, engr.

Fla., Palatka—Putnam Co. election May 1, to vote on $34,875 bonds surfacing with shell, rock, clay or gravel 13.9 mi. Peniel Settlement, Yelvington and San Mateo-Flagler Co. line Rds., 16 ft., $84,375 bonds vitr. brick paving and granite curbing 6.25 mi. San Mateo-Dunns Creek-Federal Point Rd., 9 ft.; $364,500 bonds vitr. brick paving and concrete curbing 27 mi. Palatka-Frances Rd. to Alachua Co. line, 9 ft.; $139,050 bonds vitr. brick paving and concrete curbing 10.2 mi. Rice Creek-Clay Co. line Rd., 9 ft.

Fla., St. Augustine—St. Johns Co. election Apr. 24, to vote on $84,000 bonds paving 8.4 mi. road from Durbin to Blacks; $35,000 bonds 3½ mi. Federal Point and Hastings Blvd. Extension; $30,000 bonds 3 mi. Spuds Rd.; $84,000 bonds 8.4 mi. Elkton-Tocio Rd.; $140,000 bonds 14 mi. Tocoi Rd., alternate proposals. J. F. Rodenbaugh, St. Augustine, engr.

Fla., Tallahassee—Takes bids in May, surfacing 2,734 ft. Duval St.; 2,850 ft. Adams St.; 2,490 ft. Monroe St. Bids will be received on following types of surfacing brick, grouted, bituminous filler on concrete, concrete, Kentucky rock asphalt (without concrete base), sheet asphalt and asphaltic concrete. M. Walston, city engr.

Tenn., Greenville—Greene Co. plans to expend $200,000 for various roads, probably macadam of local limestone. Engineer not selected.

Tenn., Jacksboro — Campbell Co. sold $75,000 bonds for road between Jacksboro and Jellico. Engineer not selected.

Tenn., Nashville—Plans widening to 65 ft. and paving Church St. from 13th to 20th Aves. W. W. Southgate, City Hall, engr.

Kentucky—State Rd. Dept., Frankfort, rejected bids opened Apr. 4, constructing 9 mi. Whitley City-Tennessee State Line Rd., State Project 22, B and C, McCreary Co. Will readvertise. $150,000-$200,000. J. S. Boggs, state highway engr. Noted Mar. 8.

Ky., Henderson — Plans 25,000 sq.yd. sheet asphalt paving on concrete. $50,000. J. A. Cunningham, comr. Dept. Pub. Wks. and Property.

Ky., Irvine—Estill Co. sold $140,000 bonds for road and bridge work.

Ky., Paducah — Plans paving various streets. $150,000. H. A. Pulliam, Comr. Pub. Wks.

O., Cleveland — Plans repaving Bway., Buckeye Rd. S. E., Central Ave. S. E., Davenport Ave. N. E., Lorain Ave., Scovill Ave. S. E., Union Ave. S. E., Woodland Ave. S. E., East 9th, East 17th, East 82nd, East 84th and West 9th Sts., Euclid Ave. from East 55th St. to University Circle, Euclid Ave. from Ivanhoe Rd. to city limits, Prospect Ave. S. E. from East 9th to Ontario Sts., Prospect Ave. S. E. from East 9th to East 22nd Sts., St. Clair Ave. N. E. from Woodworth Ave. to East 140th St., St. Clair Ave. N. E. from East 140th to East 152nd Sts. $500,000. R. Hoffman, City Hall, engr.

O., Columbus—Plans grading, curbing, laying necessary water services and sewer connections and paving Milford, Melrose and Ardmore Aves., Rich and 9th Sts., and 4 alleys, brick, asphalt or concrete. R. H. Simpson, city engr.

O., Columbus — Making plans grading, curbing, laying necessary water services and sewer connections and paving 2,660 ft. McAllister Ave., Lynn and Gates Sts., alley west of Linwood Ave., 20-24 ft., brick, concrete or asphalt. R. H. Simpson, city engr.

O., Middletown—See "Waterworks."

O., Dayton—Plans curbing, guttering and paving 5,500 sq.yd. Dow St. and Lefever Ave., vitr. brick, asphaltic concrete, concrete or Kentucky rock asphalt. $28,358. I. E. Houk, city engr.

Indianapolis—State Hy. Dept., Indianapolis, plans paving 42,772 sq.yd. Federal Aid Rd. 52B, Vigo Co.; 49,538 sq.yd. Federal Aid Rd. 49B, both concrete, Steuben Co., 18,360 lb. reinforcing; 21,719 sq.yd. gravel 8 in., 3,806 lb. steel for bridge and culvert structures, Federal Aid Rd. 34A, Spencer Co., C. Gray, state highway engr.

Ind., Ft. Wayne—Allen Co. revising plans 2.5 mi. Prusse Rd., 18 ft., stone and Tarvia X. $44,089. O. M. Darling, 1211 Rivermet St., Ft. Wayne, engr.

Ind., Monticello—White Co. plans paving 3 mi. Miller Rd., 18 ft., crushed stone. $27,-355. G. A. Thomas, Monticello, engr.

Ind., South Bend—Had plans prepared and soon takes bids paving Yukon Ave., Miner and Wayne Sts., $45,070; resurfacing, probably asphalt Main St. and Colfax Ave., $27,254; grading, curbing, walks and paving 1,383 ft. Eckman St., 30 ft. $30,306. F. J. Anderson, City Hall, engr.

Ind., Warsaw—Kosciusko Co. plans grading and graveling 15,840 ft. Huffer Rd., 24 ft., $25,555; paving 16,507 sq.yd. Groninger Rd., concrete or brick, on concrete, $27,249. S. S. Boggs, Warsaw, engr.

Michigan — State Hy. Dept., Lansing, soon takes bids grading and surfacing 5 mi. road in Hillsdale, Calhoun, Jackson and Mason Counties, concrete and gravel. F. F. Rogers, state comr.

Mich., Detroit—Had plans prepared paving 8 streets, incl. 99,500 sq.yd. 3½ in. sheet asphalt on 8 in. concrete, $518,105; 5 streets with 3 in. sheet asphalt on 6 in. concrete, $72,370; 18 alleys with one course 6 in. concrete, $56,470; 23 streets with 3½ in. sheet asphalt on 8 in. concrete; 85 streets with 3½ in. sheet asphalt on 8 in. concrete with Berea or Medina curbstone. J. W. Reid, city engr.

Ill., Chicago.—Bd. Local Impvts., 207 City Hall, soon takes bids concrete paving Greenwood Ave., $56,000; La Vergne and Augusta Sts., $300,000. C. D. Hill, City Hall, ch. engr.

Ill., Dwight—Takes bids in May concrete paving. $150,000. Consoer Eng. Co., 140 South Dearborn St., Chicago, engrs.

Ill., Toulon—Making plans concrete paving various streets. $60,000. A. W. Consoer Eng. Co., 140 South Dearborn St., Chicago, engrs.

Ia., Clinton—Plans paving, curbing and guttering, 4th, 5th and 7th Sts., 6th, 8th and Wesley Aves.; curbing and guttering Maple and 8th Aves., 15,960 sq.yd. vertical fibre brick, sheet asphalt or bituminous macadam and 6,540 lin.ft. combined curb and gutter. Alternate bids on various types pavement. $60,000. B. R. Anderson, city engr. Noted Mar. 22.

Ia., Colfax—Making plans 9,000 sq.yd. vertical fibre brick and bitulithic pavement. A. T. Archer & Co., 609 New England Bank Bldg., Kansas City, Mo., engrs.

S. D., Sioux Falls—Chicago, Milwaukee & St. Paul R R., 80 St. Jackson Blvd., Chicago, Ill., plans to expend $45,000 in paving and grading property here. C. F. Loweth, Chicago, ch. engr.

Wyo., Casper—Making plans grading, paving, curbing and building sewers, approximately 180,000 sq.yd. pavement. $506,-000. F. S. Knittle, Box 1143, city engr.

Wyo., Cheyenne—Plans 500,000 yd. paving. Soon takes bids 30,000 yd. in 1st Dist., asphalt, concrete, macadam, brick or asphaltic concrete. Bruce & Grupe, 408 Finance Bldg., Omaha, Neb., engr.

Mo., Kirksville—Rejected bids paving 40 blocks. B. Crabtree, Kirksville, engr. Noted Feb. 22.

Tex., Ennis—Voted $60,000 bond issue for permanent paving various streets. H. McCanless, city engr. Noted Mar. 22.

Tex., Henrietta—Clay Co. plans improving roads in Henrietta and Petrolia Rd. Dists., incl. 36 mi. concrete road from Bellevue to Wichita Co. line. $675,000 bonds voted. J. F. Vaden, Henrietta and J. W. Gerard, Petrolia.

Tex., Marshall—Election early in May to vote on $50,000 bonds for street paving.

Wash., Newport—Pend Oreille Co. plans grading and surfacing 3 mi. International Pend Oreille Highway, 20 ft. Cost to exceed $25,000. J. C. Stenger, co. engr.

Wash., Seattle—King Co. takes bids about May 3, 2 mi. Dockton Molita Rd. on Maury Island. $30,000. T. R. Beeman, co. engr.

Wash., Spokane — Spokane Co. plans grading and surfacing with crushed rock (truck rolled) 104.6 mi. road, 24 ft. $1,130,-000. H. J. Doolittle, Court House, consult. engr.

Streets and Roads (Continued)

Oregon—State Hy. Dept., Salem, plans grading and gravel surfacing 14.05 mi. Project 92, Grant Co., $202,012; rein.-con. surfacing Project 96, Marion and Clackamas Counties, $63,056. R. Klein, state highway engr.

Ore., Portland—Plans to expend $600,000 during 1923 on 67 paving projects. O. Laurgaard, city engr. Noted March 1.

Calif., Santa Barbara—Santa Barbara Co. having plans prepared paving with oiled macadam 25 mi. highway in Santa Ynez Valley. $1,000,000. O. H. O'Neill, co. surv. Noted Feb. 22.

Calif., Stockton—San Joaquin Co. had plans prepared grading and surfacing 3½ mi. Harney Lane Rd., 7,700 tons crushed rock, 1,200 tons dressing for oil, 980 bbl. asphaltic oil, etc. $36,000. F. E. Quail, co. surv.

Ont., Dunnville—Plans concrete pavement on Cedar and Broad Sts. $55,000. Prices wanted on all materials. J. Clark, city engr.

Ont., Hanover—Plans to pave Main St., cement. $80,000. Prices wanted on material.

Ont., Leamington—Plans being made and takes bids latter part of month, concrete pavement on Erie St. $60,000. Prices wanted on materials. J. J. Newman, Davis Blk., Windsor, engr.

Ont., Simcoe—Norfolk Co. voted $78,000 bonds for grading, graveling and macadamizing roads. G. R. Marston, co. engr.

Ont., Tavistock—Plans concrete pavements on Woodstock and Hope Sts. $55,000. Prices wanted on materials. A. Baechler, chn. of com.

Ont., Toronto—Plans paving ¾ mi. Jane St., 40-45 ft., bitulithic on 6 in. concrete. $183,808. R. C. Harris, city engr.

Ont., Toronto—Plans paving Campbell Ave., 4,500 sq.yd. asphalt on concrete. $33,000. R. C. Harris, city engr.

Ont., Waterloo—Plans concrete pavement on Main St. $45,000. Prices wanted on materials. J. C. Haight, city engr.

Ont., Woodstock—Oxford Co. plans to expend $80,000 on new cement highways. Prices wanted on materials. F. J. Ure, County Bldg., engr.

BIDS DESIRED

R. I., Ashland—May 9, at office of Water Supply Bd., City Hall, Providence, constructing Ashland Causeway, to carry relocated Plainfield Pike across proposed Scituate Reservoir, at village of Ashland in town of Scituate. F. E. Winsor, ch. engr.; adv. this issue.

Conn., Hartford—Apr. 24, by Bd. Contract and Supply, Municipal Bldg., for 58,400 cu.yd. 3 in. asphalt on Webster, Washington, Ann, Broad, Park from Zion to Chadwick Ave. and from City line east, $263,000; 7,000 sq.yd., 7 in. concrete on Preston St., $25,000; patching about 15,000 sq.yd. various streets, sheet asphalt, $26,000. R. N. Clark, city engr. Noted Mar. 29

Conn., Rockville—Apr. 25, by A. E. Waite, chn. Pub. Wks. Com., 6,000 lin.ft. concrete curb and gutter, 3,000 lin.ft. concrete sidewalk. $25,000. C. Bancroft, city engr. Noted Apr. 12.

N. Y., Auburn—May 1, by J. P. Jaeckel, city mgr., City Hall, improving various streets and avenues. M. F. Dullea, city engr.; adv. this issue.

N. Y., Fredonia—Apr. 23, by Village Bd. paving Maple Ave., Day and Cushing Sts., brick on concrete. $25,000.

N. Y., Lynbrook—Apr. 26, Bd. Trustees of Incorporated Village, rein.-con. pavement on certain streets, Contrs. 1, 2 and 3. P. Staudermann, pres.; adv. this issue.

N. Y., New York—Apr. 25, by J. Miller, pres. Manhattan Boro, Municipal Bldg., grading Service St. adjacent to Riverside Dr.; sidewalks on north and south sides of 108th St.; regrading, curbing, recurbing, flagging and paving Haven Ave. and Wadsworth Terrace, sheet asphalt on concrete, West 173rd St., asphalt block on concrete, West 190th St. and Wadsworth Terrace, widening and repaving widened portion roadway of Canal St., with granite block on concrete.

N. Y., Westfield—May 11, by Bd. Village Trustees, improving Union and Pearl Sts., rein.-con. or brick. J. Riley, village clk.; adv. this issue. Noted Feb. 22.

N. J., Allenhurst—Apr. 24, by Bd. Boro Comrs., 8 in. rein.-con. pavement. J. Strollo, Brent Good Bldg., Long Branch, boro engr.; adv. this issue.

N. J., Cedargrove—Apr. 25, by G. C. Bergen, purch. agt. Essex Co. Court House, Newark, grading and paving 2,830 ft. Stevens Ave., 20 ft., 8 in. rein.-con., here. $29,199. W. A. Stickel, Court House, Newark, engr. Noted Mar. 29.

N. J., Morristown—May 2, by Bd. Freeholders Morris Co., Court House, reconstructing East Main St. in town of Boonton; constructing road beginning at Passaic River at Union Co. line and extending westerly 12,700 ft. to road leading to Stirling, in Passaic Twp. F. D. Abell, dir.; adv. this issue.

Pa., North East—See "Waterworks."

Pa., Phila.—Apr. 24, by Dept. Pub. Wks., asphalt pavements on Abbotsford, Abington, Annsbury, Palethorpe, Bonsall, Boyer, Rittenhouse, Sprague, Cresheim Valley Dr., Delphine, Ella, Ruscomb, Ellet, Henley, Kingessing, Miller, Myrtlewood, Rising Sun, Mascher, Sansom, Sparks, Sydenham, 16th, 20th, 30th, 66th and 67th Sts., Schedule A; vitr. block pavements on Spencer St., Schedule B; furnishing and applying bituminous dust layer, Schedule C; removing buildings on line of Spring Garden St. between American St. and Delaware Ave., Schedule D; dredging Schuylkill River south of Spring Garden St., Schedule E; furnishing fuel oil storage tanks, Schedule G; furnishing ready mixed concrete, Schedule I. F. H. Caven, dir. Pub. Wks.

Pa., Pringle (Wilkes-Barre, P. O.)—Apr. 27, by Boro Council, grading, paving and curbing Evans St. and Conners Ave. $25,000. J. A. Boyle, 401 Bennett Bldg., Wilkes-Barre, engr.

Maryland—May 1, by State Roads Comn., Baltimore, paving 14.8 mi. State Highway, in Baltimore City, Washington, Baltimore, Prince George and Wicomico Counties, Contrs. BC-45, W-24, B-55, P-36 and Wi-24, macadam, concrete, gravel and sheet asphalt. J. N. Mackall, chn.; adv. this issue.

Md., Hagerstown—Apr. 24, at office of Bd. Street Comrs., at Mayors Office, subgrading and surfacing waterbound macadam, Summit Ave. from Howard St. to South Blvd., and Potomas Ave. from Laurel St. to Magnolia Ave. W. L. Middlekauff, pres.

Md., Towson—Apr. 26, by Baltimore Co., paving 9,900 ft. Trappe Rd., Merritt and New Pittsburgh Aves., concrete; 2 mi. Joppa and Glen Arm Rds., macadam. $100,000. S. A. Green, Towson, engr.

Va., Norfolk—April 30, at office of W. H. Taylor, 3rd, dir. Pub. Wks., curbing, grading and paving various streets, Items 1, 2, 3 and 4. C. E. Ashburner, city mgr.; adv. this issue.

N. C., Lincolnton—Apr. 24, by J. R. Gamble, mayor, 30,000 sq.yd. hardsurfacing, 13,000 lin.ft. concrete curb and gutter, 3 mi. concrete sidewalks, etc. S. M. Roper, Lincolnton, engr.

Fla., St. Petersburg—May 15, by Dir. of Finance, grading, granite or concrete curbing, brick, asphalt block, asphaltic concrete, sheet asphalt of willite process pavement. Separate bids for furnishing material. E. C. Garvin, dir. pub. wks.; adv. this issue.

Fla., Sebring—Apr. 30, by Highlands Co., paving (alternate proposals) 30 mi. road from Avon Park to Hicoria, $275,000; 14 mi. road from Hicoria to Glades Co., $75,000. Peacock & Hood, Sebring, engrs.

Fla., Starke—May 15, by Bradford Co. Comn., grading and clay surfacing 13.3 mi. Rd. 1 from Starke to Brooker. $25,000. E. R. Neff, Starke, engr.

Alabama—May 1, by W. S. Keller, state highway engr., Montgomery, grading and surfacing with sand clay and gravel 47.02 mi. road in Houston and Covington Counties, 24 ft. grading, 18 ft. surfacing; grading and gravel surfacing 10.02 mi. road, Conecuh Co., 7,000 cu.yd. imported and 18,000 cu.yd. local gravel, 24 ft. grading and 18 ft. surfacing.

Miss., Biloxi—Apr. 26, by J. J. Kennedy, mayor and city comrs. street paving, storm sewers, beach front and sea wall. M. L. Culley, Jackson, consult. engr.

La., Pointe a la Hache—Apr. 30, by J. Bernard, pres. Police Jury Plaquemine Parish, 5.48 mi. highway.

Tenn., Manchester—Taking bids and opens same about May 1, grading various roads, 15 mi. gravel, 15 mi. limestone. $250,000. N. H. Meriwether, Tullahoma, ch. engr.

Tenn., Manchester—Apr. 27, by Coffee Co. Rd. Comn., 14.47 mi. Manchester-Beach Grove Highway; 7.16 mi. Manchester-Summitville Highway; 7.51 mi. Manchester-Hillsboro Highway. N. H. Meriwether, Tullahoma, ch. engr.

Ky., Winchester—May 4, by Bd. City Comrs., City Hall, 15,000 sq.yd. sheet asphalt, concrete, Kentucky rock asphalt or asphalt macadam paving. N. A. Powell, Comr. Pub. Wks.; adv. this issue.

O., Akron—Apr. 30, by W. H. Peters, dir. Pub. Serv., grading, laying sidewalks and paving, brick or asphalt, 1,346 ft. Delta Ave., 28 ft., $31,000, 1,96b ft. Bishop St. 26 ft., $44,000, 4,081 ft. Storer Ave., 26 ft. $100,000; grading, paving and building sewers 1,500 ft. West South St., 26 ft. $39,000. E. A. Kemmler, Delaware Bldg., engr.

O., Lakewood (Cleveland, P. O.)—Apr. 23, grading, curbing and brick paving Lakeland, Athens and Oweego Aves. To exceed $25,000. E. A. Fischer, City Hall, engr.

Ind., Ft. Wayne—Apr. 26, by Auditor Allen Co., paving 2.5 mi. Prusse Rd., 18 ft. stone and Tarvia. $44,089. O. M. Darling, Ft. Wayne, engr.

Ind., Greencastle—Apr. 28, by Auditor Putnam Co., paving 30,660 sq.yd. Hunter Rd., waterbound macadam. $68,989. W. P. Koehler, Greencastle, engr.

Ind., Indianapolis—Apr. 30, by Auditor Marion Co., stone and gravel surfacing 2.9 mi. Chris Schilling Rd., 30 ft., $32,636; grading and graveling 7 mi. Schaefer Rd. 18 ft., $78,489. J. J. Griffith, co. engr. Noted Apr. 12.

Ind., Logansport—Apr. 25, by Auditor Cass Co., stone paving 3.9 mi. Duffey Rd. 18 ft., $25,774; 5 mi. Gordon Rd., 18 ft., $38,203. J. Bennett, Logansport, engr.

Ind., Monticello—Apr. 25, by Auditor White Co., paving 3 mi. Miller Rd., 18 ft. crushed stone. $27,355. G. A. Thomas, Monticello, engr.

Ind., Muncie—Apr. 25, by Auditor Delaware Co., paving 14,178 sq.yd. Baldwin Rd., bituminous macadam on concrete, $26,729; 31,176 sq.yd. Calliher Rd., concrete, $84,000. L. Janney, Muncie, engr.

Ind., Warsaw—May 7, by Auditor Kosciusko Co., grading and graveling 15,840 ft. Huffer Rd., 24 ft., $25,555; paving 16,507 sq.yd. Groninger Rd., vitr. brick or concrete on concrete, $27,249. S. S. Boggs, Warsaw, engr.

Michigan—Apr. 27, by State Hy. Dept., Lansing, grading and surfacing 5.3 mi. road, Monroe Co., 18,423 cu.yd. earth excav., 56,319 sq.yd. concrete. F. F. Rogers, comr.

Mich., Alpena—Apr. 28, by Alpena Co. Rd. Comn., grading and gravel surfacing 10.568 mi. road, 42,348 cu.yd. excav., 68,200 sq.yd. gravel. S. J. Davison, engr.

Mich., Port Huron—Apr. 24, by St. Clair Co. Rd. Comn., grading and gravel surfacing 7.586 mi. road, 28,326 cu.yd. excav., 71,843 sq.yd. gravel. W. W. Cox, engr.

Wisconsin—Apr. 24, by State Hy. Comn., div. office 2, Stephenson Bldg., Milwaukee, grading and concrete surfacing 76,656 sq. yd. Lake Shore Rd., Ozaukee Co., Elkhorn-East Troy Rd., Walworth Co. A. R. Hirst, Madison, state highway engr.

Wisconsin—Apr. 25, by State Hy. Comn. at div. office 3, Nicolet Bldg., Green Bay, grading and surfacing, etc. 8.77 mi. Manitowoc-Sheboygan Rd., Manitowoc Co., Amberg-Beecher Lake Rd., Marinette Co., Breed-Mountain Rd., Oconto Co., gravel and concrete. A. R. Hirst, Madison, state highway engr.

Wisconsin—Apr. 27, by State Hy. Comn., at div. office 4, Citizens Natl. Bank Bldg., Wisconsin Rapids, grading and surfacing 12.13 mi. Stevens Point Rd., Waupaca Co. and Fremont-Weyauwega Rd., Portage Co., 18 ft., concrete. A. R. Hirst, Madison, state highway engr.

Wisconsin—May 1, by State Hy. Comn., at div. office 6, 213 South Barstow St., Eau Claire, grading and surfacing 11.46 mi. Red Wing-Ellsworth, Ellsworth-River Falls and Plum City-Ellsworth Rds., Pierce Co., Chelsea-Westboro Rd., Taylor Co. A. R. Hirst, Madison, state highway engr.

Wis., Milwaukee—Apr. 24, by C. R. Weymouth, div. engr. State Hy. Comn., 444 Milwaukee St., 10,542 sq.yd. concrete surfacing and 25 ft. span, etc., Brown Deer-Menomonee Falls Rd., Federal Aid Project 285, Milwaukee, Co.

Ia., Carroll—Apr. 23, paving and incidental work on Primary Rd. Projects 6 and 18, 45,000 sq.yd. concrete. Iowa Hy. Comn., Ames, engrs.

Ia., Clear Lake—Apr. 27, improving several streets, 3,558 cu.yd. earth excav., 2,224 ft. curb, 28,035 sq.yd. various types paving materials. $75,000. C. R. Wood, Mason City, engr.

Ia., Onawa—May 15, by Auditor Monona Co., grading 15.336 mi. primary roads northwest and southeast of here, 147,027 cu.yd. earth excav., etc. Iowa Hy. Comn., Ames, engrs.

Ia., Sigourney—Apr. 25, by Auditor Keokuk Co., grading 15.422 mi. primary roads northeast of here, 6,000 cu.yd. channel

Streets and Roads (Continued)

change, 413,900 station yd. overhaul, 313,490 cu.yd. earth excav., etc. Iowa Hy. Comn., Ames, engrs.

Minn., Mankato — May 2, by C. L. Kennedy aud. Blue Earth Co., Job 2301, State Rd. 10, 51,474 cu.yd. excav., 76,544 cu.yd. overhaul. J. W. Hruska, Mankato, engr. Noted Mar. 29.

Minn., Ortonville—May 1, by A. V. Randall, aud. Big Stone Co., 4.5 mi. Job 2301, State Rd. B, and 3.25 mi. Job 2302 State Rd. F, 52,000 cu.yd. excav., 7,500 cu.yd. gravel surfacing, portable culverts. $25,000. F. W. Engdahl, Ortonville, engr.

Minn., Redwood Falls—Apr. 24, by L. P. Larson, aud. Redwood Co., 7 mi. Job 2301, State Rd. 3, 9 mi. Job 2302, State Rd. 3, 3 mi. Job 2303, State Rd. 10, and 1.75 mi. Job 2304, State Rd. 2, 193,000 cu.yd. excav. and 219,400 cu.yd. overhaul. $50,000. J. F. O'Meara, Redwood Falls, engr.

Minn., St. Paul—Apr. 23, by H. W. Austin, city purch. agt., constructing, relaying and repairing sidewalks, various parts of city. G. M. Shepard, city engr.

Kan., Iola—May 3, by Allen Co., grading, bridging and paving 5.187 mi. Federal Aid Project 125, Sect. B, Ft. Scott-Wichita Rd., concrete or brick. A. E. Stroup, co. engr.

Neb., Falls City—Apr. 30, by City Clerk, paving Dists. 17, 22 and 24, using brick, $142,472; asphaltic concrete with Trinidad Lake asphalt $108,770; asphaltic concrete with oil asphalt $105,202.

Neb., Syracuse—Taking bids 3,000 lin.ft. curbing, 7,000 yd. vitr. brick, wood block, asphalt, concrete or bituminous concrete paving. Bruce & Grupe, 408 Finance Bldg., Omaha, engrs.

S. D., Elkpoint—Apr. 30, paving 20,000 sq.yd. various streets, concrete, vitrolithic, asphaltic concrete or sheet asphalt, 4,500 lin.ft. concrete curb. $70,000. T. H. Johnson, 319 Iowa Bldg., Sioux City, Ia., engr. Noted Jan. 4.

S. D., Mitchell—Apr. 30, (change of date) by F. McGovern, city aud., for 58,252 sq.yd. one or two course concrete or vibrolithic concrete, or 54,418 sq.yd. bitulithic or sheet asphalt pavements, 26,910 lin.ft. concrete gutter, 17,589 lin.ft. concrete curb, 287 ft. alley approaches. $250,000. F. J. Henson, city engr. Noted Mar. 29.

N. D., Devils Lake—Apr. 27, by Auditor Ramsey Co., 6.531 mi. gravel road, and 16 mi. earth road incl. 92,000 cu.yd. earth and 3,855 cu.yd. rock excav., etc. Engineer c/o State Hy. Dept., Bismarck.

N. D., Finley—May 5, by Auditor Steele Co., 7.96 mi. earth road. 47,787 cu.yd. earth and 1,600 cu.yd. rock excav., 467 sq.yd. cobble gutter, etc. Engineer c/o State Hy. Comn., Bismarck.

N. D., Towner—May 1, by Auditor McHenry Co., 4.397 mi. earth road, 30,010 cu.yd. earth and 1,300 cu.yd. work excav., etc. Engineer c/o State Hy. Dept., Bismarck.

Wyoming—Apr. 24, by State Hy. Comrs., Cheyenne, grading and surfacing, etc., 9 mi. Greybull-Cody Rd., Federal Aid Project 125, Natrona Co., $46,000; 11.3 mi. Green River-Peru Rd., Federal Aid Project 58, Sweetwater Co., $81,000; grading, surfacing, subway paving, etc., 2 mi. Cheyenne-Laramie Rd., Lincoln Highway, Federal Aid Project 46, Laramie Co., $170,000; grading, surfacing, and one 123 ft., one 80 ft. and two 24 ft. concrete bridges, on U-Cross-Double Crossing, Federal Aid Project 116 B, Sheridan Co., $50,000. Z. E. Sevison, state highway engr.

Tex., Marshall—Apr. 24, by J. W. Scott, co. judge, treating with asphalt and stone (inverted penetration method) 23.41 mi. State Highway 11, 16 ft. $37,000. G. A. McClellan, co. engr.

Washington—May 1, by State Hy. Comn., Olympia, concrete paving 4.85 mi. Sunset Highway, Spokane and Lincoln Counties; gravel surfacing 4.23 mi. Sunset Highway from Preston to Falls City, King Co.; grading approach to Nesika bridge on National Park Highway, Lewis Co.; 6,000 cu.yd solid rock excav., grading, etc. 8.78 mi. Olympic Highway from Agnew to Port Angeles, Clallam Co.; 6.89 mi. Pacific Highway from Bellingham to Ferndale, Whatcom Co. J. Allen, Olympia, state highway engr.

Wash., Centralia—May 1, grading and paving 35,000 sq.yd. in Dists. 59 and 60, 6 in. concrete. N. W. Avery, Centralia, engr.

Wash., Seattle—Apr. 30, by King Co., paving 11,842 sq.yd. White Center-Lake Burien Rd., 7 in. concrete. $30,000. T. R. Beeman, co. engr.

Calif., Chico—City Trustees receiving bids curbing, guttering, grading and paving Dists. 1, 2 and 3, 485,850 sq.ft. 1½ in. warrenite bitulithic on 2½ in. black base, 209,400 sq.ft. 1½ in. warrenite bitulithic on 3½ in. black base, 131,200 sq.ft. 1½ in. warrenite bitulithic on 4 in. white base, 824,450 sq.ft. grading, etc. F. S. Robinson, city engr.

Calif., Hayward—Apr. 25, by M. B. Templeton, city clk., grading, concrete curbing, guttering and paving with 2 in. asphaltic concrete, on 3½ in. base, B St., 110,000 sq. ft. grading, etc. J. B. Holly, 508 17th St., Oakland, engr. Noted Apr. 5.

Calif., Madera—Apr. 23, by W. C. Utter, city clk., grading, concrete curbing, guttering and paving portions 6th and B Sts., 107,136 sq.ft. grading, 99,391 sq.ft. 2½ in. bituminous base, 1½ in. surface, etc.; West Yosemite Ave., 114,644 sq.ft. grading, 107,899 sq.ft. 2½ in. bituminous base, 1½ in. surface, etc. A. M. Acton, city engr. Noted Apr. 5.

Calif., Stockton—Apr. 24, by City Council, grading, concrete curbing, guttering and surfacing portions Harrison, Jefferson, Lincoln and Worth Sts., etc., 194,928 sq. ft. 2 in. asphaltic macadam on 4 in. cement gravel. W. B. Hogan, city engr. Noted Mar. 29.

Ontario — Apr. 30, by W. A. McLean, deputy minister highways, Toronto, 8.55 mi. concrete pavements, $250,000, 2.2 mi. asphalt pavements, $100,000, 7.4 mi. bituminous penetration pavement, all foregoing 20 ft. wide, $120,000, 8.2 mi. macadam base, $90,000, 12.6 mi. grading, $120,000, concrete bridge abutments, $50,000. G. Hogarth, 110 University Ave., Toronto, ch. engr.

Quebec—May 3, at office J. L. Boulanger, deputy minister highways, Quebec, graveling 30.98 mi. and macadamizing 23.73 mi. highways.

BIDS RECEIVED

N. Y., Brooklyn — E. Riegelmann, boro pres., Boro Hall, Apr. 11, curbing, laying cement sidewalks on (1) West 25th St., laying cement sidewalks on (2) West 32nd St. asphalt paving (3) Carroll St. (4) East 7th St. (5) East 17th St. (6) East 34th St. (7) Ave I (8) Ave I (9) 55th St., grading, curbing and flagging (10) Ave. I from Simonelli & Son, Inc., 26 Conselyea St., (1) $2,032 (2) $2,230; Borough Asphalt Co., 1301 Metropolitan Ave., (3) $9,888 (4) $9,859 (5) $21,461 (6) $6,470 (7) $17,529 (8) $16,417 (9) $8,480; Cleveland Trinidad Paving Co., Flushing, (3) $10,000 (7) $17,311 (8) 16,206; Cranford Co., 52 9th St., (3) $10,063 (4) $9,782 (5) $21,472 (6) $6,699 (7) $17,747 (8) $16,445 (9) $8,353; Uvalde Asphalt Paving Co., 1 Bway., New York, (4) $9,948 (5) $21,038 (6) $6,737 (9) $8,590; Ferguson &McGuire, 419 Atlantic Ave., Lynbrook, (10) $4,730. Noted Apr. 5.

N. Y., Buffalo—For laying and repairing sidewalks for year ending Dec. 31, 1923, 3-in. base, from Peoples Paving Co., 85 Roma Ave., $0.1423 per sq.ft., W. F. Hahn, 26 Spiess St., $0.1465, G. Casciani, 110 Roma Ave., $0.1489; extra strength, from W. F. Hahn, 26 Spiess St., $0.2275 per sq.ft., F. Ursitti, 1486 East Delavan Ave., $0.28, Delmonto Paving Co., 1537 Fillmore Ave., $0.28.

N. Y., Coney Island (Brooklyn, P. O.)—Park Bd., Municipal Bldg., New York, Apr. 10, concrete parking space at Dreamland Park, here, from M. J. O'Hara, 557 3rd St., Brooklyn, $96,000; Necaro Co., Inc., 97 Court St., Brooklyn, $109,000; P. J. Donlon, 82 South 3rd St., Brooklyn, $130,000; Awixa Corp., Mt. Vernon, $130,000. Noted Apr. 5.

Delaware—State Hy. Dept., Dover, (1) 3.58 mi. Contr. 25 B (2) 3.455 mi. Contr. 32 (3) 2.895 mi. Contr. 37 (4) 0.25 mi. Contr. 37 A (a) c.i. pipe (b) concrete, from Sherman & Rhodes, Frederica, (1b) $126,478 (4) $17,100; Golove Eng. & Constr. Co., Phila., Real Estate Trust Bldg., (1a) $160,041 (1b) $158,073; Baton Constr. Co., Phila., 1713 Samson St., (1a) $167,532 (1b) $165,672; Sutton & Corson Co., 9th and Simpson Sts., Ocean City, N. J., (1a) $171,341 (1b) $169,717 (2a) $166,712 (2b) $164,962 (3a) $135,682 (3b) $134,381; M. Staub, 21 Wildwood St., Pitman, N. J., (2a) $174,320 (2b) $169,373 (3a) $126,620 (3b) $123,036; Development & Constr. Co., Amer. Bldg., Baltimore, Md., (2a) $179,999 (2b) $178,504 (4) $18,900; W. Eisenberg, Woodbine, N. J., (3a) $138,311 (3b) $136,281; A. L. Orrell, Odessa, (4) $17,200. Noted Mar. 29.

Maryland—State Rds. Comn., Baltimore, concrete surfacing 24,500 sq.yd. Contr. S-17, Somerset Co., from Hannamann-Burroughs Co., Salisbury, $101,293, Roberts Paving Co., Vickers Bldg., Baltimore, $104,327, P. D. Phillips & Bros., Salisbury, $107,675; 15,800 sq.yd. Contr. Co-32, Caroline Co., from Webster Constr. Co., East New Market, $40,613, Holt Constr. Co., Federalsburg, $42,814, J. R. Phillips, Hurlock, $43,343; 6,500 sq.yd. Contr. P-44, Prince George Co., from Tydings, Marine Co., Knickerbocker Bldg., Baltimore, $18,784, Ward & O'Connell, New Amsterdam Bldg., Baltimore, $19,206; 10,300 sq.yd. Contr. F-63, Frederick Co., from L. R. Waesche, Thurmont, $32,325, Gosnell, Russell & Co., Frederick, $35,626; 13,250 sq.yd. Contr. Ho-23, Howard Co., from Christhilf & Ensey, 1625 Ridgely St., Baltimore, $51,083, F. D. Carozza, Munsey Bldg., Baltimore, $52,157, A. M. Mayer, Relay, $52,285; 9,000 sq. yd. Contr. D-31, Dorchester Co., from Holt Constr. Co., Federalsburg, $29,284; 6,700 sq.yd. Contr. Q-25, Queen Annes Co., from J. K. Flick, Sudlersville, $20,760, Webster Constr. Co., East New Market, $20,791. Noted Mar. 29.

Kentucky—State Rd. Dept., Frankfort, grading, etc., using (a) vitr. pipe (b) concrete pipe, 11.297 mi. Mayo Trail, Federal Aid Project 77, State Project 6, Sect. B, Johnson Co., from Dempster Constr. Co., 721 North Central St., Knoxville, Tenn., (a) $250,423 (b) $246,570, Hunt & Forbes, Ashland, (a) $276,346 (b) $273,037, R. G. Hill Co., 309 Amer. Bank Bldg., Knoxville, Tenn., (a) $279,014 (b) $275,424; 19.618 mi. Mayo Trail, Federal Aid Project 78, State Project 6, Sect. B, Lawrence Co., from J. M. Cane & Co., Louisa, (a) $312,848 (b) $313,435, Goodwin-Wade-Wallace, Williamson, W. Va., (a) $353,698 (b) $345,946; R. G. Hill, 309 Amer. Bank Bldg., Knoxville, Tenn., (a) $412,388 (b) $410,872; 8.301 mi. Lexington-Covington Rd., Grand Co., from Mills & Connolly, Brooksville, (b) $252,726, E. J. Neffle, New Port, (a) $274,499, J. M. Billeter, Covington, (b) $299,165; grading and paving with (1) rein.-con. (2) bituminous macadam penetration type (3) rock asphalt, 8.501 mi. Louisville-Bardstown Rd., Federal Aid Project 86, State Project 3, Sect. A, Bullitt, Spencer and Nelson Counties, using (c) modified telford base and vitr. pipe (d) modified telford base and concrete pipe (e) nap limestone base and vitr. pipe (f) nap limestone base and concrete pipe, from Breslin & Durrett, Louisville, (street address not available), (1a) $538,706 (1b) $538,246 (2) $396,629, Wilmore Constr. Co., Wilmore, (2) $321,012 (3c) $389,839 (3d) $388,289 (3e) $376,090 (3f) $374,539, Billeter & Wiley, Covington, (2) $365,350 (3e) $419,434 (3f) $418,037, H. Bickel & Co., 443 Garden St., Louisville, (3e) $426,151 (3f) $424,833. Noted Mar. 8.

Indiana—State Hy. Dept., Indianapolis, Apr. 10, paving 51,130 sq.yd. Federal Aid Rd. 49A, Steuben Co., from J. C. O'Connor & Sons., Ft. Wayne (street address not available), $135,116, W. L. Johnson Constr. Co., Hicksville, O., $135,818, Brennerman, Gordon & McAfee, Bluffton, $138,835; 15,611 sq.yd. Federal Aid Rd. 6B, Putnam Co., from Kerr & Murphy, Bloomington, $27,039, Foulkes Contg. Co., Cherry and Water Sts., Terre Haute, $32,497; 73,579 sq.yd. Federal Aid Rd. 21 D and E, Scott Co., 77,808 sq.yd. concrete base, from Hobbs, Davis Constr. Co., Tipton, $149,016, Courtwright, Hiny & Wheeler, Crown Point, $159,955, Wabash Contr. Co., Vincennes, $164,855; 90,624 sq.yd. Federal Aid Rd. 21A, Jackson Co., from Wabash Constr. Co., Vincennes, $173,015, Highway, Building & Constr. Co., Indianapolis (street address not available), $179,597, L. P. Beard Constr. Co., 18 Aetna Bldg., Indianapolis, $184,198; 23,015 sq.yd. Federal Aid Rd. 40C, Marion Co., from G. T. Miller, Lebanon, $40,991, Standard Paving Co., Anderson, $46,030, S. M. Timberlake Co., 236 Amer. Central Life Bldg., Indianapolis, $48,744; 39,392 sq.yd. Federal Aid Rd. 19B, Perry Co., from Ellis & Scamahorn, Rockport, $31,937, J. O. Saunders, Rockport, $32,214, W. R. Hines, Frankfort (street address not available), $32,288; 56,658 sy.yd. Federal Aid Rd. 52A, Vigo Co., from F. Cunningham, 2161 North Meridian St., Indianapolis, $127,050; combination bid on Federal Aid Rds. 35C and 52A, Vigo and Sullivan Counties, from Carpenter Constr. Co., Terre Haute (street address not available), $162,234, Wabash Constr. Co., Vincennes, $165,349, Pfizenmeyer Constr. Co., Terre Haute (street address not available), $174,517, all foregoing concrete; 49,968 sq.yd. gravel base Federal Aid Rd. 19A, Perry Co., from Harshman & Jarrell, Frankfort (street address not available), $41,245. Noted Mar. 29.

Ind., Terre Haute—Vigo Co., paving 25,956 sq.yd. Devonald Rd., concrete, from J. M. Robertson, Terre Haute (street address not available), $57,286, Layne Bros., Terre Haute (street address not available), $59,516, P. J. Welch, 817 South 5th St., $65,423. Engrs. est. $77,780. Noted Apr. 4.

Michigan — State Hy. Dept., Lansing, Apr. 3, grading and surfacing 4.145 mi. Federal Aid Project 71, Sect. A, Charlevoix Co., from Remus Constr. Co., Remus, $71,508; Charlevoix Abstract & Eng. Co., Charlevoix, $72,416; Pierson & Allswede, Hersey, $76,081. Noted Mar. 22.

Streets and Roads (Continued)

Michigan — State Hy. Dept., Lansing, grading and surfacing 2.368 mi. State Trunk Line Rd. 34-2 Sect. A, and 34-6, incl. 9,704 cu.yd. excav., 27,874 sq.yd. concrete, from W. L. Johnson Constr. Co., Hicksville, O., $45,562; Bishopp & Rowlsen, Hillsdale, $46,794; Townsend, Shuttleworth & Ballmer Co., 306 South Capitol St., Lansing, $52,328. Noted Mar. 29.

Michigan — State Hy. Dept., Lansing, grading and surfacing 5.973 mi. State Trunk Line Rd. 11-25, Oceana Co., from Pierson & Allswede, Hersey, $130,691; New Era Road Bldg. Co., New Era, $147,121; G. P. Schail, Muskegon, $149,307. Noted Mar. 22.

Missouri—State Hy. Dept., Jefferson City, Mar. 24, (1) 2.923 mi. State Project Route 16, Sect. 83, Stoddard Co. (2) 3.655 mi. State Project Route 9, Sect. 103, Bollinger Co. (3) 2.695 mi. State Project Route 1, Sect. 2, Mercer Co. (4) 5 mi. State Project Route 7, Sect. 86, Texas Co. (5) 4.987 mi State Project Route 2, Sect. 21, Saline Co. (6) 4.167 mi. State Project Route 9, Sect 141, Pemiscot Co. (7) 4.942 mi. State Project Route 14, Sect. 41, Pulaski Co. (8) 4.058 mi. State Project Route 9, Sect. 142, Pemiscot Co. (9) 1.638 mi. State Project Route 7, Sect. 102, Oregon Co., from Surface Construction Co., Poplar Bluff, (1) $109,738; Energy Constr. Co., Poplar Bluff, (1) $110,463; Hogan & Humphreys, Fredericktown, (2) $19,030; Cameron-Joyce & Co., Keokuk, Ia., (2) $19,405; (3) $13,832; W. A. Reynolds, Marble Hill, (2) $20,444; M. Haase, Trenton, (3) $12,376; A. L. Cook, Ottawa, Kan., (3) $13,835; Summerfield, Jones & Co., Springfield (street address not available), (4) $13,604 (9) $7,251; Clay Gregory, Newport, Ark., (4) $15,939 (7) $29,090; Allhands & Davis, 705 Frisco Bldg., Joplin, (4) $16,096 (9) $7,485; Haller-Davis, Boonville, (5) $58,515; A. J. Crosby, Leeds, (5) $60,053; Cook-O'Brien Constr. Co., 305 Ry. Exch. Bldg., Kansas City, (5) $60,587; Lawrence Constr. Co., Jackson, Miss., (6) $122,597 (8) $137,286; Harrison Eng. & Constr. Corp., Wichita, Kan. (street address not available), (6) $129,816 (8) $134,427; J. W. Etchison, Casey, Ill., (6) $128,530; O. A. Nickels, Laquey, (7) $28,949; M. E. Gilliozz, Monett, (7) $29,249; W. D. Lenergan Constr. Co., New Madrid, (8) $141,469; Davis Constr. Co., Mammoth Springs, Ark., (9) $7,922. Noted Mar. 15.

Colo., Denver—Concrete curbing and grading 10 mi. in North Denver Impvt. Dist. 30, from J. Collier, 63 South Logan St., $79,162; J. V. Stryker Constr. Co., 3262 Blake St., $73,240; Gibbons & Lawrence Constr. Co., South Elate and Bayaud Sts., $81,420. Engrs. est. $81,000. Noted Mar. 29.

Colo., Denver—Concrete paving (1) 12 blocks Alley Paving Dist. 90, (2) 12 blocks Alley Paving Dist. 89, (3) 12 blocks Alley Paving Dist. 88, (4) 12 blocks Alley Paving Dist. 87, from A. J. Collins, 2363 Blake St., (1) $21,973, (2) $21,119 (3) $22,235; J. F. Roberts Constr. Co., Tramway Bldg., (1) $22,886 (2) $22,498 (3) $21,210 (4) $17,024; Stack Bros. Constr. Co., 338 South High St., (1) $23,192 (2) $22,301; R. M. Larsen, 1309 Kalamath St., (3) $22,605 (4) $18,340. Noted Mar. 29.

Ariz., Phoenix—Paving Coronado Rd. between Central Ave. and 7th St., from Pacific Constr. Co., Home Builders Bldg., bitulithic $2.19 per sq.yd. total $28,753; Phoenix Tempe Stone Co., Home Builders Bldg., concrete, $2.21, total $29,112.

Wash., Seattle—Grading Brandon St. et. al., 24,700 cu.yd. earth excav., from G. J. Banderet, Bryn Mawr, $33,884, C. L. Creelman, 1079 25th St. N., $35,352, E. C. Parks, 522 Valley St., $38,505. Engrs. est. $33,260.

Calif., Martinez—Grading, curbing, guttering and paving portions Mason, Castro and Haven Sts., etc., from J. T. Sayles, Martinez, $87,305; J. A. Dowling, c/o Federal Constr. Co., Call Bldg., San Francisco, $90,894; Municipal Impvt. Co., 306 12th St., Oakland, $92,765. Noted Apr. 5.

Calif., Palo Alto — Improving Southgate Sub-Division, 250,000 sq.ft. 5 in. concrete 20,000 sq.ft. cement walks and 20,000 lin.ft. concrete curb, etc., from Shattuck Constr. Co., Underwood Bldg., San Francisco, $0.184 per sq.ft. for paving. Noted Apr. 5.

Calif., San Diego—Common Council Apr. 9, concrete curbing, guttering, laying sewers and paving 18th St. between Bway. and Imperial Ave., 169,759 sq.ft. 1½ in. asphaltic concrete on 2½ in. bituminous base, etc., from G. R. Daley, 4430 Boundary St., at $0.178 per sq.ft.; Warren Constr. Co., Granger Bldg., $0.178; Griffith Co., 25 14th St., $0.183. Noted Mar. 29.

Calif., San Francisco — City and San Francisco Co., grading, curbing, laying sewers and paving 27th, 28th and 29th Aves. between Ulloa and Vicente Sts., from Pacific States Constr. Co., Call Bldg., $38,477; Raisch Impvt. Co., 46 Kearny St., $39,256; Fay Impvt. Co., Phelan Bldg., $40,191. Noted Mar. 29.

Calif., Santa Rosa — Grading and warrenite paving portions Wilson, A, Cherry and Davis Sts., from Warren Constr. Co., Bacon Bldg., Oakland, $47,180. Noted Apr. 5.

CONTRACTS AWARDED

Connecticut—State Hy. Dept., Hartford, paving highway in Stafford, 8,500 sq.yd. 7 in. native stone macadam, to L. J. Wilcox, Norwich, $13,901; 1,550 cu.yd. plain concrete in Bristol, to A. DeMarko, Bristol (street address not available) $14,825; 6,900 cu.yd. concrete paving in Plainville and New Britain, to Osborne & Barnes, 20 West St., Danbury, $71,700; 28,300 sq. yd. bituminous macadam in East Hartford and Manchester, to Miller Bros. Co., Bloomfield, $56,117; 6,865 ft. asphalt in Stratford, 39 ft., to Warren Bros., 142 Beckley St., Boston, Mass., $90,000. Noted Apr. 12.

Conn., Manchester—Paving 4,000 ft. Main St., 80 ft., 3 in. asphalt on 6 in. concrete, to E. Balf, 26 State St., Hartford, $92,000. Engrs. est. $100,000.

N. Y., Jamestown—Will pave 1,039 ft. Union Ave., engrs. est. $25,000, 1,202 ft. McDanell Ave., $25,000 and 1,450 ft. Myrtle St., $35,000, all brick on concrete, by day labor, under supervision of Bd. Estimate & Review, City Hall. L. Bergman, city engr.

N. Y., Jamestown—Will pave 1,497 ft. Park St., $25,000-$35,000; 1,606 ft. Hedges Ave.; 3,460 ft. Hopkins Ave., $50,000; 1,340 ft. Cherry St., $30,000; all 40 ft. wide, brick on 5 in. concrete, under supervision of Bd. Estimate & Review. L. Bergman, city engr.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro., Queens Subway Bldg., to Peace Bros., Inc., 15 Lawrence St., Flushing, grading, curbing and laying sidewalks on Lent Ave. $14,228, 41st St. $7,815, grading and bituminous macadam paving 100th St. $14,229, repaving within railroad area in State St. $4,753; to Welsh Bros. Contg. Co., 32 Queens St., grading, curbing and laying sidewalks on Trumble Ave. $8,330; to J. J. O'Brien, Jr., William St., Jamaica, 88th St. $9,530; to W. J. Fitzgerald, 547 West 45th St., New York City, 108th St. $14,698, asphalt paving Crescent St. $13,975, 41st St. $13,961; to W. H. Geoghegan Realty Co., Inc., grading portions of Beach Dr., etc., $21,282; to Borough Asphalt Co., 1301 Metropolitan Ave., Brooklyn, recurbing and sheet asphalt paving Centre St. $11,050, curbing, laying sidewalks and asphalt paving Hull Ave. $7,490. Noted April 12.

N. Y., New York—H. Bruckner, pres. Bronx Boro., 3rd and Tremont Aves., to Casper Helbock Co., Harlem River and 150th St., paving White Plains Rd., granite blocks, $259,893; to C. D. Beckwith, Inc., 2875 Bway., Fulton Ave., granite block $41,634, Rae St. sheet asphalt $6,683, West 179th St. bituminous macadam $18,017, West 170th St. bituminous macadam $21,942; to Asphalt Constr. Co., 208 Bway., Ryer Ave., asphalt blocks, $59,774; to Spadero Contg. Co., 827 East 217th St., grading, building inlets, etc., on Taylor Ave. $32,406, grading, curbing, laying sidewalks on Liebig Ave. $11,910; to C. De Blasio, Knox Pl., $8,095; to F. Henretti, Bryant Ave., $21,682. Noted April 12.

N. Y., White Plains—Bd. Supervs. Westchested Co., Court House, to Roberts & Lemongelli, Ridgfield, Conn., paving 1.02 mi. Co. Rd. 4, in town of Mt. Pleasant; to F. G. Fowler Constr. Co., 77 Carpenter Ave., Mt. Kisco, 3.63 mi. Co. Rd. 12, Bedford and North Castle, 2.96 mi. Co. Rd. 13, Yorktown, all rein.-con. Noted Mar. 22.

N. J., Freehold—Monmouth Co. reconstructing Sea Bright Highlands Rd. 54, Freehold-Eatontown Rd. 42, Sect. 1 and Farmingdale-Manasquan Rd. 34, Sect. 1, to Jannarone Contg. Co., 225 Passaic Ave., Belleville, N. J., $147,458. Noted Mar. 29.

Pa., Corry — Paving 1st Ave., West Washington and Center Sts., concrete and brick, to Keystone Constr. Co., Meadville. Engrs. est. $25,000. Noted Jan. 25.

Pa., Edgewood — Grading, paving and curbing Braddock Ave. from Allen to Monongahela Sts., to C. Donatelli, 7515 Tioga St., Pittsburgh Engrs. est. $30,000.

Pa., Erie—Asphalt pavements on State and Sassafras Sts., to F. G. Andrews, 907 West 10th St., $65,051.

Pa., Hastings—Boro. Council, concrete paving 2,715 sq.yd. Main St., to Lord Constr. Co., Hastings, $26,053. Noted March 15.

North Carolina — State Hy. Comn., Raleigh, clearing, grading, concrete paving, rein.-con. bridge and culverts on 11.83 mi. State Project 115, Chowan and Perquimans Counties, to Smith Bros., Inc., Dallas, Tex. (street address not available), $296,635, 7.97 mi. State Project 578, Randolph Co., to Allport Constr. Corp., Mutual Bldg., Richmond, Va., $280,489; grading and concrete paving 12.89 mi. State Project 329, Columbus Co., to J. O. Heyworth, Harvester Bldg., Chicago, $36,[illegible]13, 3.53 mi State Project 713, Ashe Co., to Overstreet & Nance, Bradford, Va., $132,530; grading 7.35 mi. State Project 485A, Wake Co., to C. G. Kershaw Contg. Co., Woodward Bldg., Birmingham, Ala., $36,676, 7.43 mi. State Project 457A, Orange Co., to Dicus Bros., Sanford, $50,850; clearing, grading and topsoiling 10.74 mi. State Project 437, Harnett Co., to F. P. Holder, Jefferson, Ga., $51,180, 8.59 mi. State Project 618, Cabarrus Co., to L. J. Smith Constr. Co., Trust Bldg., Charlotte, $41,796; grading, asphaltic paving on concrete and rein-con. bridges and culverts on 10.18 mi. State Project 944, Haywood Co., to A. J. Wardrep, Holston Bank Bldg., Knoxville, Tenn., $372,439, 8.57 mi. State Project 6-43, Iredell Co., to Stearns Bros., Inc., Statesville, $292,377; clearing, grading and topsoiling, etc. 22.5 mi. State Project 570, Moore Co., to A. B. McDonald, Hamlet, $81,640. Noted Mar. 15.

N. C., Leaksville—Granite curbing, concrete curb and gutter, sewers and asphaltic paving various streets, to Hedrick Constr. Co., Lexington, $189,744. Noted Apr. 5.

N. C., Newton—For 30,000 sq.yd. paving, probably asphaltic on concrete, to Stearn Contg. Co., Charlotte, (street address not available). Engrs. est. $85,000, $90,000. Noted Apr. 5.

S. C., Easley—Grading, curbing, guttering and paving 25,000 yd. East and West Main, 5th, Folger and Pendleton Sts., asphaltic concrete and sheet asphalt, to Carolina Contg. Co., Chester. Engrs. est. $100,000. Noted Apr. 29.

Fla., Tampa—Grading, curbing and paving 13th St., 16,800 sq.yd. 3 in. asphalt blocks, etc., to W. L. Harwell, 721 South Orleans Ave., $47,664; Palmetto Ave., to O. Carlson, 1023 So. Dakota St., $4,178; Melville Ave., to Cone Bros., Tampa (street address not available), $17,203. Noted Mar. 8 and 22.

Fla., Tampa—Resetting curb and paving Swann Ave. and 9th St., 8,100 lin.ft. concrete curbing, 8,580 sq.yd. 2½ in. asphalt block, 1,200 cu.yd. shell, 300 lin.ft. concrete sidewalks, to W. L. Harwell, 721 South Orleans Ave., $25,864.

Fla., Tavares—Lake Co., grading and sand clay surfacing 8 mi. Rd. 1, Southern Lake Co. Special Road and Bridge Dist., to W. T. Howey, Howey, $38,352. Noted Mar. 29.

O., Akron—W. F. Peters, dir. Pub. Serv., to V. Olson Contg. Co., 501 Herberich Bldg., grading, laying sidewalks and brick paving, 4,000 ft. Bellows, Crossier and Washington Sts., $95,458, 2,200 ft. West North St., $54,144; to Hollinger & Davidson, 435 Bway., Springdale St., $11,545; Schroeder & Caputo, (address not available) grading and laying walks in Rothrock Ave., $3,432, Hite St., $8,975. Noted Apr. 12.

O., Cincinnati—Hamilton Co. grading and paving 31,130 sq.yd. Blue Ash Rd., bituminous macadam, to J. S. Slone, 2313 Mound St., Norwood, $32,514. Engrs. est. $44,951. Noted Apr. 5.

O., Cleveland—Grading, curbing and brick paving on 6-in. concrete 10,700 sq.yd. Corlett Ave., to Enterprise Paving & Constr. Co., 8444 Bway., $69,183; West 34th St., to Roehl Bros., West 25th St. and Clark Ave., $4,568; Svec Ave., to A. M. Pejsa, Euclid Heights Blvd., $30,572; Damon Ave., to H. G. Herring, Pavers Exch., Society for Savings Bldg., $14,401; Glenside Rd., to Gould & Maybach, 823 East 150th St., $14,089; East 11th and East 119th Sts., to Bentley Bros., Union Bldg., $35,127. Noted March 29 and April 12.

O., Cleveland—Grading, curbing and paving East 145th St., 4,980 lin.ft. stone curb and 4-in. tile drain gutter, 3,400 cu.yd. earth excav., 7,255 sq.yd. asphalt on concrete, to Baldwin Bros., 4500 Euclid Ave., $35,345.

O., Garfield Heights (Cleveland, P. O.)—Paving Rockwood and Ridgewood Rds. brick on concrete, to Enterprise Paving & Constr. Co., 8444 Bway., Cleveland, $52,476.

Ind., Boonville—Warrick Co., grading and graveling 5 mi. Lynn-Tyring Rd., 18 ft., to Fowler & Owens, Newburg, $33,495. Engrs. est. $36,220.

Ind., Greensburg—Decatur Co., paving 60,718 sq.yd. John McCoy Rd., concrete, to Freeland & Brown, Greensburg, $172,434. Engrs. est. $228,090. Noted Apr. 12.

Ind., Hammond—Lake Co., grading and graveling 3.5 mi. E. A. Surprise Rd., 16 ft., to J. Brannock, Lowell, $30,545, engrs. est. $31,136; 4 mi. Charles Boyd Rd., 16 ft., to Courtright, Hiney & Wheeler, Crown Point, $28,060, engrs. est. $36,784.

Ind., Indianapolis—Marion Co., grading and graveling 3.1 mi. Charles Harting Rd., 16 ft., to Park & Williams, Southport, $25,665. Engrs. est. $25,836. Noted Apr. 5.

Streets and Roads (Continued)

Ind., Martinsville—Morgan Co., grading and gravelling 4 mi. Gant Rd., 18 ft., to G. Brown, Coatsville, $25,350. Engrs. est. $28,231.

Ind., Rising Sun—Ohio Co., grading and macadamizing 32,824 sq.yd. Hanna Rd., to McIntire, Hopping & Rininger, Cleves, O., $27,995. Engrs. est. $31,139. Noted Mar. 8.

Ind., Wabash—Wabash Co., grading and graveling 1,874 ft. and asphalt surfacing 7,515 ft. H. H. Dare Rd., 16 ft., to Pike Constr. Co., Wabash, $50,400. Engrs. est. $37,250.

Mich., Bad Axe—Huron Co. Rd. Comn. grading and gravel surfacing 7½ mi. road in Lincoln and Bloomfield Twps., to H. Graham, Bad Axe, $49,800; 7 mi. road in Dwight, Huron and Port Austin Twps., to Bad Axe Constr. Co., Bad Axe, $63,230; 8 mi. in Chandler, McKinley and Winsor Twps., to W. Maxwell, Hope, $62,000.

Ill., Elmhurst—Concrete paving various streets, to Standard Paving Co., 326 West Madison St., Chicago. Engrs. est. $25,000. Noted Apr. 5.

Ill., Villa Park—Concrete paving various streets to J. Mackler, Chicago Heights. Engrs. est. $25,000. Noted Apr. 5.

Wis., Kenosha—Asphalt paving 16 streets to Western Impvt. Co., 840 9th St., Racine, $257,317; 9 streets to White Constr. Co., 68 Wisconsin St., $134,023. Noted Mar. 1.

Wis., Milwaukee — Harbor Comn., City Hall, 115,000 cu.yd. grading area adjacent to harbor entrance, to Schoonmaker Constr. Co., 373 Bway., $0.46 per cu.yd.

Ia., Burlington—Paving 15 blocks Market and 3rd Sts., 3-in. vertical fibre brick, to Matthes Coal & Constr. Co., Davenport, $100,000.

Ia., Colfax—For 22,000 yd. bitulithic pavement, to J. Horrabin, 1422 Walnut St., Des Moines $3.11 per sq.yd.

Ia., Decorah—To F. Carlson, Decorah, 1 course concrete paving (1) 3,000 sq.yd. alley paving, East Bway. and Court Sts., $2.38 per sq.yd.; (2) 10,150 sq.yd. Water St., $2.52 per sq.yd.

Ia., Marshalltown—To A. Carlson, Marshalltown, 34,017 sq.yd. concrete paving $2.18, and 29,523 lin.ft. concrete curb $0.48 per ft. Noted Jan. 11.

Ia., Waterloo—To Bryant Paving Constr. Co., Waterloo, 95,000 sq.yd. concrete paving and 12,000 sq.yd. resurfacing old asphalt pavement, incl. grading, curbing, etc., $250,000.

Minn., Hastings—Dakota Co., Job 2315, State Rd. 15, 39,409 cu.yd. earth and 240 cu.yd. loose rock excav., 33,152 cu.yd. overhaul, to C. O. Engstrom, Hastings, $12 343, corrugated metal and monolithic culverts to P. Nelson, Hastings, $5,200; Job 2316, State Rd. 16, 54,177 cu.yd. excav., 181,813 cu.yd. overhaul, to Jamieson, Thoreen & Sandeen, Stillwater, $8,420 corrugated metal and monolithic culverts, to Concrete Bridge Co., Red Wing, $1,480; Job 2305, State Rd. 5, 48,476 cu.yd. excav., 20,488 cu. yd. overhaul to Wevers & Meilke, Capitol Ave., St. Paul, $14,823, corrugated metal and monolithic culverts to Concrete Bridge Co., Red Wing $2,119. Noted Mar. 15.

Minn., Little Falls—Morrison Co., 5.12 mi. State Aid Job 2308, 29,057 cu.yd. excav., 43,714 cu.yd. overhaul, to G. M. Hoffman, Pierz, $18,282; 3.7 mi. State Aid Job 2306, 24,361 cu.yd. excav., 41,889 cu.yd. overhaul, to M. Barrett, St. Cloud, $12,437; 922 lin.ft. corrugated metal culverts to Klauer Mfg. Co., 9th and Washington Sts., Dubuque, Ia., $981.

Minn., Mankato—Blue Earth Co., Job 2303, State Rd. 11, 28,812 cu.yd. excav., 30,550 cu.yd. overhaul, to Webster Bros., Mankato, $0.275 per cu.yd. for excav., $0.02 for overhaul. Noted Mar. 29.

Kan., Hays—Paving 35,000 sq.yd. various streets, vitr. brick, to H. J. Taylor Constr. Co., Hays, $3.11 per sq.yd., excav. $0.60, combination concrete curb and gutter $0.95. Noted Feb. 8.

Kan., Topeka—Shawnee Co. concrete paving 6.498 mi. Dover Rd., Southwest Trail, 18 ft., to M. W. Watson & Co., Topeka, 35,078 cu.yd. earth excav. $0.45, 68,923 sq.yd. one course plain cement concrete $2.54, 516.2 cu.yd. concrete $21, 15,450 lin.ft. concrete curb and gutter $0.60, etc., total $223,595. Engrs. est. $250,478.

Neb., Wymore—Paving in Dist. 1, 30,000 sq.yd. asphalt, to J. B. Watts Constr. Co., Concordia, Kan., $81,200.

Mont., Shelby—For 85,000 cu.yd. 5-in. concrete, to Two Miracle Corp., Ford Bldg., Great Falls, $67,000. Engrs. est. $70,000.

Ariz., Phoenix—Paving Monte Vista Rd. between Central Ave. and 7th St., to Phoenix Tempe Stone Co., Home Builders Bldg., $27,731.

Washington—State Hy. Comn., Olympia, concrete paving 54,598 sq.yd. Pacific Highway from Stockport to Castle Rock, and 60,541 sq.yd. from Kelso south to Stockport, to J. Warter, Sr., 631 North Fife St., Tacoma, $1.92 and $2.15 per sq.yd., total $148,435 and $171,951 respectively.

Calif., Oakland—To S. Deguarda, Oakland (street address not available), improving 89th Ave. and D St., 74,415 sq.ft. grading at $0.05 per sq.ft., 4,231 ft. concrete curb $0.65, 8,316 ft. concrete gutter $0.25, 65,644 sq.ft. asphalt macadam $0.12; to Hutchinson Co., 1706 Bway., improving Walnut Ave., 76,801 sq.ft. grading $0.06, 2,372 ft. concrete curb $0.78, 5,120 ft. concrete gutter $0.26, 35,628 ft. oil macadam $0.12, 15,360 ft. sidewalks $0.175. Noted March 15.

Calif., Pomona—Paving with 5 in. concrete Antonio Ave., between Holt and Harrison Sts., to Fleming Constr. Co., 105 North Park Ave., $40,482.

Calif., Santa Ana—Orange Co. paving with 6 and 8 in. concrete portions Westminster Rd., to Wells & Bressler, California Bank Bldg., $51,940. Noted April 12.

Calif., Santa Monica—Grading, sidewalks and paving Colorado Ave., 225,575 sq.ft. 1½-in. warrenite bitulithic on 2½-in. asphaltic concrete, to Kneen Paving Co., Dudley Bldg., $65,777. Noted April 12.

Que., Hull — Paving Main St., asphalt, Bridge St., asphalt, and Youville St., sandstone block, to Standard Paving Co., Elgin St., Ottawa, Ont., $39,875, $10,000 and $7,800 respectively.

Industrial Works

PROPOSED WORK

Me., Portland—Portland Nash Co. plans 3 story brick and steel garage, plain foundation. $100,000.

Mass., New Boston—Farmington River Hydro-Electric Co., Winsted Conn., plans hydro-electric plant, rein.-con., plain foundation, here. To exceed $150,000. R. P. Ward, 170 Hinsdale Ave., secry. and treas. Private plans.

Mass., North Adams—Mohawk Garage, 9 Main St., plans 1 story garage addition. $45,000.

Conn., Ansonia—A. V. Repe plans 2 story, 30 x 130 ft. factory, timber, plain foundation, Olivia St. $40,000. Private plans.

Conn., Colebrook River (Colebrook P. O.) —Farmington River Hydro-Electric Co. plans dam, 400 ft. long, 25 ft. high. $600,000. R. P. Ward, 170 Hinsdale Ave., Winsted, secy. and treas.

Conn., Hartford—R. Piccola, 1137 Albany Ave., having plans prepared by D. A. Guerriero, 1029 Main St., 1 story, 40 x 60 ft. garage, brick, plain foundation, Albany St. $40,000.

Conn., New Britain — State Bd. Educ., Capitol, Hartford, plans 60 x 80 ft. power house, brick, plain foundation, at State Normal School, here. $40,000. Engineer and architect not selected.

Conn., Norwich — Norwich State Hospital plans 1 story, brick power house, plain foundation. $40,000. F. S. Wilcox, supt. Engineer and architect not selected.

Conn., Southington — Southington Hardware Co., Center St., had plans prepared 2 story, 50 x 110 ft. factory, rein.-con. and brick, plain foundation. $60,000. Private plans.

Conn., Southington — Beaton & Corbin Mfg. Co., Main and Chapman Sts., plans 3 story, 40 x 72 ft. factory, brick, plain foundation, Chapman St. $75,000. Private plans.

Conn., Waterbury — Connecticut Brass Fdry., 600 East Main St., having plans prepared by H. F. Wenzel, 6 Glen Ridge, 2 story, 30 x 40 ft. factory, brick and steel, plain foundation, 660 East Main St. $40,000.

Conn., Waterbury—J. H. Cassidy, 144 Bank St., had plans prepared by H. F. Wenzel, 6 Glen Ridge St., 2 story, 50 x 60 ft. garage, brick and steel, plain foundation, Mitchel Ave. $40,000.

N. Y., Brooklyn—Marke Storage Battery Co., c/o M. Morris & Sons, archts. and engrs., 533 Nostrand Ave., soon takes bids 2 story, 70 x 100 ft., rein.-con. and steel factory, plain foundation, Atlantic Ave. near New York Ave. $50,000.

N. Y., Cohoes—Cohoes Motor Car Co., 42 Oneida St., plans 2 story, brick, concrete and steel machine shop and garage, Ontario St. $60,000-$65,000. W. Perkins, pres.

N. Y., Ogdensburg—See "Buildings."

N. Y., Schenectady—Adirondack Power & Light Corp., 511 State St., plans new power station at Stop 12, Schenectady-Albany Rd. $75,000.

N. Y., Syracuse—Syracuse Lighting Co., 339 South Warren St., plans gas plant. $3,000,000. J. C. De Long, pres.

N. Y., Watertown—Otis Steam Boiler Co., 335 West 1st St., Oswego, plans 1½ story, brick and steel factory, here. $40,000. Address J. F. Otis, Oswego.

Pa., Ebensburg — Gardner Calculating Machine Co., High St., opens bids about May 15, two story and basement, 90 x 100 ft., brick and steel plant, High St. $60,000. J. L. Elder, Ebensburg, archt. and engr.

Pa., Grapeville—Westmoreland Specialty Co. having plans prepared 1 story, 80 x 100 ft. addition to plant. $150,000. Private plans.

Pa., Pittsburgh—C. J. Allen, c/o City Deposit Bank, 6112 Penn Ave., having plans prepared 1 story and basement, 175 x 296 ft. garage, Western Ave. $60,000. Private plans.

Pa., Pittsburgh—C. G. Hussey & Co., 2850 2nd Ave., having plans prepared 3 story and basement, 80 x 200 ft. concrete and brick factory, 2nd Ave. $250,000. Private plans.

Pa., Pittsburgh — McKinney Mfg. Co., Penn and Preble Aves., having plans prepared by Hunting & Davis, Century Bldg., 1 story, 120 x 182 ft. brick and steel addition to storage house. $150,000.

Pa., Warren—J. T. Newell, Pennsylvania Ave., having plans prepared by E. A. Phillips, Warren, 4 story, brick plant, 3rd St. $50,000.

W. Va., Charleston—Dewey Furniture Co., Pennsylvania St., plans rebuilding plant, recently destroyed by fire. $100,000. Engineer and architect not announced.

N. C., Asheville—J. E. Richmond, representing manufacturing interests of Phila., Pa., and Boston, Mass., plans 100 x 200 ft. knitting mill, between French Broad River Bridge and West Asheville. $85,000. Address F. Byram, Asheville.

N. C., Bravard—W. H. Gray Cotton Mills Co. (recently incorporated), plans mill. $500,000.

N. C., Hudson—Caldwell Cotton Mill Co. plans cotton mill, 5,000-6,000 spindle. $250,000. M. Squires and R. L. Gwyn, Lenoir, interested.

Tenn., Lawrenceburg—See "Dams."

Tenn., Martin—Amer. Cigar Co. plans factory. $40,000-$50,000.

Ky., La Grange—Southern Signals Co. plans plant for making railroad signals. $50,000. Engineer and architect not selected.

Ky., Louisville—Standard Sanitary Mfg. Co., 6th and A Sts., plans pottery plant. $250,000. T. E. Mueller, mgr.

O., Cleveland—Paul Bros., c/o G. Paul, Fidelity Mortgage Bldg., plans 1 and 2 story, brick, steel and concrete garage and service station, East 43rd St. and Windsor Ave. $150,000. J. F. Steffens, Fidelity Mortgage Bldg., archt.

O., Logan—McGovern Shoe Co., Stoneman Bldg., Columbus, had plans prepared by F. L. Packard, Hayden Bldg., Columbus, 3 story and basement, 45 x 115 ft., factory addition, here. $45,000.

Mich., Detroit—Everhot Heater Co., 214 West Woodbridge St., having plans prepared by Dise & Titchy, 2631 Woodward Ave., 1 story and part basement, 75 x 226 ft. brick and steel factory, plain foundation, Lafayette Blvd. $60,000.

Ill., Chicago—Brunswick-Kroeschell Co., 460 West Erie St., plans 1 and 2 story, 243 x 770 ft. factory, rein.-con., brick and steel, 4201-25 Diversey Ave. $375,000. Davidson & Weiss, 53 West Jackson Blvd., archts.

Wis., Madison—Gill Bros. Co., c/o A. J. Gill, 452 West Wilson St., plans 2 story, garage and repair shop, brick, rein.-con. and steel, plain foundation, Webster St. $80,000. Architect not selected.

Wis., Milwaukee—Oneida Impvt. Co., c/o T. Kerner, 214 Biddle St., making new plans 2 story and basement, 85 x 180 ft., brick, tile and concrete garage, plain foundation, Front St. $100,000. Private plans. Noted Mar. 1.

Wis., Waukesha—Quality Aluminum Co., c/o A. C. Pankratz, 505 Lake Ave., having preliminary plans prepared by Federal Bridge & Structural Co., Lincoln Ave., 1 story, 85 x 200 ft., concrete foundry, plain foundation. $50,000.

Tex., Beaumont — Humphrey Pure Oil Co. making plans 10,000 bbl. refinery, Smith Bluff. $2,500,000. Private plans.

Tex., Breckenridge — Breckenridge Textile Mills Co. having plans prepared by L. E. Robert, Jr., Tuft Bldg., Atlanta, Ga., textile mill. $400,000.

Tex., Breckenridge—R. W. Rainey had plans prepared brick plant, plain foundation. $250,000. Private plans.

Industrial Works (Continued)

Tex., Brownwood—Prairie Oil & Gas Co. had plans prepared gasoline plant. $250,000. Private plans.

Tex., Dallas—Brown Cracker & Candy Co., 603 Caruth St., having plans prepared by C. E. Barglebaugh, engr. and archt., Southwestern Life Bldg., 7 story and basement factory, and 2 story warehouse, rein.-con. and brick, plain foundations, Jefferson, McKinney and Caruth Sts. $1,000,000.

Tex., Dallas—F. J. Woerner, archt. and engr., Sumpter Bldg., takes bids latter part of April, 1 story, 100 x 125 ft., garage and auto paint shop, concrete and brick, plain foundation, Commerce and Duncan Sts., for B. R. Sparks, Jr., 217 North Brighton. $75,000. Darby Top & Painting Co., 1113 Camp St., lessee.

Tex., Ft. Worth—South West Portland Cement Co., Two Republics Bldg., El Paso, plans 3,000 bbl. cement plant, along tracks Houston & Texas Central R.R., here. $500,000. Private plans.

Tex., Waco—Exporters & Traders Compress & Warehouse Co., East Waco, takes bids in summer, compress and warehouse, concrete, plain foundation. $60,000. Engineer and architect not announced.

Wash., Spokane — Wendorf & Rogers Lumber Co., 1319 Old National Bank Bldg., plans 2 story mill, timber. $40,000. Work will be probably done by day labor.

Wash., Yardley — Western Cedar Pole Preservers having plans prepared plant, on 16 acre site. $100,000. O. C. Hansen, Peyton Bldg., Spokane, pres.

Ore., Burns—F. Herrick and Associates, St. Maries, Idaho, plans complete sawmill plant, here. $500,000.

Calif., Corning—See "Miscellaneous."

Calif., Fresno — San Joaquin Light & Power Corp., 1801 Tulare St., having plans prepared storage and warehouse, transformer testing plant, cross arm mill and other small structures. To exceed $250,000. Private plans.

Calif., San Francisco—Hermann Safe Co., 216 Fremont St., plans warehouse and salesrooms, fireproof, Main and Howard Sts. $150,000. Engineer and architect not selected.

Calif., San Francisco—Pacific Gas & Electric Co., 445 Sutter St., had plans prepared extensions to substations at 19th and Lexington Aves., and Balboa and 24th Aves. $20,000 each. Private plans.

Calif., San Francisco.—L. R. Lurie, 315 Montgomery St., having plans prepared by O'Brien Bros., Inc., 315 Montgomery St., 1-story, rein.-con. garage. $40,000. Pacific Telephone & Telegraph Co., 333 Grant Ave., lessee.

Calif., San Francisco—Standard Oil Co., Standard Oil Bldg., making plans several rein.-con. buildings, tanks, pipe lines, etc., for oil distribution plant, on block bounded by Beach, Jones, Jefferson and Leavenworth Sts. $500,000 or more. Private plans.

Ont., London — Utilities Comn., having plans prepared new sub-stations. $77,000. E. V. Buchanan, Hydro Office, engr.

BIDS DESIRED

Pa., Bethlehem—May 15, by W. F. Gorman, treas. Confederated Home Abattoirs Co., 314 Amer. Casualty Bldg., 5 story and basement, 140 x 150 ft. slaughter house and plant, 33 x 99 ft. by-product building, both brick, two 30 x 99 ft., rein.-con. and brick stock pens and 10 x 240 ft. scalehouse and unloading chute. $400,000. Gorman-Brown Eng. Co., 40 Rector St., New York City, engrs.

Pa., Jeannette—Pittsburgh Eng. Co. will build 1 story, 80 x 200 ft. malleable foundry, 1 story, 80 x 150 ft. storehouse and 1 story, 60 x 80 ft. core room. $500,000. Work will be done by separate contract. Private plans. Noted Apr. 12.

O., Cleveland—L. L. Corlozzi Co., 1258 East 105th St., taking bids 2 story and basement, 101 x 120 ft., brick, steel and concrete auto sales and garage, Ansel Rd. and Superior Ave. $150,000. W. S. Ferguson Co., 1900 Euclid Ave., archts.

O., Cleveland — International Harvester Co., 903 James Ave., taking bids 4 story and basement, brick, steel and concrete warehouse, concrete pile foundation, East 55th St. and Julia Ave. $300,000. Private plans. Noted Nov. 16.

Ill., Chicago—Loewenberg & Loewenberg, archts., 111 West Monroe St., receiving bids 1 and 2 story, 100 x 150 ft., rein.-con., brick and steel, auto sales building and garage, 4822 North Clark St., for J. Schiffman, c/o architects. $60,000.

Wis., Fox Lake—Fox Lake Auto Co. taking bids 2 story, 64 x 85 ft., brick and concrete garage, plain foundation. $40,000. Peacock & Frank, 445 Milwaukee St., Milwaukee, archts.

Wis., La Crosse—April 23, by O. A. Merman, archt., Linker Bldg., 1 story and basement, 50 x 100 ft., power house and laundry, brick, tile and concrete, plain foundation, for Lutheran Hospital, 1910 South Front St. $60,000. Noted Feb. 8.

Wis., Wauwatosa—April 23, by Cahill & Douglas, engrs., 217 West Water St., Milwaukee, 2 story, 47 x 62 ft. power house, brick and steel, plain foundation, for Forsyth Leather Co., State St. $40,000. Noted Feb. 1.

Ia., Muscatine—April 25, by Electric Light Trustees, complete municipal electric light plant and system. A. L. Mullergren, 555 Gates Bldg., Kansas City, Mo., engrs. Noted March 29.

Okla., Tulsa—F. A. Duggan, archt., 202 Castle Bldg., receiving bids 3 story, 103 x 140 ft. warehouse, rein.-con. and brick, for Tulsa Storage & Transfer Co., 8 North Cheyenne St. $60,000.

Ont., Simcoe—L. C. Gibson, pres. Wilkey Products Co., taking bids and opens same about May 1, one story, 50 x 230 ft. brick factory, Head St. $125,000. Private plans.

BIDS RECEIVED

N. Y., New York—Transit Comn., 49 Lafayette St., inspection shed and service building, northeast corner Jerome Park reservoir property, near Jerome Ave. and Mosholu Parkway, from Jacob Schlesinger, Inc., 259 West 30th St., $371,750; D. C. Serber, Grand Central Terminal, $388,700; Lustig & Weil, 103 Park Ave., $400,000. Noted Apr. 5.

CONTRACTS AWARDED

Vt., Sheldon Springs—Missisquoi Paper Co., 1 and 2 story, 40 x 500 ft. mill, rein.-con. and steel, plain foundation, to P. E. Sullivan, St. Albans. Engrs. est. $400,000-$500,000.

Mass., Lowell—Lowell Electric Light Corp., 29 Market St., 63 ft. extension to power house, erecting steel stack, etc., to Stone & Webster, Inc., 147 Milk St., Boston. $373,000.

Mass., Pittsfield—H. N. Wilson, archt., 651 North St., 2 story, 60 x 110 ft. garage, brick and steel, plain foundation, West St., to J. R. Hampson Co., 184 North St., $50,000, for B. K. George, 139 West Housatonic St. Archts. est. $55,000. Noted Jan. 11.

Mass., Pittsfield—S. Bridges, 46 Columbus Ave., 1 story, 120 x 150 ft. garage addition, brick and steel, plain foundation, to J. R. Hampson Co., 184 North St., $40,000.

Conn., Hartford—H. L. Solloway, 256 Windsor St., 2 story and basement, 50 x 50 ft. storehouse, brick, plain foundation, 283 Village St., to L. Schwinken, 35 Earl St. Engrs. est. $40,000.

N. Y., New York—L. H. Willard, c/o J. J. Dunnigan, archt. and engr., 394 East 150th St., will build 2 story, 115 x 330 ft., rein.-con. and steel garage, plain foundation, McClellan St., by day labor. $100,000.

N. Y., Watertown—Northern New York Utilities, Inc., 58 Pub. Sq., will build 2 story concrete and steel garage and machine shop, Front St., by day labor, under supervision of C. E. Dewey, Light and Power Bldg., archt. $40,000. Noted Apr. 12.

Pa., Erie—Keystone Fish Co., Erie, 107 x 207 ft. warehouse, to replace one recently destroyed by fire, on lake front, to J. C. Hammond, Erie. Archts. est. $50,000. Noted Mar. 15.

Pa., Phila.—Collins & Aikman, 46th and Nixon Sts., 6 story and basement, 50 x 90 ft. rein.-con. and brick plant, plain foundation, Farson and Viola Sts., to Turner Constr. Co., 1713 Sansom St., $100,000.

Pa., Phila.—McCahan Sugar Co., Tasker St. Wharf, 3 story, rein.-con., brick and steel factory, to F. L. Hoover & Sons, 1023 Cherry St., $400,000.

Pa., Phila.—R. E. Tongue & Bros., Allegheny and Amber Sts., 2 story, rein.-con. and brick factory, plain foundation, Allegheny and Collins Sts., to W. Steele & Sons, 214 North Broad St., $53,000.

Pa., Uniontown—H. W. Altman, archt., Fayette Title & Trust Bldg., 2 story, 41 x 70 ft. brick, steel and stone garage, to Darby Lumber Co., Fairchance, for Uniontown Automobile Co. Archts. est. $50,000. Noted Apr. 5.

D. C., Wash.—J. W. Gault, 1420 U St., N. W., will build garage. Archts. est. $200,000. Private plans. Owner's name withheld.

N. C., Thomasville—Amazon Mills, 132 x 488 ft., cotton mill, one half of length to be 2 story, also large picking room, to J. A. Gardner, 211½ North Tryon St., Charlotte. Plans later 30 new bungalows as an addition to mill village.

S. C., Duncan—Lockwood, Greene & Co., engrs., 24 Federal St., Boston, Mass., 4 story, 135 x 300 ft. cotton mill, 5 story, 75 x 100 ft. storehouse, part 2 story and part 1 story, 200 x 650 ft. bleachery, power house, pump room, etc., near here, to Parklap Inc., 84 Pine St., New York City, for Pacific Mills. Noted Mar. 29.

O., Cleveland—Power Impvt. Co., c/o G. E. Peterson, 15924 Euclid Ave., 5 story and basement, 109 x 135 ft., brick, steel and concrete sales, service and warehouse, Cedar Ave. and Ashland Rd., to A. A. Lane Constr. Co., 1869 East 55th St. Archts. est. $250,000. Noted Apr. 5.

O., Cleveland—West 3rd St. Clair Co., c/o A. N. Ferguson, archt., 12821 Phillips Ave., remodeling 4 story, brick and steel building into garage, 1261 West 3rd St., to Super-Built Constr. Co., 1836 Euclid Ave. Archts. est. $75,000.

O., Cleveland—See "Buildings."

Mich., Pontiac—Fisher Body Corp., General Motors Bldg., Detroit, two 1 story units and one 2 story unit, 150 x 500 ft., rein.-con., brick and steel plant, plain foundation, Baldwin Ave., to J. A. Utely Co., 718 Penobscot Bldg., Detroit. Archts. est. $2,000,000. Noted March 1.

Ill., Chicago—Harrington & King Perforating Co., 614 North Union Ave., 1-story, 164 x 284 ft. factory, rein.-con., brick and steel, 5633-59 Fillmore St., to Dahl-Stedman Co., 11 South La Salle St. Archts. est. $150,000. Noted March 22.

Ill., Chicago—G. Rosen, c/o Halperin & Braun, archts., 19 South La Salle St., 1-story, 126 x 140 ft. garage, rein.-con., brick and steel, 6415-25 Bosworth Ave., to Gamn Bros. Constr. Co., 133 West Washington St. Archts. est. $50,000.

Ill., Chicago—Reo Motor Co., 2412 South Michigan Ave., 2-story, 85 x125 ft. auto sales and service station, rein.-con., brick and steel, Bway. and Early Ave., to A. and E. Anderson, 19 South La Salle St. Archts. est. $100,000. Noted Feb. 15.

Ill., Chicago—M. J. Schmidt, c/o Rawson & Eisenberg, archts., 5 North La Salle St., 1-story, 82 x 92 ft. garage, rein.-con., brick and steel, 3327-31 West Madison St., to S. Fishkin, 2640 North Fairfield Ave. Archts. est. $75,000. Noted March 29.

Ill., Chicago—Holy Angels Guardian Orphanage, 2001 Devon Ave., 1 and 3 story, 120 x 209 ft. power plant and shop, rein.-con., brick and steel, 2001-65 Devon Ave., to J. Gebhardt & Son, 111 West Washington St. Archts. est. $150,000.

Wis., Madison—C. Rieder, 615 University Ave., 3 story, 50 x 65 ft., tire shop and service station, brick, rein.-con. and steel, plain foundation, to J. H. Findorff & Son, 601 West Wilson St. Archts. est. $50,000. Noted March. 22.

Wis., Milwaukee—Milwaukee-Waukesha Delivery Co., 2618 Grand Ave., 5 story and basement, 52 x 100 ft., brick and concrete warehouse, plain foundation, Grand Ave., to B. Wilke, 1011 Island Ave., and Cutter Constr. Co., 886 46th St. Archts. est. $100,000.

Mo., Kansas City—Busche M. Klapmeyer, 2800 East 31st St., 2 story and part basement, 50 x 113 ft., brick, steel and stone, garage and salesroom, to M. Stipel, 2323 Quincy St., $40,000. Noted March 15.

Mo., St. Louis—Rowana Petroleum Co., Arcade Bldg., 1 and 2 story, 62 x 92 ft. garage, and 1 story, 14 x 20 ft. pump house, brick and concrete, plain foundations, Audubon Ave., to Dickie Constr. Co., Syndicate Trust Bldg. Archts. est. $40,000.

Mo., St. Louis—A. H. Lewis Medicine Co., 401 Spruce St., 4-story, 70 x 90 ft., rein.-con. and brick factory, plain foundation, Spruce St., to Widmer Eng. Co., Laclede Gas Bldg. Archts. est. $100,000.

Mo., St. Louis—United Rys. Co., 3869 Park Ave., will build 1½-story car shop addition, brick, plain foundation, by day labor. $50,000.

Tex., Houston—Myers-Spalti Mfg. Co., 2118 Runnels St., 5 story and basement, concrete and brick factory, plain foundation, to Amer. Constr. Co., Gulf Bldg. $175,000.

Calif., Emeryville—Detroit Steel Products Co., 251 Kearny St., San Francisco, 1-story, 110 x 120 ft., rein.-con. factory and warehouse, in vicinity 64th and Boyle Sts., to Adam Arras Co., 185 Stevenson St., San Francisco. Archts. est. $40,000.

Calif., San Francisco—Hale Bros., 5th and Market Sts., 8-story and basement, rein.-con. warehouse, Stevenson St., near 5th St., to Macdonald & Kahn, 130 Montgomery St. $40,000.

Buildings

PROPOSED WORK

Mass., Amherst—Dormitory—Massachusetts Agricultural College plans 3 story dormitory. $250,000. K. L. Butterfield, pres.

Mass., Amherst—Library—Jones Memorial Library had sketches made by Putnam & Cox, 114 State St., Boston, 2 story, 100 x 120 ft., brick and stone. J. Tyler and G. Culter, trustees. Noted Mar. 1.

Mass., Malden — Schools — Plans school, Cross St., $150,000, and addition to Marion P. Browne School in Maplewood, $150,000. J. V. Kimball, mayor. Engineer and architect not selected.

Mass., Somerville—City Hall—Pub. Wks. Dept. plans 2 wings, each 2 story, 50 x 100 ft., also alterations to main building, concrete, plain foundation, Highland Ave. $175,000. Ritchie, Parsons & Taylor, 15 Ashburton Pl., Boston, archts.

Conn., Willimantic—Theatre—A. Davidson, Norwich, plans 4 story (ultimately 6 story) 92 x 160 ft., brick and steel, plain foundation, Main St., here. $160,000. Engineer and architect not selected.

N. Y., Albany—Bank—First National Bank purchased site at 59-61 State St. and plans new banking building. J. A. Becker, pres.

N. Y., Albany—Office and Club—B.P.O.E., plans 14 story, concrete and steel, brick or stone trim, 138-140 State St. $1,000,000. Address E. N. Scheiberling, c/o owner.

N. Y., Amsterdam—Schools—Bd. Educ. plans brick and concrete additions to 5th Ward and Vrooman Ave. schools. To exceed $150,000.

N. Y., Bay Shore—Theatre and Office—J. J. Fitzgibbons, c/o T. W. Lamb, archt. and engr., 644 8th Ave., New York, having plans prepared 2-story, brick, steel and stone, plain foundation, here. $250,000.

N. Y., Carthage — High School — Voted $187,000 bonds central high school, brick, concrete and steel. E. Villars, pres. Bd. Educ. Noted Mar. 1.

N. Y., Dolgeville — School — Election in May to vote on $225,000 bonds concrete, steel and stone.

N. Y., Fairport — High School — Voted $375,000 bonds brick, terra cotta, concrete and steel. O. W. Dwyer, 310 Cutler Bldg., Rochester, archt. Noted Apr. 5.

N. Y., Hamburg—School—Bd. Educ. had plans prepared by F. A. Spangenburg, 259 Delaware Ave., Buffalo, brick, concrete, steel, stone and terra cotta, Pleasant Ave. $300,000.

N. Y., New York — Apartments — Protestant Episcopal Church, c/o P. C. Hunter, archt. and engr., 191 9th Ave., having plans prepared two 5 story, 90 x 159 ft., brick, steel and stone, plain foundations, Morris Ave. $250,000 each.

N. Y., Troy—Infirmary and Hospital—Emma Willard School, 45 Ferry St., plans brick, concrete and steel. $150,000. Address E. Kellas, principal.

N. Y., Tupper Lake—Theatre and Store—Pond Theatre Corp., Malone, plans 3 story, brick, concrete and steel, here. $150,000-$160,000.

N. Y., Watertown—Hospital—St. Joachims Hospital plans concrete, brick and steel. $250,000. D. D. Kieff, Flower Bldg., archt.

N. Y., Watertown—School—Bd. Educ. plans brick, concrete and steel, Mullin St. $250,000-$300,000. F. S. Tisdale, City Hall, supt.

N. J., Asbury Park—High School—Bd. Educ. soon takes bids brick, steel and stone, plain foundation. $600,000. E. A. Arend, 105 West 40th St., New York City, archt. and engr.

N. J., Newark — Hospitals — Essex Co., Court House, having plans prepared by F. S. and S. E. Sutton, 402 Broad St., 3 story and basement, 50 x 450 ft. reception hospital and 2 story and basement, 80 x 450 ft. convalescent hospital, both brick and plain concrete foundations, Overbrook St. To exceed $1,000,000. Runyon & Carey, 843 Broad St., engrs.

Pa., Franklin — Exchange — Petroleum Telephone Co., Oil City, plans concrete, brick and steel, Elk St. $150,000. Address W. S. Paca, genl. mgr.

Pa., Philadelphia — Office — W. Steel & Sons, 219 North Broad St., soon takes bids 10 story and basement, 124 x 134 ft., rein.-con., brick and steel, 15th and Cherry Sts. $1,000,000.

Pa., Southmont—School—Bd. Educ., Otto Bldg., Johnstown, rejected bids Apr. 9, 2 story and basement, 142 x 156 ft. brick and tile. $200,000. P. Campbell, Park Bldg., Johnstown, archt. Noted Apr. 5.

Pa., Warren—Schools—Defeated $600,000 bond issue for new school, etc. Noted Mar. 22.

Pa., Williamsport—Church—First Church of Christ had plans prepared by W. D. Shollenberger, 1522 Scott St., and takes bids about May 1, first section, 2 story, 60 x 60 ft. brick and stone, West 3rd and Walnut Sts. $75,000. Annex 60 x 60 ft. will be built when first section is completed.

Fla., St. Petersburg — Hotel — A. McMurray having plans prepared by E. Ferdon, St. Petersburg, 5 story, rein.-con., brick and steel, 2nd Ave. N. $300,000.

La., Lecompte — High School — Having plans prepared by W. J. Avery, supt. Rapides Parish School Bd., Alexandria, new high school. $175,000 bonds voted.

Tenn., Nashville—Apartment—W. E. Jonnard, Louisville, Ky., had plans prepared by C. E. Colley & Co., First Natl. Bank Bldg., 3 story, 76 x 200 ft., rein.-con., concrete footings, 2nd St., here. $200,000.

Ky., Hazard—Loft—Patton Moore Dry Goods Co. plans 5 story, Main St. $200,000. R. L. Moore, Jellico, Tenn., pres.

O., Byesville—High School—Bd. Educ. takes bids in about 2 weeks 2 story and basement, 106 x 125 ft., brick and concrete. $150,000. F. S. Rusk, 16 South 3rd St., Columbus, archt.

O., Cleveland — Apartment — Atwater & Kaplan, 928 Williamson Bldg., had plans prepared by Steffens & Steffens, Williamson Bldg., 3 story and basement, 43 x 167 ft., brick and steel, plain foundation, 14402 Coit Rd. $150,000.

O., Cleveland — Apartment — Gers Co., 1979 East 55th St., had plans prepared 3 story and basement, 90 x 120 ft., brick and timber, 14240 Lake Shore Blvd. $150,000. Private plans.

O., Cleveland—Apartments—C. Kleinman and M. B. Abrams, 309 Society for Savings Bldg., plan five 3 or 4 story, brick and timber, plain foundations, East 85th St. south of Euclid Ave. $500,000. Engineer and architect not selected.

O., Cleveland—Apartment—J. A. McAuley, 1388 West 70th St., having plans prepared by H. W. Grieme, 110 Engineers Bldg., 3 story and basement, 42 x 115 ft., brick and timber, plain foundation, Detroit Ave. and West 70th St. $150,000.

O., Cleveland — Store — National Dept. Stores Co., c/o V. Sincere of Bailey Co., Ontario St. and Prospect Ave., Cleveland, pres., and M. Stein, 47 West 34th St., New York City, treas., plans 10 story and basement, brick, steel and rein.-con., concrete pile foundation, 63,000 sq.ft. floor space, East 9th St. and Euclid Ave. $2,000,000. Engineer and architects name withheld.

O., Cleveland Heights (Warrensville P. O.)—High School—Bd. Educ., 1805 Lee Rd., Cleveland, plans 3 story, brick, steel and concrete, Junior High School, Cedar and Lee Rds., here. $1,000,000. F. C. Warner, Hippodrome Annex Bldg., Cleveland, archt.

O., Dayton — Apartment — Consolidated Builders Co., 908 U. B. Bldg., plans 10 story and basement, 40 x 110 ft., brick and rein.-con., plain foundation, North Ludlow St. $200,000. Private plans.

O., Dayton — Church — Holy Angels Catholic Church, Brown St., plans brick, concrete and stone, South Brown St. $200,000. Engineer and architect not selected.

O., New Philadelphia—Hotel—L. C. Wallick, owner Deshler Hotel, Broad and High Sts., Columbus, plans hotel, here. $300,000. Engineer and architect not selected.

O., St. Marys—School—Bd. Educ. having plans prepared by Walker & Norwick, 1301 Amer. Bldg., Dayton, 2 story, brick and rein.-con., plain foundation. $160,000. Noted Aug. 31.

Ind., Evansville—Church—Trinity Methodist Episcopal Church having preliminary plans prepared by W. E. N. Hunter, 1436 Washington Blvd., Detroit, Mich., 2 story, 50 x 150 ft., brick, steel and stone, plain foundation. $175,000.

Ind., South Bend — Office and Store — Strauss Bros. Co., 10 South La Salle St., Chicago, had plans prepared by H. B. Beidler, 10 South La Salle St., and takes bids about June, 8 story, 99 x 165 ft., rein.-con., plain foundation, Michigan St. and Jefferson Blvd. $750,000.

Mich., Detroit—Hotel—Kohner & Seeler, archts., 405 Kresge Bldg., opens bids about May 1, 10 story and basement, 100 x 150 ft., concrete, brick and steel, plain foundation. John R St. $350,000. Owner's name withheld.

Mich., Ferndale—School—Bd. Educ. having plans prepared by H. T. Keys, and P. Kasurin, 423 Murphy Bldg., Detroit, 2 story and basement, 60 x 120 ft. rein.-con., brick and steel, plain foundation. $150,000.

Mich., Ithaca—School—Bd. Educ. having plans prepared by Lane, Davenport & Peterson, 2320 Dime Bank Bldg., 3 story, 120 x 156 ft. rein.-con., brick and steel, plain foundation. $250,000.

Ill., Chicago—Apartment—M. Keane, c/o J. H. Klafter, archt., 127 North Dearborn St., plans 3 story, 89 x 125 ft., rein.-con., brick and steel, Morgan and 70th Sts. $150,000.

Ill., Chicago—Apartment—C. Stern, c/o J. J. Jensen, archt., 4815 Lawndale Ave., plans 3 story and basement, 120 x 152 ft., rein.-con., brick and steel, 7726-38 North Ashland Ave. $150,000.

Ill., Chicago — Church — St. Brendans Catholic Congregation, 67th and Racine Sts., plans 2 story, rein.-con., brick and steel. $150,000. J. Burns, 64 West Randolph St., archt.

Ill., Chicago—Store—Straus & Schram, 665 West Madison St., plan 5 story, 72 x 110 ft., rein.-con., brick and steel, 63rd and Green Sts. $175,000. A. Epstein, 2001 West Pershing Rd., archt.

Wis., Beaver Dam—Theatre-Office—F. C. Gross, Muskego Ave., Milwaukee, plans 2 story and basement, 70 x 156 ft., brick and concrete, plain foundation, Main St. $150,000. Engineer and architect not selected.

Wis., Burlington — High School — St. Marys Congregation, having preliminary plans prepared by E. R. Liebert, 432 Bway., Milwaukee, 2 story and basement, brick, tile and concrete, plain foundation. $150,000.

Wis., Madison—Store, etc.—Piper Grocery Co., 31 North Pickney St., plans 4 story, 66 x 90 ft., store and warehouse, brick, rein.-con. and steel, plain foundation, Mifflin St. $150,000. H. Piper, mgr. Engineer and architect not selected.

Wis., Milwaukee—Apartment—Rosman & Wierdsma, archts., 424 Jefferson St., preparing plans 3 story and basement, 44 x 100 ft., brick, tile and concrete, plain foundation, Wells and 19th Sts. $150,000. Owners name withheld.

Wis., Sheboygan—Theatre—E. A. Juul, archt., Security Bldg., preparing plans 2 story, 70 x 140 ft., brick, rein.-con. and steel, plain foundation, 8th St. $150,000. Owner's name withheld.

Wis., Weyauwega—School—School Bd. having plans prepared by Auler & Jensen, F. R. A. Bldg., Oshkosh, 2 story and basement, brick and tile, plain foundation. $150,000.

Wis., West Bend—High School—School Dist. 1, rejected bids opened March 27, 2-story, 160 x 180 ft., brick, tile and concrete, plain foundation. Will readvertise. $180,000. Foeller, Schober & Stephenson, Nicollet Bldg., Green Bay, archts. Noted April 5.

Ia., Oelwein—High School—Bd. Educ. takes bids latter part of May, 2 story and basement, rein.-con., brick and stone. $200,000. W. Gordon, 317 Hubbell Bldg., Des Moines, archts.

Ia., Waterloo—Y. M. C. A., Waterloo, takes bids in May, 3 story and basement, rein.-con. and brick. $150,000. M. B. Cleveland, 603 1st National Bank Bldg., archt.

Mo., Sedalia — Court House — Pettis Co. voted $350,000 bonds rebuilding court house, destroyed by fire in 1920. Noted Jan. 11.

Mo., Trenton—High School—Voted $200,000 bonds new high school. Noted Mar. 22.

Mo., University (St. Louis P. O.)—City Hall, etc.—Voted $470,000 bonds for addition to city hall, resurfacing Delmar Blvd. and sewer in River Des Peres Dist., etc.

Tex., Ballinger—High School—Ballinger Independent School Dist. plans election soon to vote on $150,000 bond issue for high school. J. Pirie, city engr.

Tex., Dallas—Church—Highland Park Methodist Church, c/o R. H. Shuttles, chn. building com., 3918 Gillon St., plans 2 story and basement, rein.-con. and brick, plain foundation, Mockingbird Lane and Bishop Blvd. $225,000. Engineer and architect not selected.

Tex., Electra—High School—Voted $196,000 bonds for high school. Engineer and architect not selected.

Tex., Marshall—Schools—Election early in May to vote on $250,000 bonds for schools.

Tex., Waco—City Hall—Election soon to vote on $325,000 bond issue, 4 story and basement. H. R. Seward, city engr. Architect not selected.

Wash., Aberdeen — Hotel — Washington Hotel Co. having plans prepared by A. H. Albertson, Henry Bldg., Seattle, and takes bids about July 2, 5 story, 100 x 130 ft., steel and concrete. $350,000.

Ore., Astoria—Store and Office—Warren, Higgins & Co., Astoria, takes bids about May 20, 4-story, 45 x 185 ft., rein.-con., wood pile foundation, 12th, Commercial and Duane Sts. $200,000. E. A. Miller, 519 Henry Bldg., Portland, archt.

Calif., San Francisco.—Hospital—Chinese Six Companies, c/o O'Brien Bros., Inc., archts., 315 Montgomery St., soon takes bids 4-story and basement, rein.-con., Trenton St., near Jackson St. $150,000.

Calif., Venice—Club—Oceanic Club having plans prepared by Noerenberg & John-

Buildings (Continued)

son, Los Angeles Ry. Bldg., Los Angeles, 5 story and basement, rein.-con., Park St. To exceed $150,000.

Calif., Whittier—Hotel—B. w. Doyle and L. P. Mich, Los Angeles, having plans prepared by Walker & Eisen, 326 Pacific Finance Bldg., Los Angeles, 3 story, brick, here. $450,000.

Que., Montreal—Exchanges—Bell Telephone Co. Ltd., Notre Dame St. W., soon takes bids for following work: new telephone exchange St. Urbain and Ontario, Sts., $500,000, also one on Ontario and Fullum Sts., $500,000; manual switchboards at Lasalle Exch., $100,000, Victoria Exch., $150,000, Melrose Exch., $90,000 and Calumet Exch., $90,000; extensions to cable lines, both aerial and underground at Victoria Exch., $300,000, Calumet Exch., $250,000; East Exch., $125,000, St. Louis Exch., $120,000, Westmount Exch., $130,000, Melrose Exch., $75,000.

Ont., St. Thomas—College—Alma College plans 2 or 3 story, concrete, brick and steel addition. $150,000. Engineer and architect not selected.

Ont., York Mills—College—St. Andrews College, Rosedale Ave., Toronto, plans 3 story and basement, concrete and brick, here. $400,000. Engineer and architect not selected.

BIDS DESIRED

R. I., Providence—Church—Apr. 21, by St. Adalberts Church, 140 x 160 ft., brick and terra cotta, plain foundation, Attwells Ave. $170,000. H. Ludorf, Main St., New Britain, Conn., archt. Noted Mar. 22.

Conn., Bristol—Business—Apr. 23, by W. T. Tracy, 2 Riverside Ave. and J. E. Condon, 38 Laurel St., 3 story, 65 x 110 ft., Main St. $150,000. J. T. Smith, Waterbury, (street address not available), archt.

Conn., Hartford—High School—May 5, by Bd. Contract & Supply, Municipal Bldg., for Morgan Bukeley High School, 3 story, brick and steel, Maple Ave. and Benton St. $1,200,000. E. T. Willey, 75 Pratt St., archt. J. R. Worcester Co., 79 Milk St., Boston, engrs. Noted May 4.

N. Y., Brooklyn—Apartments—Realty Associates, 162 Remsen St., will build two 3 story, brick, steel and stone, plain foundations, Rockaway Parkway. $200,000 each. Work will be done by separate contracts. Benjamin Driesler, Jr., 153 Remsen St., archt. and engr.

N. Y., New York—Apartment—J. Wolff, c/o Margon & Glaser, archts. and engrs., 2804 3rd Ave., will build 5 story, 50 x 125 ft., brick, steel and stone, plain foundation, Macombs Rd. Work will be done by separate contracts under supervision of architects.

N. Y., New York—Hotel—Polsky & Goldstein, c/o G. F. Pelham, archt. and engr., 200 West 72nd St., will build 15 story, 85 x 100 ft., brick, steel and stone, plain foundation, 111 East 89th St. $1,000,000. Work will be done by separate contracts under supervision of architect.

N. J., Trenton—Bank—Apr. 23, by A. C. Bossom, archt. and engr., 680 5th Ave., New York City, 14 story, 66 x 149 ft., brick, steel and concrete, West State St., here, for Trenton Trust Co., State St. and Chancery Lane. $800,000.

Pa., Pittsburgh—Church—C. R. Geisler, archt., Ferguson Bldg., will build 4 story and basement, 100 x 100 ft., Wylie Ave., for Central Baptist Church, 2405 Center Ave. $200,000. Work will be done by separate contract.

Pa., Pittsburgh—Store—W. E. Snaman, archt., Empire Bldg., will build 1 story top addition, 5th Ave. and Smithfield St., for Frank & Seder Co., 5th Ave. and Smithfield St. $150,000. Work will be done by separate contract.

Md., Baltimore—School—May 2, by Bd. Awards, 3 story and basement, 60 x 227 ft., rein.-con. and brick, plain foundation, Nevada and 1st Sts. $600,000. B. Frank, 328 North Charles St., archt., H. Massart, 328 North Charles St., engr.

N. C., Raleigh—Institutional—Apr. 30, by Building Comn., 2 brick cottages, engineers cottage, library, gymnasium, industrial and cold storage buildings, for State School For Blind. $325,000. J. A. Salter, 102 West Hargett St., archt.

O., Cleveland—Apartment—A. L. Freeman, 10829 Earle Ave., taking bids and opens same about Apr. 24, 3 story and basement, 38 x 140 ft., brick and timber, plain foundation. 1716 East 115th St. $150,000. M. Weis, Union Bldg., archt.

O., Cleveland — Infirmary — May 4, by State Hospital Comn., Columbus, 2 story, 180 x 180 ft., brick, concrete and steel, Warner Rd., here. $225,000. R. S. Harsh, Columbus, state archt. Noted Apr. 5.

O., Lima—High Schools—Apr. 27, by Bd. Educ., 2 story, 63 x 90 ft. and 169 x 211 ft. brick, steel and concrete additions to Franklin and South High Schools. $400,000. T. McLaughlin & Associates, Savings Bldg., archts.

O., Mt. Vernon—Memorial—May 10, by Mt. Vernon Memorial Assn., 2 story and basement, 100 x 140 ft., brick, concrete and stone. $200,000. Richards, McCarty & Bulford, 584 East Broad St., Columbus, archts. Noted Apr. 12.

O., Pleasantville—High School—May 10, by Bd. Educ., 2 story and basement, brick and concrete. $170,000. Walker & Norwich, 1301 Amer. Bldg., Dayton, archts.

Ill., Chicago—Apartment—W. E. Forrester, 5617 West Madison St., receiving bids 3-story, 100 x 140 ft., rein.-con., brick and steel, 238-46 North Parkside Ave. $175,000. W. G. Kreig and J. T. and M. D. Hetherington, 105 North Clark St., archts.

Ill., Chicago—Apartment—C. W. Lampe, archt., 155 North Clark St., receiving bids 3-story and basement, 100 x 170 ft., rein.-con., brick and steel, Randolph and Maple Sts., for R. Gabel, c/o architect. $150,000.

Ill., Chicago—Apartment—F. A. Johnson, c/o Morgan Sash & Door Co., 2287 Blue Island Ave., receiving bids 3-story, 175 x 200 ft., rein.-con., brick and steel, Madison St. near Cicero Ave. $450,000. R. F. France, 155 North Clark St., archt.

Ill., Chicago—Bank, Store and Office—Z. E. Smith, archt., 305 East 55th St., receiving bids 3-story, 106 x 125 ft., rein.-con., brick and steel, Cottage Grove Ave. and 79th St., for O'Connor, Burke & McDonnell, 6823 Stony Island Ave. $200,000.

Wis., Kohler—Office—Kohler Co. taking bids 3 story and basement, 62 x 210 ft., brick and concrete, plain foundation. $150,000. Brust & Philipp, 405 Bway., Milwaukee, archts.

Wis., Milwaukee—Apartment—Apr. 23, by M. Tullgren & Sons Co., archts., 425 East Water St., 6 story and basement, 50 x 92 ft., brick and concrete, plain foundation, Hathaway St., for O. Brachman, 425 East Water St. $160,000. Noted Mar. 22.

Wis., Milwaukee — Apartment-Hotel — Apr. 30, by Rosman & Wierdsma, archts., 424 Jefferson St., 6 story, 130 x 172 x 186 ft., brick and concrete, Grand Ave. $800,000. Owners name withheld.

Wis., Milwaukee—Hotel—Apr. 23, by C. Barkhausen, archt., 97 Wisconsin St., 4 story, 75 x 120 ft., brick, steel and concrete, addition, for Hotel Medford, 3rd and Sycamore Sts. $400,000. Noted Mar. 1.

Neb., Grand Island—High School—Apr. 30, by Secy. Grand Island School Dist., 2 story, 63 x 152 ft., rein.-con. and brick. $150,000. Kirschke & Crocker, Box 790, archts. Noted Mar. 15.

Mo., Kansas City—Interurban Station—May 1, by Wright & Wright, archts., 400 First National Bank Bldg., 10 story and basement, 132 x 200 ft., stone and terra cotta, 10th and McGee Sts., for C. C. Peters, 11th St. and Grand Ave. $3,000,000. W. E. Gillham, 409 Interstate Bldg., mech. engr.

N. M., Albuquerque—Office, Theatre, etc. —May 1, by Trost & Trost, archts. and engrs., N. T. Armijo Bldg., 6 story, 90 x 140 ft., rein.-con., brick and stone for J. Barnett, Albuquerque. $200,000.

Wash., Olympia—Capitol—May 8, by Capitol Building Com., constructing capitol as far as base of dome, incl. first four divisions, Capitol Grounds. $1,500,000. Noted Mar. 8.

Calif., Modesto — Schools — Apr. 24, by Trustees Modesto Grammer School Dist., 2 brick grammer schools, $75,000 each; alterations to present school, $20,000. J. J. Donovan, 1916 Bway., Oakland, archt. Noted Mar. 15.

Calif., Norwalk — School — Apr. 30, by Trustees Excelsior Union High School Dist., group of buildings, incl. main building, domestic arts, commercial, manual arts, etc., frame and brick. To exceed $150,000. T. C. Kistner, Spurgeon Bldg., Santa Ana, archt. Noted Nov. 16.

Calif., Piedmont—School—Apr. 24, by Trustees Piedmont School Dist., 2 and 3 story, rein.-con. $150,000. W. H. Weeks, 369 Pine St., San Francisco, archt. Noted Mar. 15.

Calif., Sacramento—Hospital—Apr. 26, by R. A. Herold, archt., Forum Bldg., 5 story and basement, rein.-con. and terra cotta, 40th and J Sts., for Sisters Hospital, c/o architect. $600,000. Noted Mar. 8.

BIDS RECEIVED

D. C., Washington—School—Dist. Comrs., 509 Dist. Bldg., Henderson School 184, (1) work complete, from G. C. Wyne, Home Life Bldg., (1) $156,300 (2) deduct $950 (4) add $8,000; D. J. Phipps, Roanoke, Va., (1) $159,900 (2) deduct $1,000 (3) deduct $295 (4) add $11,000; H. B. Davis, 1311 G St., N.W., (1) $163,743 (2) deduct $1,000 (3) deduct $300 (4) add $9,850.

O., Cleveland—Hospital—City, Apr. 6, 2 story and basement, 40 x 250 ft., brick and concrete, Warrensville Farm, from M. G. Heintz, 1184 Warren Rd., Lakewood, $223,491; Central States Eng. & Constr. Co., Union Commercial Bank Bldg., $225,600; P. Kirschner Co., 1104 Prospect St., $232,000. Noted Mar. 29.

Calif., Taft—High School—Taft Union High School Dist., auditorium, gymnasium, shops, etc., for high school, general contract from W. J. Ochs, 405 Clark St., Fresno, $208,797. Noted Mar. 15.

CONTRACTS AWARDED

Mass., Boston — School — Schoolhouse Comn., City Hall, 3 story, 75 x 100 ft., brick and concrete, Gove St., to J. Bowen Co., 184 Dudley St., $148,840. Noted Feb. 1.

Mass., Springfield—School—City, 2 story, 90 x 200 ft., brick, Indian Orchard section, to J. G. Roy, 21 Silver St., $161,720. Archts. est. $200,000. Noted Oct. 19.

N. Y., Brooklyn—Apartment—A. Berfaud, c/o Seelig & Finkelstein, archts. and engrs., 44 Court St., will build 4 story, 90 x 90 ft., brick, steel and stone, plain foundation, 21st Ave. and 84th St. by day labor. $150,000.

N. Y., Brooklyn — Apartment — Hicklow Constr. Co., c/o W. I. Hohauser, archt. and engr., 116 West 39th St., New York, will build 5 story, 100 x 150 ft., brick, steel and stone, plain foundation, Bushwick and Gates Aves., here, by day labor. $250,000.

N. Y., New York—Apartment—L. Klosk, c/o Springsteen & Goldhammer, archts. and engrs., 32 Union Sq., will build 6 story, brick, steel and stone, plain foundation, Mosholu Parkway, by day labor. $250,000.

N. Y., New York—Apartment—Open Stair Dwelling Co., c/o Henry Atterbury Smith, archt. and engr., 874 Bway., will build 6 story, 85 x 115 ft., brick, steel and stone, plain foundation, West 147th St., by day labor. $200,000.

N. Y., New York—Apartment—Paterno Constr. Co., 117 West 54th St., will build 6 story, 110 x 500 ft., brick, steel and stone, plain foundation, 128 Pinehurst Ave., by day labor. $750,000. G. F. Pelham, 200 West 72nd St., archt. and engr.

N. Y., New York—Apartment—Paterno Constr. Co., 117 West 54th St., will build 5 story, brick, steel and stone, plain foundation, Northern Ave., by day labor. $250,000. G. F. Pelham, 200 West 72nd St., archt. and engr.

Pa., Allison Park—Home—Joar Home, 1 story and basement, 94 x 188 ft., Butler Pike, to F. L. Fisher, 17 Shingiss St., Pittsburgh. Archts. est. $150,000.

Pa., Altoona—Exchange—Bell Telephone Co., Broad and Vine Sts., Philadelphia, 2 and 3 story, 115 x 180 ft., 12th Ave. and 16th St., to Central Constr. Co., 5th and Emerald Sts., Harrisburg. Archts. est. $300,000.

Pa., Freeport—High School—Bd. Educ., general contract 2 story, 4th St., to Carstenson & McLain, 413 Main St., Johnstown, $108,689. Noted Mar. 8.

Pa., Phila.—College—St. Joseph's College, 17th and Thompson Sts., 3 story and basement, 54 x 197 ft., rein.-con., brick and steel, plain foundation, 17th and Thompson Sts., to F. V. Warren & Co., 132 South 17th St. Archts. est. $500,000.

Pa., Phila. — Parish House — St. Pauls Church, Chestnut Hill, (Phila., P. O.) 2 story and basement, 30 x 64 ft., 40 x 76 ft. and 25 x 40 ft. rein.-con., brick and steel, plain foundation. Chestnut Hill, to J. S. Cornell & Sons, Morris Bldg. Archts. est. $200,000.

Pa., Pittsburgh—Synagogue—B'Nai Israel Congregation, c/o Sharove & Freidman, archts., Berger Bldg., 1 and 2 story and basement (round), 120 ft. diam., North Negley Ave., to H. Miller & Son, 2565 5th Ave. Archts. est. $250,000. Noted Mar. 15.

Pa., Scranton — Store — Cleland-Simpson Co., Wyoming Ave., improving present building and constructing 5 story 50 x 167 ft. addition, also 2 miscellaneous additions, concrete, brick and steel, to E. S. Williams, Coal Exch. $350,000.

Md., Baltimore—High School—Mayor and City Council 3 story, 260 x 295 ft., rein.-con., brick and steel, plain foundation, Calhoun, Carey and Baker Sts., to J. H. Miller, Inc., Eutaw and Franklin Sts., $1,149,000. Noted Mar. 29.

D. C., Washington — Hotel — Continental Hotel, North Capitol and D Sts., hotel addition, to S. J. Prescott, 814 13th St., N. W. Archts. est. $200,000.

Va., Richmond — Bank — Broad Street Bank, 6th and Broad Sts., 1 story, to J. Fox & Sons, 2nd and Franklin Sts. $183,000.

Va., Richmond—Bank and Office—State & City Bank & Trust Co., 1111 East Main St., 13 story, rein.-con. and steel, 9th and Main Sts., to J. T. Wilson Co., Inc., Main St. Archts. est. $1,600,000.

Buildings (Continued)

N. C., Charlotte—Office—Textile Office Bldg., c/o W. L. Stoddard, archt., 9 East 40th St., New York City, 15 story and basement, 60 x 180 ft., brick, concrete and steel, to Hunkin-Conkey Constr. Co., Century Bldg., Cleveland, O. Archts. est. $1,000,000. This corrects report in Apr. 5 issue.

Fla., St. Petersburg—Hotel—Mason Hotel Co., 9 story, steel, brick and terra cotta, 4th St. and 1st Ave. N., to Ingles Iron & Steel Co., 720 Ave. D, Birmingham, Ala.

La., New Orleans — Chemistry — Bldg. Com. Loyala University, 6363 St. Charles St., 4 story, 66 x 200 ft. rein.-con., brick and terra cotta, to J. Fromherz, Title Guarantee Bldg., $260,000, plumbing, heating and lighting, to H. N. Moody, 815 Perdido St., $30,000.

Tenn., Memphis—Hotel—G. B. Barnett, Jr., St. Louis, Mo., (street address not available), general contract 10 story, containing 253 apartments, Poplar and Parkway Sts., here, to Kaucher-Hodges, Exch. Bldg., St. Louis, Mo. Archts. est. $400,000.

Tenn., Nashville—Apartment—Prichett & Thomas Co., Stahlman Bldg., general contract 3 story and basement, brick and concrete, to H. P. Jacobs & Co., Independent Life Bldg., $160,000.

O., Cleveland—Bank and Commercial, etc. —A. Greenwald, Society for Savings Bldg., 2 story, 66 x 220 ft. bank, commercial building and garage, brick and steel, Bway. and East 71st St., to Krinsky & Sadia, 11837 East 86th St. Archts. est. $150,000.

O., Columbus — Medical Science — C. E. Steele, secy. Bd. Trustees Ohio State University, 4 story and basement, 75 x 145 ft., rein.-con., brick and stone, on campus, to Boyajohn & Barr, Brunson Bldg., $230,-500. Noted Mar. 15.

O., Medina—High School—Bd. Educ., 2 story, 99 x 183 ft., brick, steel and concrete, to V. W. Surber, Federal Oil & Gas Bldg., Akron, $223,000. Noted Apr. 12.

O., Tiffin—High School—Bd. Educ., 2 story and basement, 93 x 198 ft., brick and concrete, to Hassler Bros., Tiffin, $167,000. Noted Nov. 2.

Ill., Chicago—Apartment—A. G. Erickson, 4745 North Hermitage St., 3-story, 116 x 167 ft., rein.-con., brick and steel, 6901-17 North Ashland Ave., to G. Jackson, 609 East 60th St. Archts. est. $175,000.

Ill., Chicago—Apartment—J. Hultgren, 5225 North Sawyer St., 3-story, 78 x 95 ft., rein.-con., brick and steel, 3100-08 Eastwood Ave., to J. Thorp, 5643 North Rockwell Ave. Archts. est. $150,000.

Ill., Chicago — Apartment — H. Rabinof, 856 Barry Ave., 3-story, 125 x 175 ft., rein.-con., brick and steel, 856-900 Barry Ave., to Gamn Bros. Constr. Co., 133 West Washington St. $150,000.

Ill., Chicago—Apartment and Store—O. Travis, 155 North Clark St., 3 story, rein.-con., brick and steel, 1414-24 Devon Ave., to Modern Builders & Investment Co., 155 North Clark St. Archts. est. $150,000.

Ill., Chicago—Dormitory and School—Northern Baptist Theological Seminary, Washington and Albany Sts., 3-story, rein.-con., brick and steel, to Fitzgerald Bros. Co., 105 West Monroe St. Archts. est. $150,000. Noted March 1.

Ill., Chicago—Store and Hotel—S. A. Malato, c/o R. F. France, archt., 155 North Clark St., 4-story, 75 x 125 ft., rein.-con., brick and steel, 5448-52 Bway., to H. Janisch & Co., 1813 Winona St. Archts. est. $225,000.

Ill., Chicago—Store and Office—National Bond & Mortgage Trust Co. of Illinois, 3146 North Lincoln Ave., 8-story, 164 x 167 ft., rein.-con., brick and steel, Lincoln, School and Marshfield Sts., to A. Brundage, 110 South Dearborn St. Archts. est. $400,000.

Wis., Green Bay—Hotel—Wisconsin Hotel Realty Co., 86 Michigan St., Milwaukee, 8 story, 130 x 160 ft., brick and concrete, Pine St., here, to W. W. Oeflein, Inc., 86 Michigan St., Milwaukee. Archts. est. $900,-000. Noted Mar. 1.

Wis., Sheboygan—Store—J. and W. Jung Co., 720 North 8th St., 3 story, 150 x 150 ft., brick, rein.-con. and steel, plain foundation, 8th St., to Verhulst Co., 2221 Calumet Dr. Archts. est. $200,000. Noted Mar. 22.

Ia., Ida Grove—School—Bd. Educ., general contract 2 story and basement, 60 x 200 ft., rein.-con., brick, tile and stone, to T. Park, Storm Lake, $140,000. Noted Mar. 22.

Neb., Kearney—Hospital Order of Good Samaritan, general contract 3 story and basement, 50 x 150 ft., rein.-con., brick and stone, here, to E. R. Green, Hastings. Archts. est. $200,000.

Neb., Omaha—Office and Store—C. and R. C. Cook, c/o George & Co., 902 City Natl. Bank Bldg., 4 story and basement, 135 x 260 ft., rein.-con., brick and steel, Howard St. between 16th and 17th Sts., general contract to J. Black Masonry & Contg. Co., 515 Federal Reserve Bank Bldg. Archts. est. $1,000,000. Noted Mar. 29.

S. D., Sioux Falls—School—Bd. Educ., 2 story and basement, rein.-con., brick, stone and tile, to Carlson-Snitkey Co., Minnehaha Bldg., $121,257. Noted Mar. 8.

Mo., Kansas City—Hotel—Reyburn Eng. & Constr. Co., 609 Waldheim Bldg., will build 7 story and basement, 150 x 150 ft., rein.-con., brick and stone, 37th St. and Bway., by day labor. $250,000.

Colo., Denver — Church — Sacred Heart Parish, 23rd and York Sts., general contract, 75 x 150 ft., brick, rein.-con. and terra cotta, to J. J. Cooke, 1661 East 25th Ave., Denver, $150,000. Archts. est. $200,-000. Noted Mar. 1.

Ore., Portland—Apartment—H. Gordon, owner and archt., 607 Railway Exch. Bldg., will build 4-story and basement, 88 x 93 ft., rein.-con. and brick, 545 Morrison St., by day labor. $150,000.

Ore., Portland—Apartment—J. C. Moore, Washington Bldg., 4-story and basement, 77 x 93 ft., rein.-con., East 25th and Hawthorne Sts., to G. E. Mangar, 704 Spalding Bldg., $150,000.

Calif., Ocean Park—Office and Store—Casino Building Co., 5-story and basement, rein.-con. and brick, Marine St., to Stradley & Newton, Detwiler Bldg., Los Angeles, to exceed $750,000.

Calif., Pasadena — Church — All Saints Episcopal Church, brick and concrete, to W. T. Loesch, 109 South Chester Ave., $215,000. Noted Mar. 29.

Federal Government Work

PROPOSED WORK

N. Y., Staten Island—Machine Shop—Superintendent of Lighthouses, rejected bids, 3 story, rein.-con., machine shop addition, at General Lighthouse Depot, Tompkinsville. Noted March 8.

Pa., Philadelphia—Engine Testing Room —Spec. 4835—Bureau Yards & Docks, Navy Dept., Washington, D. C., plans engine testing room at aircraft factory, here.

Pa., Philadelphia — Engine Treatment Building—Spec. 4839—Bureau Yards & Docks, Navy Dept., Washington, D. C., plans engine treatment building at aircraft factory, here.

Md., Annapolis—Water Softening Plant —Spec. 4836—Bureau Yards & Docks, Navy Dept., Washington, D. C., plans water softening plant, here.

Va., Norfolk—Steam Line—Spec. 4840—Bureau Yards & Docks, Navy Dept., Washington, D. C., plans steam line, here.

Va., Yorktown—Power Plant Equipment, etc.—Spec. 4826—Bureau Yards & Docks, Navy Dept., Washington, D. C., plans power plant equipment and piping, here.

W. Va., Huntington—Houses—U. S. Engineer, Huntington, rejected bids lockkeepers' houses at Dams 14 and 26, Ohio River. Noted Feb. 15.

Fla., Pensacola—Extension—Spec. 4837—Bureau Yards & Docks, Navy Dept., Washington, D. C., plans bulkhead extension, here.

Ky., Camp Knox—Road—Construction Quartermaster, Camp Knox, plans repairing Dixie Highway, about 8 mi. concrete and 1.2 mi. water-bound macadam, 20 ft.

Ky., Dawson Springs—Recreation Building, etc.—U. S. Veterans Bureau, Arlington Bldg., Washington, D. C., plans recreation building and 6 double sets officers quarters, here.

Ky., Louisville—Hull, etc.—U. S. Engineer, P. O. Box 72, plans 1 steel maneuver boat hull and 2 steel needle flats.

Ky., Louisville—Metal Work—U. S. Engineer, P. O. Box 72, plans metal work for weirs for Dam 44, Ohio River.

Ky., Louisville—Steel Hulls—U. S. Engineer, P. O. Box 72, plans 3 steel hulls for derrick boats.

Ark., Hot Springs—Buildings—Constructing Quartermaster, Army and Navy General Hospital, here, plans guardhouse; also building for Physiotherapy and X-ray.

Calif., Livermore—Hospital—Director U. S. Veterans Bureau, Arlington Bldg., Washington, D. C., rejected bids complete Tuberculosis Hospital, here. Noted Apr. 5.

H. T., Pearl Harbor—Fire Protection System—Spec. 4827—Bureau Yards & Docks, Navy Dept., Washington, D. C., plans fire protection system at Naval Ammunition Depot, here.

BIDS DESIRED

N. Y., Binghamton—Boilers—May 11, by Treas. Dept., Washington, D. C., 2 horizontal fire-box boilers, at U. S. Court House and Post Office, here. J. A. Wetmore, acting superv. archt.; adv. this issue.

N. J., Lake Denmark—Standpipe—Spec. 4759—May 2, by Bureau Yards & Docks, Navy Dept., Wash., D. C., standpipe, here. Noted Dec. 7.

Pa., Phila. — Underpinning Chimney — Spec. 4818—May 9, by Bureau Yards & Docks, Navy Dept., Wash., D. C., underpinning chimney, at aircraft factory, here. Noted March 22.

Del., Wilmington—Dredging—May 14, at office U. S. Engineer, dredging Tuckerton Creek, N. J.; adv. this issue.

Md., Edgewood—Water and Sewer Lines April 23, by Constructing Quartermaster, Edgewood Arsenal, water and sewer lines at Ft. Hoyle and Arsenal, here; adv. this issue.

Fla., Pensacola—Pump House, etc.—Spec. 4793—May 2, by Bureau Yards & Docks, Navy Dept., Wash., D. C., pump house, timber trestle, equipment and piping, at Naval Air Station, here. Noted March 8.

Ala., Mobile — Quarters — May 11, by Treas. Dept., Wash., D. C., medical officers quarters at U. S. Marine Hospital, here; adv. this issue.

Tenn., Memphis—Coal—Apr. 26 at office District Engineer, Mississippi River Dredging Dist., U. S. Dredge Depot, 5,000 tons coal; adv. this issue.

O., Columbus—Hangars, etc.—May 1 at office Constructing Quartermaster, Columbus General Reserve Depot, demolishing 2 steel hangars and erecting 2 steel hangars, etc.; adv. this issue.

Ind., Ft. Benjamin Harrison—Sewers—Apr. 23 at office Constructing Quartermaster, reconstruction and repair of sanitary sewers and disposal plant; adv. this issue.

Mich., Detroit—Mailing Platform—May 10, by Treas. Dept., Wash., D. C., extension to mailing platform, etc., U. S. Post Office and Court House, here. J. A. Wetmore, acting superv. archt.; adv. this issue.

Minn., St. Cloud—Dismantling—Spec. 4829—Apr. 25, by Bureau Yards & Docks, Navy Dept., Wash., D. C., dismantling tank and tower at Hampton Rds., Norfolk, Va., and transporting same to U. S. Veterans Hospital, here; adv. this issue. Noted Apr. 12.

Minn., St. Cloud—Water System, etc.—Spec. 4830—May 9, by Bureau Yards & Docks, Navy Dept., Wash., D. C., water and sewerage systems at U. S. Veterans Hospital, here. Noted April 12.

Washington—Roads—Apr. 24, by C. H. Purcell, dist. engr., U. S. Forestry Dept., Bway. and Glisan St., Portland, Ore., 7 in. gravel surfacing on 9.9 mi. International and Empire Highway, Stevens Co., 16 ft. State and Federal Government each pay one-half of cost.

Calif., Mare Island — Reroofing — Spec. 4825—May 2, at Pub. Wks. Office, Mare Island, reroofing 8 barracks buildings. L. E. Gregory, ch. Bureau Yards & Docks, Washington, D. C.

BIDS RECEIVED

Ky., Eddyville—Cement—U. S. Engineer, Custom House, Nashville, Tenn., furnishing and delivering 4,000 bbl. cement, here, from Kosmos Portland Cement Co., Kosmosdale, $2.81 per bbl.; Missouri Portland Cement Co., Post-Dispatch Bldg., St. Louis, Mo., $2.76 per bbl. (2,000 bbl. only); Atlas Portland Cement Co., 134 South La Salle St., Chicago, Ill., $2.87 per bbl. (paper sacks). All above less 10 cents per bbl. if paid within 10 days. Noted Apr. 5 under "Nashville, Tenn."

Ky., Louisville—Cement—U. S. Engineer, P. O. Box 72, furnishing and delivering 62,-000 bbl. portland cement, from Kosmos Portland Cement Co., 614 Marion E. Taylor Bldg., $2.50 and $0.10 per sack (not returned) f.o.b. Kosmosdale; Atlas Portland Cement Co., 134 South La Salle St., Chicago, for 25,000 bbl., $2.60 ($0.10 for sacks returned), f.o.b. Hannibal, Mo. Noted Mar. 15.

Ind., Newburg—Lock—U. S. Engineer, P. O. Box 72, Louisville, Ky., constructing Lock 47, Ohio River, here, from National Contract Co., 902 Citizens' National Bank, Evansville, Ind., $1,494,494; Dravo Contg. Co., Diamond Bldg., Pittsburgh, Pa., $1,664,-892. Noted Mar. 1.

Ariz., Nogales—Post Office—Treas. Dept., Washington, D. C., construction U. S. Post Office, here, from J. Devault, Massillon Rd., Canton, $92,283; H. J. Farmer, P. O. Box 1083, Nogales, $95,480; C. Weitz Sons, 713 Mulberry St., Des Moines, Ia., $98,000.

CONTRACTS AWARDED

N. Y., Ft. Lafayette (Brooklyn P. O.)—Roof—Spec. 4791—Bureau Yards & Docks, Navy Dept., Washington, D. C., magazine roof at Naval Ammunition Depot, here, to G. H. Cooper, 1674 Bway., New York, $9,340 (75 days). Noted April 12.

Pa., Phila.—Dredging—U. S. Engineer, 815 Witherspoon Bldg., dredging Delaware River, in Harbor here, 573,000 cu.yd. excav., maximum allowable overdepth 290,000 cu. yd., to Amer. Dredging Co., Mariner and Merchant Bldg., $230,000. Noted March 29.

Pa., Phila. — Extension — Treas. Dept., Washington, D. C., extension to vault in U. S. Mint, here, to E. H. Keefer & Son, 1321 Redman St., $10,902 (120 days).

Federal Government Work (Continued)

Md., Annapolis—Mechanical Equipment—Spec. 4796—Bureau Yards & Docks, Navy Dept., Washington, D. C., mechanical equipment for natatorium, at Naval Academy, here, to Roberts Filter Mfg. Co., 6th and Colorado Aves., Darby, Pa., $20,200 (180 days). Noted April 5.

Ala., Florence—Head-Gate Track, etc.—U. S. Engineer, head-gate track, screen track, seal castings, etc., for power house section of Wilson Dam, to Rock Island Arsenal, Ordnance Depot, Rock Island, Ill., Lots 1 and 2, $61,482; Dodge Foundry Co., Chattanooga, Tenn., (street address not available), Lot 3, $2,698. Noted March 8.

Ky., Louisville—Piling—U. S. Engineer, P. O. Box 72, delivering 309 tons sheet piling for Dam 44, Ohio River, to Bethlehem Steel Co., Bethlehem, Pa., $19,127. Noted April 12.

O., Cincinnati—Gates—U. S. Engineer, furnishing, delivering and erecting lock gates for Dams 36 and 38, Ohio River, to J. Eichleay, Jr., Co., 45 South 20th St., Pittsburgh, Pa., $139,200. Noted April 5.

Wash., Puget Sound—Cranes—Spec. 4755 Bureau Yards & Docks, Navy Dept., Washington, D. C., 15-ton electric traveling crane at Navy Yard, here, to Manning, Maxwell & Moore, Inc., 119 West 40th St., New York City, $11,587 (120 days). Noted March 22.

Calif., San Diego—Storehouse—Spec. 4770—Bureau Yards & Docks, Navy Dept., Washington, D. C., storehouse for paints and oils at Naval Base, here, to Union Constr. Co., foot of 14th St., Oakland, $18,940 (90 days). Alternate bid also accepted $0.30 per sq.ft. for concrete floors. Noted April 12.

Miscellaneous

PROPOSED WORK

Park—Rockville, Conn.—City plans park at Fox Hill. $25,000. C. Bancroft, Rockville, engr. Noted Nov. 16.

Elimination of Grade Crossings—Little Falls, N. Y.—Grade Crossing Elimination Comn., plans 3 overhead crossings over New York Central R.R. tracks. To exceed $200,000. L. Burrell, pres.

Golf Course—Cresson, Pa.—See "Buildings."

Subway—Meyersdale, Pa.—Comrs. Somerset Co., Somerset, soon take bids 900 ft. subway under Baltimore & Ohio R.R. tracks here, County to pay $7,500, Summitt Twp. $500, State Hy. Dept. $15,000 and Baltimore & Ohio R.R. $77,000. Total est. $100,000. E. O. Long, Somerset, engr.

Grade Separation—Detroit, Mich.—Wayne Co. Rd. Comn., 1102 Real Estate Exch. Bldg., had plans prepared grade separation at Oakwood Blvd. and Detroit, Toledo & Ironton R.R. tracks 2 mi. west of Oakwood, incl. concrete retaining walls, piers and abutments, 14,300 cu.yd. excav. below subgrade, 240 cu.yd. concrete piers, etc. $40,000. H. Shuptrine, c/o owner, engr.

Steam Heating, etc.—Chippewa Falls, Wis.—Chippewa Co. appropriated $25,000 for steam heating plant incl. boilers, for county asylum. H. R. Harris, co. clk. Engineer not selected.

Transmission Line—St. Pauls, N. C.—Carolina Power and Light Co., Raleigh, plans 10 mi. transmission line from Hope Mills to here. P. A. Tillery, Raleigh, genl. mgr.

Subways — Los Angeles, Calif. — Pacific Electric Ry. Co., 610 South Main St., had preliminary plans prepared complete subway system, with central station under Pershing Square, $20,000,000; subway between Hill St. station to 1st St. and Glendale Blvd., to serve Hollywood Dist., 4,200 ft. long, double track line, $3,000,000. E. C. Johnson, ch. engr.

Electrolier System — Porterville, Calif. — Having estimates made for ornamental eelctrolier system. To exceed $25,000. F. Pease, city engr.

Tunnel—Seattle, Wash.—Rejected bids constructing tunnel under Duwamish Waterway at 1st Ave. S. Noted Apr. 12.

Tunnel—Spokane, Wash.—Spokane International Ry., Old Nat' Bank Bldg., having plans prepared for repairs to tunnel, 540 ft. E. G. Taber, ch. engr. $75,000.

Power Development—Corning, Calif.—W. H. Samson and C. D. Hill plan development of 180,000 hp. and irrigation of lands in Sacramento Valley below Red Bluff, incl. storage dam, power plants, 35,000 ft. tunnel, 12 ft. wide and 15 ft. high, canals, etc. F. H. Tibbetts, Alaska Commercial Bldg., San Francisco, and Star, Thebe & Anderton, Sharon Bldg., San Francisco, engrs.

Electric Light and Power System—Ontario—Ontario Hydro Comn., London, plans to extend electric power lines from Port Lambton to Wallaceburg and Whitebread. $30,000.

Gold Mining Mill—Pancake Lake via (Matheson Sta.), Ont.—Crown Reserve Mining Co., Cobalt, plans to install gold mill, incl. crushers, stamps, cyanine apparatus, pumps, etc., in mine here, Larder Lake Gold Dist.

Slip Dock—Port Stanley, Ont.—London & Port Stanley Ry., Philips St., London, having preliminary plans prepared improving slip dock incl. new piling and cement work. $25,000. J. E. Richards, c/o owner, engr.

BIDS DESIRED

Road Oil—Rhode Island—May 2, by State Bd. Public Wks., Providence, asphaltic oil or refined tar for sections of State Roads; adv. this issue.

Road Oil—Hartford, Conn.—May 1, by Bd. Contract and Supply, at Mayors Office, Municipal Bldg., road oil, to Street Dept., f.o.b. tank cars, Hartford. W. F. O'Neil, secy.; adv. this issue.

Bituminous Dressing—Buffalo, N. Y.—Apr. 23, by Commissioner Pub. Wks., Municipal Bldg., bituminous dressing for repair of macadam roads for year ending Dec. 31, 1923. G. H. Norton, Municipal Bldg., engr.

Scarifier—Newton, N. J.—Apr. 30 by Town Com., for 1 steam pressure scarifier. J. R. Cornell, clk.; adv. this issue.

Pavilion, etc.—Sea Girt, N. J.—May 1, by Boro Council, pavilion, open air pool and bathing group, southwest corner Ocean Ave. and Chicago Blvd. E. A. Arend and K. M. Towner, 105 West 40th St., New York City, and Kinmouth Bldg., Asbury Park, associated archts.; adv. this issue.

Mixed Concrete, Fuel Oil Tanks, etc.—Phila., Pa.—See "Streets and Roads."

Sea Wall—Biloxi, Miss.—See "Streets and Roads."

Road Oil—Adrian, Mich.—Apr. 23, by G. P. Love, city clk., 70,000 gal. road oil f.o.b. Adrian; adv. this issue.

Foundation—Beloit, Wis.—W. G. Kreig and J. T. and M. D. Hetherington, archts., 105 North Clark St., Chicago, receiving bids foundation for 3 story, (ultimately 6 story), 80 x 124 ft., rein.-con., brick and steel administration building, here, for Beloit Water Gas & Electric Co. $200,000.

Culverts and Extensions—Sigourney, Ia.—Apr. 25, by Auditor Keokuk Co., 65 culverts and extensions. B. J. Conlon, Sigourney, engr.

Bridge Materials—Bison, S. D.—Apr. 30, by T. K. Rowbotham, aud. Perkins Co., material for bridges 10-24 ft. span, channel iron, I beams, etc. and one carload metal culverts.

Cast Iron Pipe—Alhambra, Calif.—City receiving bids 13,800 ft. 4 in., 4,800 lin.ft. 6 in. and 780 lin.ft. 8 in. Class B, c.i. bell and spigot pipe. Bids will be asked for delivery f.o.b. trench, Alhambra and f.o.b. dock, San Pedro.

Road Oil—Fresno, Calif.—May 8, by D. M. Barnwell, Fresno Co. Clk., furnishing 100,000 bbl. road oil for county highway system. C. P. Jensen, co. road engr.

Steel Penstocks and Accessories—San Francisco, Calif.—May 23, at office Bd. Pub. Wks. of city and San Francisco Co., steel penstocks and accessories for Moccasin Creek Power Plant, Contr. 91, Hetch Hetchy Water Supply. W. J. Fitzgerald, secy.; adv. this issue.

Fire Hydrants—Edmonds, B. C.—Apr. 23, by municipality of Burnaby, Municipal Hall, 225 fire hydrants. $25,000. A. G. Moore, clk.

BIDS RECEIVED

Heating and Ventilating Apparatus, etc.—Brooklyn, N. Y.—W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Apr. 10, heating, ventilating and temperature regulation apparatus in P. S. 188, Neptune Ave. between West 33rd and West 35th Sts., from D. J. Rice, 42nd St. and Lexington Ave., New York, $79,247; Federal Heating Co., 300 Madison Ave., New York, $79,972; Austin Eng. Co., 124 West 42nd St., New York, $82,700. Noted Apr. 5.

Dock Wall, etc.—Buffalo, N. Y.—Bd. Pub. Wks., Municipal Bldg., Apr. 10, (1) crib dock wall in Niagara River (2) 8 ft. 6 in. submerged rein.-con. sewer, from Peckham Constr. Co., Niagara Life Bldg., (1) $194,400 (2) $64,400; Great Lakes Dredge & Dock Co., Morgan Bldg., (1) $261,900 (2) $107,800; Cleveland Eng. Constr. Co., 778 The Arcade, Cleveland, O., (1) $311,000 (2) $124,000. Noted Jan. 25.

Stadium—East Cleveland (Cleveland P. O.), **O.**—Bd. Educ., concrete stadium of two stands, 50 x 350 ft., 8,000 seating capacity, from C. A. Carson Co., 7016 Euclid Ave., Cleveland, $73,224; Rice Jones Co., Union Bldg., Cleveland, $73,860; Kelly Demarest Co., Prospect-4th Bldg., Cleveland, $82,900. Noted Mar. 15.

Road Oil, etc.—Milwaukee, Wis.—From Lockwood Oil Co., 1421 Racine St., Racine, 400,000 gal. medium-light surfacing oil $0.0642 per gal.; from Amer. Tar Products Co., 208 South La Salle St., Chicago, 50,000 gal. light bituminous road surfacing material, 200,000 gal. medium tar, 250,000 gal. bituminous road binder, $0.1075 per gal. Noted Mar. 29.

Cement—St. Paul, Minn.—See "Waterworks."

Electrolier System—Berkeley, Calif.—For 75 electroliers on Telegraph Ave., etc., from F. E. Newberry Electric Co., 417 Webster St., Oakland, $22,213; H. C. Reid Co., 115 Mission St., San Francisco, $23,190. Noted March 15.

CONTRACTS AWARDED

Transmission Line—Pawtucket, R. I.—Blackstone Valley Gas & Electric Co., 231 Main St., 66,000 volt transmission line between here and Woonsocket, with 2 outdoor terminal substations, 13,000 volt underground line between Pawtucket stations 1 and 2, to Stone & Webster, Inc., 147 Milk St., Boston. $1,400,000.

Pier—Buffalo, N. Y.—Commissioner Pub. Wks., extending Bird Island Pier, from near foot of Ferry St., to point about 1,100 ft. northerly therefrom, in Niagara River, to Peckham Constr. Co., Niagara Life Bldg., $258,000. Noted Mar. 29.

Asphaltic Cement, etc.—St. George, N. Y.—J. A. Lynch, pres. Richmond Boro, Boro Hall, to J. Johnson Sons, 455 Bway., West New Brighton, 170 tons asphaltic cement, $3,528, 1,300 cu.yd. broken stone $7,810, 4,100 cu.yd. broken stone $16,328; to Barrett Co., 17 Battery Pl., New York City, 100,000 gal. bituminous road surfacing material $10,250; to F. J. Lewis Mfg. Co., Eastern Blvd. and East 177th St., New York, 170,000 gal. tar macadam binder $24,000; to J. E. Donovan, 2205 Richmond Terrace, Port Richmond, 170,000 gal. asphaltic binder $19,975. Noted Mar. 22.

Asphalt Oil, etc.—Trenton, N. J.—Furnishing 20,000 gal. asphalt oil, to Good Roads Co., Franklin Trust Bldg., Philadelphia, $0.32 per gal., 250 tons asphaltic cement, to Atlantic Refining Co., 3144 Passyunk St., Philadelphia, $16 per ton.

Stone, etc.—Trenton, N. J.—Mercer Co. to Pennington Trap Rock Co., Pennington and Hopewell Rds., 7,000 tons stone, 2½ in. $1.15 per ton, 1½ in. $1.95, ¾ in. $2.15, ½ in. $2.40, screenings $1.95.

Grain Elevator—Baltimore, Md.—Baltimore & Ohio R.R., Charles and Baltimore Sts., 61 x 240 ft. grain elevator, 206 ft. high, concrete, concrete pile foundation, 8m. bu. capacity, Locust Point, to M. A. Long Co., Guilford Ave. and Fayette St., $3,000,000. Noted Mar. 22.

Cement—Juneau, Wis.—For 6,000 bbl. cement for city streets, to Juneau Lumber Co., Juneau, $2.50 per bbl. Noted Mar. 22.

Asphalt—Minneapolis, Minn. — For 1,200 tons asphalt for street work, to Du Ro Asphalt Products Co., 133 West Washington St., Chicago, $21.23 per ton. Noted Apr. 4.

Lighting System—St. Paul, Minn.—Installing two hundred and ten 400 candle-power single light posts on Shelby Ave. from Summit to Lexington Aves., and in Western Ave. from Laurel to Marshall Aves., to Hubbard Electric Co., 368 Wabasha St., $39,100. Noted Mar. 29.

Paving Materials—St. Paul, Minn.—For 600 tons limestone dust, to Gopher Stone Co., 1500 Johnson St. N.E., Minneapolis, $5.10 per ton delivered; 2,400 sq.yd. sandstone blocks for street repairs, to Sandstone Quarries Co., 510 Plymouth Bldg., Minneapolis, $2.74 per sq.yd.; 1,700 bbl. portland cement for Bd. Pub. Wks., to Stiefel Material Co., 501 Concord St., $2.54 per bbl., net, on cars. Noted Mar. 1.

Cemetery—Kansas City, Mo.—Memorial Park Cemetery Assn. of Missouri, 406 Commerce Bldg., general contract cemetery, 150 acres, at Walnut Ridge Farm adjoining Swope Park, to Teich & Roessler, 406 Commerce Bldg., $160,000.

Transmission Line—Seattle, Wash.—Bd. Pub. Wks., 100 mi. transmission line, 165,000 volt, from Gorge Creek plant, Skagit Power Project, to Seattle, to Nepage, McKenny Co., Armour Bldg., $268,000. Noted Mar. 22.

Levees—Yuba City, Calif.—Recl. Dist. 1660, rescinded contract let to Callahan Constr. Co., City Natl. Bank, Wichita Falls, Tex., $915,000, for 13 mi. levees, etc. Project postponed indefinitely. Noted Apr. 5.

Docks—Ford City, Ont.—Ford Motor Co. new docks to Considine & Reed, Merchants Bank Bldg., Windsor. $40,000.

Dyke—New Westminster, B. C.—Provincial Govt., Victoria, repairing broken dyke on Nicomen Island, in Fraser River, near here, to T. R. Nickson Constr. Co. Ltd., 739 Hastings St. W., Vancouver, $25,000.

CONSTRUCTION NEWS

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Apr. 30	Oconomowoc, Wis.	Apr. 19
Apr. 30	North East, Pa.	Apr. 19
Apr. 30	Waldwick, N. J. Adv. Apr. 19 and 26.	Apr. 19
May 1	Freehold, N. J. Adv. Apr. 19 and 26.	Apr. 19
May 1	Macedon, N. Y.	Apr. 19
May 4	Cleveland, O.	Apr. 26
May 4	Phila., Pa.	Apr. 26
May 5	Brooklyn Heights (Independence P. O.), O.	Apr. 26
May 7	Napa, Calif.	Apr. 26
May 10	Hanover, Ont.	Apr. 26
May 12	Memphis, Tenn. Adv. Apr. 12 and 19.	Apr. 12
May 14	Woodville, Wis.	Apr. 26
May 15	Harrisburg, Pa. Adv. Apr. 19 and 26.	Apr. 19
May 15	Monticello, Ind.	Apr. 26
May 16	San Francisco, Calif. Adv. Apr. 19 and 26.	Apr. 19
May 18	Sidney, O. Adv. Apr. 26.	Apr. 26
May 22	Portland, Me. Adv. Apr. 26.	Apr. 26

SEWERS

Apr. 30	Morris Plains, N. J.	Apr. 19
Apr. 30	Waterloo, N. Y.	Apr. 19
Apr. 30	Falls City, Neb.	Apr. 19
Apr. 30	Long Island City, N. Y.	Apr. 26
May 1	New Jersey Adv. Apr. 19 and 26.	Apr. 19
May 1	Avon, S. D.	Apr. 19
May 2	Binghamton, N. Y.	Apr. 26
May 3	Independence, Kan.	Apr. 12
May 5	Brooklyn Heights (Independence P. O.), O.	Apr. 26
May 7	Los Angeles, Calif.	Apr. 12
May 7	Butler, N. J. Adv. Apr. 26.	Apr. 26
May 10	Elizabeth, N. J. Adv. Apr. 19 and 26.	Apr. 26
May 10	Cuba, N. Y. Adv. Apr. 26.	Apr. 26
May 15	St. Petersburg, Fla. Adv. Apr. 19 and 26.	Apr. 19
May 17	Atlantic City, N. J. Adv. Apr. 26.	Apr. 26
May 22	Marion, Wis.	Apr. 26

WASTE DISPOSAL

Apr. 28	Harrisburg, Pa.	Apr. 19
Apr. 30	West Allis, Wis.	Apr. 26

BRIDGES

Apr. 30	San Anselmo, Calif.	Apr. 12
Apr. 30	Lansing, Mich.	Apr. 19
Apr. 30	Milwaukee, Wis.	Apr. 19
Apr. 30	Illinois	Apr. 26
May 1	Alabama	Apr. 19
May 1	Indiana	Apr. 19
May 1	Washington	Apr. 19
May 1	Toronto, Ont.	Apr. 26
May 1	Greenfield, Ia.	Apr. 26
May 2	Georgia	Apr. 26
May 3	Alabama	Apr. 12
May 4	Chatham, Ont.	Apr. 26
May 7	Wentworth, N. C.	Apr. 13
May 7	Islington, Ont.	Apr. 26
May 8	Ludington, Mich.	Apr. 19
May 10	Haverhill, Mass. Adv. Apr. 19 and 26.	Apr. 19
May 15	Newcastle, Pa.	Apr. 26
May 21	Marine City, Mich. Adv. Apr. 26.	Apr. 26
Nov. 30	Sydney, Australia	Apr. 19

DAMS

May 4	Phila., Pa.	Apr. 26

EXCAVATION, DRAINAGE, IRRIGATION

May 1	Des Moines, Ia.	Apr. 19
May 1	Manitowoc, Wis.	Apr. 19
May 2	Houston, Tex.	Apr. 19
May 12	Kenosha, Wis.	Apr. 26
June 15	Albert Lea, Minn.	Apr. 12

STREETS AND ROADS

Apr. 30	Warwick, N. Y.	Apr. 12
Apr. 30	San Anselmo, Calif.	Apr. 12
Apr. 30	Elkpoint, S. D	Apr. 19
Apr. 30	Norfolk, Va. Adv. Apr. 19 and 26.	Apr. 19
Apr. 30	Sebring, Fla.	Apr. 19
Apr. 30	Indianapolis, Ind.	Apr. 19
Apr. 30	Mitchell, S. D	Apr. 19
Apr. 30	Akron, O.	Apr. 19
Apr. 30	Ontario	Apr. 19
Apr. 30	Pointe a la Hache, La.	Apr. 19
Apr. 30	Long Island City, N. Y.	Apr. 26
Apr. 30	Lancaster, Pa.	Apr. 26
May 1	Miami, Fla. Adv. Apr. 12 to 26.	Apr. 12
May 1	West Virginia	Apr. 12
May 1	Atchison, Kan.	Apr. 5
May 1	Washington	Apr. 5
May 1	Pennsylvania Adv. Apr. 12 to 26.	Apr. 12
May 1	Trenton, N. J.	Apr. 12
May 1	Alabama	Apr. 19
May 1	Washington	Apr. 19
May 1	Centralia, Wash.	Apr. 19
May 1	Maryland Adv. Apr. 19 and 26.	Apr. 19
May 1	Auburn, N. Y.	Apr. 19
May 1	Wisconsin	Apr. 19
May 1	Towner, N. D.	Apr. 19
May 1	Linton, N. D.	Apr. 26
May 1	Ortonville, Minn.	Apr. 19
May 1	South Dakota	Apr. 26
May 1	Canton, Miss.	Apr. 26
May 1	South Bend, Ind.	Apr. 26
May 1	New Hampshire	Apr. 26
May 2	Morristown, N. J.	Apr. 19
May 2	Mankato, Minn.	Apr. 19
May 2	Georgia	Apr. 26
May 2	Wisconsin	Apr. 26
May 2	Batavia, N. Y.	Apr. 26
May 2	Maine	Apr. 26
May 2	Baltimore, Md.	Apr. 26
May 2	Brooklyn, N. Y.	Apr. 26
May 2	Utica, N. Y.	Apr. 26
May 3	South Charleston (Charleston P. O.), W. Va.	Apr. 26
May 3	Iola, Kan.	Apr. 19
May 3	Mobile, Ala. Adv. Apr. 12 to 26.	Apr. 12
May 3	Quebec	Apr. 19
May 3	Buffalo, N. Y.	Apr. 26
May 3	Cleveland, O.	Apr. 26
May 4	Hiawatha, Kan.	Apr. 12
May 4	Winchester, Ky. Adv. Apr. 19 and 26.	Apr. 19
May 4	Bexley (Columbus P. O.), O.	Apr. 26
May 4	Breckenridge, Minn.	Apr. 26
May 4	Los Angeles, Calif.	Apr. 26
May 4	Tacoma, Wash.	Apr. 26
May 5	Seattle, Wash.	Apr. 26
May 5	Finley, N. D.	Apr. 19
May 5	Euclid, O.	Apr. 26
May 7	Warsaw, Ind.	Apr. 19
May 7	Bradentown, Fla.	Apr. 26
May 7	New Jersey Adv. Apr. 26.	Apr. 26
May 7	Olean, N. Y. Adv. Apr. 26.	Apr. 26
May 7	East Troy, Wis	Apr. 26
May 7	Woodland, Calif.	Apr. 26
May 7	San Diego, Calif.	Apr. 26
May 7	Oneonta, N. Y. Adv. Apr. 26.	Apr. 26
May 8	Cocoa, Fla.	Apr. 26
May 8	Brooksville, Fla.	Apr. 26
May 8	Michigan	Apr. 26
May 8	Indiana	Apr. 26
May 8	Ohio	Apr. 26
May 9	Ashland, R. I. Adv. Apr. 19 and 26.	Apr. 19
May 9	Oregon City, Ore.	Apr. 26
May 9	Wisconsin	Apr. 26
May 9	Kentucky	Apr. 26
May 10	Elizabethtown, Tenn.	Apr. 26
May 10	Virginia Adv. Apr. 26.	Apr. 26
May 11	Westfield, N. Y. Adv. Apr. 19 and 26.	Apr. 19
May 11	Louisiana	Apr. 26
May 15	Starke, Fla.	Apr. 19
May 15	Onawa, Ia.	Apr. 19
May 15	St. Petersburg, Fla. Adv. Apr. 19 and 26.	Apr. 19
May 15	St. Louis, Mo.	Apr. 26
May 16	San Francisco, Calif.	Apr. 26

INDUSTRIAL WORK

Apr. 30	Milwaukee, Wis.	Apr. 26
May 3	South Bend, Ind.	Apr. 26
May 7	Everett, Ind.	Apr. 26
May 8	New Lisbon, N. J.	Apr. 26
May 15	Bethlehem, Pa.	Apr. 19
May 15	Reading, Pa.	Apr. 26

BUILDINGS

Apr. 30	Norwalk, Calif.	Apr. 19
Apr. 30	Raleigh, N. C.	Apr. 19
Apr. 30	Milwaukee, Wis.	Apr. 19
Apr. 30	Grand Island, Neb.	Apr. 19
Apr. 30	Capa, S. D.	Mar. 8
Apr. 30	Algonac, Mich.	Apr. 26
Apr. 30	Appleton, Wis.	Apr. 26
Apr. 30	Minot, N. D.	Apr. 26
May 1	Mason City, Ia.	Mar. 22
May 1	Albuquerque, N. M.	Apr. 19
May 1	Kansas City, Mo.	Apr. 19
May 1	Detroit, Mich.	Apr. 26
May 1	Cleveland, O.	Apr. 26
May 1	Pittsburgh, Pa.	Apr. 26
May 1	Rock Creek, O.	Apr. 26
May 2	Baltimore, Md.	Apr. 19
May 3	Bayonne, N. J.	Apr. 26
May 3	Pleasant Hill, Mo.	Apr. 26
May 4	Cleveland, O.	Apr. 19
May 5	Hartford, Conn.	Apr. 19
May 5	Derry, Pa.	Apr. 26
May 5	Phila., Pa.	Apr. 26
May 7	Bergenfield, N. J. Adv. Apr. 26.	Apr. 26
May 7	Kansas City, Kan.	Apr. 26
May 7	Buffalo, N. Y.	Apr. 26
May 7	Elmira, N. Y.	Apr. 26
May 8	Olympia, Wash.	Apr. 19
May 8	Glen Lake (Hopkins P. O.), Minn.	Apr. 26
May 10	Pleasantville, O.	Apr. 19
May 10	Mt. Vernon, O.	Apr. 19
May 10	Athens, O.	Apr. 26
May 10	Clearfield, Pa.	Apr. 26
May 11	Hornell, N. Y.	Apr. 26
May 12	Racine, Wis.	Apr. 26
May 14	Syracuse, N. Y.	Apr. 26
May 15	Hightstown, N. J.	Apr. 26
May 17	Pulaski, Wis.	Apr. 26
May 22	Old Forge, N. Y.	Apr. 26
May 26	Columbus, O.	Apr. 26
June 1	Morgantown, W. Va.	Apr. 12

FEDERAL GOVERNMENT WORK

Apr. 30	Barges—Jacksonville, Fla. Adv. Apr. 5 to 26.	Apr. 5
Apr. 30	Dredging—Baltimore, Md. Adv. Apr. 5 to 26.	Apr. 5
Apr. 30	Post Office—Vernal, Utah.	Apr. 5
May 1	Hangars, etc. — Columbus, O. Adv. Apr. 19 and 26.	Apr. 19
May 2	Re-roofing—Mare Island, Calif.	Apr. 19
May 2	Standpipe—Lake Denmark, N. J.	Apr. 19
May 2	Pump House, etc.—Pensacola, Fla.	Apr. 19
May 2	Repairs—Wash., D. C.	Apr. 26
May 3	Superstructure — Detroit, Mich. Adv. Apr. 5 to 26.	Apr. 5
May 3	Boilers—Mankato, Minn.	Apr. 12
May 5	Metal Work — Louisville, Ky. Adv. Apr. 26.	Apr. 26
May 7	Boilers—Oteen, N. C.	Apr. 12
May 7	Dredging—Metuchen, N. J. Adv. Apr. 26.	Apr. 26
May 8	Boiler — Saratoga Springs, N. Y.	Apr. 12
May 9	Underpinning Chimney—Phila., Pa.	Apr. 19
May 9	Water Supply, etc. — St. Cloud, Minn. Adv. Apr. 19.	Apr. 19
May 9	Engine Testing Room—Phila., Pa.	Apr. 26
May 10	Post Office — Cordova, Alaska	Jan. 25
May 10	Mailing Platform — Detroit, Mich.	Apr. 19
May 11	Dredging — New York, N. Y. Adv. Apr. 19 and 26.	Apr. 12
May 11	Bear Trap Leaves—Louisville, Ky. Adv. Apr. 12 to 26.	Apr. 12
May 11	Quarters—Mobile, Ala.	Apr. 19
May 11	Boilers—Binghamton, N. Y. Adv. Apr. 19 and 26.	Apr. 19
May 12	Metal Work—Key West, Fla. Adv. Apr. 19 and 26.	Apr. 12
May 14	Dredging — Wilmington, Del. Adv. Apr. 19 and 26.	Apr. 19
May 14	Repairs—Perryville, Md. Adv. Apr. 26.	Apr. 26
May 21	Post Office — Houghton, Mich. Adv. Apr. 26.	Apr. 26
May 21	Scows—Wilmington, Del. Adv. Apr. 26.	Apr. 26
May 22	Steel Hull — Vicksburg, Miss. Adv. Apr. 26.	Apr. 26
May 23	Roads—San Diego, Calif.	Apr. 26

Bids Close		See Eng. News-Record
May 23	Storehouse—Pearl Harbor, H. T.	Apr. 26
May 24	Dredging, etc. — Chicago, Ill. Adv. Apr. 26.	Apr. 26
May 25	Hull, etc.—Louisville, Ky. Adv. Apr. 26.	Apr. 26
June 13	Refrigerating Machinery—Pearl Harbor, H. T.	Apr. 26

MISCELLANEOUS

Apr. 30	Trap Rock, etc.—Trenton, N. J.	Apr. 12
Apr. 30	Bridge Materials — Bison, S. D.	Apr. 19
Apr. 30	Scarifier—Newton, N. J.	Apr. 19
May 1	Pavilion—Sea Girt, N. J.	Apr. 19
May 1	Road Oil—Hartford, Conn. Adv. Apr. 19 and 26.	Apr. 19
May 2	Road Oil—Rhode Island	Apr. 19
May 3	Bituminous Material—Albany, N. Y. Adv. Apr. 26.	Apr. 26
May 3	Bituminous Material, etc. — Hollidaysburg, Pa.	Apr. 26
May 3	Paving Blocks — New York, N. Y.	Apr. 26
May 3	Heating and Ventilating System—Forest City, Pa.	Apr. 26
May 3	Electroliers—Fresno, Calif.	Apr. 26
May 7	Cement, etc. — Oroville, Calif.	Apr. 26
May 7	Tar, etc.—Trenton, N. J. Adv. Apr. 26.	Apr. 26
May 8	Road Oil—Fresno, Calif.	Apr. 19
May 8	Steel—Flushing, N. Y.	Apr. 26
May 9	Subway—Rochester, N. Y.	Apr. 26
May 11	Gravel—Baton Rouge, La.	Apr. 26
May 14	Chimney—Norfolk, Va. Adv. Apr. 26.	Apr. 26
May 18	Shaft—New York Adv. Apr. 26.	Apr. 26
May 23	Steel Penstock and Accessories —San Francisco, Calif. Adv. Apr. 19 and 26.	Apr. 19
June 1	Pier—Charleston, S. C. Adv. Apr. 26.	Apr. 26

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Tenn., Butler—Plans water supply system and plant; bids soon on pipe and equipment. $35,000. A. H. Queen, mayor.

O., Cleveland—Cuyahoga Co. takes bids in summer c.i. mains in Herman St., Russell and Grantwood Aves. $25,000. R. F. MacDowell, Court House, engr.

O., Cleveland—Cuyahoga Co. takes bids in fall pumping station, mains and elevated tanks for Mayfield Twp. $100,000. R. F. MacDowell, Court House, engr.

O., Columbus—See "Buildings."

O., Columbus—See "Streets and Roads."

O., Warren—Plans extending and improving water system. $48,000.

Mich., Grosse Pointe—Having plans prepared extending mains incl. 12,000 lin.ft. 6 in. c.i. pipe, valves and hydrants, etc., also 1,400 lin.ft. 8 in. vitr. crock sewer, $40,000. M. L. Brown & Son, 403-7 Capitol Bldg., Detroit, engrs.

Mich., Jackson—Plans to extend mains incl. 730 tons 6, 8 and 12 in. c.i. pipe, 55 hydrants, one hundred and sixty-three 6, 8 and 12 in. valves, 115 valve boxes, 15.5 tons fittings, 25 tons pig lead. C. Crary, city mgr.

Wis., Little Chute — Plans waterworks system, incl. deep well, pumping station, mains and meters. $120,000 bonds voted. M. Van Hoof, clk. Engineer not selected.

Wis., Milwaukee—Rejected bids laying c.i. mains throughout city. Will readvertise soon. G. Staal, city engr.

Wis., Oconomowoc—Making plans 1 mi. 4, 6 and 8 in. c. i. mains and 1 mi. 10-12 in. concrete or vitr. sewer in Oakwood, Greenland, Cherry, Washington, Oak, Westover and Forest Sts. $30,000. J. A. Stemper, City Hall, engr.

Wis., Portage — Plans new waterworks plant, pump and several deep wells. $160,000. C. J. Loomis, clk. Engineer not selected.

Minn., St. Charles—Takes bids about May 1, well and pumping equipment. C. L. Pillsbury Co., 1200 2nd Ave. S., Minneapolis, engrs.

N. D., Casselton — Voted $35,000 bonds for waterworks system. C. L. Pillsbury Co., 1200 2nd Ave., S., Minneapolis, Minn., engrs.

Tex., Edgewood—Making plans new mains, etc. P. O'Neil, c/o Municipal Eng. Co., Sumpter Bldg., Dallas, engr. $40,000. Noted Apr. 19.

Tex., Sulphur Springs — Voted $40,000 bonds for waterworks improvements. L. E. Gee, mayor. Noted Mar. 22.

Calif., Chico — Defeated $475,000 bonds to purchase and improve privately owned waterworks. F. S. Robinson, city engr. Noted Mar. 22.

Ont., Elmira—Plans new reservoir, extension to 6 in. mains, hydrants, pumps, etc. $30,000. J. H. Ruppel, city engr.

BIDS DESIRED

Me., Portland—May 22, by Trustees of Portland Water Dist., 16 Casco St., lake intake pipe, tunnel and conduit. H. U. Fuller, ch. engr.; adv. this issue.

Pa., Phila.—May 4, by F. H. Caven, dir. pub. wks., furnishing 300 fire hydrants. $12,000. C. E. Davis, City Hall, engr.

Pa., Woodlawn—Woodlawn Water Co. taking bids 1 and 3 story and basement, 56 x 115 ft. concrete pumping station and filter building, 500,000 gal. concrete coagulation basin, 300,000 gal. filtered water reservoir, two 2 m.g. and one 1 m. g. centrifugal pumps, high pressure piping, steel tanks, etc. $200,000. Morris-Knowles Co., Westinghouse Bldg., Pittsburgh, engrs.

O., Brooklyn Heights (Independence P. O.)—May 5, 4,330 ft. 4-8 in. c.i. mains. To exceed $25,000. W. H. Evers Eng. Co., Engineers Bldg., Cleveland, engrs.

O., Cleveland—May 4, concreting pockets at Crib 3, 3,900 cu.yd. rubble concrete. To exceed $25,000. A. V. Ruggles, City Hall, engr.

O., Sidney—May 18, by F. Smith, dir. Pub. Serv. extending mains. B. Coulson, city engr.; adv. this issue.

Ind., Monticello—May 15, by Common Council, City Bldg., 1 or more drilled wells, pumping station additions, two 300 g.p.m. motor driven centrifugal pumps, one 800 g.p.m. motor driven fire pump, 130 tons 4 and 6 in. mains, 1½ tons specials, laying 9,000 lin.ft. mains. J. Y. Stephenson, clk.

Wis., Woodville — May 14, by J. T. Heneppe, clk., waterworks system, incl. 11,100 lin.ft. 4-8 in. c.i. pipe, etc. $32,000. Druar & Milinowski, 500 Globe Bldg., St. Paul, Minn., engrs. Noted Nov. 30.

Calif., Napa—May 7, by City Council, constructing portion of Milliken Canyon pipe line, bids being taken for portion of work, as follows: Schedule 3, riveted sheet steel pipe, delivered f.o.b. Napa, 6,700 lin. ft. 16 in. slip joint, Item 1, 14 gage, Item 2, 16 gage, 5,300 lin.ft. 14 in. bolted couplings, Item 3, 12 gage, Item 4, 14 gage, 13,600 lin.ft. 14 in. dipped and wrapped, alternate bids for bolted coupling, slip joint and welded joint, gages 10, 11 and 12. Separate bids for flanges, hauling, distributing and laying pipe. Schedule 5, labor and equipment necessary for 13,600 lin.ft. trenching and backfill, Schedule 6, air valves, etc., Schedule 8, one 14 in. c.i. Ventura meter and various castings. A. Kempkey, Hobart Bldg., San Francisco, engr. Noted Apr. 19.

Ont., Hanover—May 10, by J. Taylor, town clk., waterworks system incl. laying mains, concrete reservoir, pumphouse, valve boxes, hydrants, centrifugal pumps, electric motors, gasoline engine, etc. $125,000. F. W. Thorold Co. Ltd., 54 Admiral Rd., Toronto, engrs.

BIDS RECEIVED

Ill., Astoria—Complete waterworks and distribution system, incl. 2 filter units, 100,000 gal. each, 4 centrifugal pumps, dam, 2 mi. 4 in. and 2 mi. 6 in. c. i. pipe, etc., from Nixon & Keeley, 21st and State Sts., East St. Louis, $60,000. Noted Mar. 15.

CONTRACTS AWARDED

N. Y., Jamestown—Bd. Water & Light Comn., City Hall, to U. S. Cast Iron Pipe & Fdry. Co., 71 Bway., New York, 8,000 ft. 6 in. c.i. pipe $59.80 per ton, 1,000 ft. 4 in. c.i. pipe $63.80, 9,000 lb. 6 in. fittings $0.06, 1,000 lb. 4 in. fittings $0.065. Noted Apr. 12.

Mich., Detroit—Bd. Water Comrs., furnishing five thousand ⅝ in. disc water meters (with option of increasing order to 10,000), to Gamon Meter Co., 282 South St., Newark, N. J., $35,500.

Wis., Monroe—For 6-12 rein.-con. mains in various streets, to J. F. Icke, Washington Bldg., Madison, $15,000.

Minn., Morristown — Waterworks system, 3,670 lin.ft. 6 in. and 10,910 lin.ft. 4 in. c. i. Class B pipe, 5,500 lb. special castings, 20 fire hydrants, 7 valves and boxes, to P. D. Johnson, St. James, $18,000; well, tank, tower, pump house and machinery, to Gjellefald-Chapman Constr. Co., Forest City, Ia., $11,296. Noted Jan. 25.

Minn., Staples—For 15,000 lin.ft. mains, hydrants, valves and specials, to Roise Constr. Co., 251 Hennepin Ave., Minneapolis, $23,455. Noted Apr. 4.

Sewers

PROPOSED WORK

Conn., Hartford—Plans 10,800 ft. of 18-30 in. vitr. clay sewers in various streets. $57,000. R. N. Clark, city engr.

N. Y., Kenmore—Voted $190,000 bonds new sewerage system. Noted Mar. 8.

Tenn., Nashville — City Council appropriated $55,000 extending Browns Creek Trunk Sewer to Waverly Sect. W. W. Southgate, City Hall, engr.

O., Cleveland—Cuyahoga Co. soon takes bids trunk sewer from Brook Park and Ridge Rds. to West 54th St. and Snow Rd. $100,000. R. F. MacDowell, Court House, engr.

O., Columbus—See "Streets and Roads."

O., Columbus—See "Buildings."

Mich., Grosse Pointe—See "Waterworks."

Kan., Madison—Making plans new sewerage system and sewage disposal plant. $60,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, Okla., engrs.

Neb., Syracuse—Having plans prepared storm sewers. $25,000. Bruce & Grupe, 408 Finance Bldg., Omaha, engrs.

N. D., Casselton—Voted $35,000 bonds for sewerage system. C. L. Pillsbury Co., 1200 2nd Ave., S., Minneapolis, Minn., engrs. Noted Mar. 22.

Tex., Dallas—Voted $500,000 bonds for sewage disposal improvements and $150,000 for sanitary sewers. G. D. Fairtrace, city engr.

Tex., Houston—Takes bids in May storm sewers in Caroline St., Calumet Dr. and Blodgett Ave. $95,000, Waugh Dr. $11,000. J. C. McVea, city engr.

Tex., Houston—Voted $250,000 bonds storm sewer extensions. J. C. McVea, city engr. Noted Mar. 22.

Calif., Anaheim — Had plans prepared outfall sewerage system, 28,600 lin.ft. 30 in. and 28,300 lin.ft. 24 in. pipe. O. E. Stewart, city engr.

BIDS DESIRED

N. Y., Binghamton — May 2, by Bd. Contr. & Supply, sanitary and storm water sewers in Charles, Evans, Frederick, Yates, Medford and Robinson Sts., Mason, Howard and Snow Aves. To exceed $25,000.

N. Y., Cuba—May 10, by Bd. Village Trustees, sewerage system and sewage disposal works. Hopkins & Field, 349 Cutler Bldg., Rochester, engrs.; adv. this issue. Noted Mar. 15.

N. Y., Long Island City—Apr. 30, by M. E. Connolly, pres. Queens Boro. Queens Subway Bldg., sewers in 84th St., Bliss, 95th (Chichester) and Kimball Aves., 95th St. from Rockaway Blvd. to 87th St. and 84th St. from 101st St. to Atlantic Ave.

N. J., Atlantic City—May 17, by Bd. City Comrs., City Hall, extending storm drainage system. J. W. Hackney, city engr.; adv. this issue.

N. J., Butler—May 7, by Boro Council, constructing sewers left unfinished by abandonment of previous contract. Clyde Potts, 30 Church St., New York City, engr.; adv. this issue.

N. J., Elizabeth—May 10, by Bd. Pub. Wks., vitr. and c.i. sewers along and under Elizabeth River. J. H. Fuertes, 140 Nassau St., New York City, consult. engr. T. E. Collins, city engr.; adv. this issue. Noted Nov. 2.

O., Brooklyn Heights—(Independence P. O.)—May 5, 5,470 ft. 12-30 in. vitr. clay sewers. To exceed $25,000. W. H. Evers Eng. Co., Engineers Bldg., Cleveland, engrs.

O., Cleveland—May 3, vitr. clay sewers in Rosecliff and Spring Rds., West 56th and West 58th Sts. To exceed $25,000. R. Hoffman, City Hall, engr.

Wis., Kenosha — May 12, by W. E. O'Brien, engr., 312 Main St., 10,500 ft. 8-24 in. tile sewers in Wood Rd., for Farm Drainage Bd. 1. $25,000.

Wis., Marion—May 22 (change of date), by J. K. Buhr, clk., 8,754 ft. vitr. sanitary sewers. $25,000. O. F. Weissgerber, c/o City Hall, Appleton, engr. Noted Feb. 22.

BIDS RECEIVED

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg. Apr. 23, sewers in Mitchell Ave., Lawson, Millard, Norwood, Ormond, Quaker and State Sts., from A. Paino, Corona, Type A $70,707; J. Gallo, 203 Division St., Brooklyn, Type B $63,122. Noted Apr. 19.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., Apr. 17, sewers in (1) 147th St. (2) Summitt St. (3) 131st St. (4) Metropolitan Ave. (5) Weisse Ave. (6) Darrow St. temporary drain in (7) Jamaica Ave., sheet asphalt paving (8) Woodbine St., grading sidewalk space on (9) 109th Ave., etc., from Kennedy & Smith, Inc., 93 Amity St., Flushing, (1) $2,844 (2) $4,109; Seaside Contg. Co., Inc., 193 Beach 108th

Sewers (Continued)

St., Rockaway Beach, (3) $6,775; A. Paino, 32 Court St., Brooklyn, (4) Type A $16,203 Type B $15,673 (5) Type A $94,656 Type B $93,443 (7) Type A $14,664 Type B $14,249; Spinella & Muccinni, 6102 18th Ave., Brooklyn, (6) Type A $42,726 Type B $42,223; Borough Asphalt Co., 1301 Metropolitan Ave., Brooklyn, (8) $6,848; J. J. O'Brien, Jr., William St., Jamaica, (9) $368. Noted Apr. 12.

N. J., Paterson—Passaic Valley Sewerage Comrs., 128 Market St., Newark, Apr. 17, local sewer connections in Montgomery St. and sewage controlling apparatus in Mulberry St. connection chambers, etc., here, from Spencer, White & Prentis, Inc., 47 West 42nd St., New York City, $21,890. Noted Mar. 29.

O., Akron — W. F. Peters, dir. Pub. Serv., Apr. 16, for sewers (a) brick (b) segmental block, from Schroeder & Caputo Constr. Co., 1950 West Federal St., Youngstown, 2,605 lin.ft. 30 and 36 in. in South Arlington St. Dist., Contr. 5, (a) $44,018 (b) $48,351, engrs. est. $54,884, 1,610 ft. 30 and 36 in. in South Main St. and Emerling Ave., (a) $25,158 (b) $25,273, engrs. est. $29,967; from T. Sheahan, South Potomac St., Hagerstown, Md., 3,800 lin.ft. 63 in. in West Market St., (a) $124,098, engrs. est. $125,906. Noted Apr. 5.

Mich., Detroit—Storm sewers 3848 and 3849 from A. Arcari, Detroit, (street address not available) $8,770 and $11,000 respectively; storm sewer 3857 from S. Fattore, 2201 St. Joseph St., $8,300; Lateral sewers 3832, 3901, 3902 and 3906 from Hammen & Co., 4612 Woodward Ave., $10,928, $10,840, $14,419 and $17,495 respectively; Lateral 3900 from P. Cappello, Detroit, (street address not available) $1,400; Laterals 3903 and 3904, from Western Constr. Co., 1208 Ford Bldg., $1,988 and $1,988 respectively; Lateral 3905 from T. D. Nolan, 22 Highland Ave., $4,775.

Calif., Merced—For (1) sanitary outfall sewer, 18,600 lin.ft. 24 in. pipe (2) storm sewer, 9,710 lin.ft. 12-36 in. pipe, (a) tongue and groove cement pipe (b) bell end cement pipe (c) vitr. clay pipe (d) rein.-con. pipe, from Merced Concrete Pipe Co., 16th and H Sts., (1a) $33,549 (2a) $27,220; W. J. Tobin, 527 Santa Ray Ave., Oakland, (1b) $37,564 (1c) $50,892; H. D. Churchill Co., 350 Merrick St., Los Angeles, (1d) $51,604 (2d) $41,745; Stroud Bros., Bakersfield, (2b) $31,767. Noted Mar. 29.

Que., Montreal—For 2 x 3 brick sewers, 707 yd. in Patricia St. and 48 yd. in Tiffin St., from A. Thezand, 885 St. Catherine St., $11,582 and $1,012 respectively; 153 yd. in Decarie Blvd., 136 yd. in Faillon St. and 78 yd. in Boyce St., from Toussaint Bros., 383 St. Denis St., $2,463, $2,123 and $1,457 respectively; 212 yd. in St. Zotique St., from P. DeSantis, 3929 St. Hubert St., $4,521; 752 yd. in Eadie St., from C. Frascarelli & Co., 654 Berri St., $18,177.

CONTRACTS AWARDED

Vt., Bennington — See "Streets and Roads."

Mass., Framingham—For 7 mi. 6, 8 and 10 in. sewer pipe in Framingham and 5 mi. in Saxonville (Framingham P. O.), to R. H. Newell, Uxbridge, $115,960.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sewer in Goodrich St., to Green Contg. Co., 734 Vernon Ave., Brooklyn, $9,869; 77th, 101st, 78th, 89th and 130th Sts., to E. J. Kelly, Jr., Flushing, $22,852; 117th St., to Seaside Contg. Co., 193 Beach 108th St., Rockaway Beach, $8,138. Noted Apr. 12.

Pa., Pottstown—Laying 53,050 ft. 4-18 in. vitr. sewer pipe, 5 tons c.i. pipe, etc., to D. H. Whitmer, Hagerstown, Md., (street address not available), $86,409. Noted Mar. 15.

O., Akron—W. F. Peters, dir. Pub Serv., to F. George, Mahoning Ave., Youngstown, Carpenter Heights Trunk Sewer, 1,145 lin. ft. 42 in. brick pipe $14.50 per lin.ft., 580 ft. 51 in. $20, 835 ft. 60 in. $19.50, 970 lin. ft. 66 in. $37, total $99,199, Brown St. Sewer, 650 ft. 30 in. segmental block pipe $8.25, 635 ft. 36 in. $10, 725 ft. 45 in. $12.10, 1,850 ft. 54 in. $18.65, 2,500 ft. 8 in. vitr. pipe, $0.30, total $64,048. Noted Apr. 5.

Mich., Detroit—Dept. Pub. Wks., Lateral sewers 3830 and 3895 to Western Constr. Co., 1208 Ford Bldg., $10,783 and $9,368, respectively; Laterals 3826 and 3894 to Hammen & Co., 4612 Woodward Ave., $9,530 and $11,900 respectively; Laterals 3833, 3835 and 3897 to J. Zuccola, 2808 St. Joseph Ave., $2,295, $1,810 and $1,695, respectively; Laterals 3846, 3847 and 3850 to S. Healey, Detroit (street address not available), $7,029, $7,460 and $8,135, respectively; Lateral 3820 to T. D. Nolan, 22 Highland Ave., Highland Park (Detroit, P. O.), $2,990; Lateral 3841 to S. Fattore, Detroit (street address not available), $5,500; Lateral 3845 to A. Rossi, 3447 St. Aubin Ave., $7,000; Lateral 3896 to McCordie Constr. Co., Detroit (street address not available), $8,569. Noted Apr. 19.

Wis., Milwaukee—Sewerage Comn., 508 Market St., twin outfall conduit on Jones Island, to W. H. Gillen, 902 Summit Ave., $71,000. Noted Apr. 5.

Wis., West Allis—Metropolitan Sewerage Comn., 508 Market St., Milwaukee, 9,250 ft. 30-42 in. concrete sewer from east disposal plant here to 34th and National Aves., in Milwaukee, to A. H. Prange, 101 Campau Ave., Grand Rapids, Mich., $373,880.

Kan., Frontenac—Sanitary sewerage system, to J. Stanton, 6th and Kiowa Sts., Leavenworth, $99,972. Noted Mar. 15.

Tex., Ft. Worth—For 26 cars miscellaneous vitr. sewer pipe, etc., to Texarkana Pipe Wks., P. O. Box 717, Texarkana, $40,000.

Calif., Yuba City — Sanitary sewerage system, incl. 2,900 lin.ft. 12-16 in. concrete pipe, to M. Murphy, 1321 Milvia St., Berkeley, $15,770; 2 pumping plants, 400-500 g.p.m., in connection with above, to Latourette-Fical Co., 907 Front St., Sacramento, $13,112. Noted Mar. 22.

Waste Disposal

PROPOSED WORK

N. D., Fargo—Rejected bids Apr. 13, for 35 ton incinerator. A. R. Watkins, city clk.

Calif., Marysville—Plans garbage incinerator. $15,000.

BIDS DESIRED

Wis., West Allis — Apr. 30, by A. L. Wichner, supt. pub. wks., 2 story garbage incinerator and refuse reduction plant, brick, 20 ton capacity per 16 hour day. $30,000. W. Darby, City Hall, engr. Noted Apr. 5.

BIDS RECEIVED

Wis., Sheboygan — Incinerator with 15 ton daily capacity, from H. Dollarheide, 1010 South 2nd St., Springfield, Ill., Feres 15 ton down draft furnace $18,885; Vulcan Incinerator Co., Security Bldg., St. Louis, Mo., 15 ton 1 unit single building $12,325, 15 ton 1 unit double building $17,750 Noted Feb. 15.

Bridges

PROPOSED WORK

Conn., Bristol — Plans 60 ft. concrete bridge, 2 spans, Middle St. $25,000. C. A. Buell, 173 Main St., engr.

N. Y., Rochester — Had plans prepared and purchased land for approaches for new Ridge Rd bridge, rein.-con., $300,000. Bridge complete to cost $1,200,000. C. A. Poole, city engr. Noted Jan. 11.

Pa., Milton—Northumberland Co. (Sunbury) and Union Co. (Lewisburg), plan 500 ft. rein.-con. bridge, 36 ft., from here to West Milton. $100,000. W. Frick, Lewisburg, engr. for Union Co.

Pa., New Castle — Pennsylvania R.R., Broad St. Sta., Phila., plans to replace overhead crossing, steel, on West Washington St., here, to exceed $25,000. A. C. Shand, ch. engr.

O., Toledo—Lucas Co. had plans prepared removing old 100 ft. plate girder and replacing same with 100 ft. steel plate girder, over Ten Mile Creek on Bancroft St. $34,663. Removal of old bridge separate contract. C. L. Sawyer, co. surv.

Indiana—State Hy. Dept., Indianapolis, plans steel truss bridge over Stucker Creek, Scott Co., two 150 ft. and two 75 ft. spans. $100,000. W. J. Titus, state bridge engr.

Minn., Mora—See "Streets and Roads."

Tex., Lufkin—Angelina Co. soon takes bids 279.4 ft. steel and concrete bridge over Neches River on State Highway 35. $35,-400. G. R. Baney, co. engr.

Calif., Eureka—See "Streets and Roads."

BIDS DESIRED

Virginia—See "Streets and Roads."

Pa., New Castle — May 15, by Comrs. Lawrence Co., Court House, substructure and superstructure of bridge connecting Mahoning Ave. and Moravia St. C. H. Milholland, co. engr.

Georgia—May 2, by State Hy. Dept., Atlanta, 404 ft. rein.-con. bridge over Hazel Creek on Cornelia-Clarksville Rd., Habersham Co.; 11 creosoted timber bridges and one 100 ft. steel span on Waycross-Jesup Rd., Pierce and Wayne Counties, 66,560 ft. bm untreated lumber, 89,325 ft. cresoted lumber, 7,172 lin.ft. creosoted piling or red heart piling-cypress; timber bridge on Dallas Cedartown Highway, Polk Co., 13,500 ft. creosoted and 5,200 ft. plain timber; Tar River Bridge, three 24 ft. rein.-con. girders, and Kendall Creek Bridge, three 40 ft. rein.-con. arches, both on Macon-Columbus Rd. Muscogee Co.

Ohio—See "Streets and Roads."

Mich., Marine City—May 21, by State Hy. Dept. at Dist. Office, Majestic Bldg., Port Huron, constructing Bridge 770901 on Bridge St., here. F. F. Rogers, state comr.; adv. this issue.

Illinois—Apr. 30, by Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, 840 ft. bridge to have twenty-one 40 ft. rein.-con. deck girder spans, over overflow of Little Wabash River; 325 ft. bridge, one 125 ft. steel truss and five 40 ft. rein.-con. deck girder spans, over Little Muddy Creek, both in Clay Co. G. F. Burch, state bridge engr. Noted Apr. 12.

Ia., Greenfield—May 1, by Auditor Adair Co., 3 span bridge to have two 55 ft. and one 80 ft. deck arch spans, 24 ft. roadway, 5 ft. sidewalk. $40,000. C. H. Lehmkuhl, co. engr.

South Dakota—See "Streets and Roads."

Ont., Chatham—May 4, by L. A. Pardo, supt. Kent Co., 9 rein.-con. highway culverts, 8-16 ft. spans, 20 ft. roadways, 2,000 cu.yd. concrete. $30,000. W. G. McGeorge, 153 Queen St., engr.

Ont., Islington—May 7, by S. Barratt, clk. Etobicoke Twp., 2 rein.-con. highway bridges, incl. 2,000 cu.yd. concrete, 12,000 cu.yd. grading. $35,000. James, Proctor & Redfern, 36 Toronto St., Toronto, consult. engrs.

Ont., Toronto—May 1, by F. G. Engholm, engr., 56 Huntley St., 200 ft. 3 span cantilever rein.-con. arch bridge over Rosedale Ravine on Astley Ave., for York Twp., 40 Jarvis St. $135,000.

BIDS RECEIVED

N. Y., Brooklyn — Transit Comn., 49 Lafayette St., New York, Apr. 19, concrete and steel highway bridge, 9th Ave. between 37th and 38th Sts., here, Agreement CJ, from M. A. Charles, 6831 Ridge Rd., $49,900.

Pa., Johnstown—M. L. Masterson, supt. streets and pub. improvements, City Hall, Apr. 16, 276 ft. rein.-con. 3 span bridge, through plate girders each 92 ft. long, 36 ft. roadway, 2 track trolley line and 8 ft. clear sidewalk, Laurel Ave., from T. Sheehan, South Potomac St., Hagerstown, Md., $173,395; one 129 ft. bow string truss span on existing masonry extended, 36 ft. roadway, two track trolley line, and two 8 ft. sidewalks, 1st St., from Independent Bridge Constr. Co., May Bldg., Pittsburgh, $114,000. Noted Mar. 29.

Pa., Pittsburgh—Allegheny Co., Apr. 19, 770 ft. rein.-con. bridge over Jacks Run between here and Bellevue, from Vang Constr. Co., Standard Life Bldg., $388,000, alternate bid from J. F. Casey Co., Union Arcade, $381,832. Noted Apr. 12.

Florida — State Rd. Dept., Tallahassee, treated wood bridge over Popes Lake, Project 568, being west approach to Victory Bridge, Jackson Co., from E. Pettus, Montgomery, Ala. (street address not available), $96,213. Noted Apr. 12.

Wis., Appleton—Lawe St. Bridge, from C. R. Meyer & Sons Co., 50 State St., Oshkosh, $56,947; Cherry St. Viaduct, from Wausau Iron Wks., Wausau, $218,951. Noted Apr. 5.

CONTRACTS AWARDED

Massachusetts—Boston & Albany R.R., South Station, Boston, fabrication and delivery of structural steelwork, 226,000 lb. more or less Bridge 70.68, 1.08 mi. west West Brookfield, 38,000 lb. more or less, steel Bridge 142.76, Main St., Hinsdale; 38,000 lb. more or less Bridge 144.18, East Main St., Dalton, to Fortpitt Bridge Co., 29 Bway., New York City. Noted Apr. 5.

Louisiana—State Hy. Comn., Reymond Bldg., Baton Rouge, three 100 ft. steel spans, two 80 ft. steel spans, one 50 ft. plate girder, 481 ft. creosote timber trestle, one 5 x 16 ft. concrete culvert, and reflooring one 120 ft. bridge, on Federal Aid Project 117, Sect. C, Madison Co., to Austin Bros. Bridge Co., 1813 Clarence St., Dallas, Tex., $84,923. Noted Mar. 22.

O., Painesville—Lake Co., 450 ft. concrete bridge with two 90 ft. spans, over Grand River, to N. R. Porterfield, 411 Federal Bldg., Youngstown, $130,000. Engrs. est. $155,000. Noted Mar. 22.

Ill., Kankakee — Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, 350 ft. rein.-con. arch bridge, five 70 ft. spans, 33 ft. roadway, two 5½ ft. sidewalks, here, to Miller-Fifield Constr. Co., L and J Bldg., Waterloo, Ia., $112,619. Noted Mar. 29 under "Illinois."

North Dakota—See "Streets and Roads."

Missouri—State Hy. Dept., Jefferson City, to Hogan & Humphreys, Fredericktown, bridges over Buckskin and Little White Water Creeks $19,708, Little Muddy Creek $9,422; to Cook-O'Brien Constr. Co., 305 Ry. Exch. Bldg., Kansas City, on Stations 370 plus 54, 377 plus 50 and 528 plus 33 $27,797, Blackwater River $40,021, Davis Creek $16,680, on Sta. 528 plus 17 $9,315; to L. Rich Constr. Co., East St. Louis, Ill., on Stations 611 plus 60, 50 plus 08, 162 plus 39 and 584 plus 45 $21,417, Glaize

Bridges (Continued)

Creek $23,113, Tom Creek $18,313, Mud and Tom Creeks, $28,790; to Vincennes Bridge Co., Vincennes, Ind., Loter Hollow Branch $10,314, Little Piney River $65,475; to Muskogee Contg. Co., 223 Cole Bldg., Tulsa, Okla., Big White Water Creek, $32,-402, Byrds and Cain Creeks, $28,840; to Cameron, Joyce & Co., Keokuk, Ia., Bawdry Lake $32,363, Salt River $9,393; to Baker & Koontz, Carthage, Turnback Creek $22,-781, Johnson Creek $14,887, Billies Creek $10,799; to R. P. Harper Constr. Co., Leona, Kan., on Sta. 50 plus 44 $9,831, two over Nodaway River $37,217 and $22,463 respectively; to V. E. Koch, Box 604, Joplin, Sycamore Hollow $5,595; to J. H. Roach Co., Anderson, on Stations 10 plus 00 and 160 plus 75 $7,223; to Miller Constr. Co., Springfield (street address not available), Hooker Branch $8,310; to Abell & Co., Linneus, over branch of Fabius River $6,184; to St. Louis Constr. Co., 743 Frisco Bldg., St. Louis, Old Mines and Salt Pine Creeks $18,695; to Pittsburgh-Des Moines Steel Co., Tuttle and Southwest 10th St., Des Moines, Ia., Cedar Creek $34,421; to J. H. Clark, Nevada, Dix Creek $8,239; to J. H. Hewitt, Little Rock, Ark. (street address not available), Saline Creek $11,435; to Harrison Eng. & Constr. Co., Wichita, Kan. (street address not available), Drainage Ditches 8, 26 and 27 $19,791. Noted Apr. 19.

Colo., Denver—Will build 16th St. viaduct, rein.-con. superstructure and rein.-con. decking upon steel, 8,650 cu.yd. rein.-con., 1,287,000 lb. reinforcing, 64,000 lb. miscellaneous metal, by day labor. $260,000. H. S. Crocker, Tramway Bldg., engr.

Alaska—Bridges—Alaskan Eng. Comn., 422 Bell St. Terminal, Seattle, Wash., one 60 ft. through plate steel girder bridge (45 tons), over Montana Creek, and one 308 ft. steel viaduct, two 40 ft., two 74 ft. and one 80 ft. span, 2 steel towers (220 tons), to Amer. Bridge Co., Ambridge, Pa., $.0372 per lb. Noted Dec. 28.

Dams

PROPOSED WORK

Pa., Pottsville — Pottsville Water Co. plans 400,000,000 gal. storage dam, 100 ft. high, near here. $400,000. Gannett, Seelye & Fleming Inc., 1 North Market Sq., Harrisburg, engrs.

N. C., Andrews—See "Miscellaneous."

BIDS DESIRED

Pa., Phila.—May 4, by F. H. Caven, dir. pub. wks., masonry dam incl. 12,000 cu.yd. excav., 8,000 cu.yd. rock excav., 26,000 cu. yd. cyclopean masonry, etc., $600,000. C. E. Davis, City Hall, engr.

BIDS RECEIVED

Calif., Oroville—Oroville-Wyandotte Irrigation Dist., furnishing labor to construct Los Creek Storage Works—(dam), materials to be furnished by district, from Lord & Bishop, 333 Randolph St., Napa, $58,768. Noted Mar. 22.

CONTRACTS AWARDED

Pa., Shamokin—Bear Gap Water Co., Shamokin, 700,000,000 gal. earth and rock fill dam on south branch of Roaring Creek, 75 ft. high, to Gannett, Seelye & Fleming Inc., 1 North Market Sq., Harrisburg. $200,000.

Railways

PROPOSED WORK

New York—Elmira Water, Light & R.R. Co. plans new tracks and repaving between tracks. $165,000. F. H. Hill, c/o owner, genl. mgr.

New York—Fonda, Johnstown & Gloversville R.R., Gloversville, plans rebuilding tracks on Division and other streets, in Amsterdam. $62,500. J. L. Hees, Gloversville, pres.

Pennsylvania — Western Maryland Ry., Hiln Sta., Baltimore, Md., having surveys made for branch line from Meyersdale, Somerset Co., Pa., to Jennings, Md. H. R. Pratt, Baltimore, Md., ch. engr.

California—Electro-Metals Co., Somesbar, plans 35 mi. standard gage line between Trinidad and Somesbar. $1,000,000. A. Langford, Somesbar, ch. engr.

Ontario—Kitchener Light Comn., Kitchener, plans to double track part of line in Waterloo from Union to William Sts. $30,-000. E. Fries, c/o owner, engr.

Ontario—Nipissing Central Ry., North Bay, plans electric line eastward from New Liskeard into Quebec and then northward to Larder Lake, ultimately connecting with Temiskaming & Northern Ontario Ry. branch from Dane, 60-80 mi. long, probably 60 lb. rails. $3,000,000. S. B. Clement, ch. engr.

Ontario — Temiskaming & Northern Ontario Ry., North Bay, soon takes bids electric branch line from either Dane or Swastika stations eastward to Larder Lake, (25 mi. single line, probably 80 lb. rails) $800,000. S. B. Clement, ch. engr.

CONTRACTS AWARDED

Montana—Northern Pacific Ry. Co., 5th and Jackson Sts., St. Paul, Minn., single track road from point 6 mi. west of Forsyth southwest into Rosebud coal field, to Winston Bros., 801 Globe Bldg., Minneapolis, Minn. Total cost $500,000. (Owner furnishes steel.)

California—Western Pacific R.R., Mills Bldg., San Francisco, constructing 8 mi. track in vicinity of Gerlach, to W. A. Bechtel, 618 Estudillo Ave., San Leandro.

Excavation, Drainage Irrigation

PROPOSED WORK

La., Gretna—Jefferson D. D. 4 plans to drain 30,000 acres in Jefferson Parish. $1,500,000. A. T. Dusenbury, Marine Bank Bldg., New Orleans, consult. engr.

La., Monroe—Ouachita Parish plans election to vote on $800,000 bonds for system to drain $200,000 acres.

Ark., Texarkana—McKinney Bayou D.D., Miller Co., had preliminary plans made for ditches, levees, sluiceway, etc., to reclaim 30,000 acres in Red River Valley. $380,000. Morgan Eng. Co., Goodwyn Institute, Memphis, Tenn., engrs.

BIDS RECEIVED

N. Y., New York—Commissioner Docks, Pier "A" North River, dredging between West 97th and West 99th Sts., Contr. 1799, from Taylor Dredging Co., foot Communipaw Ave., Jersey City, N. J., $103,500. Noted Apr. 5.

Calif., Oroville—Oroville-Wyandotte Irrigation Dist., constructing Oroville lateral, from A. Mitchell, 2617 U St., Sacramento, $9,990; 24 in. syphon for above, from Redwood Manufactures Co., Hobart Bldg., San Francisco, $12,251. Noted Apr. 5.

CONTRACTS AWARDED

Ill., Beardstown — South Beardstown Drainage and Levee Dist., 1st State Bank Bldg., enlarging Old Sand Levee from Sta. 0 to 67, and Old Dirt Levee from Sta. 67 to 329, etc., to J. Bell, Rushville, 14,000 cu.yd. at $0.50 per yard. Noted Mar. 8.

Ill., Winchester—Scott Co. Drainage and Levee Dist., raising and strengthening levees of district, 443,327 cu.yd. excav., to McWilliams Dredging Co., 332 South Michigan Ave., Chicago, $75,366. Noted Mar. 15.

Wis., Madison—Hotel Wisconsin Realty Co., 86 Michigan St., Milwaukee, excavation work for 8 story, 132 x 144 ft., brick and concrete hotel, plain foundation, to N. Quinn, 515 West Johnson St. Total $1,000,000.

Minn., Benson—Swift Co., Judicial Ditch 8, 1,429,000 cu.yd. excav., 118 mi. 5-28 in. tile, to Camden Constr. Co., Benson, $413,-500. Noted Jan. 19.

Mont., Chinook—Zurich Irrigation Dist., Zurich, main canal in Ft. Belknap, Alfalfa and Zurich Irrigation Dists., in Milk River Valley, 3,000 cu.yd. concrete, 150,000 lb. reinforcing and 16,000 lb. structural steel, 1,500 sq.yd. paving, 145,000 ft. lumber, 1,550 lin.ft. steel flume, 2,000 lin.ft. steel pipe, etc. to Winston Bros., 801 Globe Bldg., Minneapolis, Minn., $248,218. Noted Mar. 22.

B. C., Vancouver—Will dredge, excavate and lay 18 in. flexible steel pipe across False Creek near Connaught Bridge, by day labor. $58,086. F. L. Fellowes, city engr. Noted Mar. 29.

Calif., Oroville — Thermalito Irrigation Dist., furnishing 4-24 in. riveted slip joint pipe for irrigation project, to Montague Pipe & Steel Co., Hobart Bldg., San Francisco, $71,790. Noted Apr. 19.

Streets and Roads

PROPOSED WORK

Conn., New Britain—State Bd. Educ., Hartford, plans to grade and lay concrete walks around normal school. $30,000.

New York—F. S. Greene, comr. State Hy. Dept., Albany, received no bids Apr. 20, reconstructing 7.1 mi. highways in Columbia, Ulster and Oneida Counties. Noted Apr. 12.

N. Y., Elmira—See "Railways under New York."

N. J., Belvidere—Warren Co. plans paving 1 mi. road through Alpha to Bloomsbury Pike, 18 ft. $50,000. H. W. Vetter, Belvidere, engr.

N. J., New Brunswick—Middlesex Co. plans reconstructing 1 mi. Aqueduct-Plainsboro-Cranberry Rd. and ¾ mi. Stelton-New Market Rd., rein.-con. A. B. Fox, 175 Smith St., Perth Amboy, engr.

N. J., Trenton—Hamilton Twp. plans 18,600 lin.ft. concrete curb and 95,600 sq.ft. sidewalks at White Horse, and 50,000 ft. curb and gutters and 26,000 ft. sidewalks at Yardville. $50,000. Sincerbeaux & Moore, Amer. Mechanic Bldg., engrs.

Pa., Meadville—Plans to pave 17 mi. roads, various materials. Engineer not announced.

Fla., Bradentown — Manatee Co. rejected bids, Mar. 12, sand-clay surfacing 32 mi. Sandy Rd., etc., Miakaa Special Road and Bridge Dist., $50,000; paving with macadam 16 mi. Miakka-De Soto Co. line Rd., $100,-000. McElroy Eng. Co., Giddens Bldg., Tampa, engrs. Noted Mar. 1.

Fla., Cocoa—Plans election to vote on $33,000 bonds repaving and reoiling various streets and paving Florida Ave., et al. J. J. Bracco, city clk.

Tennessee—State Hy. Dept., Nashville, had surveys made 9.91 mi. road from Cleveland to Hamilton Co. line. D. Q. McCombs, Nashville, ch. engr.

Tenn., Martin—Plans to expend $150,000 paving streets and sidewalks, guttering and curbing. D. N. Harper, mayor.

Tenn., Nashville—Soon takes bids paving 10 streets and avenues, rock asphalt, granite or bituminous concrete. $200,000. W. W. Southgate, city engr.

Ky., Henderson—Henderson Co. plans constructing various roads, probably gravel. $65,000-$70,000. E. W. Hopkins, co. engr.

Ky., Ludlow—Plans paving 3,000 ft. Elm St., 36 ft., various types. $40,000. Glazier & Morlidge, 20 Miller Bldg., Cincinnati, O., engrs.

Ky., Whitesburg—Letcher Co. plans to construct 12 mi. Cumberland Mt.-Cumberland River Highway. $300,000.

O., Akron—W. S. Peters, dir. Pub. Serv., opens bids about June 1, grading and repaving 1,400 ft. South Arlington St., 44 ft., $40,000; paving and laying sidewalks on 2,400 ft. Delia Ave., 24 ft., $83,000; curbing, laying sidewalks and repaving 715 ft. West Market St., 70 ft., $50,000; 1,800 ft. Stanton Ave., 28 ft., $60,000, all foregoing vitr. brick or asphalt; grading and laying 50,000 sq.ft. 4 in cement sidewalks on Bacon, Fried and Noble Sts., $39,000. E. A. Kemmler, Delaware Bldg., engr.

O., Akron—S. Porter, clk., Summit Co., takes bids about June 1, grading and paving 14.42 mi. Richfield-Hudson Rd., Sect. E1-2 and F, Richfield-Hudson Rd. 19, Sect. G, Barberton-Springfield Rd. 14, Sect. A2 and B, Barberton-Springfield Rd. 14, Sect. D and Cleveland-East Liverpool Rd. 12, macadam, asphalt, brick or bituminous concrete. $563,000. J. Weaver, Court House, engr.

O., Cedarville—Plans paving North Main St. $29,000 bonds sold. J. McCorkell, village clk.

O., Cleveland—Cuyahoga Co. had plans prepared grading, curbing and paving Cedar Rd. 2 and 3, waterbound macadam. To exceed $100,000. F. Lander, Court House, engr.

O., Cleveland—Cuyahoga Co. plans grading and paving Cedar Rd. 4, Edgerton Rd. 1, Fitzwater-River and Gessmer Rds., brick, asphalt or waterbound macadam. $200,-000. F. Lander, Court House, engr.

O., Cleveland—Cuyahoga Co. plans grading and paving Lorain Ave. 2, Miller and Mills Rds., brick or waterbound macadam. $200,000. F. Lander, Court House, engr.

O., Columbus — Making plans grading, laying necessary water services and sewer connections and paving 3,469 ft. Pearl St., Chittenden Ave. and alley west of Warren Ave., brick, concrete or asphalt. R. H. Simpson, city engr.

O., Columbus—R. W. Smith, clk. Franklin Co. soon takes bids resurfacing 8.35 mi. Stimmel, Sunbury, Avery and Dublin Rds., 16 ft., waterbound macadam. $142,000. C. C. Lattimer, Court House, co. engr.

Ind., Albion — Noble Co. plans grading and graveling 15,624 ft. Lucas Rd., 18 ft., $26,263; 15,715 ft. Bender Rd., 18 ft., $25,-915. W. T. Knox, Albion, engr.

Ind., Ft. Wayne—Allen Co. plans grading and graveling 15,241 ft. Rodenbeck Rd., 18 ft. $25,500. O. M. Darling, Ft. Wayne, engr.

Ind., South Bend—Soon takes bids paving Ohio, Pulaski, Sorin and Sadie Sts. $53,072, St. Peter St. $45,748, Notre Dame Ave. $70,968. F. J. Anderson, City Hall, engr.

Michigan—State Hy. Dept., Lansing, rejected bids Apr. 7, grading and concrete surfacing 1.25 mi. road, 18 ft., Clinton Co. F. F. Rogers, state comr. Noted Apr. 22.

Mich., Detroit — Having plans prepared for 33,500 sq.yd. 3½ in. sheet asphalt on 8 in. concrete on 7 streets $199,600; 3,500 sq. yd. 3 in. sheet asphalt on 6 in. concrete on 3 streets $17,440; 14,400 sq.yd. one course concrete on 7 alleys $37,140. J. W. Reid, city engr.

Mich., Saginaw—Saginaw Co. Rd. Comn. plans grading and surfacing 4.989 mi. road, 3 mi. waterbound macadam, balance

Streets and Roads (Continued)

stone gravel. R. W. Roberts Co., Schirmer Bldg., engr.

Ill., Havana—Bd. Local Impvts. soon lets contract 22,000 sq.yd. concrete paving. C. H. Kreiling, city engr.

Wis., Monroe—See "Contracts Awarded."

Ia., Osceola—Clark Co. plans grading, building bridges on 8.6 mi. Primary Rd. 8 from Osceola east, and probably on 3.7 mi. Primary Rd. 8 from Murray west to county line. Iowa Hy. Comn., Ames, engrs.

Ia., Spencer—Clay Co. plans gravel surfacing Primary Rd. 10, drainage work on Primary Rd. 19, and laying tile, constructing bridges and gravel surfacing Primary Rd. 4, from south county line to here. Iowa Hy. Comn., Ames, engrs.

Minn., Mora—Kanabec Co. levied $50,000 for road and bridge work in 1923. R. G. Streetly, Mora, engr.

Kan., Independence — Soon takes bids 8,000 sq.yd., vitr. brick paving. H. W. Crawford, city engr. Noted Mar. 1.

Kan., Independence — Montgomery Co. soon takes bids improving 5¼ mi. Federal Aid Project 121, Sect. C., 18 ft. H. K. Hibbard, co. engr.

Kan., Wellington—Sumner Co. plans paving 16,591 sq.yd. Meridian Rd. Sect. S T, bituminous macadam, bitulithic concrete, brick or concrete. J. W. Mavity, co. engr.

North Dakota — State Hy. Dept., Bismarck, plans 1½ mi. concrete, 200 mi. gravel and 400 mi. earth roads. $1,750,000. W. G. Black, Bismarck, ch. engr.

N. D., Williston—Williams Co. plans to gravel 30 mi. road from here to point 4 mi. west of Ray. A. F. Young, Williston, engr.

Mo., Louis—W. W. Horner, city engr., soon takes bids reconstructing 42,670 sq. yd. Garrison and Lucas Aves., Thomas, Stoddard and Dickson Sts., bitulithic and asphalt. $168,900.

Tex., Athens — Henderson Co. election May 19, to vote on $1,750,000 bonds improving various roads. J. A. Johnson, co. judge. Engineer not selected.

Tex., Coleman—Coleman Co. election in May to vote on $150,000 bond issue for roads Precinct 1. W. E. Dickerson, co. engr.

Tex., Hillsboro—Hills Co. takes bids about June 17, grading, gravel surfacing and bituminous topping 4 mi. State Highway 2. $67,000. G. Johnston, co. engr.

Tex., Hondo—Medina Co. making plans surfacing with 1 in. limestone rock, asphalt topping 13.44 mi. State Highway 2, 15 ft. $80,000. Walton & Arneson, Gunter Bldg., San Antonio, engrs.

Tex., Houston—Takes bids in May paving Caroline St., Calumet Dr. and Blodgett Ave., various types, $76,100; graveling Waugh Dr., $30,000. J. C. McVea, city engr.

Tex., Paris—Lamar Co. takes bids about June 15, grading and gravel surfacing 11,863 cu.yd. State Highway 19. $54,000. W. M. Fooshee, co. engr.

Okla., Bartlesville — Having preliminary plans prepared paving various streets, 20,000 yd. concrete. E. D. Kirkpatrick, Bartlesville, engr.

Colo., Pueblo—Rejected bids 47,400 sq.yd. concrete paving in Fountain Ave. Paving Dist. $205,200. Will readvertise at once. D. P. Gayman, City Hall, engr. Noted Apr. 12.

Utah—State Rd. Comn., Salt Lake City, takes bids about May 1, gravel surfacing 7.5 mi. Woodruff-Wyoming Rd., Federal Aid Project 46; May 10, gravel surfacing 7.1 mi. Moroni-Fountain Green Rd., Federal Aid Project 47 B, 5.4 mi. Fountain Green-Juab Co. line Rd., Federal Aid Project 47 D, hardsurfacing 1 mi. Fountain Green City Rd., Federal Aid Project 47 C, 1 mi. Moroni City Rd., Federal Aid Project 47 A; May 15, gravel surfacing 3.07 mi. Gogorza-Salt Lake Rd., Federal Aid Project 49, 11.2 mi. Castle Dale-Ferron Rd., Federal Aid Project 4 F; June 1, gravel surfacing 6.5 mi. Scipio-Juab Rd., Federal Aid Project 17 A, 15 mi. Chicken Creek-Millard Rd., Federal Aid Project 17 B, constructing Price underpass, Federal Aid Project 24 C, Riverdale viaduct, Federal Aid Project 31; June 15, hardsurfacing 3 mi. Payson-Santaquin Rd., Federal Aid Project 50. H. C. Means, state road engr.

Wash., Spokane — Spokane Co. making plans grading road bed 24 ft. wide, and crushed rock surfacing 3.5 mi. road, 20 ft., along northern city limits. H. J. Doolittle, co. engr.

Calif., Bakersfield—Kern Co. having plans prepared paving 20 mi. road, Arvin and Wood Patch Dists., probably patent paving. P. Kressly, I. W. Hellman Bldg., Los Angeles, engr.

Calif., Compton — Had plans prepared paving Orange St. 5 in. concrete. To exceed $30,000. E. M. Lynch, Central Bldg., Los Angeles, engr.

Calif., Cugamonga—San Bernardino Co. (San Bernardino), had plans prepared concrete paving and reconstructing curbs on Archibald Ave., here. $25,000. E. T. Ham, co. surv.

Calif., Eureka — Humboldt Co. having plans prepared grading road between Briceland and State Highway near Lundblade Pl., and constructing 4 bridges, each having 80 ft. span, over Redwood Creek. $25,000. A. J. Logan, co. surv.

Calif., Fresno—Had plans prepared grading, concrete curbing, guttering, sidewalks and paving Poplar Ave., 34,053 sq.ft. grading, 31,106 sq.ft. asphalt, etc. W. Stranahan, city engr.

Calif., San Francisco — City and San Francisco Co. had plans prepared improving Napoleon St., incl. 23,475 cu.yd. fill. $25,000. M. M. O'Shaughnessy, city engr.

Calif., Stockton — Takes bids in May, grading, concrete curbing, guttering, sidewalks and paving portions F, East Main, East Washington and East Lafayette Sts., etc., 191,911 sq.ft. 2 in. asphaltic concrete on 3 in. crushed rock, etc. W. B. Hogan, city engr.

Calif., Vacaville—Voted $40,000 bonds paving various streets. F. A. Steiger, Fairfield engr. Noted Mar. 15.

Ont., Cornwall—Plans 20,000 sq.yd. concrete or asphalt on concrete. $100,000. J. G. Harkness, city clk.

Ont., Cornwall—Glengarry Co. plans 5 mi. waterbound macadam road. Bids will be taken soon for 3 mi., balance later. $100,000. J. R. Simpson, co. clk.

Ont., Leamington — Windsor, Essex & Lake Shore Ry., Kingsville, plans paving 8,000 sq.yd. here, brick block on concrete. $40,000. Private plans.

Ont., Thorold—Plans new concrete pavements. $35,000. Prices wanted on materials.

Ont., Welland—Plans new cement highways. $100,000. Prices wanted on materials.

Ont., Williamstown — Charlottenburg Twp. soon takes bids 3 mi. crushed stone road and 2 mi. widening and grading on Glen Ray and Johnston Rds., 18-20 ft. $40,000. W. T. Bailey, twp. clk.

BIDS DESIRED

Maine—May 2, by State Hy. Comn., Augusta, surfacing 11.64 mi. highway, bituminous macadam or gravel, in Norridgewock, Skowhegan, Casco, Northport and Belfast; gravel surfacing 24.56 mi. in Presque Isle, Perry, Woodstock, Paris, New Sharon, Passadumkeag, Lincoln and Edmunds. P. D. Sargent, ch. engr.

New Hampshire—May 1, by State Hy. Dept., Concord, paving 4,300 sq.yd. road in Lebanon, rein.-con. F. E. Everett, state highway comr.

N. Y., Batavia—May 2, by A. Russell, city clk., paving Bank and State Sts., brick, concrete, asphalt or sheet asphalt. $30,000. F. D. Emerson, city engr. Noted Apr. 12, 1922.

N. Y., Brooklyn—May 2, by E. Riegelmann, boro pres., Boro Hall, asphalt paving on concrete Barrett, 49th and 78th Sts.; curbing and asphalt paving Ave. K; grading, curbing, flagging and granite paving Kingsland Ave.; grading, curbing and flagging Ave. T and 56th St.

N. Y., Buffalo—May 3, by Commissioner Pub. Wks., Municipal Bldg., repaving 6,000 ft. Delaware Ave. from Virginia St. to Gates Circle, 42 ft., asphalt on 6 in. concrete. G. H. Norton, Municipal Bldg., engr.

N. Y., Long Island City—Apr. 30, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., grading, curbing, laying sidewalks on Alburtis Ave. and 88th St.; sheet asphalt paving Alburtis Ave.; grading Bagraw and Union Hill Sts. Noted Apr. 19.

N. Y., Olean—May 7, by Commissioners Pub. Wks., improving King St., rein.-con. G. R. Miles, city engr.; adv. this issue.

N. Y., Oneonta—May 7, by Bd. Pub. Wks., curbing, guttering asphaltic concrete and rein.-con. pavements, etc. F. M. Gurney, city engr.; adv. this issue.

N. Y., Utica—May 2, by Bd. Contr. & Supply, repairing asphalt pavements on various streets. To exceed $25,000. S. W. Snyder, secy.

New Jersey—May 7, by State Hy. Comn., Trenton, constructing Route 6, Sect. 15, Bway. in city of Gloucester, Camden Co. and Route 5, Sect. 7, Mine Hill, Morris Co. A. L. Grover, ch. clk.; adv. this issue.

Pa., Lancaster—Apr. 30, by Street Comn., paving 2,100 ft. Race St., 42 ft., rein.-con. or asphalt on concrete. $38,000. J. Malone, City Hall, engr.

Md., Baltimore—May 2, by Bd. Awards, asphalt paving 9,300 sq.yd. St. Paul St., $45,000, 16,270 sq.yd. Contr. 233-NA, and 21,010 sq.yd. Contr. 234-NA. C. F. Goob, City Hall, highways engr.

Virginia—May 10, by State Hy. Dept., Richmond, grading, paving and bridging various roads. H. G. Shirley, chn.; adv. this issue.

W. Va., South Charleston (Charleston, P. O.)—May 3, by City Council, 30,000 sq.yd. asphaltic concrete, 24,000 lin.ft. combination curb and gutter, 2,500 lin.ft. sanitary sewers. J. N. Doyle, engr.

Georgia—May 2, by State Hy. Dept., Atlanta, grading and chert surfacing 10,468 cu.yd. Dallas-Cedartown Highway, Polk Co.; grading and sand clay surfacing 6,975 cu.yd. Waycross-Jesup Rd., Pierce and Wayne Counties, also includes 40,000 sta. yd. overhaul on sand clay surfacing. W. R. Neel, state highway engr.

Fla., Bradentown—May 7, by Manatee Co. shell surfacing 15 mi. on Terra Ceia Island. $55,000. H. B. Glooer, Bradentown, engr.

Fla., Brooksville — May 8, by H. C. Mickler, clk. Hernando Co., rock surfacing roads in Kilpatrick Dist. $75,000. Noted Mar. 30.

Fla., Cocoa—May 8, by City Council, treating 53,740 sq.yd. pavement with asphaltic material, treating (2 applications) 11,660 sq.yd. rock pavement with asphaltic material, paving 11,660 sq.yd. with ojus rock. A. F. Harlee, Cocoa, engr.

Louisiana—May 11, by State Hy. Comn., Reymond Bldg., Baton Rouge, grading and surfacing 7.685 mi. Project 113, Sect. A, Lafourche Parish. J. M. Fourmy, ch. engr.

Miss., Canton—May 1, by H. R. Covington, city engr., paving 25,000 sq.yd. various streets, concrete or bituminous concrete. $60,000.

Tenn., Elizabethtown—May 10, by Rd. Comn. Carter Co., grading and surfacing, etc., 25 mi. highway to State line, limestone and waterbound macadam. J. A. Taylor, chn.

Kentucky—May 9, by State Hy. Comn., Frankfort, shaping and surfacing to width of 28 ft. in cuts and 24 ft. on fills 44.202 mi. road in Pike, Floyd, Lawrence and Johnson Counties, 496,777 cu.yd. earth, 192,289 cu.yd. solid rock, 15,229 cu.yd. loose rock and 18,108 cu.yd. borrow excav., 485,744 sta.yd. overhaul, etc.; surfacing with waterbound macadam on prepared subgrade to width of 14 ft., 7.2 mi. Danville-Lebanon Rd., Boyle Co., 16,261 tons crushed stone, 4,075 tons screenings; shaping and surfacing to width of 16 ft. with bituminous macadam, waterbound macadam or waterbound macadam surface treated on slag or limestone base 9.416 mi. Whitley-City-Tennessee State Line Rd., McCreary Co. J. S. Boggs, state highway engr.

Ohio—May 8, by Dept. Hys. and Pub. Wks., Columbus, grading, bridging and paving 71.7676 mi. highways in Adams, Ashland, Clark, Columbiana, Darke, Erie, Fairfield, Fulton, Gallia, Putnam, Richland, Trumbull, Tuscarawas, Vinton, Hardin, Holmes, Huron, Mercer, Miami, Ottawa, Portage, Warren, Delaware and Mahoning Counties, waterbound macadam, brick, rein.-con., bituminous macadam, asphalt or tar, waterbound gravel, Kentucky rock asphalt, bituminous concrete, semi-monolithic brick and concrete, etc. L. C. Herrick, dir. highways.

O., Bexley (Columbus, P. O.)—May 4, by S. W. Roderick, village clk., grading, curbing and asphalt paving 11,736 ft. Seneca Park Pl., Bexley Dr., Roche and Fair Aves., Remington, Ardmore and Cassingham Rds., 24 ft. $213,600. Former bids cancelled. Jennings-Lawrence Co., Hartman Bldg., Columbus, engrs. Noted Apr. 12.

O., Euclid—May 5, grading, curbing and paving Abbey, Monteray, Norman, Ormistos, Tyrone and Renwood Aves., asphalt on concrete. $75,000. F. A. Pease Eng. Co., Marshall Bldg., Cleveland, engrs.

Indiana—May 8, by State Hy. Comn., Indianapolis, 7 mi. highway, from Jeffersonville north, bituminous macadam, $150,000. C. Gray, state highway engr.

Ind., South Bend—May 1, by Bd. Pub. Wks.; resurfacing 3,557 sq.yd. main St., asphalt on bituminous concrete, $12,044; 7,249 sq.yd. Colfax and Yukon Aves. and Miner St., vitr. brick, asphalt, concrete or bituminous concrete, $26,250; 4,327 lin.ft. sidewalk, etc., on Johnson, Frederickson, Prast and O'Brien Sts., and Donmoyer Ave., $9,649. F. J. Anderson, City Hall, engr. Noted Apr. 19.

Michigan—May 8, by State Hy. Dept., Lansing, grading and surfacing 4.853 mi. road Macomb Co., 9,506 cu.yd. excav., 51,492 sq.yd. concrete. F. F. Rogers, state comr.

Wisconsin—May 2, by State Hy. Comn., at div. office 8, First Natl. Bank Bldg., Superior, grading and surfacing Drummond-Ashland Rd., Bayfield Co., 70,875 cu.yd. earth excav., etc., Spooner-Rice Lake Rd., Washburn Co., 39,876 cu.yd. earth excav., 9,970 cu.yd. feather edge surfacing, etc., Hayward Seeley Rd., Sawyer Co., 36,790 cu.yd. earth excav., 13,976 cu.yd. topsoiling, etc. A. R. Hirst, Madison, highway engr.

Streets and Roads (Continued)

Wisconsin—May 9, by State Hy. Comn., at div. office 9, Teller Bldg., Lancaster, grading and surfacing Boscobel-Muscoda Rd., Richland Co., 14,779 cu.yd. earth excav., 3,811 cu.yd. shale and 1,189 cu.yd. gravel surfacing; Fennimore-Montfort Rd., Grant Co., Sects. 2, 3 and 4, 19,938 cu.yd. crushed stone or mine tailing surfacing. A. R. Hirst, Madison, state highway engr.

Wis., East Troy—May 7, by H. J. O'Malley, clk., concrete paving, 9,945 sq.yd., various streets. $25,000. Private plans.

Ia., Ireton—May 10, for 6,000 lin.ft. curb and 16,000 sq.yd., concrete, vibrolithic, sheet asphalt, asphaltic concrete or bitulithic pavement. $45,000. W. Taylor, clk.

Minn., Breckenridge—May 4, by P. E. Truax, aud. Wilkin Co., Job 2301, State Rd. 6, 69,203 cu.yd. excav., 150,755 cu.yd. overhaul, 16,268 cu.yd. clay surfacing. $25,000. M. Brataas, Breckenridge, engr.

South Dakota—May 1, by State Hy. Comn., Pierre, gravel surfacing 119,000 cu.yd. roads in Brown, Grant, Kingsbury, Sully, Spink, Brookings and Stanley Counties; grading and surfacing 7.32 mi. road in Lawrence Co., 13,185 cu.yd. broken stone surface, 1,097 cu.yd. clay surface; grading 31.958 mi. roads in Turner, Kingsbury, Hamlin and Lyman Counties, incl. 316,301 cu.yd. excav.; 3 steel viaducts, 51,692 lb. reinforcing and 154,888 lb. structural steel, in Turner Co., one 78 ft. concrete viaduct in Kingsbury Co., one 60 ft. steel viaduct in Hamlin Co., one 160 ft. concrete and steel viaduct and one 12 x 12 ft. concrete box culvert in Lyman Co., and one 32 ft. and one 20 ft. I beams in Corson Co. F. D. Hudgins, state engr.

N. D., Linton—May 1, by Auditor Emmons Co., 9.741 mi road, 62,725 cu.yd. earth and 2,630 cu.yd. rock excav., 933 sq.yd. cobble gutter. Engineer, c/o State Hy. Dept., Bismarck.

Mo., St. Louis — May 15, by Bd. Pub. Serv., City Hall, paving 15 alleys, 16,600 sq.yd. concrete. $51,130. W. W. Horner, 300 City Hall, engr.

Utah—State Rd. Comn., Salt Lake City, receiving bids gravel surfacing 5.2 mi. Ft. Duchesne-Vernal Rd., Federal Aid Project 10B; hardsurfacing 1.5 mi. Richfield-Elsinore Rd., Federal Aid Project 43, 1.5 mi. Saline City Rd., Federal Aid Project 44. H. C. Means, state road engr.

Wash., Seattle—May 5, by King Co., paving 11,842 sq.yd. White Center-Lake Burien Rd., concrete. $30,000. T. R. Beeman, co. engr.

Wash., Tacoma—May 4, by Pierce Co., concrete paving 2.81 mi. Permanent Highway 20, Spanaway-McKenna Rd. C. H. Votaw, Tacoma, engr.

Ore., Oregon City—May 9 by Comrs., Clackamas Co., paving 2.11 mi. Mt. Hood Loop Rd., Rock Creek, (A) 7 in. concrete, on 7 in. gravel or broken stone, 9 ft. wide with 4 ft. shoulders, $42,500 (B) 2 in. bitulithic concrete on 2 in. broken stone, 16 ft., $35,000. R. Klein c/o State Highway Dept., Salem, engr. Noted Jan. 25.

Calif., Los Angeles—May 4, by Bd. Harbor Comn., surfacing Badger Ave. and Dock St. approaching drawbridge, 317,775 sq.ft. 2 in. warrenite bitulithic on 7 in. rein.-con.

Calif., Merced—Supervs. Merced Co. receiving bids improving 8.14 mi. Rd. Impvt. Dist. 5, 43,557 lin.ft. sub-grade, 525,904 sq.ft. rock screenings. A. E. Cowell, Merced, engr. Noted Mar. 15.

Calif., San Bruno—City Trustees receiving bids grading, concrete curbing, guttering, sidewalks and paving with asphaltic oil and screenings on waterbound macadam, portions Tucker, Poplar, Cedar, Cypress and Linden Sts., etc. To exceed $25,000. G. A. Kneese, c/o Co. Surveyor Office, Redwood City, engr. Noted Apr. 5.

Calif., San Diego—May 7, by A. H. Wright, city clk., improving Goldfinch, Bush and Ibis Sts., 152,432 sq.ft. 1½ in. asphaltic concrete on 2½ in. bituminous, etc. F. A. Rhodes, city engr. Noted Mar. 22.

Calif., San Francisco—May 16, by Bd. Pub. Wks., grading, concrete and granite curbing, artificial stone sidewalks and paving Rhode Island St., 23,184 sq.ft. asphaltic concrete and 24,800 sq.ft. concrete, etc., for city and San Francisco Co. $25,000. M. M. O'Shaughnessy, city engr.

Calif., Woodland — May 7, by H. R. Saunders, clk. Yolo Co., improving Prefix 7, Sect. A, 1,700 cu.yd. willite or Class A, B or C asphaltic concrete, 196,480 sq.ft. willite, Class A concrete or Class A, B or C asphaltic Concrete, etc.; Prefix 3, Sect. B, 15,418 sq.ft. asphaltic concrete or Class A concrete, 3,230 sq.ft. asphaltic concrete, etc.

BIDS RECEIVED

Conn., New Britain—Patching 10,000 sq. yd. various streets, asphalt, from Robinson & Powers Inc., 35 Colony St., Meriden, $2.56 per sq.yd.

New York—F. S. Greene, comr. State Hy. Dept., Albany, Apr. 20, improving 0.75 mi. Highway 5685 Catskill Village; Main, Bridge and Spring Sts., Greene Co., from B. I. Mandel, New York City, $43,913, engrs. est. $44,647; 0.46 mi. Highway 1664, Patchogue Village: Medford Ave., Suffolk Co., from F. Romeo, Patchogue, $17,441, $17,957; reconstructing 3.88 mi. Repair Contr. 3048, Saugerties-Catskill, Part 2, Greene Co., from L. Mayersohn, 6 Catalpa Dr., Albany, $147,485, $147,865; 1.26 mi. Repair Contr. 1360, Spring Valley-Knapp Corners, Rockland Co., from Ferber-Gill Co., Hackensack, N. J. (street address not available), $49,572, $54,101; 2.03 mi. Repair Contr. 1357, Johnstown-Broadalbin, Part 2 and 1.5 mi. Repair Contr. 3047, Mayfield-Northville, Part 2, both Fulton Co., from R. Wemple, Fultonville, $68,520 and $54,240 respectively, engrs. est. $69,705 and $55,144 respectively; 1.8 mi. Repair Contr. 1361, Herkimer-Frankfort, Herkimer Co., from J. E. Flood, Hudson Falls, $67,896, $70,058; 0.78 mi. Repair Contr. 5692, Cobleskille Village: East and West Main Sts., Schoharie Co., from Griffin & Griffin, Norwich (street address not available), $61,647, $63,205; 1.86 mi. Repair Contr. 1355, River Rd.-Windsor, Part 1, Broome Co., from Stento & Serafini, 84 Court St., Binghamton, $64,298, $66,852; 2 mi. Repair Contr. 1359, Syracuse-Lafayette, Onondaga Co., from F. S. and A. Sporato, Syracuse, (street address not available), $77,925, $82,477; 0.84 mi. Highway 5693 Medina Village: South Main St., Orleans Co., from W. J. Gallagher, Medina, $26,349, $27,395; 2.21 mi. Repair Contr. 1336, Phelps-Clifton Springs, Ontario Co., from M. C. Soper, Seneca Falls (street address not available), $76,141, $83,055; 2.11 mi. Highway 5600, Farnham-Irving, Erie Co., from Dale Eng. Co., Mann Bldg., Utica, $55,058, $58,112. Noted Apr. 12.

N. Y., Buffalo—A. W. Kreinheder, comr. Pub. Wks., repaving (1) DeWitt St. (2) 7th St. paving (3) Arthur St. (4) 4th St. (5) Florida St., with (a) asphalt (b) brick (c) Medina block, from H. P. Burgard Co., 1968 Filmore Ave., (1) $15,535 (3a) $29,380; Rock Asphalt & Constr. Co., Morgan Bldg., (2) $44,520 (4a) $6,184 (5) $22,679; Erie Contg. Co., Morgan Bldg., (3b) $30,267; B. F. Spire, 24 Colonial Circle (4b) $6,500 (4c) $8,577.

N. Y., Long Island City—See "Sewers."

N. Y., Utica—Bd. Contr. & Supply, paving (1) Devereaux St. (2) Burrstone Rd. (3) St. Joseph St. (4) Culver Ave., with (a) asphaltic concrete (b) warrenite bithulithic (c) concrete with waterbound (d) concrete with asphaltic (e) concrete, from H. W. Roberts Co., 622 South St., (1) $7,238 (2a) $19,901 (2b) $20,798 (2c) $18,638 (2d) $18,507 (3a) $7,911 (3b) $8,199 (4a) $16,406; N. D. Peters, 216 Kossuth St., (3e) $6,460.

Pa., Ebensburg—Cambria Co. paving 3.25 mi. Route 62, brick on concrete, from Owen & Plummer, Inc., Otto Bldg., Johnstown, $216,593. Noted Apr. 5.

Delaware—State Hy. Dept., Dover, 4.43 mi. Harbeson-Sunshine School Rd., Contr. C S-18 and 4.583 mi. Sunshine School-Lewes Rd., Contr. C S-19, from R. L. Bonham, Bridgeton, N. J., $130,499 and $138,353 respectively; 5.45 mi. Reliance-Seaford Rd., Contr. C S-20, from Old Line Constr. Co., Chestertown, Md., c.i. pipe $158,358, concrete pipe $156,875. Noted Apr. 5.

Maryland—State Rds. Comn., Baltimore, Apr. 17, 17,800 sq.yd. concrete surfacing, Contr. M-38, Montgomery Co., from Gosnell, Russell Co., Frederick (street address not available) $59,170; 9,500 sq.yd. concrete surfacing Constr. Co.-27, Caroline Co., from Holt Constr. Co., Federalsburg, $27,357. Noted Apr. 5.

Florida — State Rd. Dept., Tallahasse, bituminous macadam surfacing 6.686 mi. road between Project 27A Sta. 300 and Project 505, State Project 27B, Columbia Co., from C. F. Lytle, Jacksonville (street address not available), $289,264, 5.674 mi. road between Lake City and Project 27B, State Project 27A, Columbia Co., from McDougald Constr. Co., Healy Bldg., Atlanta, Ga., $196,287; sheet asphalt surfacing 10.708 mi. Rd. No. 8, between Frostproof and Avon Park, State Project 562B, Highlands Co., from W. P. Kennedy, Quincy, $321,594. Noted Apr. 5.

O., Akron—S. Porter, clk. Summit Co., Apr. 16, 1.42 mi. Akron-Northampton Rd. 27, A1, 6,000 sq.yd. vitr. brick on concrete, 17,050 cu.yd. earth excav., 8,000 sq.yd. 10 in. waterbound gravel, from Hollinger & Davidson, 435 South Bway., $49,482, engrs. est. $50,127; Granger-Ghent Rd. 79, 14,000 lin.ft. 2 x 6 in. concrete curb, 7,650 cu.yd. earth excav., 11,500 sq.yd. 3 in. bituminous concrete, 12,700 sq.yd. 5 x 7 in. concrete base, from T. E. McShaffrey Constr. Co., 171 South Forge St., $47,214, engrs. est. $50,975; 1.26 mi. Hammonds Corners Ira Rd. 46, 11,000 cu.yd. earth excav., 12,000 sq.yd. 5 in. waterbound macadam, 12,000 sq.yd. 3 in. bituminous macadam, from A. F. Wible, 859 Chalker St., $38,148, engrs. est. $26,400. Noted Apr. 12.

O., Cincinnati—C. F. Hornberger, dir. Pub. Serv., City Hall, Apr. 16, repaving 1,200 ft. Guilbert Ave. viaduct granite blocks, from M. F. Quill & Son, 109 Gerke Bldg., $53,003. Engrs. est. $59,285. Noted Apr. 12.

O., Cleveland—Bd. Educ., East 6th St. and Rockwell Ave., (1) cement walks, grading and landscaping (2) masonry work at Audubon, Lafayette, Mt. Auburn, Rickoff and Warner Rd. Schools, from V. Q. Galler, Builders Exch., (1) $45,150; A. MacDougall Co., Irene Ave., (2) $24,351. Noted Mar. 29.

O., Cleveland—For approximately 385,700 sq.ft. stone sidewalks in southerly, northerly and westerly sidewalk districts, from Ohio Quarries Co., Citizens Bldg., $43,803, $33,918 and $49,518 respectively. Noted Mar. 15.

O., Cleveland—For 149,900 sq.ft. stone sidewalks in West Park Dist., from Ohio Quarries Co., Citizens Bldg., $48,218.

O., Cleveland — Paving with (a) vitr. brick (b) asphalt (1) East 105th St. (2) Idarose Ave. (3) East 116th St. (4) Sylvia Ave. (5) Grovewood Ave. (6) East 131st St. (7) East 127th St. (8) East 121st St. (9) Jesse Ave. (10) Beyerle Rd., from Baldwin Bros., 4500 Euclid Ave., (a1) $8,661; Gould & Maybach, 823 East 150th St., (a2) $17,950; A. M. Pejsa, Euclid Heights Blvd., (a3) $62,819; River Constr. Co., 2402 Mapleside Rd., (a4) $48,305 (a5) $17,349; Cleveland Trinidad Paving Co., The Arcade, (b6) $27,368 (b7) $14,945 (b8) $20,480; Bentley Bros., 1836 Euclid Ave., (a7) $18,729; W. E. McHugh, Pavers Exch., Society for Savings Bldg., (a8) $25,435; Enterprise Paving & Constr. Co., 8,444 Bway., (a9) $28,341 (a10) $9,856. Noted Apr. 5.

Mich., Detroit—Paving with 3 in. sheet asphalt on 6 in. concrete, (1) 1,700 sq.yd. Glinnan Ave. (2) 700 sq.yd. Gibson Ave. (3) 1,800 sq.yd. Moyes St., 3½ in. sheet asphalt on 8 in. concrete on (4) 3,100 sq. yd. Burton Ave. (5) 8,100 sq.yd. Calvert Ave. (6) 6,000 sq.yd. Coplin Ave. (7) 2,500 sq.yd. Fleming Ave. (8) 15,000 sq.yd. Grand River Ave. (9) 2,400 sq.yd. Marcus Ave., (10) 3,200 sq.yd. Reeder Ave., from Detroit Asphalt Paving Co., 20 McGraw Bldg., (1) $10,672 (3) $9,842 (4) $18,790 (6) $17,592 (8) $84,975 (9) $14,976 (10) $19,121; Cleveland Trinidad Paving Co., 402 Hammond Bldg., (2) $4,907 (5) $50,431; G. R. Cooke, 1260 Penobscot Bldg., (7) $15,005.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, portland cement concrete paving (1-2-11 means State Rd. Route 1, Federal Aid Project 2, Sect. 11). (1) 0.2 mi. 1-2-11 Will Co. (2) 4.07 mi. 1-52-4 White Co. (3) 4.81 mi. 2-0-12 Union Co. (4) 563 mi. 2-54-51 Macon Co. (5) 4.5 mi. 1-0-20 Crawford Co. (6) 3 mi. 1-0-21 Crawford Co. (7) 7.5 mi. 1-0-Combination A Crawford Co. (8) 4.93 mi. 1-53-41 Massac Co. (9) 4.55 mi. 4-26-25 Sangamon Co. (10) 2.1 mi. 4-26-26 Sangamon Co. (11) 6.65 mi. 4-26-Combination B Sangamon Co. (12) 3.17 mi. 7-55-12 Bureau Co. (13) 3.65 mi. 7-55-13 Bureau Co. (14) 6.82 mi. 7-55-Combination C Bureau Co. (15) 0.37 mi. 7-7-13 La Salle Co. (16) 0.92 mi. 8-0-2C Warren Co. (17) 5.87 mi. 9-56-13 Ford Co. (18) 7.02 mi. 9-56-18 Ford Co. (19) 12.89 mi. 9-56-Combination D Ford Co. (20) 36.39 mi. 9 and 25-56 and 61-Combination H Champaign and Ford Counties (21) 3.68 mi. 3-0-7 Rock Island Co. (22) 6.06 mi. 25-61-28 Champaign Co. (23) 4.96 mi. 25-61-29 Champaign Co. (24) 4.88 mi. 25-61-30 Champaign Co. (25) 23.5 mi. 25-61-Combination G Champaign and Ford Counties (26) 36.39 mi. 25 and 9-61-Combination Y, incl. 1 bridge, Champaign and Ford Counties (27) 12.48 mi. 25-61-Combination F Champaign and Ford Counties (28) 11.02 mi. 25-61-Combination E Champaign Co. (29) 4.36 mi. 25-61-31 Champaign and Ford Counties (30) 2.74 mi. 25-61-32 Ford Co. (31) 23 mi. 25-61-Combination X, incl. 1 bridge, Champaign and Ford Counties (32) 5.12 mi. 16-58-18 Christian and Montgomery Counties (33) 4.27 mi. 29-60-13 McHenry-Lake Counties (34) 8.12 mi. 18-59-12 Kane-Kendall Counties (35) 19.56 mi. 18 and 22-59-Combination U, incl. 1 bridge, Will-Kane-Kendall Counties (36) 6.25 mi. 22-59-15 Will Co. (37) 5.19 mi. 22-59-16 Will-Kendall-Kane Counties (38) 11.44 mi. 22-59-Combination I, Will-Kendall-Kane Counties (39) 19.56 mi. 18 and 22-59-Combination J Will - Kendall - Kane Counties (40) 6.42 mi. 21-24-2 Lake Co. (41) 4.4 mi. 28-63-4 Knox-Henry Counties (42) 4.94 mi. 28-63-5 Henry Co. (43) 9.34 mi. 28-63-Combination K Knox - Henry Counties (44) 2.76 mi. 27-39-1 Cairo Co. (45) 3.7 mi. 30-64-12 Stark Co. (46) 5.48 mi. 31-65-21 Fulton Co. (47) 7.96 mi. 32-66-3 Moultrie Co. (48) 3.91 mi. 42-67-113 Lake Co. (49) 3.06 mi. 44-68-19 Will Co.

Streets and Roads (Continued)

from Pierson & Co., Chicago Heights (1) $8,144; B. J. Morrison, Inc., Effingham (2) $73,443; J. Kesl, Effingham (3) $103,476 (32) $110,888; McMahon Constr. Co., Rochester, Ind. (street address not available (4) $87,576; C. Arnold, Casey, (5) $96,427 (6) $64,979; J. W. Etchinson, Casey (7) $154,444; M. Hayes & Son, Janesville, Wis. (8) $131,113; Chicago Heights Coal Co., Chicago Heights, (9) $79,602 (10) $56,820 (11) $135,474 (34) $161,989 (37) $120,680 (38) $222,000; Weber Co., Ionia, Mich. (12) $87,309 (13) $102,835 (41) $87,131; R. F. Conway, 133 West Washington St., Chicago (14) $189,-000; Trompeter & Son, Peru (15) $14,660; Monmouth Gate & Mfg. Co., Monmouth (16) $28,365; C. W. Clarke Co., Terre Haute, Ind. (street address not available) (17) $97,017; I. D. Lane, Bloomington (18) $144,042; Verhey Constr. Co., Champaign (street address not available) (22) $94,161 (23) $106,580 (25) $422,912 (26) $668,000 (28) $129,500; W. F. Smith, Rensselaer, Ind. (street address not available) (19) $244,896 (27) $202,092; J. O. Connor & Son, Fort Wayne, Ind. (20) $685,000; O'Neill & Sons, Faribault, Minn. (21) $91,-991; Harrison Eng. & Constr. Corp., Ellicott Sq., Buffalo, N. Y. (24) $89,009 (29) $86,654 (30) $52,239 (31) $727,700; J. J. Dunnegan, Shenandoah, Ia., (33) $95,104 (48) $85,398; Powers-Thompson Constr. Co., Joliet (35) $419,200 (39) $393,800 (49) $94,008; Northern States Contg. Co., Waterloo, Ia. (36) $106,783 (40) $108,205; I. W. Baumann Co., Peoria (street address not available) (42) $92,872 (43) $171,973; C. D. Vanderboon, Mt. Cairo (44) $63,270; Edwardsville Constr. Co., Edwardsville (47) $148,364; Russell Condon & Co., Omaha, Neb. (street address not available) (46) $115,939. Noted Mar. 29.

Wis., Fond du Lac — For 57,640 sq.yd. pavement and 44,000 lin.ft. concrete curb and gutter, from J. Rasmussen & Sons, foot 7th St., Oshkosh, asphaltic concrete, $195,-173; C. Johnson, 75 Main St., Oshkosh, vibrolithic concrete $201,877. Noted Mar. 29.

Wis., Green Lake — Green Lake Co., gravel surfacing, etc., Green Lake Center-Markesan and Princeton-Berlin Rds., from M. Fisch, Kilbourn, $13,539 and $22,861, respectively; grading Marquette-Ripon Rd., from Brogan & Burns, Green Bay (street address not available), $29,363; gravel surfacing foregoing, from J. L. Burch, 2009 Madison St., Madison, $15,916.

Wis., Milwaukee—Concrete paving various streets, from A. E. Retzloff, 948 4th St., Concordia Ave., $4,495, Finn Pl., $9,427; from Czerwinski Constr. Co., 376 16th Ave., Greely St., $4,861, Mervina St., $8,029, Pease St., $9,389, 23rd St., $22,350; from Kroening Constr. Co., 39th Ave. and Mitchell St., Herman St., $6,675, Holton St., $19,737.

Wis., Milwaukee — Concrete paving various alleys, from Kroening Constr. Co., 39th Ave. and Mitchell St., Group 1, 6,424 cu.yd. grading $0.50, 13,393 sq.yd. concrete $2.29; from Bodemann Constr. Co., 691 48th St.; Group 2, 2,856 cu.yd. grading $1.45, 9,627 sq.yd. concrete $2.20; from Clayton Constr. Co., 397 Farwell Ave., Group 4, 2,007 cu.yd. grading $1.24, 4,934 sq.yd. concrete $2.38; from W. T. Vanderboom, 99-32nd St., Group 3 1,691 cu.yd. grading $1.25, 6,332 sq.yd. concrete $2.07, Group 5, 1,301 cu.yd. grading $1.35, 5,468 sq.yd. concrete $2.10.

Wis., Ripon—Paving 10,000 sq.yd. various streets, from Universal Eng. Co., Ingram Blk., Eau Claire, reinforced vibrolithic concrete $2.69 per sq.yd.; C. Johnson, 75 Main St., Oshkosh, plain vibrolithic concrete $2.57, one course concrete $2.61. Noted Mar. 29.

Wis., Two Rivers—Paving, etc., various streets, from E. J. Streu, Two Rivers, 2 course concrete $27,919, vibrolithic concrete $27,650. Noted Apr. 5.

Tex., Corsicana—Navarro Co., concrete surfacing 34,066 sq.yd. Highway 31 in Richland Creek Bottom, from F. P. McElwrath, Corsicana, $85,998. Engrs. est. $95,000. Noted Mar. 29.

Nev., Reno—For 573,340 sq.ft. 5 in. and 15,954 sq.ft. 2 in asphaltic concrete pavement, from Clark & Henery Constr. Co., 38 South Sutter St., Stockton, Calif., $125,-023. Noted Mar. 29.

Washington—State Hy. Comn., Olympia, concrete paving 55,841 sq.yd. Pacific Highway from Castle Rock to Laughlins, and 65,839 sq.yd. from Laughlins to Neals, Cowlitz Co., to McHugh Constr. Co., 517 3rd Ave. N., Seattle, $147,560 and $180,116 respectively. Noted Mar. 15.

Wash., Seattle—For 20,000 lin.ft. of 6 ft. and 5,200 lin.ft. 5 ft. concrete sidewalk, Atlantic St. et al., from Paduano & Crissman, 646 West 51st St., $31,532, engrs. est. $38,236; 14,225 sq.yd. 6 in. concrete paving on Findlay St. et al., from Coluccio & Erickson, 517 22nd St. S., $43,030, engrs. est. $37,000.

Calif., Chico—Curbing and paving Esplanade, from T. H. Polk, Chico, 183,000 sq.ft. 4 in. asphaltic macadam at $0.15 per sq.ft., 3,000 lin.ft. concrete curb $0.55. Noted Mar. 22.

Calif., Kingsburg — Grading, concrete curbing, guttering, sidewalks and paving Riverside St., etc., 105,393 sq.ft. 1½ in. warrenite on 2½ in. asphaltic concrete, etc., from California Constr. Co., Mattei Bldg., Fresno, $53,160.

Calif., Long Beach—Improving various streets in Belmont Shore Dist., 870,746 sq. ft. 5 in. concrete, 33,610 lin.ft. concrete curb, 168,573 sq.ft. cement walks, etc., from Two Miracle Concrete Co., Ford Bldg., Great Falls, Mont., $500,000. Noted Mar. 8.

Calif., Los Angeles—Supervs. Los Angeles Co., grading, curbing, laying sidewalks and paving Ocean Ave., 180,526 sq.ft. 5 in. concrete, etc., from H. H. Peterson, Loma Portal, $60,700. Noted Apr. 5.

Calif., Oakland—Improving 96th Ave., from Hutchinson Co., 1706 Bway., 227,350 sq.ft. grading at $0.06, 116,950 ft. oil macadam pavement $0.12, 42,998 ft. cement walks $0.17, etc. Noted Apr. 12.

Calif., San Bernardino—San Bernardino Co., paving 5 mi. Big Bear Lake Blvd., 444,200 sq.ft. 8 in. oil macadam, 40,360 cu.-yd. grading, etc., from H. H. Lienau, 420 Brookside Ave., Redlands, $149,500. Noted Mar. 15.

Calif., San Diego—Common Council, improving Goldsmith and Evergreen Sts., from California Constr. Co., Union Bldg., 101,779 sq.ft. 1½ in. asphaltic concrete on 2½ in. bituminous at $0.1595 per sq.ft., total $16,234; Eagle St., from G. R. Daley, 4430 Boundary St., 83,544 sq.ft. 1½ in. asphaltic concrete on 2½ in. bituminous at $0.163, etc., total $14,073; 8th and A Sts., from California Constr. Co., Union Bldg., 94,645 sq.ft. 1½ in. asphaltic concrete on 2½ in. bituminous, $0.164, 15,600 sq.ft. 5 in. concrete $0.258, total $20,049. Noted Apr. 5.

Calif., Santa Ana — Orange Co., paving Richfield Rd., 5 in. asphaltic concrete on 4 in. gravel, from S. Finley, Santa Ana, $38,500.

CONTRACTS AWARDED

Vt., Bennington—For 10,800 sq.yd. concrete paving and 4,200 lin.ft. vitr. clay or concrete sewer pipe, to Portland Constr. Co., 52 Exchange St., Portland, Me. Noted Apr. 5.

Mass., Boston — Paving 15,270 sq.yd. Massachusetts Ave., bitulithic concrete, to Warren Bros., Parkman Bldg., $46,909.

Mass., Newton—Street Comn., 1,500 ft. curbing, 100,000 sq.ft. concrete, 50,000 cu.-yd. excav., to Simpson Bros. Corp., 77 Summer St., Boston, $38,326. Noted Apr. 12.

N. Y., Jamestown—Will pave 10,128 ft. Mt. Vernon Pl., Stearns, Fairfield, Flagg and Hedges Aves., Westcott, Price, Derby, Lafayette, 10th, Crown, Stafford and Cherry Sts., brick on concrete, by day labor. L. Bergman, city engr.

N. Y., Mineola—Bd. Supervs. Nassau Co., Court House, improving Park St., to Columbian Constr. Co., 215 Montague St., Brooklyn, $184,750. Noted Mar. 29.

N. Y., Mount Morris—Paving Main and Chapel Sts., brick and concrete, to Rochester Foundation Co., 205 E. and B. Bldg., Rochester. To exceed $25,000. Noted June 8.

N. Y., Utica—Bd. Contr. & Supply, concrete sidewalks, to N. D. Peters, 216 Kossuth St., $39,220.

N. J., Freehold—Monmouth Co., reconstructing 1.91 mi. Sect. 1 Farmingdale-Manasquan Rd. 34, 20 ft. rein-con. to Mercer Constr. Co., Freehold, $71,942; 2.27 mi. Sea Bright-Highlands Rd. 54, 30 ft., rein.-con., to Jannarone Contg. Co., 225 Passaic Ave., Belleville, $147,458; 2.48 mi. Sect. 1 Freehold-Eatontown Rd., 20 ft., to Utility Contg. Co., 5 Spring St., New Brunswick, $118,088. Noted Apr. 19.

Maryland—State Hy. Comn., Baltimore, 0.78 mi. Contr. BC-25A, asphalt, Baltimore City, to P. Flanigan & Son, Baltimore and Ohio R.R. and Hartford Rd., Baltimore, $77,834; concrete paving 4.96 mi. Contr. G-20A, Garrett Co., to F. D. Claiborne Co., Garrett Bldg., Baltimore, $167,661; 2 mi. Contr. F-53, Frederick Co., to M. J. Grove Lime Co., Lime Kiln, $69,445; 4.5 mi. Contr. B-53, Baltimore Co., to Robertson Bros., Vickers Bldg. Baltimore, $111,485, 4.5 mi. Contr. CO-33, Caroline Co., to Harrison Eng. & Constr. Co., Dover, Del., $117,818, 2.8 mi. Contr. WI-22, Wicomico Co., to Hannemann-Burroughs Co., Salisbury, $64,-772, 6,700 sq.yd. Contr. Q-25, Queen Annes Co., to J. K. Flick, Sudlersville, $20,760, 9,000 sq.yd. Contr. D-31, Dorchester Co., to Holt Constr. Co., Federalsburg, $29,284, 24,500 sq.yd. Contr. S-17, Somerset Co., to Hannaman-Burroughs Co., Salisbury, $101,293, 6,500 sq.yd. Contr. P-44, Prince George Co., to Tydings, Marine Co., Knickerbocker Bldg., Baltimore, $18,784; 10,300 sq.yd. Contr. F-63, Frederick Co., to L. R. Waesche, Thurmont, $32,325. Noted Mar. 22 and Apr. 19.

North Carolina—State Hy. Comn., Raleigh, grading and gravel surfacing 6.74 mi. State Project 971, Madison Co., to Reynolds Constr. Co., White Pine, Tenn., $103,-661; grading and paving with waterbound macadam 6.97 mi. State Project 835, Henderson Co., to J. B. Ross, Jr., Pickens, S. C., $186,126. Noted Mar. 15.

Tenn., Dyersburg — Dyer Co., 10 mi. gravel road, to Lawrence Constr. Co., Jackson, Miss.; 20 mi. concrete road, to Forcum-James Lumber Co., Obion; 5 mi. concrete and 20 mi. gravel road, to Smith Bros. Constr. Co., Sumpter Bldg., Dallas. Noted Mar. 29.

Kentucky—State Rd. Dept., Frankfort, constructing 8.5 mi. Jackson Highway, rock asphalt, Bullitt, Spencer and Nelson Counties, and 6 mi. Jackson Highway from High Brove to Cox Creeks, to Wilmore Constr. Co., Wilmore, $374,539 and $252,726, respectively. Noted Apr. 19.

Ky., Harlan—Grading, curbing, guttering and paving Main, Bailey, Oak, Jones, 1st, Central and 2nd Sts., Harlan Ave. and Courthouse Alley, 26,375 sq.yd. rein.-con., 6,885 sq.yd. Kentucky rock asphalt, 3,225 sq.yd. bituminous macadam, etc., to E. J. Knepfles Sons, Bellevue, $95,000. Noted Mar. 29.

O., Cleveland—For 6,100 cu.yd. grading, 7,850 lin.ft. stone curbing and 4 in. tile drain, and 13,000 sq.yd. paving on Tampa Ave. and West 97th St., vitr. brick on concrete, to Roehl Bros., West 25th St. and Clark Ave., $60,842.

O., Toledo—Paving Avondale Ave. from Hawley St. to Junction Ave. and Monroe St. from tracks of New York Central R.R. to Auburn Ave., both vitr. brick on 7 in. concrete, to Harris & Tansey, 504 Nasby Bldg., $38,152 and $33,916 respectively; repaving Huron St. from Orange to Cherry Sts. and from Cherry to Bush Sts., vitr. brick and asphalt, to H. P. Streicher Co., Inc., 319 Terminal Bldg., $62,740.

Ind., Laport—Laporte Co., concrete paving 30,024 sq.yd. Fail Rd., to Ackerman Bros., Laporte, $76,779, engrs. est. $82,321; 14,781 ft. Tetter Rd., 18 ft., vitr. brick, to L. Martine, Laporte, $66,000, engrs. est. $89,892.

Mich., Detroit—Paving following alleys with one course 6 in. concrete, Alleys 1629 and 1635 also alley between Dequindre, St. Aubin, Mullet and Catherine Sts., to Otis Cement Constr. Co., 806 Hammond Bldg., $8,700, $3,539 and $3,577 respectively; Alleys 1630, 1631 and 1638 to R. J. Powelson, 6415 Iroquois Ave., $5,752, $5,755 and $4,853 respectively; Alleys 1633 and 1636 to G. Nunn, 6509 3rd St., $2,491 and $5,062 respectively; Alley between Lycaste, Hart, Charlevoix and Goethe Aves., to T. E. Currie, 20 McGraw Bldg., $4,516; Alley 1634 to J. Porath, 745 Griswold St., $2,708.

Mich., Saginaw—Saginaw Co. Rd. Comn., grading and surfacing 5.557 mi. Assessment Dist. Rd. 67, waterbound macadam, to T. McNally, 1115 Thompson St., $125,868.

Ill., Havana—Bd. Local Impvts., grading, curbing and paving, Dist. E, F and G, 55,000 sq.yd. concrete pavement, etc., to Jansen & Schaefer, 212 North Capitol St., Pekin, $2.88 per sq.yd. total $207,587. Noted Apr. 12.

Wis., Beloit—Paving 84,330 sq.yd. various streets, rein.-con., to G. Welch, 206 Water St., $1.85 per sq.yd. Noted Mar. 22.

Wis., Milwaukee—Concrete paving, etc., various alleys, to A. E. Retzloff, 948 4th St., Group 3 $13,801, Group 6 $13,161, Group 7, $15,838; to W. T. Vanderboom, 99 32nd St., Group 4, $9,610, Group 5, $23,-219; to F. Schormann, 770 28th St., Group 1 $7,751; to F. W. Blodgett, 204 Grand Ave., Group 2 $10,754. Noted Apr. 12.

Wis., Monroe—Green Co. State Road and Bridge Com., Monticello-Argyle Rd., to Finley Bros., Janesville, 12,133 cu.yd. earth excav. $0.50, 3,972 cu.yd. crushed rock surfacing $2.45, etc., total $26,649; Brodhead-Monroe Rd., to Webb & Dixon, Albany, 14,-000 cu.yd. earth excav. $0.65, 47,520 sq.yd. concrete surfacing $1.25, etc., total $78,298. Bids for York Church Rd. rejected. Noted Apr. 5.

Wis., Wausau — Paving 10,606 sq.yd. various streets, vibrolithic concrete, to C. Lotz, Wausau, $24,182. Noted Mar. 14.

Wis., Wauwatosa—Rein.-con. paving 19,-510 sq. yd. Kavanaugh Pl., Wisconsin, Warren, 12th and Watkins Aves., to Jacobus & Winding Concrete Constr. Co., 1 State St., $2.34, $2.36 and $2.41 per sq.yd.

Wis., West Allis — Paving George St., 52nd, 65th, 70th and 74th Aves., to Schaefer-Thompson Constr. Co., Central Ave., Marshfield, $2.54 per sq.yd.; Greenfield Ave. from 66th to 74th Aves., to Milwaukee General Constr. Co., 427 Mitchell St., Milwaukee, $2.49 Work includes 43,-381 sq.yd. vibrolithic concrete. Noted Apr. 12.

Streets and Roads (Continued)

Ia., Jesup—For 13,340 sq.yd. concrete paving, 13,629 lin.ft. curb and 8,614 cu.yd. excav., to Dearborn Constr. Co., Waterloo, $2.36 per sq.yd. Noted Apr. 5.

Kan., Cherryvale—Paving various streets, 7,625 sq.yd., vitr. brick, 6,097 lin.ft. curb and gutter, etc., to O'Leary Bros., Cherryvale, $28,819. Noted Apr. 5.

Kan., Sabetha—Paving 21,000 yd. various streets, brick, to Asplund Constr. Co., Tecumseh, Neb., paving $3.15 per yd., etc., total $83,231. Noted Mar. 22.

Minn., Elbow Lake—Grant Co., grading 6.6 mi. job 2301, State Rd. 2, 72,713 cu.yd. excav., 83,584 cu.yd. overhaul, and Job 2302, State Rd. 1, 61,474 cu.yd. excav., 93,904 cu.yd. overhaul, to W. A. Hollern, St. Cloud, $18,855 and $17,831 respectively. Noted Mar. 22.

Minn., Mahnomen—Mahnomen Co., Jobs 22-02, 22-03 and State Aid Rd. 2, 63,796 cu.yd. excav., 81,778 cu.yd. sta. overhaul and 3,685 cu.yd. hand ditching, grading to Hanley & Underhill, Staples, $15,922; drain to Red Lake Drainage Co., Fosston, $13,639.

Minn., Moorhead—Clay Co., 6 mi. State Rd. 15, Egan Twp., and 8 mi. State Rd. 16, Goose Prairie and Comwell Twps., 87,009 cu.yd. excav., 35,815 cu.yd. overhaul, to Larkin Constr. Co., Barry, $23,112; concrete culverts to Fergus Falls Tile Wks., Fergus Falls; metal culverts to North Dakota Metal Culverts Co., 501-509 4th St. N., Fargo, N. D. Noted Mar. 29.

S. D., Pierre—Concrete paving 25,850 sq. yd. Pierre St. and Dakota Ave., to Hanlon & Okes, 338 Lumber Exch. Bldg., Minneapolis, Minn., $2.34 per sq.yd. Noted Feb. 15.

North Dakota—State Hy. Comn., Bismarck, grading 24 mi. road, Walsh Co., to W. Schultz, Fergus Falls, Minn., $31,910; concrete bridges to J. J. Rue & Sons, Baldwin, $8,462. Noted Mar. 29.

Missouri—State Hy. Dept., Jefferson City, improving roads (2-22 means Route 2, Sect. 22), to Cook & O'Brien Constr. Co., 305 Ry. Exch. Bldg., Kansas City, 4.744 mi. **2-22,** Saline Co. $20,605, 4.973 mi. **2-18,** Saline Co. $37,712, 5 mi. **2-21,** Saline Co. $60,587, 5 mi. **2-20** Saline Co. $83,334, 4.779 mi. **2-19,** Saline Co. $29,630, 4.744 mi. 2-22, Saline Co. $19,017; to Allhands & Davis, 105 Frisco Bldg., Joplin, 4.261 mi. **32-5,** Dent Co. $14,928, 4.28 mi. **12-52,** Franklin Co. $30,947, 4.856 mi. **32-6,** Dent Co. $24,427, 4.856 mi. **32-6,** Dent Co. $22,207; to A. L. Cook, Ottawa, Kan., 2.727 mi. **18-6,** Nodaway Co. $19,377, 2.268 mi. **18-11,** Nodaway Co, $11,834, 2.727 mi. **18-6,** Nodaway Co. $17,616; to L. Rich Constr. Co., East St. Louis, Ill., 2.868 mi. **9-73,** Jefferson Co. $36,917, 4.548 mi. **9-71,** Jefferson Co. $46,556, 4.773 mi. **9-72,** Jefferson Co. $54,768; to Cameron-Joyce & Co., Keokuk, Ia., 4.551 mi **3-35,** Carroll Co. $38,174, 4.115 mi. **7-6,** Schuyler Co. $12,874; to Summerfield-Jones Co., Springfield (street address not available), 5 mi. **7-86,** Texas Co. $14,697, 5 mi. **7-85,** Texas Co. $16,732, 1.638 mi. **7-100,** Oregon Co. $7,251; to Muskogee Constr. Co., 223 Cole Bldg., Tulsa, Okla., 5 mi. **9-111,** Cape Girardeau Co. $34,848, 4.981 mi. **9-112,** Cape Girardeau Co. $30,090; to Baker & Koontz, Carthage, 4.81 mi. **14-9,** Lawrence Co. $47,635, 2.464 mi. **14-10,** Lawrence Co. $28,543; to Somers-Hall Constr. Co., Newton, Kan., 3.83 mi. **1-20,** Holt Co. $34,870, 2.55 mi. **1-22,** Andrew Co. $25,441; to J. H. Hewitt, Little Rock, Ark. (street address not available), 4.95 mi. **9-99,** Madison Co. $39,728, 4.996 mi. **9-97,** Madison Co. $46,767; to W. J. Welch, Genoa, Neb., 0.848 mi. **4-18A,** Gentry Co. $17,534, 0.44 mi. **4A-2,** Gentry Co. $6,704; to M. E. Gillioz, Monett, 4.997 mi. **14-49,** Phelps Co. $34,401, 3.284 mi. **14-47,** Phelps Co. $15,791, 2.338 mi. **14-38A,** Laclede Co. $30,018, 2.954 mi. **14-13,** Greene Co. $29,568; to M. Haase, Trenton, 2.476 mi. **3-1,** Mercer Co. $9,010, 2.695 mi. **3-2,** Mercer Co. $12,376; to Miller Constr. Co., Springfield (street address not available), 2.032 mi. **14-44,** Pulaski Co. $50,895, 3.984 mi. **14-46,** Pulaski Co. $68,041; to Hogan & Humphreys, Fredericktown, 4.89 mi. **9-100,** Bollinger Co. $23,531, 3.655 mi. **9-103,** Bollinger Co. $19,030, 4.955 mi. **9-102,** Bollinger Co. $28,099; to Republic Constr. Co., Republic, 4.068 mi. **14-12,** Greene Co. $48,711; to St. Louis Constr. Co., 743 Frisco Bldg., St. Louis, 3.846 mi. **21-4,** Washington Co. $31,597; to Lawrence Constr. Co., Jackson, Miss., 4.167 mi. **9-141,** Pemiscot Co. $122,597; to Harrison Eng. & Constr. Co., Wichita, Kan. (street address not available), 4.055 mi. **9-142,** Pemiscot Co. $134,427; to O. F. Nichols, Laquay, 4.942 mi. **14-41,** Pulaski Co. $28,949; to J. H. Clark, Nevada, 0.36 mi. **36-6,** Barton Co. $4,214; to J. H. Roach & Co., Anderson, 3.143 mi. **1-108** McDonald Co. $28,113; to Pittsburgh-Des Moines Steel Co., Tuttle and Southwest 10th Sts., Des Moines, Ia., 1.827 mi. **7-43,** Callaway Co. $21,573; to V. E. Koch, Box 604, Joplin, 3.551 mi. **14-11,** Greene Co. $29,018; to Davis Constr. Co., 4.761 mi. **14-37,** Laclede Co. $53,773; to J. B. Ramsey and E. L. Davis, Caruthersville, 3.161 mi. **14-48,** Phelps Co. $86,334; to Springfield Constr. Co., Springfield (street address not available) 1.398 mi. **3-94,** Greene Co. $44,027. Noted Apr. 12 and 19.

Mo., Maplewood (St. Louis P. O.)—J. D. Schuster, mayor, City Hall, grading, curbing and paving 5,083 ft. Manhattan, Cambridge and Commonwealth Aves., 26 ft., 6½ in. concrete, to Cooper Constr. Serv. Co., Federal Reserve Bldg., St. Louis, $59,102; 2,551 ft. Oxford and Sutton Aves., 26 ft., 6½ in. concrete, to Carland Constr. Co., Maplewood, $25,666. Noted Mar. 22.

Mo., St. Louis—Bd. Pub. Serv., City Hall, paving 17,065 sq.yd. Washington Blvd., Westminster Pl., McPherson and Shaw Aves., asphalt, to Bridges Asphalt Paving Co., Wabash, Ind., $46,976. Noted Apr. 5.

Tex., Dallas—Paving 1,200 ft. Lamar St., warrenite bitulithic, to Central Bitulithic Co., Praetorian Bldg., $3.45 per sq.yd., etc., total $25,446. Engrs. est. $25,000.

Tex., Waco — Paving 22 blocks South 11th, North 18th and Elm Sts., 30 ft., warrenite bitulithic, to Central Bitulithic Co., Praetorian Bldg., Dallas, $115,481. Engrs. est. $115,000.

Tex., Wichita Falls — Paving Lamar, Travis and 6th Sts., 6 in. concrete, to L. E. Whitham & Co., Wichita Falls, $32,751; Ave. F, warrenite bitulithic, to West Texas Constr Co., Cotton Exch. Bldg., Ft. Worth, $15,240; Taylor and Lucile Sts., 3 in. vertical fibre brick, to Plains Paving Co., Amer. National Bank, $40,500 and $26,218.

Colo., Colorado Springs—Will pave 90,000 sq.yd in Paving Dist. 3 (Nevada Ave), asphaltic concrete on concrete, by day labor. $150,000. F. O. Ray, city engr.

Colo., Denver — Asphaltic Paving 11 blocks in Washington Park Paving Dist. 1, to Western Paving Co., 625 First National Bank Bldg., $28,515. Engrs. est. $31,770. Noted Apr. 5.

Colo., Grand Junction—Paving 3,315 ft. in East Main St. Paving Dist., 7th to 14th Sts., 40, 56 and 66 ft. 2 in. bitulithic on 5 in. concrete, to Strange-Maguire Contg. Co., Utah Savings & Bank Bldg., Salt Lake City, Utah, $57,115. Engrs est. $82,890. Noted Mar. 15.

Colo., Pueblo—Paving 12,120 sq.yd. in Northern Ave. Paving Dist., warrenite bitulithic, to Strange Maguire Contg. Co., Utah Savings & Bank Bldg., Salt Lake City, Utah, $35,029. Engrs. est. $43,900.

Colo., Trinidad — Concrete paving in Dists. 19 and 18, to Strange-Maguire Contg. Co., Utah Savings and Bank Bldg., Salt Lake City, Utah, $35,549 and $67,963 respectively.

Wash., Seattle—Grading Brandon St. et al., 24,700 cu.yd. excav., to G. A. Banderet, Bryn Mawr, $36,554. Engrs. est. $33,260. Noted Apr. 19.

Ore., Eugene—Lane Co., 6 in. rock surfacing 5.5 mi. Cottage Grove Rd., 18 ft., to Warren Constr. Co., Park Rose Bldg., Portland, $27,305, engrs. est. $32,500; 7 mi. from Coburg north, to A. C. Hansen, 703 North 2nd St., Portland, $26,439, engrs. est. $27,500. Noted Dec. 7.

Ore., Portland—Paving 12 blocks Flanders St., bitulithic, 30 ft., to A. D. Kern, Railway Exch., Bldg., $54,741. Noted Mar. 29.

Calif., San Diego—Common Council, paving 18th St., to G. R. Daley, 4430 Boundary St., $30,822. Noted Apr. 19.

Calif., San Rafael — Surfacing various streets, 279,000 sq.ft. 2 in. asphaltic concrete, 90,000 sq.ft. asphalt macadam, to Raisch Impvt. Co., 46 Kearny St., San Francisco, $37,440. Noted Apr. 5.

Calif., Venice—To Braun-Bryant & Austin, 1680 4th St., Santa Monica, paving Ocean Ave., 5 in. concrete, $44,170, grading and paving Woodland Ave., 2 in. willite, $11,398.

Industrial Work

PROPOSED WORK

Mass., Foxboro — Foxboro Co. having plans prepared by Monks & Johnson, archts. and engrs., 99 Chauncey St., Boston, 4 story, 50 x 160 ft. plant, rein-con. and brick, plain foundation, $150,000-$200,000. Noted Mar. 29.

Mass., Holyoke — Plans electric power plant, off Hampden St. $1,000,000. J. F. Griffin, pres. bd. aldermen.

Conn., Hartford—L. G. Carroll having plans prepared by B. M. Sellew, 721 Main St., altering garage, store and office building, 3 story, 30 x 90 ft., brick and steel, plain foundation, 164 Trumbull St. $50,000.

Conn., Hartford—H. Bland, 521 Park St., having plans prepared by Berenson & Moses, 30 Allyn St., 1 story, 50 x 120 ft. garage, brick and steel, plain foundation, Park St. $40,000.

Conn., Hartford — S. Kaplan, Windsor Ave., having plans prepared by F. C. Walz, Trumbull St., 2 story, 60 x 160 ft. garage, brick and steel, plain foundation, Windsor Ave. $40,000.

Conn., Meriden—Connecticut Telephone and Electric Co., Inc., 70 Britannia St., had plans prepared by W. T. Arnold, Hall and Lewis Blk., 3 story factory, rein.-con., plain foundation. $90,000. Noted Mar. 1.

Conn., Meriden — I. Limon, 127 South Colony St., plans 3 story, 70 x 130 ft. storehouse, garage, etc., brick and steel, plain foundation, 13 Cherry St. $100,000. Engineer and architect not selected.

Conn., Plainville—Peck Spring Co., 68 Broad St., plans 2 story, 30 x 60 ft. factory, brick, plain foundation. $40,000. Private plans.

Conn., South Norwalk—South Norwalk Tax Dist., Dept. Public Wks., City Hall, plans 3 story, brick, concrete and steel addition to power plant, Wharf St. $300,000. Westcott & Mapes, Inc., 207 Orange St., New Haven, engrs. and archts.

Conn., Wallingford—Dowd-Rodgers Co., Carlton St., plans 1 story, 40 x 120 ft. factory, rein.-con. and brick, plain foundation, Cherry St. $40,000. Private plans.

Conn., Waterbury—R. F. Worden & Sons Co., 152 Cherry St., had plans prepared by McCormack Co., Waterbury, 3 story, 50 x 70 ft. dairy, brick, plain foundation. $55,000.

N. Y., Binghamton—W. D. Sweet, 140 Chapin St., plans to rebuild garage and service station, recently destroyed by fire. $45,000. Engineer and architect not announced.

N. Y., Brooklyn—Manifold Supplies Co., 3rd Ave., having plans prepared by Lockwood-Green, archts. and engrs., 101 Park Ave., New York City, 4 story, 60 x 100 ft., brick and steel plant addition, plain foundation.

N. Y., Jamestown—Eagle Garage Co., Inc., 316 Washington St., plans 2 story garage and service station addition, 10th and Washington Sts. $50,000. Engineer and architect not selected.

N. Y., New York—Cushmans Sons, Inc., 461 West 125th St., having plans prepared by L. S. Beardsley, archt. and engr., 116 West 39th St., 6 story, 100 x 100 ft., brick, steel and stone bakery, plain foundation, Lawrence St.

N. Y., Rochester—Addison Lithographing Co., 59 South Ave., plans brick plant. $85,500. Engineer and architect not announced.

N. Y., Watertown—Autopticon Inc., Paddock Arcade, plans concrete and steel factory. $75,000-$100,000. Address E. J. Garono, 451 Main St., Buffalo.

N. J., Kearny (Arlington, P. O.)—Pub. Serv. Electric Power Co., Newark, plans power station, initial capacity about 200,000 hp., ultimate capacity 400,000 hp., here. To exceed $20,000,000. T. N. McCarter, pres.

Pa., Erie—Bessemer & Lake Erie R.R., Meadville, plans large freight house, here, to exceed $150,000.

Pa., Erie—A. H. Murphy, 141 East 12th St., plans 40 x 140 ft. addition to garage. Engineer and architect not announced.

Pa., Lewistown—Mifflin Sand Co., plans to increase capital stock from $100,000 to $250,000 for new storage house, office building, and new railroad siding, etc. S. B. Russell, secy.

Pa., Scranton — J. Hall & Bro., Pine Brook, plan to rebuild factory recently destroyed by fire. $50,000-$60,000. Engineer or architect not announced.

Pa., Sharon—Air Reduction Sales Co., 342 Madison Ave., New York City, having plans prepared by Francisco & Jacobs, 511 5th Ave., New York City, gas plant, brick, Washington St., here. $250,000.

Pa., Warren — Nypenn Furniture Co. plans 4 story, 40 x 51 ft. brick addition to factory, $50,000. Engineer and architect not announced.

Md., Baltimore — Porcelain Enamel & Mfg. Co., 8th and O'Donnell Sts., plans plant to replace one recently destroyed by fire. $150,000. A. Krekel, c/o owner, engr.

Md., Hagerstown — Western Maryland Ry., Morris Bldg., Baltimore, plans repair shops, here, to replace those destroyed by fire. Loss $150,000. H. R. Pratt, ch. engr.

W. Va., Fairmount—Dixie Co. plans 2 story oil refinery. $75,000. Engineer and architect not announced.

N. C., Elizabeth City—Interstate Cooperage Co. plans rebuilding sawmill, recently destroyed by fire. $50,000. Engineer and architect not announced.

N. C., Fayetteville—Carolina Power Co., Raleigh, plans large power plant and substation, here. $750,000. P. A. Tillery, Capitol Apartments, Raleigh, genl. mgr.

N. C., Gastonia—Art Cloth Mills, Inc. plans cotton mill. $200,000. R. L. Stowe, Belmont, pres.

Industrial Works (Continued)

N. C., Greensboro—Hill Flour Mills Corp. plans 6 story, concrete, flour mill, 400 bbl. daily capacity, West Lee St. $200,000. W. B. Hill, Danville, Va., pres.

Ga., Eatonton—Putnam Mills & Power Co. plans power plant, 750 hp. initial capacity. $85,000.

Fla., Mt. Dora—May 12, to vote on $40,000 bonds for electric light plant. J. H. Crane, city.

Tenn., Memphis — Broens-Weller Truck Body Co., 345 Jefferson Ave., plans 2 story brick addition to plant. $50,000.

O., Cincinnati — Hills-Griffith Co., 1262 State Ave., plans rebuilding 4 story brick foundry, destroyed by fire. $200,000. Engineer and architect not announced.

O., Cleveland — Western Reserve Fdry. Co., c/o L. G. Wagner, genl. mgr., 1209 Marquette Ave., had plans prepared 1 story, 90 x 180 ft., brick and steel foundry. $80,000. Private plans.

O., Cleveland—See "Buildings."

O., Cleveland—Lake Erie Metal Products Co., c/o J. F. Strnad, 4001 West 25th St., had plans prepared by J. Selasak, 6600 Park Ave., 1 story, brick and steel factory, East 152nd St. near Bway. $50,000.

Ind., Crawfordsville—R. R. Donnelly & Sons Co., Plymouth and Polk St., 1 story, 150 x 300 ft. plant, rein.-con., steel and brick, to Austin Co., 208 South State St., Chicago. Archts. est. $1,000,000. Noted Feb. 8.

Ill., Chicago—Western Electric Co., 52nd and Cicero Sts., plans 4 story, 100,000 sq.-ft. floor space, rein.-con., brick and steel addition, to Hawthorne plant. $1,000,000. W. R. Katelle, c/o owner, archt.

Ill., Whitehall—Voted $54,000 bonds for electric light plant.

Wis., Gatesville—C. Klundred having plans prepared by J. G. Schneider, Arcadia, 1 story and basement, 40 x 80 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation, Main St. $40,000.

Wis., Hurley—Norman Motor Co., 51 3rd Ave., plans 2 story, 50 x 135 ft. garage and repair shop, brick, rein.-con. and steel, plain foundation, Main St. $40,000. B. E. Norman, pres. Engineer and architect not selected.

Wis., Janesville — Southern Wisconsin Coca Cola Co., 617 East Washington Ave., Madison, having plans prepared by R. A. Phillips, Beaver Bldg., Madison, 2 story and basement, 60 x 150 ft., bottling plant, brick, rein.-con. and steel, plain foundation, North Franklin Ave., here. Noted Mar. 29.

Wis., Kaukauna—Thilmany Pulp & Paper Co. plans 1 story, steam generating plant, brick, rein.-con. and steel, plain foundation. $50,000. Engineer and architect not selected.

Wis., Madison—G. Wiesse, 111 King St., plans 1 or 2 story, 50 x 100 ft., brick, rein.-con. and steel factory, plain foundation, Williamson St. $40,000. Engineer and architect not selected.

Wis., Medford—Frendle Bros. Co., c/o H. Grann, having plans prepared by J. G. Schneider, Arcadia, 1 story, 50 x 100 ft., garage, repair shop and filling station, brick, rein.-con. and steel, plain foundation, Main St. $40,000.

Wis., Medford—C. Flemming having plans prepared by J. G. Schneider, Arcadia, 1 story and basement, 50 x 95 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation. $40,000.

Wis., Merrill—H. H. Juul having plans prepared by J. Bauman, Genesee St., 1 story, 70 x 90 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation. $40,000.

Wis., Milwaukee—Milwaukee Journal Co., 182 4th St., having preliminary plans prepared by F. D. Chase, Inc., engrs., 645 North Michigan Blvd., Chicago, 3 or 7 story addition, brick and concrete, plain foundation, 4th and State Sts.

Wis., Oconto—I. Telford plans 2 story, 47 x 125 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation, Main St. $40,000. Engineer and architect not selected.

Wis., Shawano—J. Popp soon takes bids 2 story, 40 x 106 ft., garage addition, brick and concrete, plain foundation. $40,000. Private plans.

Wis., Sheboygan—Ebenreiter Lumber Co., 1215 Erie Ave., having plans prepared by W. C. Weeks, 720 Ontario Ave., 1 story, 58 x 98 ft., brick, rein.-con. and steel factory, plain foundation, Erie Ave. $40,000.

Ia., Oskaloosa—Oskaloosa Daily Herald plans 2 story and basement, 60 x 120 ft. plant, brick, concrete and timber. $45,000. C. Walling, mgr. Architect and engineer not announced.

Kan., Ft. Scott — L. De Stowolinska, Central Garage, having preliminary plans prepared 1 story and basement, 50 x 150 ft., rein.-con. and steel garage. $45,000. Private plans.

Kan., Wichita—Steffin Ice & Ice Cream Co., 813 1st National Bank Bldg., plans 4 story, 140 x 150 ft., rein.-con. and brick plant, plain foundation, Santa Fe and 1st Sts. $400,000. C. M. Beachy, pres. Engineer and architect not selected.

N. D., Minot—K. Kulaas, Minot, having plans prepared by I. L. Rush, Minot, 2 story, 80 x 150 ft. rein.-con. and brick garage. $40,000.

Mont., Billings—Northwestern Distributing Co., 23rd St. and Montana Ave., 1 story and basement, 75 x 130 ft., plans bakery, brick, concrete and tile. $40,000. A. L. Greenleaf, mgr. Architect not announced.

Mont., Great Falls—Sunburst Refining Co., 1st National Bank Bldg., plans oil refinery, incl. tanks for storage stills, machine shops, etc. $500,000. E. A. Wyatt, genl. mgr.

Tex., Dallas—Sutton, Steele & Steele, Inc., Forney Ave., had plans prepared by O. Steele, engr. and supt., c/o owner, 1 story, 100 x 350 ft. mill. $125,000.

Colo., Ward—C. W. Thuringer, engr., East 42nd and Josephine Sts., Denver, prepared preliminary plans Sethman electric smelter and 40,000 hp. hydro electric plant. $500,000. Owner's name withheld.

Wash., Seattle—H. Disston & Sons, Inc., 322 Occidental St., plans several buildings, incl. 129 x 150 ft. factory. $60,000.

Calif., Bakersfield—San Joaquin Light & Power Co., 1801 Tulare St., Fresno, had plans prepared rein.-con. warehouse, here. $40,000. L. R. Duncan, structural engr. for company.

Calif., Los Angeles — May Corp., 801 South Bway., having plans prepared by A. C. Martin, Higgins Bldg., 4 story, 200 x 250 ft., rein.-con. warehouse, Grand Ave. and 35th St.

Calif., Los Angeles—Rowe China Co., c/o E. M. Frazier, archt., Regents Apartments, having plans prepared 1 story, 160 x 360 ft., brick and steel factory.

Calif., Marysville—Pacific Gas & Electric Co., 445 Sutter St., San Francisco, plans substation addition, here. $50,000. Private plans.

Calif., Oakland—Western Waxed Paper Co., Monadnock Bldg., San Francisco, having plans prepared by R. V. Woods, 505 17th St., 1 story, concrete or brick factory, Doyle St., here. $60,000.

Calif., San Pedro — Foote Transfer & Storage Co., 606 Beacon St., plans warehouse, fireproof. To exceed $75,000.

Calif., Stratford—F. E. Cryder, 2505 Balboa St., San Francisco, plans creamery, here. $75,000. Engineer and architect not selected.

Que., Montreal — National Cement Co., Versailles Bldg., plans cement mill, 3,000 bbl. daily capacity. $1,800,000. R. K. Meade, c/o owner, ch. engr. L. Hurtubise, 90 St. James St., consult. engr.

Ont., Hamilton—Canadian Westinghouse Co., Traders Bank Bldg., Toronto, plans 2 or 3 story, brick, concrete and steel addition to plant, here. $1,250,000. Private plans.

Ont., London — H. J. Jones & Sons, Dundas St., plans to rebuild factory recently destroyed by fire. $150,000.

B. C., Vancouver—Canadian Pacific Ry., Seymour St., plans to rebuild repair shops recently destroyed by fire, Drake St. $80,000 to $100,000. F. W. Alexander, Seymour St., div. engr.

BIDS DESIRED

Mass., Everett—May 7, by E. Dana, genl. mgr. Boston Elevated Ry., 108 Massachusetts Ave., Boston, superstructures of 150 x 360 ft., 170 x 360 ft. and two 52 x 53 ft. shop buildings, rein.-con. and steel. $500,000. H. M. Steward, c/o owner, engr. Noted May 4.

Mass., Holyoke—Judd Paper Co., 166 Race St., taking bids 3 story, 90 x 100 ft. factory, brick and steel, plain foundation, Race St. $75,000. G. P. B. Alderman & Bro., 316 High St., engrs. and archts. Noted Apr. 4.

R. I., Providence—B. S. D. Martin, archt., 86 Weybosset St., taking bids 1 story and basement, 75 x 100 ft. garage, brick and concrete, plain foundation, Elmwood Ave., for F. D. McKendall, c/o architect. $50,000. Noted Mar. 15.

Conn., Waterbury—Connecticut Co., 127 Church St., New Haven, taking bids 1 story, 40 x 177 ft. bus garage, 1 story, 40 x 100 ft. sand house, 1 story, 205 x 370 ft. car barn and 2 story, 46 x 156 ft. operating building, all brick and steel, West Main St., here. $450,000. H. R. Stamm, c/o owner, engr. Noted Apr. 4.

Pa., Brownsville—E. Meyer, taking bids 2 story and basement, 57 x 90 ft. brick, stone and tile garage. $40,000. H. W. Altman, Fayette Bldg., Uniontown, archt.

Pa., Mount Lebanon — R. E. Murray, archt., 401 Washington Rd., taking bids 2 story and basement, 86 x 115 ft., brick and steel garage, Washington Rd., for M. A. Haller, 217 Trenton St., Pittsburgh. $40,000.

Pa., Phila.—Ballinger & Co., archts., 12th and Chestnut Sts., taking bids 1 and 2 story rein.-con. and brick factory buildings, Wyoming and Stenton Aves., for Apex Machine Co. $500,000.

Pa., Phila. — C. J. Mitchell, archt., 15 South 21st St., taking bids 1 story, 50 x 114 ft. brick and steel garage, plain foundation, 4538 Merion Ave., for A. Powers, c/o architect. $75,000.

Pa., Reading—May 15, by Confederated Home Abbatoir Co., Amer. Casualty Bldg., 5 story and basement, 140 x 150 ft. slaughter house and other buildings, rein.-con., brick and steel, caisson foundation. $1,000,000. Private plans.

Pa., Wilkinsburg (Pittsburgh, P. O.)—H. R. Heller, 231 South Euclid St., Pittsburgh, taking bids 1 story, 60 x 80 x 100 ft. brick and steel garage Johnson St. $40,000. Private plans.

O., Ashtabula—Standard Oil Co. of Ohio, c/o E. B. Wagner, supt. of construction, East Ohio Gas Bldg., Cleveland, taking bids 1 story, brick, steel and concrete garage and warehouse, here. $40,000. Private plans.

O., Cleveland—Arnold Creamery Co., 701 Woodland Ave., taking bids 3 story, 60 x 90 ft., brick and concrete top addition to factory. $50,000. C. E. Tousley, 4500 Euclid Ave., archt. Noted Feb. 22.

Ind., South Bend—May 3, by A. Kahn, archt., 1000 Marquette Bldg., Detroit, Mich., 4 story, 81 x 365 ft. car storage building, and 1 story loading shed, brick and rein.-con., for Studebaker Corp., Main and Bronson Sts.

Mich., Big Rapids—Lane, Davenport & Peterson, archts., 2330 Dime Bank Bldg., Detroit, taking bids and opens same about May 2, 1 story, 180 x 240 ft. brick and steel garage and repair shop, plain foundation, for Turner, Crimmins & Water, Big Rapids. $75,000. Noted Mar. 29.

Wis., Madison—Chicago & North Western Ry., 226 West Jackson St., Chicago, taking bids roundhouse, brick, rein.-con. and steel, here. $300,000. Private plans.

Wis., Manitowoc — Smith & Reynolds, archts., Dempsey Bldg., taking bids 2 story, 46 x 120 ft., brick, rein.-con. and steel laundry, plain foundation, for Globe Steam Laundry, 14th and Washington Sts. Noted Mar. 22.

Wis., Milwaukee—H. J. Esser, archt., 82 Wisconsin St., taking bids 1 story, 125 x 250 ft., brick and timber warehouse, plain foundation, Dousman St., for Shadbolt & Boyd Iron Co., 129 West Water St. $50,000. Noted Mar. 29.

Wis., Milwaukee—Apr. 30, by C. Barkhausen, archt., 79 Wisconsin St., 2 story and basement, 42 x 100 ft. bakery addition, brick and concrete, plain foundation, for M. Carpenter Baking Co., 102 7th St. Noted Mar. 1.

Calif., Oakland — O'Brien Bros., Inc., archts., 315 Montgomery St., San Francisco, receiving bids 1 story, rein.-con. garage, Adeline and 32nd Sts., here, for L. R. Lurie Co., 315 Montgomery St., San Francisco. $40,000. Pacific Telephone & Telegraph Co., 333 Grant Ave., San Francisco, lessee.

Calif., Sacramento—Dean & Dean, archts., Library Bldg., receiving bids 1 story and basement, rein.-con. warehouse, 3rd and Q Sts., for Lindley & Co., 220 K St. $100,000.

CONTRACTS AWARDED

Mass., Cambridge—Ginn & Co., 15 Ashburton Pl., Boston, 4 story, 55 x 317 ft. plant, Monroe and 2nd Sts., here, to Evatt Constr. Co., 161 Devonshire St., Boston. Noted Feb. 1.

Mass., Lowell—Saco-Lowell Co., Dutton St., 2 story and basement, 100 x 360 ft. machine shop, rein.-con. and steel, wood pile foundation, to Aberthaw Constr. Co., 27 School St., Boston, $500,000.

Mass., New Bedford—Riley & Galligan, Olympia Bldg., 1 story, 50 x 180 ft. garage, brick and concrete, plain foundation, Mill St., to M. J. Doonan, 1821 Purchase St. Archts. est. $40,000.

R. I., Providence—Narragansett Electric Light Co., Turks Head Bldg., 4 story, 30 x 220 ft. switch house, brick, concrete and steel, plain and concrete pile foundation,

Industrial Works (Continued)

Eddy St., to D. P. Robinson Co., Inc., 125 East 46th St., New York City. Archts. est. $1,000,000.

Conn., East Norwalk—Crofut & Knapp, Water and Tolles St., South Norwalk, 2, 3 and 4 story factory buildings, rein.-con. and brick, Van Zant St., to Turner Constr. Co., 242 Madison Ave., New York City. Archts. est. $800,000. Noted Feb. 15.

Conn., Hartford—F. Stayton, 70 Freeman St., 2 story, 32 x 65 ft. storage plant, brick and steel, plain foundation, rear Buckingham St., to D. O'Brien & Sons, 118 Asylum St. Archts. est. $40,000. Noted Apr. 2.

Conn., Thompsonville—Bigelow-Hartford Carpet Co., 58 Main St., 4 story, 135 x 270 ft. mill addition, brick and steel, plain foundation, to Locke & Co., Lawrence. Archts. est. $200,000.

N. Y., Brooklyn—M. Rothschild, c/o E. M. Adelsohn, archt. and engr., 1778 Pitkin Ave., will build 1 story, 100 x 200 ft., brick and steel garage, plain foundation, Liberty Ave., by day labor. $60,000.

N. J., Camden—See "Buildings."

Pa., Altoona—Pennsylvania R.R., Broad St. Sta., Phila., 1 story, 340 x 690 ft. brick and steel machine shop, plain foundation, here, to Hughes-Foulkrod, Commonwealth Bldg., Phila. Engrs. est. $200,000.

Pa., Jeannette—Amer. Window Glass Co., Farmers Bank Bldg., Pittsburgh, 1 story, 42 x 160 ft. gas producer building, 1 story, 42 x 102 ft. boiler house and 1 story, 48 x 84 ft. power house, to Bollinger-Andrews, Empire Bldg., Pittsburgh. Noted Mar. 22.

Pa., Phila.—Phila. Last & Pattern Co., 38th and Cuthbert Sts., 2 story and basement, 52 x 105 ft. rein.-con., brick and steel factory, plain foundation, to Hughes-Foulkrod Co., Commonwealth Bldg., $100,000.

Pa., Pittsburgh—C. J. Allen, c/o City Deposit Bank, 6112 Penn Ave., 1 story and basement, 175 x 296 ft. garage, Westtern Ave., to Feltyberger-Reed Constr. Co., Peoples Bldg. Archts. est. $60,000. Noted Apr. 19.

Pa., Williamsport—Keystone Glue Co., West Williamsport, 2 story and basement, 45 x 70 ft. rein.-con., and steel power plant, to Foundation Co., 120 Liberty St., New York City, 4 watertube boilers, cross-drum type, to E. Keeler Co., 238 West St. Total est. $200,000.

D. C., Wash.—Potomac Electric Power Co., 231 14th St., N. W., 4-bay extension to Bennings Power Station, steel and concrete, incl. 3 boilers, one 20,000 kw. turbo-generator, etc., to Stone & Webster, Inc., 147 Milk St., Boston. $1,500,000. Noted Apr. 5.

D. C., Wash.—Sanitary Grocery Co., Inc., 52 O St., N. W., 4 story and basement, 150 x 250 ft. warehouse and office, rein.-con., brick and steel, 4th and T Sts., N. E., to C. H. Tompkins, 1612 Park Rd., N. W., $400,000. Noted Apr. 5.

W. Va., Charleston—Kanawha Mfg. Co., Dixie St., 66 x 160 ft. rein.-con. factory and 2 story, 36 x 70 ft., rein.-con. office, to Ring-Hartman Co. Inc., 304-6 Pearson Bldg. Noted Jan. 25.

S. C., Clinton—Lydia Mills will build 3 story, 125 x 280 ft. cotton mill, by day labor. Lockwood, Greene & Co., Piedmont Bldg., Charlotte, N. C., engrs. Noted Mar. 1.

Ky., Louisville—Gibbs-Inman Co., 325 West Bway., 5 story, 99 x 218 ft. printery, 9th St. and Bway., to C. A. Koerner & Co., 318 East Burnett St. Archts. est. $300,000. Noted Apr. 12.

O., Barberton — Ohio Insulator Co., 1 story, 50 x 480 ft., brick and steel factory, to Austin Co., 16113 Euclid Ave., Cleveland. Archts. est. $75,000.

O., Cincinnati—Hanna Locomotive Stoker Co., 411 4th National Bank, 1 story, 90 x 140 ft., brick, steel and concrete factory, to Austin Co., 16112 Euclid Ave., Cleveland. Archts. est. $40,000.

O., Cleveland—Bash & Steverding, 12309 Phillips Ave., 1 story, 55 x 94 ft., brick and steel garage, plain foundation, 609 East 140th St., to W. A. Wallett, 18719 Ironwood Rd. Archts. est. $40,000.

O., Cleveland—National Screw & Tack Co., 2440 East 75th St., concrete work for 5 story and basement, 56 x 165 ft., brick and rein.-con. factory, Platt Ave., to S. W. Emerson Co., Union Bldg. Total cost $250,000. Noted Dec. 21.

Mich., Dearborn—Dearborn Publishing Co., 2 story and basement, 50 x 235 ft., rein.-con., steel and stone plant, plain foundation, to H. G. Christman Co., 315 Stevens Bldg., Detroit. Archts. est. $1,000,000.

Mich., Marquette — Upper Michigan Motors Corp., 2 story, 80 x 100 ft. rein.-con., brick and steel garage, plain foundation, Washington St., to Hegner Constr. Co., 989 Appleton St., Appleton, Wis. Archts est. $60,000.

Wis., Green Bay—Sheboygan Dairy Products Co., 520 Cedar St., 1 story, 50 x 57 ft. dairy, brick, rein.-con. and steel, plain foundation, to E. H. Regal, 134 South Adams St. Archts. est. $40,000. Noted Apr. 12.

Wis., La Crosse—La Crosse Plumbing & Heating Supply Co., South Front St., 4 story and basement, 60 x 120 ft., brick and concrete warehouse, plain foundation, to J. E. Wallace, 1117 Division St. Archts. est. $75,000.

Wis., Madison — C. B. Fritz, 138 North Frances St., will build 1 story, 50 x 110 ft. planing mill, brick, rein.-con. and steel, plain foundation, by day labor. Claude & Starck, Badger Annex, archts. Noted Apr. 12.

Wis., Madison—J. E. Teckemeyer, 807 University Ave., 2 story, 36 x 70 ft., brick, rein.-con. and steel service station, plain foundation, to W. H. Deason, 355 Washington Bldg. Archts. est. $40,000. Noted Mar. 22.

Wis., North Milwaukee — Dadmun-La Budde Co., 93 Michigan St., Milwaukee, 2 story, 90 x 120 ft., brick and timber, plain foundation, to W. F. Tubesing Co., 139 Chestnut St., Wauwatosa. Archts. est. $50,000.

Wis., Sturgeon Bay—Door County Fruit Growers Co., 1 story, 50 x 90 ft., brick, rein.-con. and steel plant, plain foundation, to L. M. Hansen Co., 113 West Walnut St., Green Bay. Archts. est. $50,000. Noted Jan. 18.

Wis., Tomahawk — Tomahawk Craft Paper Co., c/o Wausau Sulphate Fibre Co., Wausau, will build 2 story mill, 1 story, 34 x 110 ft. power house, brick, concrete and steel, plain foundation, and 800 ft. concrete dam, 19 ft. head, by day labor. L. A. De Guere, Wisconsin Rapids, engr. $1,250,000.

Wis., Wausau — A. Kickbusch Grocery Co., 126 West Washington St., 2 story and basement, 60 x 65 ft., brick and concrete warehouse, plain foundation, to Larson Constr. Co., 627 Werle Ave. Archts. est. $50,000. Noted Feb. 1.

Wis., Wauwatosa—Liberty Fdry. Co., 57th and State Sts., 1 story, 82 x 100 ft. foundry addition, brick and steel, plain foundation, to W. F. Tubesing Co., 139 Chestnut St. Archts. est. $45,000.

Ia., Des Moines—Eagle Iron Wks., Court and Southeast 3rd Sts., general contract 2 story and basement, 80 x 280 ft. factory, brick and stone, to J. Widerberg, 1116 Thompson St., $49,187. Noted Mar. 15.

Ia., Maquoketa—Eastern Iowa Electric Co., hydro-electric plant, here, to Price Bros. Co., 45 Davies Bldg., Dayton, O., $250,000.

Minn., Minneapolis — Northern States Power Co. will build 4 story and basement, 60 x 77 x 100 ft. shop and office, brick, concrete and steel, 2820 Marshall St. N.E., by day labor. $125,000. Byllesby Eng. & Management Corp., 208 South La Salle St., Chicago, engrs.

Minn., St. Paul — Brown & Bigelow, Quality Park, general contract 1 story, 21 x 44 x 276 ft. factory, brick and steel, University Ave. near Syndicate St., to W. M. Murphy & Son, 616 Endicott Bldg., $120,000.

Minn., St. Paul—Waldorf Paper Products Co., Myrtle St. near Hampden Ave., general contract 5 story and basement, 84 x 193 ft. factory, rein.-con., brick and tile, to P. Steenberg Constr. Co., 535 Endicott Bldg., $130,000. Noted Apr. 4.

Tex., Breckenridge—Columbian Carbon Black Products Co. will construct 6 buildings, concrete and steel, plain foundations, by day labor. $350,000. A. J. Flint, Breckenridge, archt.

Tex., Texas City—Texas Sugar Refining Co., refinery, along waterfront, to J. Monks & Son, 438 Bway., New York City, $5,500,000. Noted Mar. 15.

Wash., Kelso—Long-Bell Lumber Co., power plant at Longview, to C. Moore & Co., Sheldon Bldg., San Francisco, $2,000,000. Noted Sept. 21.

Calif., Fresno — Durant-Steeves Motor Co., 1 story, brick, garage, Van Ness St., to Trewhitt-Shields Co., Rowell Bldg., $40,000.

Calif., Los Angeles — Standard Auto Body Co., 1501 Central Ave., will build 2 story, 50 x 150 ft., brick factory, Central Ave., by day labor.

Calif., Los Angeles—Kleiber Motor Truck Co., 1938 South Main St., 1 story factory, brick, Santa Fe and 24th Sts., to Austin Co., Pacific Electric Bldg., $85,000.

Calif., Newman—Associated Milk Producers, 53 Clay St., San Francisco, creamery, concrete, here, to O. W. Britt, 1257 Arguello Blvd., San Francisco, $170,000. Noted Apr. 12.

Calif., San Diego—Vitrified Products Co., Spreckels Bldg., will construct group of buildings, by day labor. To exceed $150,000.

Calif., San Francisco—Gallway Lithograph Co., 515 Folsom St., 2 story factory addition, heavy mill construction, Folsom and 1st Sts., to G. P. Jensen, 320 Market St., $40,000.

Calif., San Francisco — J. Pasqualetti, Humboldt Bank Bldg., 2 story, rein.-con. garage, Sacramento St. near Leavon St., to American Concrete Co., 785 Market St., $40,000.

Calif., Stockton—Cowell Estate, c/o W. H. George, mgr., 2 Market St., San Francisco, 1 story, 80 x 100 x 150 ft. rein.-con. garage, Channel and Hunter Sts., here, to J. E. Shepherd, Yosemite Bldg., $50,000. Noted Feb. 22.

B. C., North Vancouver — See "Miscellaneous."

Buildings

PROPOSED WORK

Conn., Danbury — Dormitory—State Bd. Educ., Hartford, plans 3 story, brick, plain foundation, at State Normal School, here. $225,000. Engineer and architect not selected.

Conn., Darien—Gymnasium and Dormitory—Cherry Lawn School having plans prepared by W. R. Steinmetz, Stamford, 3 story and basement, 40 x 70 ft., brick and steel, plain foundation. $150,000.

Conn., Hartford — Apartment — R. A. D'Avino, archt., 647 Main St., preparing plans two 3 story, 40 x 180 ft., brick, plain foundations. $200,000. Owner's name withheld.

Conn., Hartford—Office—Central Co. having plans prepared by Whiton & McMahon, 36 Pearl St., 6 story, 70 x 150 ft., brick and stone, plain foundation, Main and Asylum Sts. $300,000. S. Elisner, 902 Main St., pres.

Conn., Hartford — School — Monroe St. School rejected bids school, 32 class rooms. $200,000. Will revise plans and readvertise. I. A. Allen, Jr., 100 Farmington Ave., archt.

Conn., Hartford—Theatre, etc.—N. A. Schatz, 1029 Main St., interested in syndicate which plans 60 x 100 ft., State St. $200,000. Engineer and architect not selected.

Conn., Meriden—High School—Bd. Educ. having plans prepared by W. T. Arnold, 34½ West Main St., 2 story and basement, brick and stone, plain foundation. $750,000. Noted Mar. 29.

Conn., Meriden—Temple—Masonic Lodge, c/o H. Wales Lines, 134 State St., plans 2 or 3 story, brick and granite, plain foundation, East Main St. $200,000. Engineer and architect not selected.

Conn., Middletown—Temple—Five Local Masonic Chapters plan brick, plain foundation, Court St. To exceed $150,000. Address R. E. Molander, pres. Fellowcrafts Club. Engineer and architect not selected.

Conn., New Haven — Museum — Day & Klauder, archts., 925 Chestnut St., Phila., soon let contract 3 story, 175 x 243 ft. brick, stone and steel, plain foundation. Whitney Ave., here, for Yale University. $1,000,000.

Conn., Norwich — Hospital — Norwich State Hospital plans 2 and 3 story ward buildings, brick and stone, plain foundations, $200,000 and $250,000 respectively; nurses home, 3 story, brick, plain foundation, $150,000. F. S. Wilcox, supt. Engineer and architect not selected.

Conn., Wallingford—Club and Business—Wallingford Y.M.T.A.B. having plans prepared by W. T. Arnold, 31½ West Main St., Meriden, 3 story, brick, plain foundation.

N. Y., Jamaica—Office—Louvain Constr. Co., c/o F. A. Rooke, archt. and engr., 15 East 40th St., New York, soon takes bids brick, steel and stone, plain foundation. Garden St. $300,000.

N. Y., New York—Gymnasium—Fordham University, Fordham Rd., soon lets contract 2 story, cut stone, brick and steel on campus. $250,000. E. G. Perrot, 233 Bway., archt. and engr. Noted Mar. 29.

N. Y., New York—Market—Dept. Pub. Markets, Municipal Bldg., soon takes bids 7 story, 310 x 330 ft., brick and concrete, plain foundation, Harlem River and Cromwell St. $5,000,000. Private plans.

N. Y., New York—School—Bronx Co. Society for Prevention of Cruelty to Children, c/o Ralderes & La Velle, archts. and engrs., 505 5th Ave., having plans prepared 3½ story, brick, steel and stone, plain foundation. Grand Concourse and McClellan St. $250,000.

N. Y., Ogdensburg—Office, etc.—Ogdensburg Power & Light Co. plans 3 or 4 story, tapestry brick, concrete and steel office, salesroom and storage building, Ford and Caroline Sts. $150,000-$160,000.

Buildings (Continued)

N. Y., Rochester—Bank—East Side Savings Bank, Main St. E. and Clinton Ave., had plans prepared by L. Stern, 1017 Chamber of Commerce Bldg., altering and stone, concrete and steel addition. To exceed $150,000.

N. Y., Rochester—Bank—Lincoln-Alliance Bank purchased site northeast corner North Goodman and East Main Sts. and plans branch banking building. $150,000-$175,000.

N. Y., Roosevelt—School—Bd. Educ. rejected bids Feb. 27, brick, steel and stone, plain foundation. $150,000. Will readvertise. Tooker & Marsh, 101 Park Ave., New York City, archts. and engrs. Noted Feb. 1.

N. Y., St. Johnsville—School—Bd. Educ. soon takes bids brick, concrete and steel. $150,000-$175,000. Nichols & Gardiner, 46 North Pearl St., Albany, archts. Noted May 11.

N. Y., Schenectady — Hotel — Building Com. Chamber of Commerce plans 215 room hotel. $1,000,000.

N. Y., Schenectady—School—Bd. Educ. plans brick, concrete and steel school to replace present Elway. School. $200,000.

N. J., Kearny (Arlington, P. O.)—Hospital—West Hudson Hospital plans campaign to raise funds for Stumpf Memorial Hospital, Bergen Ave. and Elm St. $200,000. G. Alexander, c/o Nairn Linoleum Co., Belgrove Dr., pres. Engineer and architect not selected.

N. J., Newark—Bath House—City having plans prepared by R. W. Erler, 45 Clinton St., 1 story, 80 x 80 ft., brick, plain foundation, Morris Ave. $175,000. Engineer not selected.

N. J., Newark—Prison—Essex Co., Court House, having plans prepared by C. W. Wands, 59 Central Arcade, Caldwell, 4 story, 44 x 115 ft. prison $208,000. Runyon & Carey, 843 Broad St., engrs.

Pa., Altoona—Cathedral—Altoona Catholic Diocese, c/o J. J. McCort, 1213 13th St., bishop, having plans prepared by G. I. Lovatt, 4th and Walnut Sts., Philadelphia, and takes bids in 2 months for 2 story and basement, 120 x 210 ft., rein.-con., steel and stone, 13th Ave. $500,000.

Pa., Cresson — Clubhouse — Summitt Country Club, C. L. Watkins, pres., purchased 60 acre farm and will alter and erect 2 story, 50 x 50 ft. addition to house, and build golf course, Cresson Rd. $150,000. Engineer or architect not announced.

Pa., Cynwyd—Exchange—J. T. Windrim, archt., Commonwealth Bldg., Phila., soon takes bids 2 story and basement, 150 x 200 ft. brick and steel, plain foundation, here, for Bell Telephone Co., 13th and Arch Sts., Phila. $200,000.

Pa., Indiana—Theatre—W. P. McCarthy, Jefferson Theatre, Punxsutawney, having plans prepared by L. Lampert, Cutler Bldg., Rochester, N. Y., 2 story and basement, 71 x 200 ft. brick, steel and tile. $150,000.

Pa., Johnstown—High School—Bd. Educ. having plans prepared by J. E. Adams, Nemo Bldg., 2 story and basement, brick and stone, Somerset St. $900,000.

Pa., Pittsburgh — Community — Kingsley Assn., Inc., 43 Fernando St., having plans prepared by W. F. Struthers, Publication Bldg., 2 story and basement, 98 x 110 ft., concrete, brick and steel, Larimer and Auburn Sts. $200,000.

Pa., Pittsburgh—School—Bd. Educ., Fulton Bldg., having plans prepared by S. F. Heckert, Bessemer Bldg., 2 story, rein.-con. and brick, Boggs Ave. $160,000.

Pa., Spangler — Nurses Home — Miners Hospital Assn. having plans prepared by W. R. Myton, 1204 1st Natl. Bank Bldg., Johnstown, 3 story and basement, 90 x 100 ft. addition to hospital, Main St. $150,000.

Pa., West Chester—Hospital—Memorial Hospital Assn. soon takes bids 2 story and basement, brick and stone. $600,000. Day & Klauder, Franklin Bank Bldg., Phila., archts.

Pa., White Haven—Sanatorium—Jewish Consumptive Aid Assn. plans fireproof sanitorium. $250,000. Engineer and architect not announced.

Pa., Williamsport—Clubhouse—B. P. O. E. rejected bids 6 story, 104 x 208 ft., East 4th St. Will readvertise. Noted Nov. 16.

W. Va., Charleston—Store and Office—M. B. Goldman, 103 Capitol St., having plans prepared by Millspaugh & Carmichael, 67 East Long St., Columbus, O., 8 story and basement, 80 x 125 ft., rein.-con., brick and stone, Summers St. $175,000.

N. C., Asheville—Hotels—G. Vanderbilt and Battery Park Hotel Companies, soon let contract for above named hotels. $1,500,000. W. L. Stoddart, 9 East 40th St., New York City, archt. Noted Mar. 29.

N. C., Burlington—Hotel—Burlington Hotel Corp. having plans prepared by H. Hartman, Greensboro, 6 story and basement, 98 x 131 ft., brick, Main and Maple Sts. $250,000. R. L. Holt, pres. Noted Oct. 12.

N. C., Chapel Hill—Church—Methodist Church had plans prepared by J. G. Rogers, 367 Lexington Ave., New York City, and soon takes bids 280 x 300 ft., brick, with 207 ft. spire. $250,000. M. T. Plyler, Durham, chn. Building Com.

N. C., Kinston—College—State Legislature, Raleigh, appropriated $500,000 new buildings for Caswell Training School, here. H. A. Underwood, Commercial Bank Bldg., Raleigh, engr.

Fla., Sarasota—Hotel—A. McAnsh plans hotel, Central Ave. $350,000.

Ky., Bowling Green—Station—Louisville & Nashville Ry., 10th St. and Bway., Louisville, plans station and yards, here. $360,000. G. R. Smiley, ch. engr. of construction.

Ky., Louisville—Store—Bensinger Outfitting Co., 315 West Market St., having plans prepared by Joseph & Joseph, Francis Bldg., 5 story, 50 x 200 ft., brick and terra cotta, 313-315 West Market St. $200,000.

O., Cleveland—Apartment—B. Benjamin, 9917 Parkgate Ave., had plans prepared 4 story, 50 x 201 ft., brick and concrete, plain foundation, 2036 East 100th St. $300,000. Private plans.

O., Cleveland—Apartment—W. P. Yelsky, 14702 Superior Ave., had plans prepared by M. Altschuld, 5116 Woodland Ave., 2 story and basement, 72 x 114 ft., brick and timber, plain foundation, Superior Rd. $150,000.

O., Cleveland—Commercial—Twenty-Nine Twenty-One Euclid Co., c/o J. Laronge, 214 Williamson Bldg., plans 4 story brick, steel and concrete, East 30th St. and Euclid Ave. $250,000. Engineer and architect not selected.

O., Cleveland — Hospital — Cleveland Homeopathic Medical Society, c/o L. E. Siemon, pres., 423 Erie Bldg., plans brick, steel and concrete hospital group, 724 Huron Rd. $2,000,000. Engineer and architect not selected.

O., Cleveland—Office—L. J. Lesser, 38 South Dearborn St., Chicago, and Paschen Bros., 111 West Washington St., Chicago, having plans prepared by W. W. Ahlschlager, 65 East Huron St., Chicago, 16 story and basement, 82 x 150 ft., brick, steel and concrete addition, concrete pile foundation, East 6th St. and Superior Ave., here. $2,000,000.

O., Cleveland — Store, Apartment and Loft—Paul Bros., c/o G. Paul, Fidelity Mortgage Bldg., having plans prepared by J. F. Steffens, Fidelity Mortgage Bldg., 3 story and basement, 85 x 300 ft. store and apartment and 3 story and basement, 85 x 300 ft. store and loft building, brick, steel and concrete, East 43rd St. and Euclid Ave. $400,000 each.

O., Cleveland — Store and Office — M. Marmorstein, Ulmer Bldg., having plans prepared by S. H. White, Schofield Bldg., 10 story, 45 x 133 ft., brick, steel and concrete, East 9th St. and Vincent Ave. $300,000.

O., Dayton—Apartment—J. I. Geiger Co., 409 Dayton Savings & Trust Bldg., plans 3 story and basement, 40 x 200 ft., brick and terra cotta, plain foundation, Riverside St. $150,000. Private plans.

O., Dayton — Store — Rike-Kumler Co., 2nd and Main Sts., plans 8 story and basement, 50 x 200 ft., rein.-con. and brick, plain foundation, West 2nd St. $500,000. Engineer and architect not selected.

O., Dayton—Store—M. L. Simons, Main St. plans remodeling 4 story, 25 x 160 ft. and constructing 2 story terra cotta top addition, North Main St. $175,000. Engineer and architect not selected.

O., Dayton — Temple — Masonic Temple Co., 134 South Main St., plans stone, brick and rein.-con., plain foundation, Riverview St. $850,000. Engineer and architect not selected.

O., Portsmouth—Hotel—A. Ruggles, 6th and Troy Sts., having plans prepared by De Voss & Donaldson, 1st National Bank Bldg., 6 story and basement, 60 x 100 ft., brick, stone and concrete. $200,000.

O., Shaker Heights (Cleveland, P. O.)—School—University School, c/o A. C. Brown, 4403 St. Clair Ave., Cleveland, plans administration, recitation halls, dormitories and gymnasium, 4 story, brick and steel, Warrensville Center Rd., here. $1,000,000. Engineer and architect not selected.

Mich., Detroit—Hotel—Varney & Varney, archts., 1422 Washington Blvd., preparing plans 8 story and basement, 63 x 90 ft., brick, steel and terra cotta, plain foundation, Park Blvd. $250,000. Owner's name withheld.

Mich., Lansing—Temple—Masonic Temple Assn., Amer. State Savings Bank Bldg., having plans prepared by E. A. Bowd, 127 West Allegan St., 7 story and basement, 100 x 164 ft. rein.-con., brick and steel, plain foundation.

Mich., River Rouge—(Detroit, P. O.)—Office—Ford Motor Co., Highland Park (Detroit, P. O.) had plans prepared by A. Kahn, 1000 Marquette Bldg., Detroit, 1 story, 51 x 146 ft., and 2 story, 40 x 113 ft. and 40 x 145 ft., rein.-con. and brick additions, plain foundations. $150,000.

Ill., Chicago—Apartment—V. C. Magill, c/o W. W. Ahlschlager, archt., 65 East Huron St., having plans prepared 7 story, rein.-con., brick and steel, Lake Shore Dr. and Sherwin Ave. $1,250,000.

Ill., Chicago — Apartment-Hotel — P. T. Johnstone, Archt., 190 North State St., preparing plans 5-story, 50 x 95 ft., rein.-con., brick and steel, Kenmore and Bryn Mawr Aves. $350,000. Owner's name withheld.

Ill., Chicago—Hotel—Hotel Harper Corp., 6236 Harper Ave., plans 11 story, 182 x 185 ft., rein.-con., brick and steel, 6236-74 Harper Ave. $4,500,000. Fridstein & Co., 111 West Washington St., engrs.

Ill., Chicago—Hotel—Jackson Shore Hotel Co., c/o Fridstein & Co., engrs., 111 West Washington St., plans 11 story, 193 x 324 ft., rein.-con., brick and steel, 5450-84 South Shore Dr. $5,550,000.

Ill., Chicago—Hotel—Weller & Rippel, Inc., 140 South Dearborn St., preparing plans 16 story, 100 x 150 ft., rein.-con., brick and steel, Walton St. near Delaware Ave. $3,000,000. Owner's name withheld.

Ill., Chicago—Store—The Fair Co., 140 South State St., plans 4 story, 190 x 351 ft., rein.-con., brick and steel addition. $2,000,000. Mundie & Jensen, 39 South La Salle St., archts.

Ill., Evanston—Apartment—J. A. Lindstrand, archt., 1661 North Oakley Blvd., Chicago, preparing plans 3-story, 107 x 175 ft., rein.-con., brick and steel, Mulford and Custer Sts. $150,000. Owner's name withheld.

Wis., Mayville—High School—School Bd. rejected bids 2 story and basement, brick, tile and concrete, plain foundation. $200,000. Will readvertise later. Parkinson & Dockendorff, Linker Bldg., La Crosse, archts. Noted Apr. 5.

Wis., Milwaukee — Church — Kenwood Methodist Episcopal Congregation, c/o Leenhouts & Guthrie, archts., 424 Jefferson St., preparing plans 2 story, 79 x 105 ft., stone and concrete, plain foundation, Kenwood Blvd. $200,000.

Minn., Minneapolis — Apartment — Young & Kennedy, 807 Andrus Bldg., having plans prepared by C. J. Bard, 2 North 10th St., 3 story and basement, 44 x 142 ft., rein.-con., brick, tile and stone, 1368 LaSalle Ave. $175,000.

Kan., Wichita—Home—York Rite Masonic Assn. having plans prepared by Eberson & Weaver, Orpheum Bldg., 6 story and basement, 75 x 134 ft., rein.-con. and brick, Market and William Sts. $375,000.

Mo., St. Louis—Apartment and Store—Local Syndicate, c/o F. J. Cornwall, 111 North 7th St., plans 5-story, 100 x 200 ft., rein.-con. and brick, plain foundation, Grand Blvd. and Botanical Ave. $500,000. Engineer and architect not selected.

Mo., Webster Groves—Apartment—O. Rosegren, International Life Bldg., St. Louis, plans several 6 story, 50 x 90 ft., fireproof construction, Lockwood Ave., here. $1,000,000. P. J. Bradshaw, International Life Bldg., St. Louis, archt.

Tex., Cleburne—Hotel—Cleburne Hotel Co. having plans prepared by H. O. Atkinson, archt. and engr., 806 Taylor St., Ft. Worth, 4 story and basement, $150,000.

Tex., Dallas—Home—C. C. Young Memorial Home (Methodist Church Property), having plans prepared by Dewitt & Lemon, engrs., Southwestern Life Bldg., 2 and 3 story and basement, rein.-con. and brick, plain foundation, Ft. Worth Pike. $200,000.

Tex., Dallas — Theatre — J. H. Yeargan, Jr., 4407 Live Oak St., takes bids in May, 3 story and basement, 75 x 105 ft., steel and brick, plain foundation, Masten, Bryan and Pacific Sts. $150,000. W. H. Keyser, 4615 Bryan St., archt. and engr.

Tex., Denison—Hotel—Denison Hotel Co., c/o Chamber of Commerce, had plans prepared 6 story and basement, 120 x 150 ft., rein.-con. and brick, plain foundation, Main St. $300,000. Architect not announced.

Tex., Galveston—Bank and Office—A. C. Bossom, archt. and engr., 680 5th Ave., New York City, soon lets contract 10 story, 85 x 120 ft., concrete, steel and brick, for Texas Bank & Trust Co., Galveston. $750,000. Noted Jan. 25.

Tex., Texarkana — Theatre — Sanger Amusement Co. had plans prepared 3 story 120 x 150 ft., rein.-con. and brick, plain foundation, Broad St. $150,000. Engineer and architect not announced.

Tex., Tyler—Schools—Having plans prepared by De Witt & Lemmon, archts. and engrs., Southwestern Life Bldg., Dallas, junior high school with gymnasium, domestic science department, manual training, etc., also improvements in grammar school, rein.-con. and brick, plain foundations. $250,000. Noted Apr. 5.

Buildings (Continued)

Okla., Pawhuska—Hotel—C. A. and J. L. Duncan, had plans prepared by E. Forsblom, 305 Sedgwick Bldg., Wichita, Kan., 5 story, 52 x 190 ft., rein.-con. and steel. $200,000. Noted Aug. 17.

Wash., Tacoma—Church—First Baptist Church had tentative plans prepared by Heath, Gove & Bell, National Realty Bldg., church. $250,000.

Calif., Berkeley — School — Armstrong School for Private Secretaries, 2024 University Ave., had plans prepared and soon takes bids 2 story, rein.-con., Kittridge St. and Harold Way. $150,000. W. H. Ratcliff, Jr., 1st Natl. Bank Bldg., archt.

Calif., Glendale—Hotel and Apartment—Ambronini Hotel Co. having plans prepared by G. M. Lindley, American Bank Bldg., Los Angeles, 5 story and basement, rein.-con. To exceed $250,000.

Calif., Huntington Park—School—Huntington Park Union High School Dist. voted $500,000 bonds for new school buildings and equipment. Noted Mar. 1.

Calif., Los Angeles—Apartment—Russell & Alpaugh, archts., Story Bldg., preparing plans 4 story, 73 x 150 ft., brick, 6th St. and St. Andrews Pl. $200,000. Owner's name withheld.

Calif., Los Angeles—Office—R. Duncan, 1151 West 6th St., having plans prepared by Dodd & Richard, Brack-Shopps Bldg., 80 x 175 ft., rein.-con., St. Paul Ave. To exceed $250,000.

Calif., Los Angeles—Office—I. C. Frued, c/o Walker & Eisen, archts., Pacific Finance Bldg., having plans prepared 13-story, rein.-con., brick and terra cotta, Hill St. To exceed $500,000.

Calif., Los Angeles — School — Cumnock School for Girls, c/o A. S. Heineman, archt., San Fernando Bldg., had plans prepared brick and concrete, 3rd and Las Palmas Aves. $175,000.

Calif., Oakland—Bank and Office—American Bank, 16th St. and San Pablo Ave., plans 11 story and basement, annex, fireproof. To exceed $150,000. G. W. Kelham, Sharon Bldg., San Francisco, will probably be selected to design plans.

Calif., Oroville—Lodge, Store and Office—Oroville Lodge of Odd Fellows, plans 3 story and basement, (ultimately 6 story) fireproof. To exceed $150,000. Engineer and architect not selected.

Calif., Pasadena—Bank and Office—Pacific Southwest Trust & Savings Bank, Los Angeles, having plans prepared by Curlett & Beelman, Union Bank Bldg., Los Angeles, 8 story and double basement, 150 x 200 ft., brick, steel and terra cotta, here.

Calif., San Diego—Library—Voted $250,000 bonds constructing 2 wings to Central Library, also branch buildings in La Jalla, Ocean Beach and University Heights. F. A. Rhodes, city engr. Noted Feb. 8.

Calif., San Francisco—Store and Office—T. C. Kleruiff, Balboa Bldg., had preliminary plans prepared by B. G. McDougall, 381 Bush St., 6 story and basement, rein.-con., Sansome St. near Pine St. $150,000.

Calif., San Francisco—Store and Office—A. F. Rousseau, French Bank Bldg., having plans prepared by D. C. Coleman, 110 Sutter St., 5 story and basement, fireproof, Market St. near 7th St. To exceed $150,000.

Calif., San Pedro—Store and Apartment—L. Del Carlo, c/o L. Jones, archt., Grosse Bldg., Los Angeles, having plans prepared 4 story, brick, here. $150,000.

Calif., Santa Monica—Apartment and Store—H. L. McMahan had plans prepared 3 story, 150 x 175 ft., brick, Santa Monica Blvd. To exceed $150,000. Engineer and architect not available.

Calif., Stockton — Auditorium — City to vote on an additional $200,000 bonds for auditorium. G. Allen, L. Stone and W. J. Wright, 41 South Sutter St., archts. Noted Apr. 5.

Que., Montreal — Hospital — Sisters of Providence, Hospital for Incurables, 149 Fullum St., plan to rebuild hospital recently destroyed by fire. $1,000,000.

Que., St. Anne de Beaupre—Church—Parish of St. Anne de Beaupre having plans prepared by M. Roison, Paris, France, J. F. Daoust, St. James St., Montreal, and S. N. Audet, Sherbrooke, 192 x 312 ft. church with two 225 ft. steeples, 26 altars, etc. $1,000,000.

Ont., Ottawa—Bank—Bank of Nova Scotia, 116 Wellington St., soon takes bids 99 x 100 ft., Sparks St. $200,000. Engineer or architect not selected.

BIDS DESIRED

Conn., Bridgeport—Church—J. A. Jackson, archt., 185 Church St., New Haven, taking bids 1 story, 78 x 176 ft., brick, stone and steel superstructure, East Main St., for St. Charles Roman Catholic Church. $150,000.

Conn., New Haven—Orphanage—Norton & Townsend, archts., 839 Chapel St., taking bids group of buildings, rein.-con., steel and brick, plain foundation, Whitney Ave., for New Haven Orphan Asylum, c/o architects. $500,000. Noted Feb. 22.

N. Y., Buffalo—School—May 7, by Bd. Educ., 1401 Telephone Bldg., 2 story and basement, 114 x 220 ft., rein.-con., brick, stone and terra cotta, Parkside Ave. $500,000. Associated Buffalo Architects, 232 Delaware Ave., archts.

N. Y., Elmira—May 7, by Y. M. C. A., 322 East Market St., new concrete, brick and steel. $250,000. Pierce & Bickford, 120 Lake St., archts. Noted Mar. 16, 1922.

N. Y., Hornell—School—May 11, by Bd. Educ., rebuilding brick, Lincoln St., recently destroyed by fire. $240,000. Tooker & Marsh, 101 Park Ave., New York City, archts. and engrs. Noted Mar. 15.

N. Y., New York—Apartment—Fred F. French Co., 350 Madison Ave., will build 15 story, brick, steel and stone, plain foundation, Park Ave. Work will be done by separate contracts. Private plans.

N. Y., New York—Loft—Magoba Constr. Co., 103 Park Ave., will build 12 story, 77 x 100 ft., brick, steel and stone, plain foundation, 146-152 West 29th St. Work will be done by separate contracts. Springsteen & Goldhammer, 32 Union Sq., archts. and engrs.

N. Y., Old Forge—Schools—May 22, by Bd. Educ., brick, concrete and steel additions to Old Forge Grade School and high school in town of Webb. $150,000. Fuller & Robinson Co., 95th St., Albany, archts.

N. Y., Perry—Hotel—R. Smith, pres. Chamber of Commerce taking bids brick, concrete, steel and terra cotta. To exceed $150,000. Dreher & Churchman, Otis Bldg., Phila. archts. Noted Mar. 1.

N. Y., Syracuse—High School—May 14, by Bd. Contr. & Supply for 19th Ward Junior high school, 3 story, 140 x 200 ft., rein.-con., brick and steel, Lafayette Ave. $480,000. T. H. Mather, City Hall, archt. and engr.

N. J., Bayonne—School—May 3, by Bd. Educ., 717 Bway., brick, steel and stone addition to Horace Mann School, plain foundation, Bway. and Ave. C. $250,000. Private plans.

N. J., Bergenfield—School—May 7, by Bd. Educ., Summit and Taylor Aves., new school. E. Sibley, archt.; adv. this issue.

N. J., Hightstown—High School—May 15, by Bd. Educ., 2 story, 45 x 165 ft. and 61 x 72 ft., brick, terra cotta and steel. $150,000. Guilbert & Betelle, 546 Broad St., Newark, archts.

N. J., Trenton—Exchange—J. T. Windrim, archt., Commonwealth Bldg., Phila., taking bids 7 story, 51 x 52 ft. and 2 story, 20 x 143 ft. additions, brick and stone, 216 East State St., here, for Delaware & Atlantic Telephone & Telegraph Co. $500,000.

Pa., Bryn Mawr—School—Baldwin School taking bids 2½ story and basement, 91 x 147 ft. rein.-con., brick, steel and stone, plain foundation. $500,000. Allen & Collins, 75 Newberry St., Boston, Mass., archts.

Pa., Clearfield—Church—May 10, by Building Com. West Side Methodist Church, 2 story and part basement, 85 x 135 ft. rein.-con., brick and steel, plain foundation, Nichols and New Sts. $150,000. C. G. Johnston, chn.

Pa., Derry—High School—May 5, by Bd. Educ., 3 story and basement, 110 x 120 ft. brick, rein.-con. and steel. $200,000. Bartholomew & Smith, Keenan Bldg., Pittsburgh, archts.

Pa., Harrisburg—Hotel—Penn Harris Hotel, c/o W. L. Stoddart, archt. and engr., 9 East 40th St., New York City, taking bids and opens same about May 1, brick, steel and stone. $500,000.

Pa., Phila.—Apartment—Sugarman, Hess & Barger, archts., 16 East 43rd St., New York City, taking bids 15 story and basement, 42 x 95 ft., rein.-con., brick, steel and stone, 19th and Rittenhouse Sts., for Rittenhouse Apartment Co., c/o architect. $2,000,000.

Pa., Phila.—Church—Stuckert & Co., archts., Crozier Bldg., taking bids 1 and 2 story and basement, 75 x 130 ft. rein.-con., brick, steel and stone, plain foundation, 50th and Locust Sts., for 1st Reformed Church, 4948 Locust St. $250,000.

Pa., Phila.—High School—May 5, by Bd. Educ., 19th and Chestnut Sts., 3 story and basement, 148 x 180 ft. rein.-con., brick and steel, plain foundation, Anne and Tulip Sts. $750,000. Private plans.

Pa., Pittsburgh—Gymnasium—May 1, by Carnegie Institute of Technology, Schenley Park, and H. H. Hornbostel, archt., Century Bldg., 3 story and basement, brick, steel and tile, Woodlawn Ave. $500,000. Noted Apr. 5.

Pa., Swarthmore—Apartment—Stuckert & Co., archts., Crozier Bldg., Phila., taking bids 3 story and basement, brick, steel and stone, plain foundation, Chester Pike, here, for Swarthmore Apartment House Co., $750,000.

O., Athens — School — May 16, by Bd. Educ., 2 story, rein.-con. and brick, plain foundation. $300,000. W. E. Buttner, 911 Locust St., St. Louis, Mo., archt. Noted Feb. 22.

O., Cleveland — Apartment — Narosny & Libhaber, 3225 East 116th St., taking bids and open same about May 1, 3 story, 37 x 145 ft., brick and steel, 1824 East 97th St. $150,000. M. Weis, 617 Union Bldg., archt. Noted Apr. 5.

O., Cleveland — Store, Apartment and Theatre—J. H. MacDowell, archt., Bulkley Bldg., taking bids 2 story, brick, steel and concrete, Detroit Rd. and Blount Ave., for Four Way Impvt. Co., c/o R. E. Thulen, mgr., National City Bldg. $150,000.

O., Cleveland—Store and Office—May 1, by S. H. White, archt., 1032 Schofield Bldg., 6 story, 43 x 132 ft., brick, steel and concrete, East 9th St. and Vincent Ave., for Vincent-East 9th St. Co., c/o M. Marmorstein, Ulmer Bldg. $300,000.

O., Columbus—School—May 26, by Bd. Educ., Town and High Sts., 2 story, 72 x 166 ft., brick and concrete, Lincoln Park. $175,000. H. D. Smith, 50 East Town St., archt. Noted Dec. 14.

O., Rock Creek—School—May 1, by Bd. Educ., 2 story and basement, 12 room, brick and concrete. $150,000. Fulton, Taylor & Cahill, 8120 Euclid Ave., Cleveland, archts. Noted Sept. 14.

Mich., Algonac—High School—Apr. 30, by R. T. Gilbert, secy. Bd. Educ. Dist. 1, 2 story and basement, 89 x 150 ft. rein.-con., brick and steel, plain foundation. $200,000. W. S. Holmes Co., Tussing Bldg., Lansing, archt.

Mich., Detroit—Apartment—May 1, by M. Hamburger, 535 Dime Bank Bldg., 4 story and basement, 125 x 168 ft. brick, steel and stone, plain foundation. C. N. Agree, 1133 Book Bldg., archt.

Ill., Chicago—Apartment—A. H. Quitsow, archt., 11 South La Salle St., receiving bids 3 story, 112 x 210 ft., rein.-con., brick and steel, Paulina St. near Thorndale St. $250,000. Owner's name withheld.

Ill., Chicago — Apartment — Steinborn & Simon, archts., 111 North Dearborn St., receiving bids 3 story and basement, 100 x 125 ft., rein.-con., brick and steel, Keeler St. and 5th Ave. $150,000. Owner's name withheld.

Ill., Chicago—Hotel—C. D. McLane, archt., 127 North Dearborn St., receiving bids 6 story, rein.-con., brick and steel, 4144 Sheridan Rd. $450,000. Owner's name withheld.

Ill., Chicago — Hotel — Realty Building Constr. Co., 177 North State St., receiving bids 4 story, 50 x 150 ft., rein.-con., brick and steel, 5047-49 Kenmore Ave. $150,000. R. Gregori, 155 North Clark St., archt.

Ill., Rockford—Apartment—A. H. Hecht, archt., 155 North Clark St., Chicago, receiving bids 6 story, 150 x 158 ft., rein.-con., brick and steel, Church, Mulberry and Peace Sts., here, $400,000. Owner's name withheld.

Ill., Rockford—Apartment—Eliel & Eliel, archts., Steward Bldg., receiving bids 3 story and basement, 136 x 260 ft., rein.-con., brick and steel, Seminary and South 3rd Sts., for E. Oppenheim, 218 South Main St. $250,000. Noted Mar. 29.

Wis., Appleton—Temple—Apr. 30 (change of date), by Appleton Masonic Temple Assn., and Leenhouts & Guthrie, archts., 424 Jefferson St., Milwaukee, 2 and 3 story, 62 x 104 ft. and 46 x 50 ft. steel and concrete, plain foundation. $150,000. Noted Apr. 12.

Wis., Milwaukee — School-Auditorium—Backes & Pfaller, archts., 216 West Water St., taking bids brick, tile and concrete, plain foundation, Center St., for St. Catherine Congregation, c/o A. C. Reichard, secy., 86 Mason St. $150,000. Noted Feb. 8.

Wis., Platteville—Temple—Melody Lodge 2, c/o J. Beuris Jr., taking bids 3 story, 90 x 100 ft., brick, rein.-con. and steel, plain foundation. E. Tough, Conklin Bldg., Madison, archt. Noted Mar. 29.

Wis., Pulaski — Church — May 17, by Church of Assumption of Blessed Virgin Mary, superstructure for 76 x 181 ft., brick and tile. $150,000. Worthmann & Steinbach, 155 North Clark St., Chicago, archts. Noted Dec. 14.

Wis., Racine — Auditorium — May 12 (change of date), by Bd. Pub. Wks., 1 and 2 story, brick and concrete, plain foundation, for Memorial Hall Assn., c/o Bd. Pub. Wks. $300,000. H. Shaw, 39 South State St., Chicago, archt. Noted Apr. 5.

Minn., Glen Lake (Hopkins P. O.) — Sanatorium—May 8, by Hennepin Co. Sanatorium Comn. and A. P. Erickson, aud. Hennepin Co. (Minneapolis), 6 story and basement, 40 x 180 ft. infirmary, employees building, addition to nurses home and 2 garages, rein.-con., brick and tile. $500,000. Rose & Harris, 318 Auditorium Bldg., Minneapolis, engrs. Sund & Dunham, 512 Essex Bldg., Minneapolis, archts. Noted June 22.

Buildings (Continued)

Kan., Kansas City—High School—May 7, by Bd. Educ., constructing North East Junior High School, 3 story and basement, 4th St. and Troup Ave. $350,000. Rose & Peterson, 432-440 Brotherhood Blk., archts.

N. D., Minot—Hospital—Apr. 30, by Trinity Lutheran Hospital Assn., 5 story and basement, 38 x 120 ft. rein.-con., brick, stone and tile. $150,000. G. H. Bugenhagen, Minot, archt.

Mo., Pleasant Hill—High School—May 3, by W. H. Saylor & Co., archts., 306 Mutual Bldg., Kansas City, rein.-con., brick, steel and stone, for Bd. Educ. $150,000. Noted Mar. 15.

Tex., Dallas—Hospital—J. H. Croseclose, supt. Dallas Methodist Sanitarium, taking bids 4 story and basement, rein.-con. and brick, plain foundation, Oak Cliff St. $1,500,000. De Witt & Lemmon, Southwestern Life Bldg., archts. Noted Nov. 16.

Okla., Tulsa—Office and Store—C. A. McDonald, archt., 405 Security Bldg., receiving bids 50 x 140 ft., rein.-con., brick and stone, Main and Arches St., for C. Tingley, Wright Bldg. $200,000.

BIDS RECEIVED

N. Y., Brooklyn—School—Bd. Educ., 500 Park Ave., New York, Apr. 19, P. S. 100, 5 story, 178 x 195 ft., brick, steel and stone, plain foundation, West 3rd St. near Sheepshead Bay Blvd., here, from Concord Constr. Co., 476 Seneca Ave., $679,800. Noted Apr. 5.

N. Y., New York—Schools—Bd. Educ., 500 Park Ave., Apr. 19, P. S. 66, Jennings St. and Longfellow Ave., and P. S. 67, East 179th St. between Mohegan and Honeywell Aves., from G. Dekemple, $1,019,950 and $1,038,000 respectively; P. S. 70, Weeks Ave., from T. Dwyer, Bway. and 216th St., $1,070,000. All brick, steel and stone. Noted Apr. 5.

Pa., Brookville—Court House—Jefferson Co., remodeling and building 2 story and basement, 32 x 64 ft. addition, brick and steel, from H. J. Conrath, Ariel Bldg., Erie, $249,974. Noted Jan. 4.

O., Cincinnati—School—Bd. Educ., Mar. 26, Hartwell School, 2 story, 136 x 336 ft., brick, Springfield Pike, excavation, rein.-con. and carpentry work, from D. Meinken & Son, 2126 Western Ave., $176,344, add $3,120 for Campbell metal windows and credit $600 for omitting wood bases in class room, total contract $178,864; brickwork, hollow tile partitions, furring, and cut stone work, from E. A. Curry, 1855 Kinney W. H., $125,529. Noted Mar. 1.

O., Oxford — Dormitory — Bd. Trustees Miami University, 3 story, 80 x 250 ft., brick and concrete, from Woods Constr. & Supply Co., 427 Holland Bldg., Lima, $241,846. Noted Mar. 22.

Wis., Sheboygan — Hospital — Sisters of St. Francis, c/o J. C. Straub, dir., Springfield, Ill., 2 story, brick, rein.-con. and steel, plain foundation, here, from Wisconsin Eng. & Constr. Co., Wausau, $99,850. Noted Mar. 22.

Calif., Los Angeles—High School—Bd. Educ., group buildings, Wilshire Blvd., general contract, from Los Angeles Planing Mill Co., 1812 Industrial St., $316,580. Noted Apr. 5.

CONTRACTS AWARDED

Mass., Boston — Apartment — Audubon Realty Co., 18 Tremont St., will build four 5 story, brick and stone, plain foundations, Audubon Rd., by day labor. $750,000. Silverman, Brown & Heenan, 51 Cornhill, archts.

Mass., Boston—Church—Hellenic Assn. of Boston, 46 Winchester St., will build 3 story and basement, 86 x 119 ft., brick and steel, plain foundation, Parker and Ruggles Sts., by day labor. $250,000. H. Macropol, c/o owner, supt. of construction. H. S. Demoorjian, 340 Main St., Worcester, archt. Noted Oct. 19.

Mass., Lawrence—City Hall—Public Wks. Dept., brick and concrete city hall, to E. A. Peabody & Son, Bay State Bldg., $329,000. Noted Apr. 12.

Mass., Somerville—Apartment—J. A. and F. A. Walker, 460 Solen St., Medford, will build 5 story, 45 x 140 ft., brick and timber, plain foundation, Bway. and Main St., here, by day labor. $200,000. G. A. Cornet, 10 Central St., Lynn, archt.

Mass., Springfield — Station — Boston & Albany R.R., South Station, Boston, 2 story, 150 x 300 ft., brick, stone, steel and concrete, Liberty St., here, to D. O'Connells' Sons, 480 Hampden St., Holyoke. Archts. est. $4,000,000. Noted Dec. 28.

Conn., Hartford — Business — Golden-Storrs & Co., archts., 118 Asylum St., 4 story, 50 x 100 ft., brick, plain foundation, Garden St., to C. C. Kilby, Inc., Farmington Ave. Archts. est. $150,000. Owners name withheld.

N. Y., Buffalo—High School—Bd. Educ., 1401 Telephone Bldg., general contract Bennett High School, to C. H. Everitt, 295 Auburn Ave., $1,406,000; heating and ventilating, to Power Efficiency Corp., White Bldg., $197,785; plumbing, to J. J. Bresnahan, Inc., 462 Elk St., $69,898; electrical work, to Sanborn Electric Co., 309 North Illinois St., Indianapolis, Ind., $48,960.

N. Y., New York—Loft—Dorcoe Realty Co., c/o Sommerfeld & Steckler, archts. and engrs., 31 Union Sq., will build 14 story, 100 x 100 ft., brick, steel and stone, plain foundation, West 37th St., by day labor. $350,000.

N. Y., New York — School — St. Clare Parochial School, c/o Salvati & Le Quornick, archts. and engrs., 369 Fulton St., Brooklyn, 4 story, brick, steel and stone, plain foundation, West 36th St. between 9th and 10th Aves., to W. Kennedy Constr. Co., 215 Montague St., Brooklyn. Archts. est. $150,000.

N. J., Camden—Terminal—Philadelphia & Reading R.R., Reading Terminal, Phila., 42 x 115 ft. office, 105 x 328 ft. concourse, Y.M.C.A. building, power house, etc., here, to New York Shipbuilding Corp., Bway. and Fairview St. Archts. est. $2,000,000. Noted Sept. 28.

Pa., Monongahela—High School—Bd. Educ., 2 story and basement, 75 x 300 ft., Chess St., to J. G. Fullman, E. E. Trust Bldg., Pittsburgh. Archts. est. $200,000. Noted Feb. 8.

Pa., New Castle—Apartment—E. E. Hileman, North Jefferson St., will build 3 story, brick, steel and block, East Wallace and North Jefferson Sts., by day labor. $150,000. Earl & Altschuler, Dean Blk., archts. Noted Feb. 22.

Pa., Phila.—Clubhouse—B.P.O.E., Juniper and Wood Sts., 15 story and basement, 163 x 197 ft., rein.-con., brick and steel, caisson foundation, Broad and Wood Sts., to Cramp & Co., Denckla Bldg., $2,000,000. Noted Mar. 1.

Pa., Phila.—High School—West Phila. Catholic High School, 49th and Chestnut Sts., 3 story and basement, 108 x 248 ft., to F. V. Warren Co., 132 South 17th St., $450,000.

Pa., Phila.—Office and Store—Freeman & Co., 1509 Chestnut St., 6 story and basement, 45 x 115 ft., 1808 Chestnut St., to R. M. Peterson & Son, 6th Ave. and Queens Lane. Archts. est. $500,000.

Pa., Phila.—School—Bd. Educ., 19th and Chestnut Sts., 3 story, rein.-con., brick and steel, plain foundation, 17th and Moyamensing Sts., to W. R. Dougherty & Co., 1516 Sansom St., $486,471. Noted Apr. 12.

Pa., Phila.—Theatre—S. Borowsky, 1610 South Broad St., 2 story and basement, 40 x 170 ft. rein.-con., brick, steel and terra cotta, plain foundation, Fairmount Ave. and Lex St., to F. Claro, 5439 Webster Ave. Archts. est. $200,000.

Pa., Pittsburgh—Bank—City Deposit Bank, Penn and Center Aves., and Mowbray & Uffinger, archts., 56 Liberty Ave., New York City, 3 story and basement, 22 x 150 ft. addition, Penn and Center Aves., to A. & S. Wilson Co., 541 3rd Ave. Archts. est. $200,000. Noted Mar. 29.

D. C., Washington—Office—See "Industrial Works."

N. C., Kinston—Depot—Norfolk Southern Ry., Norfolk, Va., 50 x 114 ft. depot and 650 ft. sheds, brick and sandstone, for joint use of Norfolk Southern Ry., its subsidiaries and Atlantic Coast Line Ry., to R. L. Blalock, Kinston.

N. C., Washington—Schools—School Bd., 2 brick buildings, to Hancock & Davis, Beaufort, $155,768.

W. Va., Charleston—Office—See "Industrial Works."

Fla., Miami—High School—Dade Co. School Bd., 3 story, rein.-con., stucco and terra cotta, South West 7th Ave. and 3rd St., to G. Jahn, Miami (street address not available), $157,435.

Fla., Tavares—Court House—Lake Co., 4 story, 72 x 108 ft., rein.-con. and brick, to C. C. Hanner, Orlando, $205,836. Noted Mar. 29.

Ala., Gadsden—High School—City, high school (exclusive of excavation), to Baxter Bros., Huntsville, Ala., $130,000.

La., Baton Rouge—Schools—School Bd. of East Baton Rouge Parish, three 2 story, concrete and brick schools as follows, Highland School to J. V. and R. T. Burkes, Carondelet Bldg., New Orleans, $189,875; Queensboro School to Heineman & Quillon, Shreveport, $119,000; Cedar Grove School to Buchanan & Boone, Haynesville, $114,142.

Ky., Louisville—Club and Home—Elks Home, 8 story, 140 x 180 ft., rein.-con., 3rd and Chestnut Sts., to G. H. Rommel Co., 958 Logan St. Archts. est. $1,200,000. Noted Dec. 28.

O., Cleveland—Commercial—H. Guenther, 1733 Euclid Ave., 2 story and basement, 50 x 189 ft., brick, steel and concrete, 1510 Euclid Ave., to G. A. Rutherford Co., 2735 Prospect Ave. Archts. est. $200,000.

O., Cleveland — Hospital — City, 2 story and basement, 40 x 250 ft., brick and concrete, Warrensville Farm, to Central States Eng. & Constr. Co., 809 Union National Bank Bldg., $225,600. Noted Apr. 19.

O., Gambier — Dormitory — A. Garfield, archt., 913 National City Bldg., Cleveland, for Leonard Hall, 4 story and basement, brick and steel, here, to Norve & Norton, 806 South Ohio St., Columbus, for Kenyon College, c/o W. T. Pierce, pres. Noted Feb. 15.

O., Lakewood (Cleveland P. O.)—Schools—Bd. Educ., 1430 Warren Rd., 2 story and basement, 48 x 123 ft., brick, steel and concrete addition to Roosevelt School, Athens Ave., to J. Grant & Son, 4500 Euclid Ave., Cleveland, archts. est. $150,000; 2 story and basement, 68 x 123 ft., brick, steel and concrete addition to Harrison School, 2079 Dowd Ave., to Schirmer O'Hara Co., 2031 Euclid Ave., archts. est. $200,000. Noted Apr. 12.

O., Marietta—Bank and Office—Weary & Alford, archts., 1923 Calumet St., Chicago, 10 story and basement, 50 x 114 ft., brick, steel, stone and terra cotta, 2nd and Putman Sts., here, to S. M. Siesel, 16 Ogden Ave., Milwaukee, Wis., for Peoples Banking & Trust Co., Marietta. Archts. est. $400,000. Noted Mar. 22.

Mich., Detroit — School — Donaldson & Meier, archts., 1314 Penobscot Bldg., 2 story and basement, 120 x 220 ft. rein.-con., brick and steel, plain foundation, Seminole Ave., to F. N. Cooper, 6370 Gratiot Ave., for St. Catherines Parish, c/o architects. $250,000. Noted Mar. 29.

Mich., Detroit—School—St. Margarets Parish, Lemay and Warren Aves., masonry contract on 2 story and basement, 65 x 190 ft. rein.-con., brick and steel, plain foundation, to Moore & Brown, 400 Penobscot Bldg. Archts. est. $150,000. Noted Apr. 5.

Ill., Chicago—Apartment, Store and Office—H. B. Aarens, archt., 109 North Dearborn St., 2 and 3 story, 99 x 196 ft., rein.-con., brick and steel, 3759-67 North Racine Ave., to H. Sjoblom, 4220 North Western Ave. Archts. est. $300,000.

Ill., Chicago—Apartment—C. W. Carlson, 7240 South Park Ave., 3 story, 121 x 153 ft., rein.-con., brick and steel, 7235-45 Jeffery Ave., to A. T. Herlin, 6117 Evans Ave. Archts. est. $275,000.

Ill., Chicago—Apartment—Chicago Title and Trust Co., 69 West Washington St., 13 story, 87 x 109 ft., rein.-con., brick and steel, 622 Bittersweet Pl., to McLennan Constr. Co., 400 North Michigan Ave. Archts. est. $300,000.

Ill., Chicago — Apartment — Kaplan & Ritchie, 2153 West Division St., 3 story, 100 x 170 ft., rein.-con., brick and steel, to Schneider & Warshawsky, 1607 South Central Park. Archts. est. $250,000.

Ill., Chicago—Apartment—Sevins & Willens, 140 North Dearborn St., 3 story and basement, rein.-con., brick and steel, 5818-26 Glenwood Ave., to H. Sjoblom, 4220 North Western Ave. Archts. est. $150,000.

Ill., Chicago—Hotel—Holton-Seelye & Co., 140 South Dearborn St., 11 story, 75x137 ft., rein.-con., brick and steel, 6400-6408 South Woodlawn Ave., to H. Janisch & Co., 1813 Winona St. Archts. est. $750,000.

Ill., Chicago—Store and Apartment—D. Walker & Co., 6356 Cottage Grove Ave., 3 story, 42 x 206 ft., rein.-con., brick and steel, 6100-04 Drexel Blvd., to A. T. Herlin, 6117 Evans Ave. Archts. est. $200,000.

Ill., Evanston—Apartment—A. H. Quitsow, archt., 11 South La Salle St., Chicago, 3 story and basement, 94 x 156 ft., rein.-con., brick and steel, Hinman and Kedzie Sts., here, to H. Janisch & Co., 1813 Winona St., Chicago. Archts. est. $150,000. Noted Mar. 22.

Wis., Madison — Store — Kessinicks Co., 26 North Carroll St., general contract 4 story, 60 x 155 ft., brick, rein.-con. and steel, plain foundation, State St., to J. H. Findorff, 601 West Wilson St. Noted Apr. 12.

Wis., Milwaukee — Exchange — Wisconsin Telephone Co., 418 Bway., structural steel for 5 story, 120 x 120 ft., brick, steel and concrete addition, to Worden-Allen Co., Port Washington Ave. Total cost $500,000. Noted Mar. 29.

Wis., Milwaukee — Hotel — Second Street Co., c/o A. Richards, 90 Mason St., 4 and 11 story, 100 x 100 ft. and 100 x 100 ft., brick and concrete, plain foundation, 2nd St., to Raulf Co., 428 Grand Ave. Archts. est. $1,000,000.

Ia., Fairfield—School—Bd. Educ., general contract, high school addition and 2 grade schools, each 2 story and basement, brick, tile and stone, to J. H. Hunzinger & Co., Security Bldg., Davenport. Cost complete $150,000. Noted Mar. 15.

Minn., Chisholm — High School — Bd. Educ., 3 story and basement, 200 x 400

Buildings (Continued)

ft., rein.-con. and brick, general contract to Pfeffer Constr. Co., 412 Torry Bldg., Duluth, $548,000. Former contract rescinded. Noted Mar. 8.

Minn., Minneapolis — Bank — First National-Soo Line Co., 5th St. and Marquette Ave., 6 story and basement, 66 x 165 ft. addition, rein.-con., brick and tile, Bedford stone front, Marquette Ave., between 5th and 6th Sts., general contract to Madsen Constr. Co., 848 Builders Exchange, $300,000.

Minn., Minneapolis — Church — First Baptist Church and W. B. Riley, 10th St. and Harmon Pl., wrecking front of church to permit widening 10th St., and constructing addition at rear, brick and stone, 10th St. and Harmon Pl., to J. and W. A. Elliott, 907 Lumber Exchange, $150,000.

Minn., Minneapolis—Office, etc.—G. R. Newell Co., 1st Ave. N. and 3rd St., general contract 5 story and basement, 122 x 149 ft., rein.-con., brick and tile, 6th Ave. N. and 3rd St., to J. Peterson, 3152 10th Ave. S. Total $200,000. Noted Feb. 15.

Mo., St. Louis—Bank—Mauran, Russell & Crowell, archts., Chemical Bldg., 5 story, 116 x 160 x 269 ft., gray granite and rein.-con., concrete pile foundation, Bway., to Westlake Contg. Co., Railway Exch. Bldg., for Eighth Federal Reserve Dist., Bway. and Pine Sts. Archts. est. $3,000,000.

Mo., St. Louis—Exchange—Southwestern Bell Telephone Co., Bway. and Locust St., general contract 4 story, 50 x 75 ft., rein.-con. and brick addition. Delmar Blvd., to Mid-Continent Co., 1132 Arcade Bldg. Archts. est. $150,000.

Ariz., Tucson—High School—Bd. Educ., 2 story, rein.-con., rein.-con. pile foundation, to E. C. English, 508 Citizens National Bank Bldg., Los Angeles, Calif. $468,800. Noted Mar. 29.

Ore., Portland—School—School Dist. 1, Administration Bldg., 2 story and basement, 175 x 184 ft., rein.-con., brick and stone, Pellegrove, 26th and 27th Sts., to H. J. Settergren, Railway Exch. Bldg., $204,306. Archts. est. $275,000.

Calif., Los Angeles—Hotel and Store—Kass & Ruben, 608 Bank of Italy Bldg., 4 story, brick, 2nd St., to L. T. Mayo, 531 Black Bldg., $150,000.

Calif., Los Angeles—Store and Office—R. Stern, c/o E. Frazier, archt., Regent Apartments, 10 story and basement, rein.-con., Hollywood St., to Heitman Constr. Co., Merrit Bldg., $725,000. Noted Apr. 12.

Calif., Santa Barbara — Office and Theatre—E. A. Johnson, 8 story, rein.-con. and steel, to C. M. Urton, Santa Barbara, $500,000. Noted Jan. 11.

Ont., Ottawa—Auditorium—Ottawa Auditorium Ltd., Sparks St., auditorium, O'Connor St., concrete, brick and steel finish to T. C. James, 130 Flora St.; steel framework to Dominion Bridge Co., Carleton Chambers. Archts. est. $175,000.

B. C., North Vancouver—Office and Store—See "Miscellaneous."

Federal Government Work

PROPOSED WORK

Fla., Jacksonville—Dredging—U. S. Engineer, rejected bids dredging and rock removal in Tampa Harbor. Noted Mar. 8.

Ky., Louisville—Steel Hull—U. S. Engineer, P. O. Box 72, plans 1 sectional steel hull, with vertical spuds 44 x 100 x 7 or 8 ft. for dipper dredge.

Ill., Rock Island—Derrick Boats—U. S. Engineer, Federal Bldg., plans 4 steel hull derrick boats.

Alaska — Bridge — Alaskan Eng. Comn., 422 Bell St. Terminal, Seattle, Wash., rejected bids 120 ft. steel truss over Noyes Slough. Noted Dec. 28.

BIDS DESIRED

N. J., Metuchen—Dredging—May 7, at office Constructing Quartermaster, 39 Whitehall St., New York City, dredging at Raritan Arsenal Dock, Raritan Arsenal, here; adv. this issue.

Pa., Phila.—Engine Testing Room—Spec. 4835—May 9 by Bureau Yards & Docks, Navy Dept., Wash., D. C., engine testing room at aircraft factory, here. Noted Apr. 19.

Del., Wilmington—Scows—May 21 at office U. S. Engineer, Wilmington, constructing 2 scows; adv. this issue.

Md., Perryville—Repairs—May 14 by Treas. Dept., Wash., D. C., repairs to medical officers residence 501, at P. H. S. Hospital, here. J. A. Wetmore, acting superv. archt.

D. C., Wash.—Repairs—Spec. 4841—May 2 by Bureau Yards & Docks, Navy Dept., repairs to Marine Barracks and officers quarters, here.

Miss., Vicksburg—Steel Hull—May 22, at office Mississippi River Comn., 3rd Dist., P. O. Box 404, furnishing 1 steel motor-launch hull; adv. this issue.

Ky., Louisville—Hull, etc.—May 25 at office U. S. Engineer, P. O. Box 72, 1 steel hull maneuver boat and 2 steel needle flats. Noted Apr. 19.

Ky., Louisville—Metal Work—May 5, at office U. S. Engineer, P. O. Box 72, metal work for weirs for Dam 44, Ohio River; adv. this issue. Noted Apr. 19.

Ky., Louisville—Steel, etc.—U. S. Engineer, Louisville, receiving bids 500 bars soft steel, flat, and 380 bars soft steel, round, structural steel angles, etc., f.o.b. Addison, Ky.

Mich., Houghton—Post Office—May 21 by Treas. Dept., Wash., D. C., construction complete incl. mechanical equipment, U. S. Post Office, here. J. A. Wetmore, acting supervs. archt.; adv. this issue.

Ill., Chicago—Dredging, etc.—May 24, at office U. S. Engineer, 537 South Dearborn St., dredging and pier removal in Calumet Harbor and River, Illinois and Indiana; adv. this issue.

Calif., San Diego—Roads—Spec. 4766—May 23, by Bureau Yards & Docks, Navy Dept., Washington, D. C., concrete roads at Marine Corps Base, here. Noted Dec. 7.

H. T., Pearl Harbor—Refrigerating Machinery—Spec. 4767—June 13, by Bureau Yards & Docks, Navy Dept., Washington, D. C., refrigerating machinery, here. Noted Dec. 21.

H. T., Pearl Harbor—Storehouse—Spec 4692—May 23, by Bureau Yards & Docks, Navy Dept., Washington, D. C., 2 story, concrete tile and steel storehouse, at Naval Operating Base, here.

BIDS RECEIVED

N. Y., Chelsea—Ice-Making and Refrigerating Plant—Treas. Dept., Wash., D. C., ice making and refrigerating plant at U. S. Veterans Hospital, here, from Brunswick-Kraeschell Co., New Brunswick, N. J., $10,000 (90 days government specifications) (20 days bidders specifications). Noted Mar. 22.

Va., Norfolk — Wharf — Spec. 4777—Bureau Yards & Docks, Navy Dept., Washington, D. C., extension to timber Wharf C, at Navy Yard, here, (1) work complete, from T. A. Tatlerson, 411 West 13th St., (1) $32,320 (130 days) (2) add $1.25 deduct $0.09. Noted Mar. 8.

CONTRACTS AWARDED

Miss., Vicksburg—Metal, etc.—U. S. Engineer, Drawer 421, furnishing and delivering about 467,000 lb. structural metal for Locks and Dam 5 and 8, Cuachita River, La. and Ark., to C. Hegewald Co., New Albany, Ind., $39,359; erecting 4 steel gates at Dam 5 and modifying 2 steel gates at Dam 8, to Nashville Bridge Co., foot of Shelby Ave., Nashville, Tenn., $9,854. Noted Mar. 15.

Ky., Louisville—Cement—U. S. Engineer, P. O. Box 72, furnishing and delivering 62,000 bbl. portland cement for Dams 44 and 45, Ohio River, to Kosmos Portland Cement Co., 614 Marion E. Taylor Bldg., $155,000. Noted Apr. 19.

Tenn., Chattanooga—Lock Gates—U. S. Engineer, furnishing, delivering and erecting steel lock gates for Windows Bar Lock in Tennessee River, 56 mi. below here, to Penn Bridge Co., Beaver Falls, Pa., $31,475. Noted Mar. 29.

Ind., Newburg—Lock—U. S. Engineer, P. O. Box 72, Louisville, Ky., constructing Lock 47, Ohio River, here, to National Contract Co., 902 Citizens Bank Bldg., Evansville, $1,494,494. Noted Apr. 19.

Mich., Detroit—Dredging—U. S. Engineer dredging below locks in St. Marys River, 134,000 cu.yd. excav. with maximum allowable overdepth 113,000 cu.yd. to Duluth-Superior Dredging Co., foot of 45th Ave., W., Duluth, Minn., $226,695. Noted Apr. 5.

Mich., Detroit—Dredging—U. S. Engineer, dredging Vidal Shoals, St. Marys River, 102,000 cu.yd. sand, gravel and hard-pan excav. with possible overdepth of 60,000 cu.yd. to Great Lakes Dredge and Dock Co., 104 South Michigan Ave., Chicago, $246,840. Noted Mar. 29.

Ill., Rock Island—Steel Hull—U. S. Engineer, Rock Island, steel hull for towboat "Elinor," to Howard Ship Yards & Dock Co., Jeffersonville, Ind., $19,737. Noted Mar. 22.

Neb., Mitchell—Tunnel, etc.—U. S. Recl. Serv., Mitchell, for Tunnel 3 and concrete lining approaches to same on Ft. Laramie Canal, North Platte Project, Nebraska-Wyoming, near Haig, to R. S. Morrow & Sons, 5006 Burt St., Omaha, $313,568. Noted Mar. 1.

Calif., Eureka—Stone—U. S. Engineer, Custom House, San Francisco, furnishing 80,000 ton stone for jetty construction at entrance to Humboldt Bay, here, to A. D. Kern, Exch. Bldg., Portland, Ore., $273,265. Noted Mar. 15.

Calif., Fremont—Weir—U. S. Engineer, 85 2nd St., San Francisco, concrete weir near here, to Utah Constr. Co., Pheelan Bldg., San Francisco, $842,[illegible]. Noted Mar. 22.

Miscellaneous

PROPOSED WORK

Cement — Hartford, Conn. — Street Dept. plans to purchase 400 bbl. cement. R. N. Clark, city engr.

Road Oil—New Britain, Conn.—Bd. Pub. Wks. plans to purchase 100,000 gal. road oil (about 50% asphalt base). J. D. Williams, city engr.

Swimming Pool—New Britain, Conn.—Bd. Park Comrs. plans swimming pool at Stanley Quarter Park. $50,000. Engineer not selected.

Transmission Line — New York — Utica Gas & Electric Co., 222 Genesee St., Utica, plans approximately 35 mi. 3 phase 60 cycle high tension transmission line from Oneida-Lewis Co. line through towns of Boonville, Steuben and Floyd, to Utica.

Gas Plant Improvements—Elmira, N. Y.—Elmira Water, Light & R.R. Co., plans laying new high pressure gas mains, installing automatic fuel handling equipment and addition to plant in general. $100,000. F. H. Hill, genl. mgr.

Conduits — Pennsylvania—Bell Telephone Co., 33 East Northampton St., Wilkes-Barre, plans to lay conduits in Hazel St. through Wilkes-Barre and on to Ashley, Sugar Run and Mauch Chunk.

Hydro Electric Plant—Andrews, N. C.—Bd. Aldermen Cherokee Co. authorized $350,000 bonds for hydro electric plant and dam in Hiawassee River, to develop 1,500 hp. Ludlow Engrs., Winston-Salem, engrs.

Electric Light System—Columbus, O.—See "Buildings."

Stadium—Bloomington, Ind.—University of Indiana plans stadium, 30,000 seating capacity, concrete or steel. $250,000. Address J. W. Cravens, secy. Engineer and architect not selected.

Levee Protection — Fairfield, Ill.—Union D.D., Fairfield, having preliminary plans prepared levee protection in Edwards and Wayne Counties. $200,000. Elliott & Harmon, 144 Fredonia Ave., Peoria, engrs.

Stadium — Madison, Wis.—University of Wisconsin making plans rein.-con. and steel addition to athletic stadium, 400 ft. long, curve 62 ft. wide, 28.6 ft. high at rear. $50,000. A. Peabody, Capitol Bldg., engr. Noted Mar. 22.

Foundation, etc.—Milwaukee, Wis.—Kenwood Methodist Episcopal Congregation, c/o Leenhouts & Guthrie, archts., 424 Jefferson St., soon takes bids plain foundation and excavation 2 story, 79 x 105 ft., stone and concrete, Kenwood Blvd. $200,000.

Transmission Line — Red Lake Falls, Minn.—Red River Power Co., South 3rd St., Grand Forks, N. D., plans line from here to Terrebonne, 28 mi. $32,000. W. H. Brown, mgr.

Levee, etc.—Larned, Kan.—Pawnee-Arkansas Valley D. D. having preliminary plans prepared levee and river control system to provide protection for 1,400 acres. C. E. Jacobi, 527 Shukert Bldg., Kansas City, Mo., engr.

Flood Protection—Wichita, Kan.—Sedgwick Co. Dist., Big Slough D.D. and Riverside D.D. 31, having preliminary surveys made flood protection for above districts. C. E. Jacobi, 527 Shukert Bldg., Kansas City, Mo., engr.

Levees—Charleston, Mo.—Levee Dist. 3, Cary Bird, Mississippi Co., voted $220,000 bonds to raise levees to 58 ft. level on Cairo Gauge, near here. Federal Government will double bond issue, while Missouri-Pacific and Cotten Belt Railroads agreed to donate $95,000. Total $550,000.

Fire Alarm System—St. Joseph, Mo.—Soon takes bids automatic electric fire alarm system with call boxes throughout city. $250,000. J. Seitz, City Hall, engr.

Pier — Santa Monica, Calif. — Santa Monica Pier Amusement Co., c/o W. L. Wollett, archt., Pacific Mutual Bldg., Los Angeles, plans amusement pier, incl. dance hall, theatre, etc. To exceed $500,000.

Levees—Yuba City, Calif.—Recl. Dist. 1660, c/o State Recl. Bd., Forum Bldg., Sacramento, soon takes new bids for levees, here. $1,000,000. Noted Apr. 19.

Electric Light and Power Lines—Ontario—Ontario Hydro Electric Power Comn., 190 University Ave., London, having plans prepared extending light and power lines from Sarnia to Corunna and Courtright. $42,000. E. R. Lawler, 190 University Ave., London, engr.

Breakwater—Port Burwell, Ont.—Plans to complete repairs to concrete superstructure of breakwater $17,000, repair existing structures $14,500, construct rubble mound breakwater extending 2,000 ft. into lake from outer end of existing breakwater, new east pier with widened entrance channel

Miscellaneous (Continued)

to inner harbor. K. M. Cameron, c/o Dept. Pub. Wks., Ottawa, acting ch. engr.

BIDS DESIRED

Car Barns—Waterbury, Conn.—See "Industrial Works."

Shaft, etc.—New York—May 18, by Bd. Estimate & Apportionment, City Hall, New York City, South St. Shaft at St. George, in Richmond Boro and for freight and passenger tunnel in Brooklyn and Richmond Boros and under New York Bay, New York City. J. F. Hylan, chn.; adv. this issue.

Bituminous Material—Albany, N. Y.—May 3, by F. S. Greene, comr. State Hy. Dept., Albany, bituminous material. Contr. 11. W. A. Patton, secy.; adv. this issue.

Steel—Flushing, N. Y.—May 8, by Transit Comn., 49 Lafayette St., New York, furnishing and erecting steel for part of Rapid Transit R.R., Flushing Route. Noted Apr. 12.

Paving Blocks—New York, N. Y.—May 3, by Bd. Purch., Municipal Bldg., granite paving blocks to Dept. Plant & Structures. G. A. Whalen, chn.

Subway—Rochester, N. Y.—May 9, at office of Bd. Contract & Supply, City Hall, about 5 mi. subway from Court St. to crossing of Rochester & Eastern Rapid R.R., Contr. 2. H. L. Davis, secy.; adv. this issue.

Tar, etc.—Trenton, N. J.—May 7, by State Hy. Comn., for tar, asphalt, bituminous concrete, sheet asphalt and crushed slag. A. L. Grover, ch. clk.; adv. this issue.

Heating and Ventilating System—Forest City, Pa.—May 3, by School Dist., heating and ventilating system in High School No. 3. $25,000.

Bituminous Material, etc.—Hollidaysburg, Pa.—May 3, by Comrs. Blair Co., furnishing 64,000 gal. bituminous materials for Plank, Catfish, Woodbury, Sinking Valley and Hollidaysburg roads, bids also on cut black cold patch materials f.o.b. in barrels or steel drums in carload lots. D. A. McCloskey, Hollidaysburg, engr.

Chimney—Norfolk, Va.—May 14, at office W. H. Taylor, 3rd, dir. Pub. Wks., for chimney. D. H. Maury, 1445 Monadnock Blk., Chicago, consult. engr.; adv. this issue.

Pier—Charleston, S. C.—June 1, by Port Utilities Comn., Room 712 Peoples Bldg., pier on Town Creek, Charleston Harbor. H. M. Gallagher, genl. mgr.; adv. this issue.

Gravel—Baton Rouge, La.—May 11, by State Hy. Comn., Reymond Bldg., furnishing f.o.b. cars at Pit, 48,128 cu.yd. sand clay gravel containing not less than 60 per cent stone retained on ¼ in. screen, or as an alternate 21,993 cu.yd. washed gravel and 26,135 cu.yd. sand clay gravel containing not less than 40 per cent stone retained on ¼ in. screen, for highway work. J. M. Fourmy, ch. engr.

Road Oil—Madison, Wis.—Taking bids approximately 50,000 gal. asphaltic road oil. E. F. Bunn, city clk.

Electroliers—Fresno, Calif.—May 3, by R. Y. St. George, city clk., furnishing and installing 99 electroliers in various streets. W. Stranahan, city engr. Noted Apr. 5.

Cement, etc.—Oroville, Calif.—May 7, by J. A. Wisner, secy. Oroville-Wyandotte Irrigation Dist., furnishing 10,000 lb. cement, 34,000 lb. steel bars for reinforcing concrete, one 42 in. Needle valve and 42 in. pipe outlets, one 18 in. standard valve and 18 in. pipe outlet and 66,000 ft. lumber. S. J. Norris, engr.

Fire Hydrants—Pasadena, Calif.—City receiving bids fire hydrants. $50,000. B. Chamberlain, city clk.

BIDS RECEIVED

Heating and Ventilating Apparatus, etc.—Brooklyn, N. Y.—W. H. Gompert, archt. of Bd. Educ., Flatbush Ave. extension and Concord St., Apr. 18, heating, ventilating and temperature regulation apparatus in P. S. 189, East New York Ave. between Rockaway Blvd. and East 96th St., from Austin Eng. Co., 124 West 42nd St., New York, $77,772. Noted Apr. 12.

Borings—New York, N. Y.—Transit Comn., 49 Lafayette St., Apr. 19, borings on sites of proposed Coney Island Yard, Boro of Brooklyn, proposed Westchester Ave. Yard, Boro of Bronx and along proposed extension to Bway.-4th Ave. R.R. in Central Park between 7th Ave. and Central Park W., Agreement C. L., from J. H. Edwards, Montgomery St., Jersey City, N. J., $10,088. Noted Apr. 12.

Steam Main—Cleveland, O.—For 2,140 ft. steam main under Carnegie Ave. extension, from T. M. Shand Co., Finance Bldg., $42,000. Noted Apr. 5.

Dock—Milwaukee, Wis.—Sewerage Comn., 508 Market St., 1,388 ft. pile and concrete dock around one end of sewage disposal plant, from W. W. Whitney, 216 West Water St., $138,768. Noted Apr. 5.

Granite Paving Blocks—Minneapolis, Minn.—For 2,000 sq.yd. granite paving blocks, from Wisconsin Granite Co., 1013 Chamber of Commerce, Chicago, $3.10 per sq.yd. Noted Apr. 12.

CONTRACTS AWARDED

Remodeling Park Buildings—Hull, Mass.—Golden & Stowe, 53 State St., Boston, will remodel buildings, etc., at Paragon Park, by day labor. $150,000. Private plans.

Bulkhead Wall—New York, N. Y.—Commissioner Docks & Ferries, Pier "A" North River, concrete bulkhead wall along Harlem River driveway between 165th and 193rd Sts., to Phoenix Constr. Co., 41 Park Row, $179,987. Noted Feb. 1.

Tar—Cincinnati, O.—Hamilton Co., 200,000 gal. Grade 1 tar, to Barrett Co., 517 Carr St., $0.1097 per gal. Noted Mar. 29.

Road Oil—Dayton, O.—Montgomery Co. 100,000 gal. road oil, to E. W. Light, Middletown, $7,900.

Cement—Waterloo, Wis.—For 6,000 bbl. cement, to J. A. Skalitzky, Waterloo, $2.50. Noted Feb. 22.

Piling, etc.—Beaumont, Tex.—For 1,102,950 ft. Douglas fir piling for 1,400 ft. wharf extension, to H. D. Davis Lumber Co., c/o N. N. Crary, 5 Weed Bldg., $72,461. Noted Jan. 25.

Floating Drydock—North Vancouver, B. C.—Burrard Drydock Co., c/o Wallace Shipyards, Ltd., 850 Hastings St. W., will build floating drydock, 15,000 ton capacity, 700 ft. pier, 50 ft. wide, 60 x 250 ft. machine shop, blacksmith shop, power house, stores, offices, etc., by day labor. $3,750,000.

Flume—Pentleton, B. C.—Provincial Government, Victoria, 15,000 ft. sheet metal zinc flume for irrigating land for Soldier Settlement at Oliver, delivered in 13 ft. sheets to form semi circular flume 8 ft. 4 in. diam., to A. C. R. Guill, 626 Pender St. W., Vancouver, $68,000.

Gas Mains—Point Grey, B. C.—Vancouver Gas Co. Ltd., 425 Carroll St., Vancouver, will lay gas mains, here, mostly by day labor. $100,000. J. Keillor, c/o owner, engr.

OFFICIAL PROPOSALS

Bids: May 15.

Sanitary Sewers

St. Petersburg, Fla.

Sealed proposals for the construction of sanitary sewers, located in 1st Alley South and 1st Alley North from 1st Street to 8th Street and 2nd Alley North from 1st Street to 6th Street, will be received at the office of the Director of Finance until 7:30 p.m., May 15, 1923.

Approximately 8,025 feet of 12-inch pipe and 1,643 feet of 10-inch pipe, 28 manholes.

Plans and specifications may be obtained from the Director of Finance.

Bidders must accompany their proposal with a certified check, payable to the Director of Finance, for not less than 5 per cent of their bid price.

The City reserves the right to reject any or all bids and to waive any or all technicalities in awarding contract.

H. T. DAVIS, Director of Finance.

Bids: June 1.

Pier

Charleston, S. C.

Sealed proposals will be received by the Port Utilities Commission of Charleston, S. C., at its office Room 712 Peoples Building until noon June 1, 1923, and then publicly opened for constructing a pier (exclusive of earth fill) on Town Creek, Charleston Harbor.

Specifications and proposal forms will be furnished to prospective bidders on deposit of $5, which will be refunded to depositors who submit proposals or return sets in good condition. Further information on application.

H. M. GALLAGHER,
General Manager.

Bids: May 3.

Paving and Storm Sewers

Mobile, Ala.

Sealed bids will be received by the Commissioners of the City of Mobile, Alabama, until noon, Thursday, May 3, 1923, for the following:

ONE COURSE SIX INCHES IN DEPTH CONCRETE PAVING (including grading)

Approximately	3,390 sq.yd.
5 x 18 inches concrete curbing.	
Approximately	1,827 lin.ft.

ASPHALTIC CONCRETE PAVING—One and one-half inch surface on four inches of concrete (including grading)

Approximately	11,510 sq.yd.
5 x 18 inches concrete curbing.	
Approximately	4,720 lin.ft.

SHEET ASPHALT PAVEMENT—One and one-half inch surface on one and one-half inch binder upon four inches concrete base (including grading)

Approximately	4,953 sq.yd.
5 x 18 inches concrete curbing.	
Approximately	3,553 lin.ft.

STORM SEWERS

Vitrified or Concrete Pipe

Approximately—	6-inch pipe	300 lin.ft.
	10-inch pipe	1,119 lin.ft.
	12-inch pipe	3,037 lin.ft.
	15-inch pipe	2,663 lin.ft.
	18-inch pipe	1,932 lin.ft.
	21-inch pipe	250 lin.ft.
	Manholes	26
	Inlets	75
	Special basins	19

Plans and specifications can be seen at the City Engineer's Office. The right is reserved to reject any or all bids.

R. V. TAYLOR, Mayor.
WRIGHT SMITH, City Engineer.

Bids: May 17.

Storm Drains

Atlantic City, N. J.

Sealed proposals for the construction of extensions to the storm water drainage system for the City of Atlantic City, New Jersey, will be received by the Board of Commissioners of Atlantic City, when called for at Chambers of the Board in the City Hall, during a meeting to be held by that body at 3 p.m. on the seventeenth day of May A.D. 1923, at which time and place, during the session of the said Board, the proposals will be publicly opened and read.

The work to be done embraces the building of approximately 1,930 feet of reinforced concrete drains from 3 feet 6 inches to 4 feet 6 inches wide; 4,270 feet of brick and concrete drain from 27 to 36 inches in diameter; 8,500 feet of terra cotta drains from 12 inches to 24 inches in diameter; 8,000 feet of terra cotta inlet pipes from 10 to 12 inches in diameter, together with manholes, catch basins, storm-water inlets and the necessary timber and pile foundations; also 1 concrete bulkhead.

Each proposal submitted must be accompanied by a certified check drawn upon a National or State Bank or Trust Company, and to the order of City Treasurer of Atlantic City, for the sum of Five Thousand Dollars ($5,000).

Specifications and blank forms of proposal can be obtained of John W. Hackney, the City Engineer, and a full set of plans can be obtained from him for the sum of Ten Dollars ($10.00), such sum to accompany the order. This sum will be returned upon surrender of the plans in good condition.

The Board of Commissioners reserves the right to reject any or all bids as provided in the "Instruction to Bidders."

LOUIS A. STEINBRICKER,
Director of Streets and Public Improvements

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ADVERTISEMENTS ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE.

OFFICIAL PROPOSALS

(Continued from page 253)

Bids: May 21.

Bridge File Number 770901

MARINE CITY, COTTRELLVILLE TOWNSHIP, ST. CLAIR COUNTY MICH.

Lansing, Mich.

Sealed proposals will be received at the district office of the State Highway Department 1-2 Majestic Building, Port Huron, Michigan, until 12:30 o'clock p.m., Central Standard Time, Monday, May 21st, 1923, by Frank F. Rogers, State Highway Commissioner, for the superstructure, machinery, floor and backwalls of a 133 ft. swing bridge located on T. L. Route No. 27, on T. L. project No. 27-3, crossing Belle River, in Cottrellville Township, St. Clair County, on Bridge Street in Marine City, being bridge file number 770901.

DESCRIPTION: The general nature of the work to be done is as follows:

SUBSTRUCTURE now under Contract. Pivot pier and West abutment is complete and timber protection work at the pivot pier is under construction.

SUPERSTRUCTURE consists of one 135 ft. swing span with 24 ft. clear roadway and two 4-ft. cantilever walks and involves approximately 320,000 pounds of structural steel and 59,000 pounds of machinery.

FLOOR roadway section of reinforced concrete, involves about 65.7 cubic yards of concrete and 18,500 pounds of reinforcing steel. Cantilevered sidewalks and curb of creosoted lumber involves about 4.3 M. BM lumber.

ERECTION: To be erected on timber protection work at pivot pier.

General: Abutment backwalls and concrete spindle railing to be placed by superstructure contractor. Involves about 62.7 cubic yards of concrete.

Plans, instructions to bidders, specifications and proposal blanks may be obtained at the office of the State Highway Department, Lansing, Michigan. Plans will be furnished by the undersigned upon receipt of a deposit of ten ($10) dollars, which will be refunded upon their safe return. Only bids from fabricating companies will be considered.

A certified check in the sum of five hundred ($500) dollars, made payable to Frank F. Rogers, State Highway Commissioner, must accompany each proposal.

The right is reserved to reject any or all proposals.

FRANK F. ROGERS,
State Highway Commissioner.

Lansing, Michigan.
April 18th, 1923.

Bids: May 15.

Storm Water Drains

St. Petersburg, Fla.

Sealed proposals for the construction of storm water drains will be received at the office of the Director of Finance of the City of St. Petersburg, Fla., until 7:30 p.m., May 15, 1923.

Approximately 67,939 feet of 10-inch to 84-inch pipe and all inlets, manholes and special structures.

Plans and specifications may be obtained from the Director of Finance upon the deposit of ten dollars ($10.00) to secure the return of same in good condition within thirty days.

Bidders must accompany their proposal with a certified check, payable to the Director of Finance, for not less than 5 per cent of their bid price.

The City reserves the right to reject any or all bids and to waive any or all technicalities in awarding contract.

H. T. DAVIS, Director of Finance.

OFFICIAL PROPOSALS

Bids: May 7.

Street Paving

Oneonta, N. Y.

Sealed bids or proposals will be received by the Board of Public Works at the City Clerk's Office of Oneonta, New York, until 8 p.m., on the 7th day of May, 1923, for paving four (4) streets in said City.

The work consists of the following:

Excavation, 8,490 cubic yards; Catchbasins, 72; Manholes, 20; Curb Stone, 13,000 ft; Concrete Gutters, 372 cubic yards; Concrete Base for Paving, 5,200 cubic yards; 6 to 27 inch sewer pipe, 8,000 feet; Asphaltic Concrete Pavement, 28,000 square yards; Reinforced Concrete Pavement, 865 cubic yards.

Proposals must be accompanied by a certified check of five per cent (5%) of the bid. Plans and specifications may be had at the office of the City Engineer, Oneonta, New York. Price $5.00 per street.

The Board of Public Works reserves the right to reject any and all bids and waive any informalities.

Formal advertisement will be found in the Oneonta Star April 24-30, 1923, and May 7, 1923.

This is not a formal advertisement.

FRANK M. GURNEY,
City Engineer.
EDWARD L. SELLERS,
City Clerk.

Bids: May 23.

Steel Penstocks and Accessories

San Francisco, Calif.

OFFICE OF THE BOARD OF PUBLIC WORKS OF THE CITY AND COUNTY OF SAN FRANCISCO, APRIL 13, 1923.

Sealed proposals will be received at this office between the hours of 2:00 o'clock p.m. and 3:00 o'clock p.m. on Wednesday, the 23rd day of May, 1923 for:

Furnishing, delivering and installing steel penstocks and accessories for the Moccasin Creek Power Plant Contract No. 91, Hetch Hetchy Water Supply.

The work will be located near Groveland, Tuolumne County, Calif. Approximately 7,900 tons of riveted steel pipe or 6,000 tons of welded steel are required. Provision is made for division into two contracts for about 18 and 82 per cent of the whole respectively.

Specifications accompanied by proposal forms and official advertisement may be obtained from the office of M. M. O'Shaughnessy, City Engineer, City Hall, on deposit of $20.

By order of the Board of Public Works,
W. J. FITZGERALD,
Secretary.

Bids: May 8.

Street Paving

Peekskill, N. Y.

The Board of Trustees of the Village of Peekskill, N. Y., will receive bids for repaving with reinforced concrete, wood block or brick, certain streets in said village in accordance with the plans and specifications therefor, on file in the office of the Village Clerk, Municipal Building, Peekskill, N. Y. Estimated amount of yardage, 16,000 square yards. Bids to be sealed and left with the undersigned on or before 8 o'clock p.m., Tuesday, May 8, 1923, and must be accompanied by a certified check on a State or National Bank, payable to the order of the Treasurer of the Village of Peekskill, in the sum of five hundred dollars. Said check to be deposited as a guarantee of good faith that the contractor will enter into a contract with said village within the specified time should the work be awarded him.

The said Board of Trustees hereby reserves the right to reject any and all bids.

Dated, Peekskill, N. Y., April 24, 1923.

ALBERT E. CRUGER, Clerk.

OFFICIAL PROPOSALS

Bids: May 16.

State Hospital Work

Albany, N. Y.

Sealed proposals for Construction, Heating, Sanitary and Electric Work — Employees Home for Married Couples, and Construction, Sanitary and Electric Work —Dairy Barn and Silos, at the Utica State Hospital, Marcy Division, Marcy, N. Y., will be received by the State Hospital Commission, Capitol, Albany, N. Y., until 2 o'clock p.m. (Standard Time), Wednesday, May 16, 1923, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a deposit, consisting of a certified check drawn upon some legally incorporated bank in this State and made payable to the State of New York, or money, equal to five per cent (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 4065, 4066, 4067, 4068, 4077, 4078 and 4079. The right is reserved to reject any or all bids. Drawings and specifications may be examined at the Utica State Hospital, Utica, N. Y.; at the New York Office of the Department of Architecture, Room 1058, 25 Broadway, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, SULLIVAN W. JONES, Capitol, Albany, N. Y.

Dated: April 20, 1923.

Bids: May 10.

Sewerage System and Disposal

Cuba, N. Y.

Sealed proposals will be received by the Board of Trustees of the Village of Cuba, N. Y., until 2 o'clock p.m., on the 10th day of May, 1923, for the construction of a sewerage system and sewage disposal works.

Plans may be seen and specifications obtained at the office of the Board at Cuba, N. Y., or at the office of Hopkins & Field, Engineers, 349 Cutler Building, Rochester, N. Y.

The Board hereby reserves and has the right to reject any or all bids or to accept the one that in its judgment will be for the best interests of the Village.

A surety bond satisfactory to the Board and in amount of $25,000 will be required of the one to whom the contract may be awarded.

A certified check, made payable to the order of the Board of Trustees, Cuba, N. Y., to the amount of $2,000 must be deposited by each bidder and accompany his bid as a guarantee that in case the contract is awarded to him, he will, within ten days thereafter, execute such contract and furnish his bond.

Bids must be sealed and addressed to the Board of Trustees, Cuba, N. Y., and marked on the outside of the envelopes, "Proposal for Sewerage System and Disposal Works."

H. W. EVANS,
President.
A. O. RENWICK,
Trustee.
H. J. DEMCEY,
Trustee.

H. M. SETCHEL, Village Clerk.
Dated Cuba, N. Y., Apr. 16, 1923.

CONSTRUCTION NEWS

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
May 7	Napa, Calif.	Apr. 26
May 7	Chester, Neb.	May 3
May 8	Coulter, Ia.	May 3
May 9	Granbury, Tex. Adv. May 3.	May 3
May 10	Hanover, Ont.	Apr. 26
May 10	Jamestown, N. Y.	May 3
May 12	Memphis, Tenn.	Apr. 12
May 14	Woodville, Wis.	Apr. 26
May 14	Liberty, N. Y. Adv. Apr. 26 and May 3.	May 3
May 14	Canton, Ill.	May 3
May 15	Gaylord, Kan. Adv. Apr. 26 and May 3.	May 3
May 15	Harrisburg, Pa.	Apr. 19
May 15	Monticello, Ind.	Apr. 26
May 16	San Francisco, Calif. Adv. Apr. 19 to May 3	Apr. 19
May 18	Sidney, O.	Apr. 26
May 18	Traer, Ia.	May 3
May 18	Mt. Greenwood, Ill. Adv. May 3.	May 3
May 22	Portland, Me. Adv. Apr. 19 and May 3	Apr. 26
May 25	Cleveland, O. Adv. May 3.	May 3

SEWERS

May 7	Los Angeles, Calif.	Apr. 12
May 7	Butler, N. J. Adv. Apr. 26 and May 3	Apr. 26
May 7	Pottstown, Pa. Adv. Apr. 26 and May 3.	May 3
May 8	Park Ridge, Ill.	May 3
May 9	Ashtabula, O. Adv. May 3.	May 3
May 10	Elizabeth, N. J.	Apr. 26
May 10	Cuba, N. Y. Adv. Apr. 26 and May 3	Apr. 26
May 10	Cleveland, O.	May 3
May 11	Columbus, O.	May 3
May 12	Kenosha, Wis.	Apr. 26
May 15	Hartford, Conn. Adv. May 3.	May 3
May 15	St. Petersburg, Fla. Adv. Apr. 19 to May 3.	Apr. 19
May 15	South Bend, Ind.	May 3
May 17	Atlantic City, N. J.	Apr. 26
May 22	Marion, Wis.	Apr. 26

BRIDGES

May 7	Wentworth, N. C.	Apr. 13
May 7	Islington, Ont.	Apr. 26
May 8	Ludington, Mich.	Apr. 19
May 8	Ontario	May 3
May 10	Haverhill, Mass.	Apr. 19
May 11	Illinois	May 3
May 14	Kenansville, N. C.	May 3
May 15	Newcastle, Pa.	Apr. 26
May 15	Monticello, Ind. Adv. May 3.	May 3
May 15	Florida	May 3
May 21	Marine City, Mich.	Apr. 26
May 22	Walhalla, S. C.	May 3
May 24	Chicago, Ill. Adv. May 3.	May 3
July 31	La Center, Wash.	May 3
Nov. 30	Sydney, Australia Adv. Apr. 19 and May 3	Apr. 19

DAMS

May 8	Yerington, Nev.	May 3

RAILWAYS

May 5	Ontario	May 3

EXCAVATION, DRAINAGE, IRRIGATION

May 9	Fairfield, Ill.	May 3
May 9	Clarinda, Ia.	May 3
May 10	Boone, Ia.	May 3
May 10	Grand Forks, N. D.	May 3
May 11	Canada	May 3
May 15	Eudora, Ark.	May 3
May 15	Pontiac, Mich. Adv. May 3.	May 3
June 15	Albert Lea, Minn.	Apr. 12

STREETS AND ROADS

May 7	Warsaw, Ind.	Apr. 19
May 7	Bradentown, Fla.	Apr. 26
May 7	New Jersey Adv. Apr. 26 and May 3	Apr. 26
May 7	Olean, N. Y.	Apr. 26
May 7	East Troy, Wis	Apr. 26
May 7	Woodland, Calif.	Apr. 26
May 7	San Diego, Calif.	Apr. 26
May 7	Oneonta, N. Y.	May 3
May 7	Elmhurst, Ill.	May 3
May 7	Elora, Ont.	Apr. 26
May 8	Cocoa, Fla.	Apr. 26
May 8	Brooksville, Fla.	Apr. 26
May 8	Michigan	Apr. 26
May 8	Indiana	Apr. 26
May 8	Ohio	May 3
May 8	Henderson, Ky. Adv. May 3.	May 3
May 8	Stockton, Calif.	May 3
May 8	Massillon, O.	May 3
May 8	Ft. Wayne, Ind.	May 3
May 8	Red Wing, Minn.	May 3
May 8	Johnstown, Pa.	May 3
May 8	Peekskill, N. Y.	May 3
May 8	Ontario	May 3
May 8	Sandwich, Ont.	May 3
May 8	Toronto, Ont.	May 3
May 8	Valley City, N. D.	May 3
May 8	Colorado	Apr. 19
May 9	Ashland, R. I.	Apr. 26
May 9	Oregon City, Ore.	Apr. 26
May 9	Wisconsin	Apr. 26
May 9	Kentucky	May 3
May 9	Clayton, Mo.	May 3
May 9	Cleveland, O.	May 3
May 9	Corry, Pa. Adv. May 3.	May 3
May 9	Phila., Pa.	May 3
May 9	Lisbon, N. D.	May 3
May 9	Binghamton, N. Y.	Apr. 26
May 10	Elizabethtown, Tenn.	Apr. 26
May 10	Virginia	May 3
May 10	Ellwood City, Pa. Adv. May 3.	May 3
May 10	Koutze, Tex.	May 3
May 10	Boston, Tex.	Apr. 19
May 11	Westfield, N. Y. Adv. Apr. 19 to May 3	Apr. 26
May 11	Louisiana	May 3
May 11	Illinois	May 3
May 11	Ellendale, N. D.	May 3
May 12	Idaho	May 3
May 14	East Orange, N. J.	May 3
May 14	Finley, N. D.	May 3
May 14	South Bend, Ind.	May 3
May 14	North Tonawanda, N. Y.	Apr. 19
May 15	Starke, Fla.	Apr. 19
May 15	Onawa, Ia.	Apr. 19
May 15	St. Petersburg, Fla. Adv. Apr. 19 to May 3.	Apr. 19
May 15	St. Louis, Mo.	Apr. 26
May 15	Maryland Adv. May 3.	May 3
May 15	Georgetown, Tex.	May 3
May 15	South Bend, Ind.	May 3
May 15	Burbank, Calif.	May 3
May 15	Red Lake Falls, Minn.	May 3
May 16	Ebensburg, Pa.	May 3
May 16	New York Adv. May 3.	May 3
May 16	Delaware Adv. May 3.	May 3
May 16	San Francisco, Calif.	Apr. 26
May 16	Lakota, N. D.	May 3
May 17	Poughkeepsie, N. Y. Adv. May 3	May 3
May 17	Minot, N. D.	May 3
May 17	Newton, N. J. Adv. May 3.	May 3
May 21	St. Paul, Minn. Adv. May 3.	May 3
May 28	Akron, O.	May 3
May 29	St. Louis, Mo.	May 3

INDUSTRIAL WORK

May 5	Hartford, Conn.	May 3
May 7	Everett, Mass.	Apr. 26
May 9	Waterbury, Conn.	May 3
May 12	Hartford, Conn.	May 3
May 15	Bethlehem, Pa.	Apr. 19
May 15	Reading, Pa.	Apr. 26

BUILDINGS

May 5	Baltimore, Md.	May 3
May 7	Frederick, Md.	May 3
May 7	Bergenfield, N. J.	Apr. 26
May 7	Kansas City, Kan.	Apr. 26
May 7	Buffalo, N. Y.	Apr. 26
May 7	Elmira, N. Y.	Apr. 26
May 7	Pittsburgh, Pa.	May 3
May 8	Olympia, Wash.	Apr. 19
May 8	Glen Lake (Hopkins P. O.), Minn.	Apr. 26
May 8	New Britain, Conn.	May 3
May 8	Hartford, Conn.	May 3
May 8	St. Albans (Jamaica P. O.), N. Y.	May 3
May 8	Electra, Tex.	May 3
May 8	Brooklyn, N. Y.	May 3
May 9	Newcomerstown, O.	May 3
May 9	Oshawa, Ont.	May 3
May 10	Pasadena, Calif.	May 3
May 10	Pleasantville, O.	Apr. 19
May 10	Mt. Vernon, O.	Apr. 19
May 10	Athens, O.	Apr. 26
May 10	Clearfield, Pa.	Apr. 26
May 10	Clearwater, Fla.	May 3
May 11	Hornell, N. Y.	Apr. 26
May 12	Racine, Wis.	Apr. 26
May 12	St. Thomas, Ont.	May 3
May 12	Waterbury, Conn.	May 3
May 14	Syracuse, N. Y.	Apr. 26
May 15	Hightstown, N. J.	Apr. 26
May 15	Toronto, Ont.	May 3
May 17	Pulaski, Wis.	Apr. 26
May 17	Columbus, O.	May 3
May 19	Ferndale, Pa.	May 3
May 22	Old Forge, N. Y.	Apr. 26
May 26	Columbus, O.	Apr. 26
May 28	Cleveland, O.	May 3
May 28	Byesville, O.	May 3
May 29	Stockton, Calif.	May 3
June 1	Morgantown, W. Va.	Apr. 12

FEDERAL GOVERNMENT WORK

May 5	Metal Work — Louisville, Ky. Adv. Apr. 26 and May 3	Apr. 26
May 7	Boilers—Oteen, N. C.	Apr. 12
May 7	Dredging—Metuchen, N. J.	Apr. 26
May 8	Boiler — Saratoga Springs, N. Y.	Apr. 12
May 8	Road—Oregon	May 3
May 9	Underpinning Chimney—Phila., Pa.	Apr. 19
May 9	Water Supply, etc. — St. Cloud, Minn. Adv. Apr. 26 and May 3	Apr. 19
May 9	Engine Testing Room—Phila., Pa.	Apr. 26
May 9	Roads and Bridge—Utah	May 3
May 10	Post Office — Cordova, Alaska	Jan. 25
May 10	Mailing Platform — Detroit, Mich.	Apr. 19
May 10	Road—Arizona	May 3
May 11	Dredging — New York, N. Y. Adv. Apr. 19 to May 3	Apr. 12
May 11	Bear Trap Leaves—Louisville, Ky. Adv. Apr. 12 to May 3	Apr. 12
May 11	Quarters—Mobile, Ala.	Apr. 19
May 11	Boilers—Binghamton, N. Y.	Apr. 19
May 12	Metal Work—Key West, Fla.	Apr. 12
May 12	Bridge—Arizona	May 3
May 14	Dredging — Wilmington, Del. Adv. Apr. 19 to May 3	Apr. 19
May 14	Repairs—Perryville, Md.	Apr. 26
May 17	Road—New Mexico	May 3
May 18	Dredging — Los Angeles, Calif.	May 3
May 21	Post Office — Houghton, Mich.	Apr. 26
May 21	Scows—Wilmington, Del. Adv. Apr. 26 and May 3	Apr. 26
May 21	Levee—St. Louis, Mo.	May 3
May 22	Steel Hull — Vicksburg, Miss. Adv. Apr. 26 and May 3	Apr. 26
May 22	Post Office—Phoenixville, Pa.	May 3
May 23	Roads—San Diego, Calif.	Apr. 26
May 23	Storehouse—Pearl Harbor, H. T.	Apr. 26
May 24	Dredging, etc. — Chicago, Ill. Adv. Apr. 26 and May 3	Apr. 26
May 25	Hull, etc.—Louisville, Ky. Adv. Apr. 26 and May 3	Apr. 26
May 31	Dredging—Milwaukee, Wis. Adv. May 3.	May 3
May 31	Hospital—Rutland, Mass.	May 3
May 31	Dredging — Providence, R. I. Adv. May 3.	May 3
June 8	Dredging—Phila., Pa. Adv. May 3.	May 3
June 13	Refrigerating Machinery—Pearl Harbor, H. T.	Apr. 26

MISCELLANEOUS

May 5	Rein.-con. Pipe—South Carolina	May 3
May 7	Cement, etc. — Oroville, Calif.	Apr. 26
May 7	Tar, etc.—Trenton, N. J. Adv. Apr. 26 and May 3	Apr. 26
May 7	Pier—New York, N. Y.	May 3
May 7	Heating and Ventilating Apparatus, etc. — New York, N. Y.	May 3

Bids Close		See Eng. News-Record
May 7	Heating and Ventilating Apparatus, etc. — Brooklyn, N. Y.	May 3
May 7	Heating and Ventilating Apparatus, etc. — Astoria, N. Y.	May 3
May 8	Road Oil—Fresno, Calif.	Apr. 19
May 8	Steel—Flushing, N. Y.	Apr. 26
May 8	Underground Fire Alarm System—New York, N. Y.	May 3
May 9	Subway—Rochester, N. Y. Adv. Apr. 26 and May 3	Apr. 26
May 9	Iron Casting — Baltimore, Md.	May 3
May 10	Asphalt Cement — Milwaukee, Wis.	May 3
May 11	Gravel—Baton Rouge, La.	Apr. 26
May 11	Levee—Illinois.	
May 11	Gravel—Baton Rouge, La.	May 3
May 14	Chimney—Norfolk, Va. Adv. Apr. 26 and May 3	Apr. 26
May 14	Road Oil—St. Paul, Minn.	May 3
May 15	Cement, Paving Block, etc. —Wash., D. C.	May 3
May 16	Retaining Walls — Freehold, N. J. Adv. May 3.	May 3
May 17	Bulkhead, etc. — Newark, N. J. Adv. May 3.	May 3
May 18	Shaft—New York	Apr. 26
May 22	Subway — New York, N. Y.	May 3
May 23	Steel Penstock and Accessories —San Francisco, Calif. Adv. Apr. 26 to May 3.	Apr. 19
June 1	Pier—Charleston, S. C. Adv. Apr. 26 and May 3	Apr. 26

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Conn., Hartford—Colts Patent Fire Arms Co., Huyshope Ave., plan 40 x 60 ft. concrete reservoir, 7 ft. deep, 100,000 gal. capacity. $60,000. Private plans.

N. Y., Albany—Bd. Pub. Wks. plans to improve filtration plant, etc. To exceed $30,000. F. A. Raven, comr.

N. Y., Hammondsport — Bd. Village Trustees plans additions and repairs to water system. $20,000. Address J. H. Brown, supt. Pub. Wks. and Safety.

N. Y., Fairport—Bd. Village Trustees had plans prepared reservoir and gravity system water supply. $325,000. J. P. Wells, 249 Cutler Bldg., Rochester, civil engr. Noted Mar. 22.

N. Y., Saranac Lake — Bd. Village Trustees plans increasing water supply.

N. Y., Syracuse—Bureau Water plans new high pressure water system from Onondaga Hill reservoir to congested business district. To exceed $15,000. P. F. Durkin, supt.

N. C., Chapel Hill—University of North Carolina appropriated $120,000 for permanent water supply system. H. W. Chase, pres. T. A. Atwood Corp., Chapel Hill, engrs.

N. C., Graham—Graham Water Comn. had plans prepared and soon lets contract 62 x 102 ft. rein.-con. reservoir, 12 ft. deep, galvanized roof, near pumping station. S. T. Johnston, chn.

O., Bedford—Takes bids in summer c.i. mains in various streets. $150,000. E. P. Wright, Town Hall, engr.

O., Columbus—Plans 28,595 ft. 4-8 in. c.i. mains in Mock Rd., Wilson Pl., Sunset and Westwood Drives, Gates and Mithoff Sts., Karby, Wilson, Thruman, Linwood, Studer, Eureka, Ray, 4th, Cordell, 14th, Thurlow, Stevens, Manhattan, Jefferson, Neil, Leona and 26th Aves. $57,190. R. H. Simpson, city engr.

O., Columbus—Making plans 13,025 ft. c. i. mains in Westwood Dr., Gates St., Thurman, Stevens, Jefferson, Wilson, Linwood and Studer Aves., $26,340; grading, curbing, laying necessary water services and sewer connections and paving 2,553 ft. Milton Ave., alley north of Gates St., alley north of 18th Ave. and alley west of Summit St., brick, concrete or asphalt. R. H. Simpson, city engr.

O., Cuyahoga Heights (Cleveland, P. O.) —See "Sewers."

Minn., Willmar—See "Industrial Works."

Minn., Owatonna — See "Contract Awarded."

N. D., Bismarck—Plans waterworks system. $706,000. T. A. Atkinson, city engr.

N. D., Hankinson — Plans waterworks system. $51,000.

S. D., Esmond—Having plans prepared water works system. $15,000. Druar & Milinowski, 500 Globe Bldg., St. Paul, Minn., engrs.

Mo., King City—Making plans new water system. $70,000 bonds voted. A. T. Archer & Co., 609 New England Bldg., engrs.

Mo., Oran—May 15, to vote on $42,000 bonds for 22,800 ft. 4-8 in. c.i. mains, 29 fire hydrants, fourteen 4-8 in. valves, 60,000 gal. concrete reservoir or 60,000 gal. steel tank on tower, etc.; $23,000 bonds electric light improvements. W. A. Fuller, 1917 Ry. Exch. Bldg., St. Louis, engr. Noted Apr. 5.

Mo., Piedmont—Making plans waterworks and distribution system, pumping units for 30,000 gal. W. A. Fuller, 1917 Ry. Exch. Bldg., St. Louis, engr.

Tex., San Angelo—Water, Light & Power Co. making plans and takes bids in 60-90 days, filter plant 5 units, 8 x 24 ft., 2,500,000 gal. daily capacity. $50,000. Private plans.

Okla., Maysville—Town Clerk takes bids about June 1, waterworks system, tank, tower and pump, 15,000 4-8 in. c. i. pipe. $35,000 bonds voted. Macintosh Co., 1st Natl. Bank Bldg., Oklahoma City, engrs.

Okla., McAlester — Having preliminary plans prepared waterworks improvements. $500,000. A. T. Archer & Co., 609 New England Bank Bldg., Kansas City, Mo., engrs.

Wash., Tacoma—Plans to lay 16 in. main to replace 12 in. in East 11th St. $20,850. J. C. Manley, city engr.

Calif., Alhambra—City plans waterworks extensions. $250,000. T. B. Downer, city engr.

Calif., Willows—See "Excavation, Drainage, Irrigation."

Ont., Cochrane — Plans filtration and chlorination plant. $25,000 to $50,000. Engineer not selected.

Ont., Durham—Plans waterworks system, incl. 30,000 ft. c. i. mains, mostly 6 in., centrifugal pumps, pumphouse, reservoir or tank, etc. $75,000. James, Proctor & Redfern, 36 Toronto St., Toronto, engrs.

BIDS DESIRED

N. Y., Liberty—May 14, by Bd. Water Comrs., at office of T. S. Kessler, village clk., c.i. mains and specials. H. W. Taylor, 149 Bway., New York City, engr.; adv. this issue.

N. Y., Jamestown—May 10, by Bd. Water & Light, City Hall, for 1,000 ft. 4 in. and 8,000 ft. 6 in. c. i. pipe and 10,000 lb. fittings.

O., Columbus—See "Sewers."

O., Cleveland—May 25, at office of Commissioner Purchases & Supplies, 219 City Hall, coagulation basins, Contr. 44. A. V. Ruggles, comr. water; adv. this issue.

O., Wadsworth—See "Sewers."

Ill., Canton—May 14, by city, artesian well. $40,000. E. F. Motzinger, Canton, engr.

Ill., Mt. Greenwood — May 18 by Bd. Local Impvts., c.i. mains, etc. A. H. E. Grant, pres.; adv. this issue. Noted Mar. 29.

Ill., Western Springs — Receiving bids waterworks addition. $35,000. E. Hancock, 2047 Ogden Ave., Chicago, engr. Noted Apr. 12.

Ia., Coulter—May 8, for waterworks system, incl. 8 in. well, 125 ft. deep, 1,580 lin.ft. 6 in. and 3,740 lin.ft. 4 in. c.i. pipe, 40,000 gal. steel tank on 100 ft. tower, pump, etc. $15,000. H. R. Green Co., Cedar Rapids Savings Bank Bldg., Cedar Rapids, engrs.

Ia., Traer—May 18, for 80,000 gal. steel tank and 2½ mi. 4-10 in. mains. C. P. Chase, Clinton, engr. Noted Feb. 8.

Kan., Gaylord—May 15, by J. P. Boesche, city clk., waterworks system. Black & Veatch, Mutual Bldg., Kansas City, Mo., engrs.; adv. this issue.

Mo., Jasper—A. C. Moore, engr., 222 Independent Bldg., Joplin, soon takes bids mains, buildings, deep well, tower, tank, etc., for city. $40,000.

Neb., Chester—May 7, by Village Bd., waterworks system, incl. 12,250 lin.ft. 4 in. and 3,120 lin.ft. 6 in. c.i. pipe, one 8 in. well, 150 ft. deep, one 40,000 gal. steel tank on tower, 90 ft. high, etc. Grant, Fulton & Letton, 505 Bankers Life Bldg., Lincoln, engrs.

Ark., Ft. Smith—Kiersted & Stringfellow, engrs., 611 Interstate Bldg., Kansas City, Mo., taking bids extension to mains and laterals, 3,000,000 gal. high service reservoir, equipment, etc., for city. Noted Mar. 8.

Tex., Cranbury—May 9, by A. T. Keith, mayor, and City Council, light and waterworks equipment. Municipal Eng. Co., 715-16 Praetorian Bldg., Dallas, engrs.; adv. this issue.

Tex., Georgetown—May 15, [illegible] Comrs. Williamson Co., bituminous su[illegible]ing 140,000 sq.yd. Highway 2-C, from [illegible] to Bell Co. line. $130,000. R. A. Nich[illegible] Co. engr.

BIDS RECEIVED

O., South Euclid—For c. i. mains in Emerson and Liberty Rds., from Joseph & Co., 877 Orange Ave., Cleveland, $4,108 and $10,255 respectively; Prasse, Fairhurst and Rainbow Rds., from A. Morea, Elmer Bldg., Cleveland, $5,720, $4,210 and $2,857 respectively; Liberty Ave., from Consolo & Palermo Constr. Co., Benwood Ave., Cleveland, $12,927. Work involves 9,757 ft. 4 and 8 in. pipe.

Calif., Costa Mesa—Newport Heights Irrigation Dist., furnishing and laying double dipped and wrapped steel pipe, from Western Pipe & Steel Co., 5717 Santa Fe Ave., Los Angeles, $107,035; furnishing 734,000 gal. riveted steel stand-pipe, from Chicago Bridge & Iron Wks., Rialto Bldg., San Francisco, $17,350. Noted Apr. 12.

CONTRACTS AWARDED

N. Y., New York—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., hauling and setting valves and hydrants in various streets, to Wataga Contg. Co., $39,000; mains in Bway., Amsterdam, 10th and 11th Aves., West 51st st., 54th, 57th Sts., etc., to Beaver Eng. Co., 57 Chambers St., $94,410. Noted Mar. 22.

N. Y., New York—Bd. Purch., Municipal Bldg., furnishing delivering, unloading, stacking and storing c. i. pipe, special and valve box castings, valves and double nozzle fire hydrants, to Kennedy Valve Mfg. Co., 95 John St., $94,390. Noted Mar. 22.

N. Y., New York—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in Webster Ave., Bronx Boro, to Norton Eng. Co., 510 West 149th St., $42,000. Noted Apr. 5.

N. Y., Poughkeepsie—Bd. Pub. Wks., Eastman Park Mansion, reconstructing pumping station, to L. Chevalier, Inc., 207 East 43rd St., New York City, $34,882. Noted Apr. 19.

N. Y., St. George—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York City, mains in Midland and Maple Aves., 2nd, 3rd, 4th, 5th, 6th, 7th, 8th and 9th Sts., here, to Knight & Demicco, 448 East Tremont Ave., New York City, $29,492. Noted Apr. 12.

N. C., Marshville—See "Sewers."

Tenn., Fayetteville — For 1,000,000 gal. concrete reservoir, to F. M. Brogan Constr. Co., Fayetteville, $15,000. Noted Mar. 22.

Ala., Birmingham—Alabama Water Co., Amer. Trust Bldg., will construct 12 in. mains in North Birmingham from 29th St. and 21st Ave. to 27th St. and 29th Ave., by day labor. $16,000.

O., Cleveland — For superstructure of pumping station, 1 story, 180 x 193 ft., 67 ft. high, brick, steel and concrete, at Fairmount Pumping Sta., to Schirmer O'Hara Co., 2031 Euclid Ave., $516,568. Noted Mar. 29.

O., Mariemont—See "Sewers."

Ill., Altamont—For 24,485 ft. 4 in. and 5,520 ft. 6 in. c.i. pipe, etc., to Monie-Dunbar Constr. Co., Chemical Bldg., St. Louis, Mo., $36,610. Noted Apr. 19.

Ill., Astoria—Complete waterworks and distribution system, incl. 2 filter units, 100,000 gal. each, 4 centrifugal pumps, dam, 2 mi. 4 in. and 2 mi. 6 in. c.i. pipe, etc., to Nixon & Keeley, 22nd and State Sts., East St. Louis. Noted Apr. 26.

Minn., Owatonna—For 500,000 gal. tank and tower, concrete and steel, to Pittsburgh-Des Moines Steel Co., 9th and Tuttle Sts., Des Moines, Ia., $31,375. Bids later on 1,500,000 gal. concrete reservoir, $40,000. Noted Apr. 4.

Minn., St. Paul—For 8,000 bbl. portland cement to Thompson Yards, Inc., 2694 University Ave., and 10,000 bbl. to St. Paul Builders Material Co., 605 Ryan Bldg., $2.54 per bbl. net, f.o.b. cars; 10,000 cu.yd. gravel and 5,000 cu.yd. sand for Water Dept., to J. L. Shiely Co., 305 Dakota Bldg., $2.75 and $1.50 respectively. Noted Apr. 19.

S. D., Blunt — Waterworks system, to Bruce-Bickelhaupt Co., Yankton, $24,492.

Wash., Longview—Long-Bell Lumber Co. water system for town, involving 56,000 lin. ft. 6-24 in. c.i. mains, 13,000 cu.yd. excav., to J. Payne, Kelso. Engrs. est. $100,000.

Sewers

PROPOSED WORK

Conn., Middletown — Pub. Wks. Dept. plans 10,000 ft. 8 in. sewer, vitr. clay and tile. $40,000. J. W. Mylchrest, 255 Main St., dir.

Sewers (Continued)

N. Y., Albany—See "Miscellaneous."

N. Y., Corning—Bd. Pub. Wks. plans to extend storm water and sanitary sewerage system. $30,000.

N. C., Chapel Hill—University of North Carolina plans sewers, heating and lighting systems. $115,000. H. W. Chase, pres. T. A. Atwood Corp., Chapel Hill, engrs.

O., Akron—W. E. Peters, dir. Pub. Serv., opens bids about May 21, 5,100 ft. 48 in. brick sanitary outlet sewer in Hawkins Ave., 35-75 ft. below surface of ground. $400,000. J. E. Root, Delaware Bldg., engr.

O., Bedford—Takes bids in summer vitr. clay or segmental block sewers in various streets. $100,000. E. P. Wright, Town Hall, engr.

O., Cleveland—Cuyahoga Co. takes bids in spring inverted siphon across West 73rd St. bridge and Ridge Rd., outfall sewer from north end West 73rd St. bridge to connect with West 65th St. and Barberton Ave. sewer. $150,000. R. F. MacDowell, Court House, engr.

O., Columbus—See "Waterworks."

O., Cuyahoga Heights (Cleveland, P. O.)—Plans storm and sanitary sewers and water mains in Grant Ave. $40,000. Hecker & Irish, 905 Leader News Bldg., Cleveland, engrs.

O., Cuyahoga Heights (Cleveland, P. O.)—Takes bids in summer sewers in factory districts. $30,000. Hecker & Irish, Leader-News Bldg., Cleveland, engrs.

Mich., Detroit—Had plans prepared 3,485 ft. Warren Ave. Arm East, Sect. 1, Connors Creek Sewer, 4 ft. to 5 ft. 6 in. cylinder; 3,175 ft. Warren Ave. Arm. East Sect. 2, Ashland Ave. Sewer, 4 ft. to 6 ft. 3 in. cylinder; 2,665 ft. Warren Ave. Arm East Sect. 3 Ashland Ave. Sewer, 4 ft. to 5 ft. 9 in. cylinder; 4,247 ft. Warren Ave. Arm East Sect. 4, Bedford Rd. Sewer, 4 ft. to 4 ft. 6 in. cylinder; 1,218 ft. 2 ft. 8 in. x 4 ft. brick sewer in Clayton Ave. Arm Central Ave. Sewer. J. W. Reid, city engr.

Wis., Reeseville—Making plans sanitary and storm sewers, vitr. clay. $30,000. E. B. Parsons, Jefferson, engr.

Kan., Madison — Making plans complete sewerage system and disposal plant. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, Okla., engrs.

S. D., Alcaster—Having plans prepared sanitary sewerage system and disposal plant. $30,000. T. H. Johnson, 319 Iowa Bldg., Sioux City, Ia., engrs.

Mo., St. Louis—Soon lets contract for Sublette Ave. sewer, 19,635 cu.ft. brick masonry, 345 ft. 12-25 in. vitr. pipe, 3,575 lb. cast iron, etc., $30,000; Harlem Creek Dist. Sewer 18, 8,755 ft. 8-30 in. vitr. pipe, 1,260 ft. 36 and 42 in. segmental block pipe, 22,425 lb. cast iron, etc., $43,600; Arlee Creek Dist. Sewer 3, 4,045 ft. 8-18 in. vitr. pipe, 7,560 lb. cast iron, etc., $13,000; Ohio Ave. Dist. Sewer 26,305 ft. 8 and 12 in. vitr. pipe, 1,180 lb. cast iron, etc., $1,100; Rock Creek Sewer Dist. 8, 4,080 ft. 12-24 in. vitr. pipe, 8,300 lb. cast iron, etc., $18,000. W. W. Horner, city engr.

Tex., Merkle—City Com. takes bids in summer disposal plant and sanitary sewers. $60,000 bonds voted. A. D. Howerene, Amarillo, engr. Noted Mar. 29.

Utah, Price—Plans 3 mi. 6-15 in. tile sewers, 31 manholes and flush tanks, in Northeastern section. F. S. Dunlevy, P. O. Box 132, engr.

Calif., Huntington Park—Plans to vote on $250,000 bonds sewerage system, disposal and treatment plants.

Calif., Marysville — Plans improving sewerage system, 3 plans under consideration (1) temporary relief, placing settling tanks having life of 5 years, $30,000 (2) sprinkling filters, $60,000 (3) activated sludge system to care for 1 m.g. per day, $70,000-$75,000.

Calif., Newport Beach—Plans sewage disposal plant. $145,000.

Calif., Reedley—Plans to improve sewage disposal plant. $100,000-$140,000.

Ont., Cochrane—Plans extending sewers, 8,000 ft. vitr. pipe, mostly 8 in. $25,000 to $35,000. Engineer not selected.

Ont., Thorold—Had plans prepared 8-9,000 ft. relief sewer in Regent St., vitr. tile and concrete pipe, 12 in. up. $35,000. F. N. Rutherford, Queen St., St. Catharines, engr.

B. C., Vancouver—June 16 to vote on $250,000 bonds for new sewers in various streets. F. L. Fellowes, city engr.

BIDS DESIRED

Conn., Hartford—May 15, by Bd. Contract and Supply, rein.-con., vitr. segment block and tile sewers. R. N. Clark, city engr.; adv. this issue.

Pa., Johnstown—See "Streets & Roads."

Pa., Pottstown—May 7, at office M. L. Seasholtz, secy. of Council, sanitary sewers. Gannett, Seelye & Fleming, Inc., 1 Market Sq., Harrisburg, engrs.; adv. this issue.

O., Ashtabula—May 9, at office of W. M. Cotton, city mgr., for West St. Storm Drain. G. B. Gascoigne, 648 Leader News Bldg., Cleveland, engr.; adv. this issue.

O., Cleveland—May 10, sewer in East 185th St. To exceed $25,000. R. Hoffman, city engr.

O., Columbus.—May 15, by R. W. Smith, clk., Franklin Co., joint intercepting sewer, 2,248 ft. 39 in., 1,296 ft. 33 in., 12,704 ft. 30 in. and 4,498 ft. 24 in. segmental block or concrete pipe, etc., Contr. 3, $165,000; East Main Branch Sewer, 2,182 ft. 24 in., 2,122 ft. 18 in., 7,437 ft. 15 in., 6,650 ft. 12 in. and 1,176 ft. 10 in. vitr. pipe, Contr. 5, $60,000; 1,072 ft. 6 in. water mains in Sewer Dist. Clinton 2, Contr. 20, $2,000; 1,270 ft. 6 in. c. i. mains in Sewer Dist. Clinton 2, Clemont Ave. area, Contr. 31, $2,700. E. G. Bradbury, 406½ South High St., engr.

Ind., South Bend—May 15, by Bd. Pub. Wks., 2,520 lin.ft. 24-42 in. circular and 4,947 lin.ft. 8-22 in. vitr. sewer in Lafayette and Jefferson Blvds. $74,438. F. J. Anderson, City Hall, engr.

Ill., Park Ridge—May 8 for sewers. $25,000. Consoer Eng. Co., 140 South Dearborn St., Chicago, engr.

Ill., Western Springs — Receiving bids sewers. $35,000. E. Hancock, 2047 Ogden Ave., Chicago, engr. Noted Oct. 19.

Mo., Richmond Heights (St. Louis, P. O.)—H. Prettyman Co., United Home Building, St. Louis, taking bids 20,000 ft. 8-24 in. vitr. sewers in Pennsylvania Park subdivision, here. $25,000. Pitzman Surveying & Eng. Co., 615 Chestnut St., St. Louis, engrs.

Calif., Ukiah—City Trustees taking bids and open same about May 10, 6,485 lin.ft. 6 in. vitr. sewers, 2,500 cu.yd. excavating and backfilling, etc. R. E. Donohoe, city engr.

BIDS RECEIVED

N. Y., Buffalo—Commissioner Pub. Wks., Apr. 24, for 33 ft. 6 in. and 32 ft. 6 in. rein.-con. drain to care for storm water at Scajaquada Creek, from F. L. Cohen, Inc., Prudential Bldg., $1,379,233. Noted Mar. 29.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., Apr. 30, sewers in (1) Bliss St. (2) 95th St. (3) 95th Ave. (4) Kimball Ave. (5) 84th St. (6) 84th St., from Green Contg. Co., 734 Vernon Ave., Astoria, (1a) $13,307; D. Bonnacci, 672 Degraw St., Brooklyn, (1b) $8,194 (2b) $6,101 (3b $22,853 (5b) $29,369; Seaside Contg. Co., 193 Beach 108th St., Rockaway Beach, (2a) $6,372 (4a) $9,663 (5a) $41,196; F. J. Kelly, Inc., Flushing, (6b) $23,400. Noted Apr. 26.

Pa., Phila.—F. H. Caven, dir. pub. wks., Apr. 25, 4 in. concrete sewer in Johnson St. from Marvine to B Sts., from Lombardi & Co., Lincoln Bldg., $25,825. Noted Apr. 19.

Md., Baltimore—For 1.08 mi. sewers, Storm Water Contr. 57, from Ryan Constr. Co., 735 Real Estate Trust Bldg., Philadelphia., $107,003.

O., Cleveland—For 5,595 ft. 12-24 in. vitr. clay, 320 ft. 2C and 320 ft. 3C brick sewers in Prince Ave. from J. Lahnom, 1133 East 71st St., $26,228, Melba Ave. from G. Dewish. Cleveland (street address not available), $8,498, East 117th St. and War Ave., from Kassouff & Co., 3182 West 25th St., $2,644 and $6,128 respectively, Schiller Ave. from Water & Sewer Impvt. Co., 10923 Detroit Ave., $3,595.

O., Cleveland—Cuyahoga Co., 17,613 ft. 18-30 in. vitr. tile sewer in Ridge Rd. Impvt. 9, from D. Zullo, 10614 Frank Ave., $233,273.

Calif., Mayfield — Sanitary sewers, incl. 5,500 lin.ft. 6 in. vitr. pipe, 29,000 lin.ft. 4 and 6 in. c. i. pipe, etc., from W. J. Tobin, 527 Santa Ray Ave., Oakland, $39,000.

CONTRACTS AWARDED

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sewers in 147th and Summitt Sts., to Kennedy & Smith, Inc., 93 Amity St., Flushing, $2,844 and $4,109 respectively; 131st St., to Seaside Contg. Co., Inc., 193 Beach 108th St., Rockaway Beach, $6,775; Metropolitan and Weisse Aves. and temporary drain in Jamaica Ave., to A. Paino, 32 Court St., Brooklyn, $15,675, $93,443 and $14,249 respectively; Darrow St., to Spinella & Muccinni, 6102 18th Ave., Brooklyn, $42,223; sheet asphalt paving Woodbine St., to Borough Asphalt Co., 1301 Metropolitan Ave., Brooklyn, $6,848; grading sidewalk space on 109th Ave., to J. J. O'Brien, Jr., William St., Jamaica, $368. Noted Apr. 26.

N. J., Paterson—Passaic Valley Sewerage Comrs., 128 Market St., Newark, local sewer connections in Montgomery St. and sewage controlling apparatus in Mulberry St. connection chamber, etc., to Spencer, White & Prentis, Inc., 47 West 42nd St., New York City, $21,890. Noted Apr. 26.

N. C., Marshville—Sewerage and waterworks systems, to J. B. McCrary Co., 3rd Natl. Bank Bldg., Atlanta, Ga., $75,000.

O., Akron—W. F. Peters, dir. Pub. Serv., to Schroeder & Caputo Constr. Co., 1950 West Federal St., Youngstown, 1,825 lin.ft. 8-20 in. vitr. sewer in South Arlington St., Contr. 3, $6,364, South Main and Emeline Sts., 1,590 lin.ft. 30 in. brick $6.50 per lin.ft., 1,020 lin.ft. 36 in. brick pipe $6.50, total $25,158, engrs. est. $30,000, South Arlington St. Dist., Contr. 5, 2,085 lin.ft. 30 in. and 520 lin.ft. 36 in. brick pipe $6, 2,960 lin.ft. 8 in. vitr. pipe $2.60, 1,015 lin. ft. 12 in. vitr. pipe $2.50, total $46,018, engrs. est. $55,000, South Arlington St. Dist., Contr. 3, 1,195 ft. 8 in. $1.50, 560 ft. 12 in. $2.50, 320 ft. 15 in. $2.75, 655 ft. 18 in. $3 and 360 ft. 24 in. $4.50, all foregoing vitr. pipe, engrs. est. $25,000; to H. T. French Constr. Co., 683 Noah Ave., West Market St. Outlet sewer, 365 ft. 30 in. $19, 285 ft. 54 in. $24, 2,695 ft. 63 in. open cut $25,460 ft. 63 in. in tunnel $68, etc., all foregoing brick pipe, total $135,905, engrs. est. $130,000. Noted Apr. 26.

O., Mariemont—For 78,700 lin.ft. 6-18 in. vitr. sewers, 51,200 lin. ft. 6-30 in. vitr. and 7,900 lin.ft. 33-66 in. rein.-con. drains, etc., to J. L. Walker Co., 231 Court St., Hamilton, $375,085; 74,550 lin.ft. 4-16 in. c. i. water mains, etc., to Crumley, Jones & Crumley, 2301 Concord St., Cincinnati, $281,127. Remaining 9 items divided between these 2 contractors.

O., Youngstown—Mahoning Co., vitr. and concrete sewerage system in Boardman Dist., Sect. 1 to Turner Contg. Co., Park Theatre Bldg., $28,699; Sect. 2 to Turner Constr. Co., 242 Madison Ave., New York City, $52,108; Sect. 3 to F. George, 1657 Mahoning Ave., $83,151; Sect. 4 to Grubb & Andrews, Youngstown (street address not available), $48,210. Noted Mar. 22.

Wis., Milwaukee — Sewers in various streets to Szukalski & Matke, 1089 Amer. Ave., Adams Ave. $1,457, Arctic Ave. $429, Indiana Ave. $470, Kinnickinnic Ave. $4,080, New York Ave. $890, Pennsylvania Ave. $1,622; to W. T. Werner, 675 Hi Mount Blvd., Fernwood Ave. $7,262, 55th St. $8,985. Noted Apr. 12.

Wis., Wauwatosa—Metropolitan Sewerage Comn., 508 Market St., Milwaukee, main sewer from end of contract 1 in State St. to county institutional buildings, to G. E. Zimmerman, 3402 Grand Ave., Milwaukee, 3,720 ft., 36 in. concrete sewer $31 per lin.ft., 4,900 ft. 24 in. terra cotta pipe $26, 366 vertical ft. manholes, $22, total $247,112.

Wash., Longview—Long-Bell Lumber Co., sanitary sewer, 45,000 cu.yd. excav., 29,000 lin.ft. 8-30 in. pipe, to Bardsen & Co., Butte, Mont.; storm sewer, 26,000 cu.yd. excav., 39,000 lin.ft. 10-54 in. pipe, to J. D. Hanley, 1316 Rodney St., Portland, Ore. Engrs. est. $150,000. Noted Oct. 5.

Que., Montreal—Sewer in Patricia and Tiffin Sts., to A. Thezand, 885 St. Catherine St. E., $11,582 and $1,012 respectively; Decarie Blvd., Faillon and Boyce Sts., to Toussaint Bros., 383 St. Denis St., $2,463, $2,123 and $1,457 respectively; St. Zotique St., to P. DeSantis, 3929 St. Hubert St., $4,521; Eadie St., to C. Frascarelli & Co., 654 Berri St., $18,177. Noted Apr. 26.

Bridges

PROPOSED WORK

Conn., Saybrook—State Hy. Dept., Hartford, and New York, New Haven & Hartford R.R., New Haven, plan 100 ft. bridge over Ferry and Hartford Rds., 7 spans, concrete and steel, here. $55,000. C. J. Bennett, state highway engr.

N. J., Newark—Essex Co. having plans prepared extending present 12 ft. single arch brown stone bridge by means of 12 ft. single span rein.-con. flat slab bridge, also removing two 12 ft. arches of rubble masonry and replacing with 28 ft. single span I beam encased in concrete, Livingston Twp. To exceed $25,000. W. A. Stickel, co. engr.

O., Cleveland—Cuyahoga Co. plans bridge over Cuyahoga River on East 71st St. To exceed $100,000. A. M. Felgate, Court House, engr.

Indianapolis—State Hy. Dept., Indianapolis, plans 600 ft. steel truss bridge over Muscatatuck River, four 150 ft. spans. $90,000. W. J. Titus, state bridge engr.

Ind., New Albany—See "Railways" under "Indiana."

Bridges (Continued)

Minnesota—Hennepin Co. (Minneapolis) plans 4,200 ft. steel bridge over Minnesota River, near Mendota. $1,000,000. J. W. Shaffer, co. surv.

Kan., Troy—See "Streets and Roads."

Missouri—State Hy. Dept., Jefferson City, plans one 70 ft. steel truss, Ripley Co.; one 20 ft. rein.-con. slab, Atchison Co.; one 40 ft. deck girder, Mercer Co.; six 20 ft. rein.-con. slab and one 80 ft. steel truss spans, Monroe Co.; one 60 ft., one 80 ft. and one 140 ft. steel truss spans, Monroe Co.; one 70 ft. steel truss, Texas Co.; three 40 ft. I-beam spans, Pemiscot Co.; three 16 ft. rein.-con. slab spans, St. Clair Co.; one 70 ft. steel truss, Ripley Co.; two 140 ft. and two 80 ft. steel truss spans, Hickory Co.; two 35 ft. rein.-con. deck girder spans, Texas Co.; all 20 ft. roadways. B. H. Peipmeier, state highway engr.

Mo., St. Louis—See "Streets and Roads."

Tex., Beaumont—See "Streets and Roads."

Tex., Beaumont—Jefferson Co. making plans 426 ft. concrete and steel bascule span, over Neches River. $282,000. A. C. Love, co. engr.

Tex., McKinney—See "Streets and Roads."

Ont., Lakefield—Peterboro Co. having plans prepared rein.-con. bridge near here, probably arch truss type or concrete arch, 100 ft. long, 20 ft. wide. $25,000. A. W. Connor, 34 Victoria St., Toronto, engr.

BIDS DESIRED

N. C., Kenansville—May 14, by Duplin Co. Highway Comn., 4 bridges near Calypso and 6 near Wallace, creosoted, about 950 lin.ft., average pile about 20 ft. J. J. Bowden, secy.

S. C., Walhalla — May 22, by Superv. Oconee Co., rein.-con. and steel bridge over Tugalo River on Westminster-Toccoa Rd., between Oconee Co. and Stelphens Co., Ga., three 150 ft. steel spans, one 35 and one 50 ft. slab approaches.

Florida — May 15, by State Rd. Dept., Tallahassee, 896 ft. concrete bridge over Sebastian River, Project 39 S, between St. Lucie and Brevard Counties, incl. 76 ft. steel deck girder span, hydraulic fill for both approaches, 1,304 ft. long. W. F. Cocke, state highway engr.

Ind., Monticello — May 15, at Comrs. White Co., Courthouse, raising 10 steel bridges over Tippencanoe River and tributaries. $55,000. P. Ward, co. engr. R. M. Freeman, 8 West 40th St., New York City, consult. engr.; adv. this issue.

Illinois—May 11, by Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, rein.-con., concrete and steel bridges, superstructures, etc., 37,081 cu.yd. concrete, 2,595,970 lb. steel, etc. C. Older, ch. highway engr.

Ill., Chicago—May 24, by H. E. Wallace, clk., at office Sanitary Dist. of Chicago, 910 South Michigan Ave., substructure of double leaf trunnion bascule bridge (Strauss type) over Main Drainage Channel; adv. this issue.

Minn., Red Lake Falls — See "Streets and Roads."

Wash., La Center—July 31, by State Hy. Comn., Olympia, 14,000 ft. rein.-con. bridge over Lewis River, here, 1 main arch over river and remainder short spans, 20 ft. roadway, 4 ft. sidewalks. $100,000. J. Allen, state highway engr. Noted Dec. 28.

Ontario — May 8, by G. E. Stephenson, Walkerton, engr. Bruce Co., one 50 ft. rein.-con. girder span, 1 mi. from Ripley, also 90 ft. steel truss bridge 4 mi. east of Paisley. $30,000.

BIDS RECEIVED

S. C., Hampton—See "Streets and Roads."

Calif., Sacramento — Sacramento Co., furnishing 511,000 lb. structural steel and machinery for Steamboat Slough Bridge and Paintersville Slough Bridge, (a) furnishing steel per lb. (b) machinery per lb., from Moore Drydock Co., Balfour Bldg., San Francisco, (a) $0.0799 (b) $0.249; Union Constr. Co., Balfour Bldg., San Francisco, (a) $0.0681 (b) $0.37; United States Steel Products Co., Rialto Bldg., San Francisco, (a) $0.077 (b) $0.303. Noted Apr. 5.

CONTRACTS AWARDED

Fla., Dade City—Pasco Co., 10 rein.-con. bridges, to Lutch Bridge Co., Palatka, $53,467.

Fla., Quay—Quay Bridge Dist., 2,880 ft. wood trestle, 144 ft. steel drawspan on concrete pier, over Indian River, here, steel work to Austin Bros. Bridge Co., Hurt Bldg., Atlanta, Ga., $9,850; trestle and fill to Newman, Fletcher & Law, Vero, $19,398. Noted Mar. 29.

O., Bowling Green—Wood Co. for Oregon Rd. Bridge, to Standard Eng. Co., 2463 Bway., Toledo, $64,047. Noted Mar. 8.

Wis., Appleton—Cherry St. viaduct, to Wausau Iron Wks., Wausau, $218,951; Lawe St. bridge, to C. R. Meyer & Sons, 50 State St., Oshkosh, $56,947. Noted Apr. 26.

Illinois—See "Streets and Roads."

Ill., Chicago—South Park Comrs., 57th St. and Cottage Grove Ave., steel work for South Park Blvd. viaduct, to Stroebel Steel Constr. Co., 53 West Jackson Blvd., $266,740. Noted Apr. 5.

Ia., Davenport—Scott Co., to Federal Bridge Co., Bankers Trust Bldg., Des Moines, 1 slab, 1 I-beam and 5 box culverts, $16,036; W. D. Phelan & Co., Davenport, 6 box culverts, $8,862; L. Plumb, Wapello, 9 box culverts, $8,468; F. J. Smith, Tipton, 3 slab bridges and 8 box culverts, $10,496.

Ia., Mason City—Cerro Gordo Co. to A. Olson Constr. Co., Waterloo, one 70 ft. and one 90 ft. pony truss, $13,567; C. A. Hovlik, Mason City, one 16 ft. slab, one 100 ft. arch, one 40 ft. and one 50 ft. pony truss, $19,842.

Ia., Primghar—O'Brien Co., to G. Gardner, Sheldon, 3 pony trusses, 3 I-beam spans, and 3 box culverts, $21,928; Graves Bros., Melvin, 4 box culverts and 3 I-beams, $6,776; Pynchon Eng. Co., Sheldon, 13 box culverts and 1 pony truss, $9,444. Noted Mar. 29.

South Dakota—State Hy. Dept., Pierre, bridge on Project 124, Codington Co., to Schreiber Eng. Co., Watertown, $8,342; bridges on Project 119, Grant Co., Project 139 Roberts Co. and Project 117 Haakon Co., to Youngberg Constr. Co., Aberdeen, $2,420, $2,420 and $14,624 respectively. Noted Mar. 15.

Kan., Holton—See 'Streets and Roads."

Wyoming—State Highway Comrs., Cheyenne, one 123 ft., one 80 ft. and two 24 ft. concrete bridges, Federal Aid Project 116-B 11, Sheridan Co. to Security Bridge Co., 502 North 32nd St., Billings, Mont., $31,226. Noted Apr. 19 under "Streets and Roads."

California—F. E. Webb, Grand Central Terminal Bldg., New York City, et al., constructing 6 mi. drawbridge over San Francisco Bay from Little Coyote Point in San Mateo Co., to Alameda Co. shore, 20,000 tons reinforcing, 250,000 cu.yd. concrete, 4,000 tons structural steel and 7½ mi. paved highway approaches, to Coast Constr. Co., Crocker Bldg., San Francisco, $10,000,000. Noted Feb. 1.

Washington—See "Streets and Roads."

Wash., Chehalis—Lewis Co., 220 ft. steel bridge with concrete piers and timber approaches, over Chehalis River, near Claquato, to C. L. Graves, 2124 Montgomery St., Spokane, wood stringer, $29,572. Noted Apr. 4.

Ore., Astoria—State Hy. Com., Salem, single leaf bascule bridge, 100 ft. clear span, concrete piers and about 700 ft. pile trestle approach, on Roosevelt Highway, over Lewis and Clarke River, near here, to Pacific Bridge Co., foot of East Salmon St., Portland, $170,837. Noted Mar. 29.

Ontario—Dept. Pub. Highways, 110 University Ave., Toronto, steel bridge superstructures between Barrie and Orillia, Contrs. 791 and 792, to Ontario Bridge Co., Crown Office Bldg., Toronto, $25,000.

Ore., Hillsboro—State Hy. Dept., Salem, rein.-con. bridge on Tualatin Valley Highway, over Daisy Creek, here, 730 cu.yd. concrete and 110,000 lb. reinforcing, to W. D. Hoffman, Amity, $28,720.

Dams

PROPOSED WORK

N. Y., Beacon—Voted $190,000 bonds for rein.-con. dam at municipal water supply station.

N. Y., Stewarts Landing (Dolgeville, P. O.)—Adirondack Power & Light Corp., 511 State St., Schenectady, plans new concrete dam and power house on East Canada Creek, here. To exceed $175,000.

Pa., Lilly—Summitt Water Co. plans 300 ft. rein.-con. dam, 5 ft. high. $50,000. P. Klemstine, supt.

Mo., Kansas City—Soon takes bids 340 ft. rein.-con. dam with 250 ft. spillway, 42½ ft. wide. $85,000. Harrington, Howard & Ash, Orear-Leslie Bldg., consult. engrs.

Okla., Sapulpa — City plans dam on Euchee Creek, 2,700 yd. excav., 2,400 yd. concrete, etc. $42,000. F. E. Lawrence, city engr.

Washington—See "Industrial Works."

Calif., Oroville — Thermalito Irrigation Dist. had plans prepared Concow dam, arch type, 75 ft. high, 240 ft. long on crest, to store 3,500 acre ft., involving 3,000 cu.yd. concrete. $50,000. S. J. Norris, ch. engr.

BIDS DESIRED

Nev., Yerington—May 9, by H. C. Dukes, secy. Walker River Irrigation Dist., Yerington, earth fill dam, to impound 42,000 acre feet, 125,000 cu.yd. earthwork, 1,500 cu.yd. rein.-con. and 20,000 cu.yd. earth and rock excav. Cost to exceed $100,000.

CONTRACTS AWARDED

N. Y., Newburgh — W. J. McKay, city mgr., 2 dams about 2 mi. south of here, to Mapes & Erway, Warren, O. Noted Mar. 22.

Ind., Ft. Wayne—Movable dam and appurtenances in Maumee River, to I. E. Smith Constr. Co., Richmond. Noted Apr. 4.

Wis., Brokaw—Wausau Paper Mills, 500 ft. rein.-con. dam, 16 ft. head, 11 steel tainter gates, to W. E. Ule, Stevens Point. Noted Mar. 1.

Mexico, Sonora—For 3,300 ft. rock fill dam, 12 ft. high, 125 ft. wide, in addition to extension canal construction, to Richardson Constr. Co., Van Nuys Bldg., Los Angeles, Calif., to exceed $750,000. Owner's name withheld until plans are further advanced. Quinton-Code-Hill, Hollingsworth Bldg., Los Angeles, Calif., engrs.

Railways

PROPOSED WORK

North Carolina—Bd. Trustees State University, Chapel Hill, appropriated $65,000 for 1 mi. line from depot at Chapel Hill to University power house. T. A. Underwood Corp., Chapel Hill, engrs.

Pennsylvania — Scranton, Montrose & Binghamton R.R., 227 Wyoming Ave., Scranton, plans to relay steel rails in North Scranton and also move tracks at 2 points. $25,000.

Kentucky—Louisville, Henderson & St. Louis Ry. Co., 2nd and Main Sts., Louisville, plans new track on new right of way at points between Louisville and Henderson, to shorten main line and avoid sharp grades. $100,000. W. S. Moore, engr. M. W.

Indiana—Monon Route, Chicago, Indianapolis & Louisville Ry., 608 South Dearborn St., Chicago, plans reconstructing west leg of Y, at New Albany; also erecting new steel trestle. $30,000. A. S. Kent, Chicago, ch. engr.

BIDS DESIRED

Ontario—May 5, by A. Beck, chn. Hydro Electric Power Comn. of Ontario, 190 University Ave., Toronto, single and double track electric street railway, 4 mi. long, on various streets in Windsor, Walkerville and Ford City. $300,000. F. A. Gaby, ch. engr. Noted Apr. 12.

CONTRACT AWARD

Michigan—Ford Motor Co., Highland Park (Detroit P. O.) 15 mi. double track road connecting plant at River Rouge with Detroit, Toledo & Ironton R.R., to F. R. Jones Co., 111 West Washington St. $250,000.

Missouri—St. Louis & San Francisco R.R. Frisco Bldg., St. Louis, 9 mi. double track and 2 double track bridges over Meramec River at Diecke and at Valley Park to replace narrow single track bridges, to Grant-Smith & Co., Merchants-Laclede Bldg., St. Louis, Engrs. est. $900,000. Noted Feb. 8.

Excavation, Drainage, Irrigation

PROPOSED WORK

Tex., Corpus Christi—Nueces Co. voted $1,000,000 bonds for improvement in D. D. 1. Address H. R. Sutherland, co. judge.

Calif., Willows—San Jacinto Irrigation Dist. having plans prepared drainage system, incl. pumping plants, 15 wells and deep well turbine pumps, 18 and 20 in. with power lines, motors, etc. J. F. Ryan, Willows, consult. engr. Noted Nov. 9.

BIDS DESIRED

Mich., Pontiac—May 15, by Drain Commissioner Oakland Co., county drain in city and Waterford Twp.; adv. this issue.

Ill., Fairfield—May 9, by F. M. Yohe, co Clerk Wayne County, for 843,000 cu.yd. levee and 571,000 cu.yd. ditch work in Union D.D.

Ia., Boone—May 10 at office of A. Paterson, aud. Boone Co., for Drain 132, 33,674 lin.ft. 6-32 in. tile, etc. $25,676.

Ia., Clarinda—May 9 by Supervs. Page Co., new channel for West Tarkio River in D.D. 19, 153,554 cu.yd. excav., etc. A. S. Van Sandt, Clarinda, engr.

N. D., Grand Forks—May 10, by Auditor Grand Forks Co., 9 mi. Drain 12, 61,000 cu.yd. excav., $34,000, 4½ mi. Drain 13, 6,000 cu.yd. excav., $10,000, in Levant and

Excavation Drainage and Irrigation (Continued)

Lakeville Twps. J. Ingram, Grand Forks, engr.

Ark., Eudora—May 15, by Bd. Comrs. Eudora Western D.D., 3,000,000 cu.yd. excav. Baxter Eng. Co., Moore & Turner Bldg., Little Rock, engrs.

Canada—May 11, by R. C. Desrochers, secy. Dept. Pub. Wks., Ottawa, Ont., hydraulic dredging at Bowmanville, Midland, Penetanguishene, Port Hope, Saulte Ste. Marie and Point Traverse in province of Ontario, and Nicolet, River St. Charles, Rivere du Loup and St. Pierre les Becquets in province of Quebec. $200,000.

CONTRACTS AWARDED

Fla., Melbourne — Melbourne-Tillman Cocoa Dist., drainage work, to Florida Drainage & Constr. Co., Palatka, $700,000.

Ill., Savanna—Carroll Co. Drainage and Levee Dist. 1, 16 mi. levee and ditches, 768,700 cu.yd. excav., etc., to Callahan & Crawford, Great Southern Life Bldg., Dallas, Tex., $0.108 per cu.yd. and $0.208 per yd. across deep sloughs for levee. Noted Mar. 22.

Wis., Milwaukee—Dredging various rivers and channels during season, to Great Lakes Dredge & Dock Co., 216 West Water St., $0.364 per cu.yd., total $31,500.

Minn., Olivia—Renville and Sibley Counties. Judicial Ditch 15, 4,678,900 cu.yd. excav., 432 mi. tile, 4 mi. sewer excav. to E. D. Barr, Lake Crystal; tile and sewer to Kircher Bros., Olivia. Engrs. est. $1,700,000.

Mo., Foley—Sandy Creek D.D., drainage ditches and levee to protect 1,000 acres, to McWilliams Dredging Co., McCormick Bldg., Chicago, $0.14 per cu.yd. Engrs. est. $25,000.

Streets and Roads

PROPOSED WORK

Massachusetts—State Hy. Dept., Boston, preparing plans 4.21 mi. road in Brimfield, Hampden Co., 106,000 gal. asphalt. $280,000. J. A. Johnston, 544 Main St., Worcester, dist. engr.

Conn., Hartford — Street Dept. plans widening 1,200 ft. Ford St., 12 ft. each side. $32,000. R. N. Clark, city engr.

Conn., Saybrook—State Hy. Dept., Hartford, and New York, New Haven & Hartford R.R., New Haven, plan to eliminate 4 railroad crossings by building 4,000 ft. Ferry Rd. and Hartford Turnpike, 20 ft., here. $85,000. C. J. Bennett, state highway comr.

N. Y., Albany—See "Miscellaneous."

N. Y., Eastwood—Soon takes bids concrete paving Sunnycrest Rd. and Midler Ave. $60,000. J. J. Schaefer, village pres. Noted Mar. 29.

N. Y., Jamestown—Plans paving Dearborn St., brick on concrete. $25,000. L. Bergman, city engr.

N. Y., Malone—Village Bd. plans macadamizing various streets. $32,500.

N. Y., Niagara Falls—Plans curbing, sidewalks and paving 640 sq.yd. 18th St. brick, $16,080; paving Maple Ave. and Lockport St., brick, asphalt, bithulithic or concrete, $23,350. W. Bennett, Convention Hall, city engr.

N. Y., Solvay (Syracuse, P. O.)—Bd. Village Trustees plans macadamizing and new pavements on various streets and park roads. $175,000. T. Erwin, highway comr.

N. Y., Troy—Common Council approved $276,000 bond issue macadam and asphalt paving 24 streets, Blakely and Park Courts. A. E. Roche, city engr.

N. Y., Watertown—Bd. Pub. Wks. plans macadamizing portion West Ten Eyck, Dimmick, South Meadow, North Rutland and South Pleasant Sts.; concrete paving Le Ray and Huntington Sts. $100,000. P. B. Sutton, city engr. Noted Jan. 11.

N. J., Allenhurst—Bd. Boro Comrs. rejected bids 8 in. rein.-con. pavement. Noted Apr. 19.

N. J., East Orange—Plans resetting curb and paving 3,500 ft. North 19th St., 30 and 34 ft., $40,000; grading, curbing and paving 4,900 ft. Brookwood St. and Rutledge Ave., 30 ft., $85,000, sheet asphalt, asphalt block, warrenite, bithulithic, etc., on old Telford or 6 in. concrete. W. D. Willigerod, City Hall, engr.

N. J., Irving (branch of Newark)—Soon takes bids 10,200 lin.ft. blue stone curbing and 16,900 sq.yd. 6 in. rein.-con. paving on New St., Normandy and Rosehill Places, Mount Vernon and Chester Aves. $65,000. I. J. Casey, town engr.

N. J., Newark—Essex Co. plans grading and paving 2,640 ft. Bay Ave. in Bloomfield and Glen Ridge, 30-36 ft., $50,000, 1,320 ft. Rutger St. in Belleville, 30-80 ft., $36,000, both granite block and bituminous concrete on 6 in. concrete; $6,020 ft. Franklin Ave. in Nutley, $130,000, 5,280 ft. Scotland St. in Orange, $90,000, both sheet asphalt or asphalt block on 6 in. concrete; 4,224 ft. River Rd. in Nutley, 24 ft., $45,000, 6,388 ft. Grandview Ave. in North Caldwell, 20 ft., $90,000, both 8 in. rein.-con. W. A. Stickel, Court House, co. engr.

N. J., Orange—Making plans grading and paving 2,000 ft. Lincoln Ave., 36 ft., warrenite bitulithic, National asphalt block or sheet asphalt on old macadam. $44,300. K. E. Crane, city engr.

N. J., South Orange—Preparing plans curbing and paving 4,000 ft. Prospect St., 30 and 36 ft., asphalt block, bithulithic or national pavements on 6 in. concrete or 8 in. rein.-con. $80,000. I. I. Redfern, Village Hall, engr.

Pa., Carrolltown — Boro. Council and Comrs. Cambria Co. open bids about May 30, paving 2,650 ft. Main St., 32 ft., brick on concrete, stone curb. $50,000. Cambria Co. to pay $8,000 and Boro. $42,000. F. A. Kline, Bank Bldg., engr.

Pa., Ebensburg—Opens bids about May 30, paving 3.25 mi. Route 62, asphalt. Former bids rejected. Noted Apr. 26.

Pa., Erie—Plans asphalt pavements on 16 streets. $338,110. F. G. Lynch, city engr.

Pa., Patton — Comrs. Cambria Co. and Boro Council, c/o H. T. Jones, controller, (Ebensburg), open bids about May 30, paving 2,514 ft. brick on concrete, stone curb. $50,000. O. P. Thomas, Park Bldg., Johnstown, engr.

Pa., Pittsburgh—Soon takes bids grading, paving and curbing St. Martin St., asphalt on concrete. $46,000. F. W. Lyon, City County Bldg., engr.

Pa., Sharon—Plans paving 1,600 ft. Cedar St., brick, asphalt or sheet asphalt. $25,000. L. Burnside, city engr.

Pa., Wilkes-Barre—Plans paving Dagobert and Prospect Sts., sheet asphalt on concrete, stone or concrete curb. $50,000. F. H. Gates, city clk.

N. C., Chapel Hill—University of North Carolina plans grading and paving roads and driveways, $50,000; grading and constructing exercise and recreation grounds, $50,000. T. A. Atwood Corp., Chapel Hill, engrs.

S. C., Gaffney—City Council plans curbing and guttering Buford, Cherokee, Logan and Robeson Sts., et al., 23,600 lin.ft. combined concrete curb and gutter, 5,975 sq.yd. 4 in. concrete sidewalk, etc. $48,000. H. Beebe, Spartanburg, engr.

S. C., Gaffney — Had plans prepared grading, curbing, guttering, sewers and paving Smith, Buford, Meadow, Birnie, Jeffries, Montgomery and Limestone Sts., 5,360 cu.yd. excav., 14,400 sq.yd. asphalt on concrete, etc. $53,000. H. Beebe, Spartanburg, engr.

Fla., Salerno—May 15, to vote on $60,000 bonds for 14 mi. shell roads.

Tennessee—Dept. of Highways, Nashville, making surveys highway between Crossville and Rhea Co. line, 18 ft., Cumberland Co. J. G. Creveling, Nashville, comr. highways and Pub. Wks.

Tenn., Livingston—Overton Co. plans to vote on $300,000 bonds limestone roads. J. H. McDonald, co. judge.

Kentucky—State Hy. Dept., Frankfort, having plans prepared grading 11.55 mi. Pineville-Harlan Rd., State Project 6, Sect. A, Bell Co. J. S. Boggs, state highway engr.

O., Bedford — Plans grading, curbing, vitr. brick paving, concrete or stone sidewalks on various streets. $200,000. E. P. Wright, Town Hall, engr.

O., Cleveland—Cuyahoga Co. had plans prepared grading and paving Highland Rds. 3 and 4, brick or waterbound macadam. $150,000. F. Lander, Court House, engr.

O., Columbus—See "Waterworks."

O., Cuyahoga Heights (Cleveland, P. O.)—Making plans brick paving and laying stone sidewalks on Grant Ave. $80,000. Hecker & Irish, 905 Leader News Bldg., Cleveland, engrs.

O., Cuyahoga Heights (Cleveland, P. O.)—Plans paving East 49th St. $30,000. Hecker & Irish, Leader-News Bldg., Cleveland, engrs.

O., Hillsboro—Highland Co. selling $32,000 bonds road improvements. J. S. Kerns, clk.

O., Marietta—Plans asphalt and vitr. brick paving on Front, Greene and 5th Sts. $76,837. C. A. Stone, Marietta, engr. Noted Feb. 1.

O., Warren—Soon takes bids paving 4,878 ft. South Main St., sheet asphalt, brick, macadam, etc.

Indiana—State Hy. Dept., Indianapolis, plans resurfacing 5.7 mi. State Rd. 42, Sect. D, from New Albany to Paoli, bituminous tar. W. K. O'Neill, New Albany, dist. highway engr.

Indiana—State Hy. Dept., Indianapolis, plans 28 mi. gravel, macadam and bituminous macadam roads in Perry and Crawford Counties. $862,380. C. Gray, state highway engr.

Ind., Jeffersonville—Clark Co. plans 4.78 mi. George Lindemeyer Rd., Oregon Twp., 12 ft. $46,776. K. W. Barnes, co. surv.

Ind., New Albany—Floyd Co. plans macadam paving 2,600 ft. North 2nd St., 16 ft., $8,276; graveling 14,186 ft. Martin-Campion St., 9 ft., $4,317; resurfacing 7 mi. road from Jeffersonville to New Albany River Rd. M. Boland, co. engr.

Ind., South Bend—Takes bids latter part of May paving, etc., Randolph, Huey and Kosciusko Sts., Elwood and California Aves. $40,867. F. J. Anderson, City Hall, engr.

Michigan — State Hy. Dept., Lansing, plans grading and surfacing 3.862 mi. road, Calhoun, Jackson and Hillsdale Counties, 11,141 cu.yd. excav., 20,393 sq.yd. gravel.

Ia., Iowa City—Johnson Co. plans grading and bridge work on Primary Rd. 7 from Tiffin to west county line, 4 mi. Primary Rd. 11 from south county line northeast, and 5.12 mi. Primary Rd. 40 from south county line north. Iowa Hy. Comn., Ames, engrs.

Ia., Onawa—Monona Co. plans grading and bridge work on 6.67 mi. Primary Rd. 37 southeast of Soldier, 8.35 mi. Primary Rd. 12 from Woodbury Co. Line southeast through Whiting, approximately 7.5 mi. Primary Rd. 34, northwest of Mapleton and 1 mi. Primary Rd. 34 between Ute and Mapleton. Iowa Hy. Comn., Ames, engrs.

Ia., Sigourney—Keokuk Co. plans grading and bridge work on Primary Rd. 2, etc., approximately 8 mi., and Primary Rd. 13 from north county line to Sigourney. Iowa Hy. Comn., Ames, engrs.

Kan., Holton—Jackson Co. had plans prepared 15 mi. concrete road, 18 ft. Kansas Eng. Co., Topeka (street address not available), engrs.

Kan., Iola—Allen Co. had plans prepared 2 mi. concrete road, 18 ft. Kansas Eng. Co., Topeka, (street address not available), engrs.

Kan., Oberlin—Decatur Co. had plans prepared grading and constructing 56 mi. earth road. Kansas Eng. Co., Topeka (street address not available), engrs.

Kan., Troy — Doniphan Co. had plans prepared 17 mi. concrete paving, 18 ft. and 4 concrete bridges 30-100 ft. spans. Kansas Eng. Co., Topeka (street address not available), engrs.

Mont., Great Falls—Cascade Co. plans grading 14 mi. Ulm-Cascade Rd. $100,000. J. E. Moran, clk.

Mont., Hardin—Big Horn Co. plans 17.5 mi. hard surfaced road between here and Custer. $105,000. R. J. Ephland, co. engr.

Mont., Helena—Plans paving 15 blocks Main, 6th and State Sts., Neill Ave. and Bway. $60,000. T. Carmichael, city engr.

Missouri—State Hy. Dept., Jefferson City, plans grading, etc., 77.5 mi. highways in Ripley, Atchison, Pemiscot, St. Genevieve, Hickory, St. Clair, Texas, Carroll, Monroe, Mercer, Crawford, Andrew, Warren, Macon, Platte and Saline Counties. B. H. Piepmeier, state highway engr.

Mo., St. Louis—Takes bids in next few months curbing and paving 210,425 sq.yd. various streets, asphalt, bitulithic concrete, warrenite bitulithic, asphaltic concrete, bitulithic, brick, willite, Kentucky rock asphalt, sheet asphalt, or rein.-con., $989,275; grading 49,090 cu.yd., $40,650. W. W. Horner, city engr.

Ark., Blytheville—Making plans paving streets, various types. $500,000. A. T. Archer & Co., 609 New England Bank Bldg., Kansas City, Mo., engrs.

Ark., Newport — Making plans paving 7,000 ft. 1st and Hazel Sts. et al., 27-50 ft. Morgan Eng. Co., Goodwyn Institute Bldg., Memphis, Tenn., engrs.

Tex., Beaumont — Jefferson Co. making plans grading, asphalt surfacing and concrete and timber pile trestles on 2,589 ft. State Highway 3, 20 ft. $127,930. A. C. Love, co. engr.

Tex., Cleburne — Johnson Co. defeated $40,000 bonds improving 2 roads in Venus Rd. Dist. O. B. McPherson, co. judge. Noted Mar. 22.

Streets and Roads (Continued)

Tex., Dallas—Dallas Co. making plans grading and surfacing 2 in. asphalt on waterbound macadam 3.03 mi. State Highway 15, 20 ft. $143,254. Nagle-Witt-Rollins Eng. Co., Courthouse, engrs.

Tex., Hemphill—Sabine Co. making plans grading and gravel surfacing 9,600 cu.yd. State Highway 21. $50,000. W. A. French, San Augustine, co. engr.

Tex., McKinney—Collin Co. making plans grading, rein.-con. paving and bridging 7 mi. State Highway 6, 16 ft. $280,000. F. W. Cawthon, co. engr.

Tex., Palo Pinto—Palo Pinto Co. rejected bids grading and surfacing with sledged stone on stone 9.81 mi. North Branch State Highway 1, Federal Aid Project 369, 16 ft. 25,717 cu.yd. stone at quarry to be furnished by county, $177,500; 5.81 mi. Highway 1, Federal Aid Project 356, 20,464 cu.yd. stone at quarry, $100,000. Will readvertise. Contract for 1 in. bituminous topping to be let at later date.

Oklahoma — State Hy. Dept., Oklahoma City, rejected bids surfacing with brick or concrete 1.65 mi. Federal Aid Project 88, Creek Co. Will readvertise. F. G. Simmons, c/o State Engineers Office, engr. Noted Jan. 25.

Okla., Blackwell—Having plans prepared grading and vitr. brick paving 15 blocks, 26-40 ft., in Dist. 22. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Okla., Healdton—Having plans prepared grading and paving 6 blocks Main St., 40-60 ft. C. Coon, 1820 North Bway., Oklahoma City, engr.

Okla., Okmulgee—Okmulgee Co. plans 6 mi. concrete or gravel road from Henryetta to western county line. H. C. King, Okmulgee, engr.

Okla., Perry—W. A. Lucas, city clk., takes bids about June 15, grading and paving 50 blocks. $300,000. C. Wood, Stillwater, engr.

Okla., Sapulpa — Creek Co. having preliminary plans prepared constructing 10 mi Ozark Trail, 18 ft. C. K. Howard, Sapulpa, engr.

Okla., Sapulpa — Creek Co. had plans prepared constructing 8½ mi. Albert Pike Rd., Federal Aid Project 109, 18 ft. C. K. Howard, Sapulpa, engr.

Utah, Provo—A. Demming, city engr., soon takes bids curbing, guttering and sprinkling system in park. $50,000.

Wash., Bellingham—Whatcom Co. had plans prepared concrete paving 2.5 mi. Acme-Wickersham Highway. $65,000. F. W. McElmon, co. engr.

Wash., Tacoma—Plans concrete paving Yakima Ave. $40,000. J. C. Manley, city engr.

Oregon—State Hy. Dept., Salem, plans grading 8.36 mi. Federal Aid Project 97, Coos Co., $300,135. Federal Government appropriated $153,331. R. Klein, state highway engr.

Calif., Fresno—Had plans prepared grading, concrete curbing, guttering, sidewalks and paving Abby St., 95,379 sq.ft. grading, 85,881 sq.ft. asphaltic pavement, etc. W. Stranahan, city engr.

Calif., National City—Plans to vote on $33,000 bonds paving streets.

Calif., Redwood City—Received no bids grading, curbing, guttering and oil macadam paving various streets in Oak Knoll Manor. $100,000. Will readvertise. C. L. Dimmitt, city engr. Noted Apr. 12.

Calif., San Diego—Had plans prepared curbing, sidewalks and paving 25th and Crosby Sts., 30,221 sq.yd. 2½ in. asphaltic concrete base, 1½ in. surface, etc. F. A. Rhodes, city engr.

Calif., Turlock — Had plans prepared grading, concrete guttering and paving portions Orange St., 90,000 sq.ft. grading, 83,000 sq.ft. 1½ in. warrenite on 3 in. asphaltic concrete, etc. H. Hall, city engr.

Calif., Yuba City—Having plans prepared paving portions B and Shasta Sts., etc. To exceed $25,000. E. Von Geldern, Yuba City, engr.

Que., Montreal—Plans to open and widen 5 mi. Sherbrooke St. from Delormier St. to city limits, incl. subway under property of St. Jean de Dieu Hospital, 17 ft. wide, concrete and steel. $71,287. E. Gauthier, asst. city clk.

Ont., Chatham—Kent Co. plans to expend $256,430 building concrete, gravel and macadam roads. Portion of work will be done by day labor, balance by contract. W. G. McGeorge, 153 Queen St., engr.

Ont., Niagara Falls—Preparing plans 18,000 sq.yd. asphalt pavement on Bridge St., concrete base. $73,000. T. S. Scott, town engr.

Ont., Simcoe—Norfolk Co. plans to expend $131,450 on macadam and gravel roads. Some of work will be done by day labor, balance by contract. G. R. Marston, co. engr.

Ont., Toronto—Plans 4,000 sq.yd. asphalt pavements on Adrian Ave. $6,883, Strathmore Blvd. $11,691, concrete sidewalks on Larchmont Ave. $4,342. 5,000 lin.ft. concrete curbs on Connollov St., Adrian, Cannon and Mulock Aves. $4,959. R. C. Harris, city engr.

Ont., Toronto—Plans improving Mulock Ave., 9,000 sq.yd. asphalt on concrete, brick gutters, $44,033. R. C. Harris, city engr.

B. C., Vancouver—June 16, to vote on $250,000 bonds improving various streets, probably bituminous macadam on macadam. F. L. Fellowes, city engr.

BIDS DESIRED

Mass., Holyoke—Bd. Public Wks. taking bids 25,000 sq.yd. asphalt surfacing on Cabot, Main, Lyman, Appleton and Dwight Sts. $50,000. P. W. Bond, city engr.

New York—May 16, by F. S. Greene, comr. State Hy. Dept., Albany, improving highways in Cayuga, Columbia, Jefferson, Montgomery, Warren and Wayne Counties; reconstructing highways in Jefferson, Oneida, Schuyler, St. Lawrence, Sullivan and Ulster Counties. W. A. Patton, secy.; adv. this issue.

N. Y., Binghamton—May 9, by Bd. Contr. & Supply, asphalt paving State, Chenango and Center Sts. $60,000. W. E. Weller, city engr. Noted Apr. 12.

N. Y., North Tonawanda—May 14, by Bd. Pub. Wks., asphalt paving Felton St., Lincoln and 7th Aves. To exceed $25,000.

N. Y., Peekskill—May 8, by Bd. Village Trustees, repaving various streets, rein.-con., wood block or brick. A. E. Cruger, clk.

N. Y., Penn Yan—Bd. Village Trustees taking bids paving Lake St., sheet asphalt, bituminous macadam, 3 in. brick or rein.-con. To exceed $25,000. R. Cramer, village pres. Noted Feb. 1.

N. Y., Poughkeepsie—May 17, by Bd. Pub. Wks., Eastman Park Mansion, asphalt, granite block and brick pavements, etc. T. F. Lawlor, supt.

N. J., East Orange—May 14, by Mayor and City Council, 6,000 lin.ft. bluestone curb and 11,000 sq.yd. paving on North 19th St., 30 and 34 ft., sheet asphalt, asphalt block, warrenite bitulithic or National pavement on old Telford base. $40,000. W. D. Willigerod, city engr.

N. J., Newton—May 17, by Sussex Co., graveling Lafayette Twp. Rd. 1. W. S. Vought, clk.; adv. this issue.

Pa., Corry — May 9, brick or concrete pavements. N. R. Dickson, city engr.; adv. this issue.

Pa., Ebensburg—May 16, by Comrs. Cambria Co., reconstructing 17,902 ft. Cresson Pike, brick on concrete. $100,000. H. F. Dorr, co. engr.

Pa., Ellwood City—May 10, by Boro. Council at office Boro. Clerk, 228 6th St., grading, paving, curbing and guttering Line Ave. A. Main, boro. engr.; adv. this issue.

Pa., Johnstown—May 8, by M. L. Masterson, supt. dept. streets, paving 12 mi. and building sanitary and storm sewers in various streets, Contracts 1, 2, 3, 4, 5 and 6, $400,000 and $200,000 respectively. H. L. Wilson, city engr.

Pa., Phila.—May 9, by Director Pub. Wks., 8,994 sq.yd. granite block pavement on Delaware Ave. from Snyder to Bigler Sts. $50,000. 35,500 sq.yd. granite block on Delaware Ave. from Snyder to Porter Sts. $42,000. J. A. Vogelson, City Hall, engr.

Delaware—May 16, by State Hy. Dept., Dover, 2.21 mi. Marsh Rd., Contr. CN-7, 2.746 mi. Bear-State Rd., Contr. CN-10, 4.35 mi. Townsend-Coldwell Rd., Contr. CN-11, fill at Appoquinimink, Contr. 48-C, highway drainage sewer in Camden, Contr. 48-C; adv. this issue.

Maryland — May 15, by State Rds. Comn., Baltimore, Contrs. G-25, W-25, M-11, M-37, M-25A, Ho-33 AA-32, K-22, Ce-44 and Ce-46, Garrett, Washington, Montgomery, Howard, Anne Arundel, Kent and Cecil Counties. J. N. Mackall, chn.; adv. this issue.

Ky., Henderson—May 8, by Comr. Pub. Wks., paving, curbing and guttering Main, Elm and Green Sts.; adv. this issue.

O., Akron—May 28, by W. F. Peters, dir. Pub. Serv., grading, curbing and paving 6,800 sq.yd. South Arlington St., 44 ft., vitr. brick or asphalt on concrete. $40,000. E. A. Kemmler, Delaware Bldg., engr. Noted Apr. 19.

O., Cleveland—May 9, grading, curbing and brick, concrete or asphalt paving Shaw Ave. S.W., Way Ave. S.E., Tuscora Ave. N.E., Oakwood Ave. S.E., and Lorain Ave., East 55th, East 125th and West 9th Sts. To exceed $100,000. R. Hoffman, city engr.

O., Massillon—May 8, for 60,000 sq.yd. paving and resurfacing. C. E. Rice, city engr.

Ind., Ft. Wayne—May 8, by Auditor Allen Co., grading and graveling 15 mi. ft. Rodenbeck Rd., 18 ft. $25,500. C. M. Darling, Ft. Wayne, engr. Noted Apr. 26.

Ind., South Bend — May 14, by Bd. Comrs., St. Josephs Co., c/o County Auditor, grading and concrete paving 46,636 sq.yd. Bremen Highway. $144,135. P. R. Gillin, co. engr.

Ind., South Bend—May 15, by Bd. Public Wks., paving 32,402 sq.yd. St. Peter, Ohio, Pulaski, Sadie, Sorin and Wayne Sts., $182,850; 1,521 sq.yd. new surfacing and 24,387 sq.yd resurfacing on Notre Dame Ave. $70,968. F. J. Anderson, City Hall, engr. Noted Apr. 26.

Illinois—May 11, by Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, grading various sections, 3,511,556 cu.yd. excav.; paving 29.19 mi., 18 ft. Alternate bids on concrete, 4 in. monolithic brick, 4 in. bituminous filled brick, bituminous concrete with or without binder course. C. Older, ch. highway engr.

Ill., Elmhurst—May 7, concrete paving various streets. $215,000. E. Hancock, 2047 Ogden Ave., Chicago, engr. Noted Apr. 12.

Minn., Red Lake Falls—May 16, by G. Dupont, aud. Red Lake Co., 6.8 mi. State Project 32-02, Federal Aid Project 273, 160,645 cu.yd. excav.; Bridge 3986, 171 ft. truss span with two 60 ft. approach spans, portable and monolithic culverts. $65,000. H. E. Palmer, Red Lake Falls, and State Hy. Dept., 1246 University Ave., St. Paul, engrs. Noted Oct. 5.

Minn., Red Wing—May 8, by city, paving 39,133 sq.yd. E Ave. and 4th St., 13,923 cu.yd. excav. $100,000. W. Geisheker, city engr. Noted Apr. 12.

Minn., St. Paul—May 21, by Ramsey Co. at office of County Auditor, 60,000 sq.yd. paving, Project (23-02) and (23-55). P. N. Coates, co. engr.; adv. this issue.

N. D., Ellendale—May 11, by Auditor Dickey Co., 6.335 mi. earth road with gravel surfacing Project 143, and 10.984 mi. earth road Project 112, Sect. C, 79,457 cu.yd. earth and 42,998 cu.yd. rock excav. W. G. Black, c/o State Hy. Dept., Bismarck, engr.

N. D., Finley—May 14, by Auditor McIntosh Co., 17.402 mi. Project 183, 123,762 cu.yd. earth and 5,092 cu.yd. rock excav. W. G. Black, c/o State Hy. Dept., Bismarck, engr.

N. D., Lakota—May 16, by Auditor Nelson Co., 9.147 mi., Project 152 and 17.739 mi., Project 169, 224,814 cu.yd. excav. W. G. Black, c/o State Hy. Dept., Bismarck, engr.

N. D., Lisbon—May 9, by Auditor Ransom Co., 10.919 mi., Project 129, 81,049 cu. yd. excav. W. G. Black, c/o State Hy. Dept., Bismarck, engr.

N. D., Minot—May 17, by Auditor Ward Co., 8.196 mi., Project 182; 9.111 mi. Project 82, 18.441 mi., Project 181, 281,259 cu.yd. earth and 19,570 cu.yd. rock excav. W. G. Black, c/o State Hy. Dept., Bismarck, engr.

N. D., Valley City—May 8, by Auditor Barnes Co., 9.233 mi., Project 171, 63,638 cu.yd. excav., 10.36 mi. Project 126, 69,233 cu.yd. excav. 7.31 mi. Project 135, 10,014 cuyd. gravel, 6.88 mi. Project 47, 9,426 cu.yd. gravel. W. G. Black, c/o State Hy. Dept., Bismarck, engr.

Mo., Clayton—May 9, by St. Louis Co. grading and Telford macadam paving 3,776.96 squares McKelvey-Creve Coeur Mill Rd., Hancock Ave., Old Florissant and Chambers Rds., 14 ft.; grading and rein. con. paving 12,575 sq.yd. Ozark Trail, 21 ft. $82,484. W. Elbring, Clayton, engr.

Mo., Richmond Heights (St. Louis, P. O.) —H. Prettyman Co., United Home Building, St. Louis, taking bids 200,000 sq.ft. concrete sidewalks in Pennsylvania Park subdivision, here. $50,000. Pitzman Surveying & Eng. Co., 615 Chestnut St., St. Louis, engrs.

Mo., St. Louis — May 29, by Bd. Pub. Serv., City Hall, curbing and paving 35,450 sq.yd. Slevin, Gimblim, Pershing and Enright Aves., Smiley Ave. from Ivanhoe Ave. to tracks of St. Louis & San Francisco R.R., Smiley Ave. from Leola to Ivanhoe Aves., Lansdowne Ave. from January to Hampton Aves., Lansdowne Ave. from Macklind to January Aves., brick, asphalt, concrete, asphaltic concrete, bituminous macadam, or warrenite bitulithic. $150,700. Noted Apr. 12.

Tex., Boston—May 10, by O. B. Pirkey and S. L. Henderson, judges Bowie Co. grading, gravel surfacing, etc., 1.47 mi. State Highway 1-A, 16 ft. $39,500. T. E. Hess, co. engr.

Tex., Georgetown — May 15, by F. D. Love, judge, Williamson Co. bituminous topping 137,026 sq.yd. State Highway 2-C, various types and thicknesses. $85,000-$100,000. R. A. Nichols, co. engr.

Tex., Kountze—May 10, by T. F. Teel, judge Hardin Co., grading, gravel surfacing and timber pile trestles on 15.66 mi.

Streets and Roads (Continued)

State Highway 40, 16 ft. $185,000. G. C. Brown, co. engr. Noted Apr. 5.

Okla., Sapulpa—Creek Co. receiving bids constructing 9 mi. Drumright-Oilton Rd., Federal Aid Project 110, 18 ft. C. K. Howard, Sapulpa, engr.

Colorado—May 8, by State Hy. Dept., Denver, gravel surfacing and bridging 2.708 mi. Federal Aid 125, Gunnison Co., 24,980 sq.yd. gravel, $87,215; gravel surfacing 2.179 mi. State Project 782, Moffat Co., 20,454 sq.yd. gravel, $23,627; concrete paving 2.5 mi. Federal Aid 256-A, Logan Co., 26,400 sq.yd. 1 course concrete, $89,669; grading 3.924 mi. Federal Aid 157-B, Chaffee Co., 34,600 cu.yd. common and 10,700 cu.yd. rock excav., $74,970; 568 ft. masonry flume at Blackhawk, State Project 72, Gilpin Co., 874 cu.yd. cement rubble masonry $13,553. L. D. Blauvelt, state highway engr. Noted Apr. 12.

Idaho—May 12, by Commissioner Pub. Wks., 202 Pioneer Bldg., Lewiston, 23,409 cu.yd. crushed rock surfacing on Federal Aid Project 68, North and South Highway, Idaho Co. $50,000. Bureau of Highways, Lewiston, engrs.

Calif., Burbank—May 15, by F. Webster, city clk., grading, curbing and macadam paving 6,000 lin.ft. 8th St. between Walnut City and city limits, 36 ft.; grading, curbing, sidewalks and macadam paving 6,000 lin.ft. 6th St. between Walnut St. and city limits, 36 ft.

Calif., Stockton—May 8, by City Council, grading, curbing, guttering, sidewalks and paving portions F, East Main, East Washington and East Lafayette Sts., etc., 191,911 sq.ft. 2 in. asphaltic concrete on 3 in. crushed rock, etc. To exceed $50,000. W. B. Hogan, city engr. Noted Apr. 26.

Ontario—May 8, by J. G. Cameron, engr. Stormont, Dundas and Glengarry Counties, Cornwall, 14 mi. waterbound macadam, 1.75 mi. bituminous penetration, 1 mi. waterbound macadam or bituminous penetration 2 mi. gravel and 4½ mi. earth roads, 6½ mi. grading and concrete culverts. Contrs. 32-47 inclusive. $450,000.

Ont., Elora—May 7, by H. Clark, city clk., paving 13,900 sq.yd. asphalt or concrete, 4,500 lin.ft. concrete curb and gutter. $30,000. A. W. Connor & Co., 34 Victoria St., Toronto, engrs.

Ont., Sandwich—May 8, by W. P. Coyle, clk. Essex Co., 3 mi. concrete pavements in suburbs of Windsor. $75,000. J. J. Newman, Davis Blk., Windsor, engr.

Ont., Toronto—May 8, by C. A. Maguire, chn. Bd. Control, grading and building 4 mi. concrete sidewalks, 4 ft. 6 in. to 8 ft. wide. $60,000. R. C. Harris, city engr.

BIDS RECEIVED

Massachusetts—Paving 33,658 ft. road in Wrentham, Norfolk and Walpole, 18-20 ft., from Arco Contg. Co. and Middlesex Constr. Co., 178 State St., Boston, $350,000. Noted Apr. 12.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., Apr. 30, grading, curbing, laying sidewalks, etc., on (1) Alburtis Ave. (2) 88th St., sheet asphalt paving (3) Alburtis Ave., guttering, grading sidewalk space, laying sidewalks on (4) Bragaw St., grading sidewalk space and laying sidewalks on (5) east side of Union Hill St., from Peace Bros., Inc., 15 Lawrence St., Flushing, (1) $30,731; Kennedy & Smith, Inc., 93 Amity St., Flushing, (2) $11,612; W. J. Fitzgerald, 547 West 45th St., New York, (3) $45,135; J. J. O'Brien Jr., William St., Jamaica, (4) $1,730 (5) $1,344. Noted Apr. 26.

N. Y., New York—J. Miller, pres. Manhattan Boro., Municipal Bldg., Apr. 25, grading Service St. adjacent to Riverside Dr., etc., from S. Nugent, 285 West 150th St., $118,452; sidewalks on north and south sides of 108th St., from Kramer & Leedecke, $1,661; regrading curbing, recurbing, flagging, reflagging and sheet asphalt paving roadway of Haven Ave., from Asphalt Constr. Co., 208 Bway., $8,260; curbing, recurbing, flagging, reflagging and asphalt block paving roadway of West 173rd St., from Regan Towers Co., 124 West 121st St., $14,521; widening and repaving widened portion of Canal St. and curbing, recurbing, flagging, reflagging and paving Wadsworth Terrace, etc., both granite block, from D. J. McCarthy, 88 Audubon Ave., $12,405 and $18,462 respectively. Noted Apr. 19.

Pa., Phila.—Dept. Pub. Wks., Apr. 24, 15,851 sq.yd. asphalt pavements on Abbottsford Ave. from Wissahickon to McKean Aves., and 14,355 sq.yd. asphalt, and 1,570 sq.yd. vitr. brick on Boyer St. from Haines to Chelten Aves., from Eastern Paving Co., Colonial Trust Bldg., $29,532 and $42,561 respectively; furnishing and laying 200,000 gal. bituminous dust layer, from B. Foster & Co., 20th and Venango Sts., $14,640. Noted Apr. 19.

S. C., Hampton—Hampton Co., constructing 7 mi. Federal Aid Project 189, between Almeda and Jasper Co. line, from J. L. Carroll, Orangeburg, $28,303; bridge on above project from Latimer & Peake, Conway, $8,387.

Florida — State Rd. Dept., Tallahassee, surfacing with broken stone base No. 2, road between 0 plus 00—308 plus 00 and 480 plus 00 and Melbourne, Brevard Co., from Barber Fortin Co., Gainesville, $207,314.

O., Cleveland—For 218,500 sq.ft. cement sidewalks in northerly and southerly sidewalk districts, from P. H. De Santis, East 22nd St. near Woodland Ave., $61,687; 340,000 sq.ft. cement sidewalks in westerly and West Park Dists., from M. P. Platten, Engineers Bldg., $90,804.

O., Cleveland—Cuyahoga Co. grading and paving Riverside Rd., 3,130 lin.ft. stone curb and 4 in. sewer pipe gutter, 5,660 cu.yd. earth excav., 11,330 sq.yd. concrete base, 11,350 sq.yd. pavement, from Highway Constr. Co., 903 Lorain Co. Bank Bldg., Elyria, bituminous concrete, $68,490, sheet asphalt, $71,680. Engrs. est. $71,907.

O., Euclid—Grading, curbing and asphalt paving South Lake Shore Blvd., Lakemore Rd., Marigold, Garland, Orchard, Eastlawn, Azalea and Fern Drives, 11,930 lin. ft. stone curb and tile drain gutter, 5,400 cu.yd. rock excav., 19,310 sq.yd. asphalt, 179,030 sq.ft. concrete base, from Cleveland Trinidad Paving Co., The Arcade, Cleveland, $102,877.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, improving roads (12-70-5) means Route 12, Project 70, Sect. 5, concrete paving 6.6 mi. 12-70-5, Richland Co., Ill., from O. Arnold, Casey, $136,347; 5.55 mi. 14-71-4 Franklin Co., from Keeley Bros. Contg. Co., 2100 State St., East St. Louis, Ill., $132,090; 3.54 mi. 25-23-7 Clay Co., from Edwardsville Constr. Co., Edwardsville, $71,682; 7.32 mi. 25-73-21 Douglas Co. and 5.2 mi. 43-72-1 Mason Co., from W. F. Smith & Co., Rensselaer, Ind., $122,260 and $104,181 respectively; 5.62 mi. 26-74-2 Ogle Co., from Weber Co., Ionia, Mich., $126,094; 2 concrete bridges 12-70-5-B, Richland Co., from E. J. Barney, Ottersville, $21,030; 6.6 mi. 12-70-Comb. A, Richland Co., incl. 2 bridges, from R. A. Baum, Paris, $171,679. Noted Apr. 5.

> An innovation at compilation of bids was introduced when the Indiana State Highway Commission opened proposals recently for approximately 40 miles of paving.
>
> M. L. Schuetz, an Indianapolis business man who bonds many of the contractors on state work, had a number of people take down the proposals as read. Thirty-four bidders submitted 43 proposals on nine projects, and nine minutes after the last bid was read, typed sheets of all bids were given out. Prior to the bidding Mr. Schuetz sent out blue prints on all projects to 300 contractors in surrounding states. The service is gratis and is greatly appreciated. The low bids, together with the highway engineers' estimates are sent to state highway commissioners of adjacent states and are useful for comparison.

Tex., Cleburne—Johnson Co. grading and gravel surfacing 10.86 mi. State Highway 2-E, 18 ft., from Buchanan, Veazey & White, Temple, $63,719, 24,051 cu.yd. gravel to be furnished by county $30,000, engrs. est. $117,244 incl. engineering, contingencies and material furnished by county; 14.98 mi. State Highway 2, 18 ft., from Texas Road Co., 1303 Bush Bldg., Dallas, $127,166, 44,927 cu.yd. gravel to be furnished by county $45,000, engrs. est. $202,362 incl. engineering, contingencies and material furnished by county. Noted Apr. 12.

Tex., Columbus — Colorado Co. gravel surfacing 8,833 cu.yd. State Highway 3, Borden-Weimer Rd., from B. Hooper, Louise, $7,028; county to furnish gravel $17,246. Noted Apr. 12.

Calif., Daly City—Paving with 1½ in. asphaltic concrete on 4 in. concrete portions Winchester, Hanover, Oliver Sts., etc., from Eaton & Smith, Ocean and Tara Sts., San Francisco, $31,493.

Calif., Hanford—Grading, guttering and paving Ivy St., 105,483 sq.ft. grading, 92,622 sq.ft. 1½ in. warrenite on 4 in. asphaltic concrete, etc., from California Constr. Co., Mattei Bldg., Fresno, $32,935.

Calif., Madera—From Thompson Bros., Divisadero and G Sts., Fresno, grading, concrete curbing, guttering and paving, 2½ in. bituminous base, 1½ in. surface, portions 6th and B Sts., $35,437; Yosemite Ave., $38,379. Noted Apr. 19.

Calif., Merced—Merced Co. paving 8.14 mi. road in Dist. 5, 12 ft. wide, 4 in. rock screenings, from Merced Concrete Pipe Co., 16th and H Sts., $49,750. Noted Apr. 26.

Calif., Sacramento—Improving L St. between 15th and 26th Sts., (a) 1,427 yd. excav., (b) 211,492 ft. 2 in. asphaltic concrete, (c) 18 manholes, from Clark & Henery Constr. Co., Ochsner Bldg., (a) $0.03 (b) $0.12 (c) $6; McGillivray Constr. Co., Capitol Natl. Bank Bldg., (a) $0.029 (b) $0.1195 (c) $6.25.

Calif., San Francisco—City and San Francisco Co., grading, curbing, sewers and paving 28th, 29th and 30th Aves., between Ulloa and Vicente Sts., from Pacific States Constr. Co., Call Bldg., $38,477. Noted Apr. 19.

Calif., Santa Ana—Paving and sewers in South Garnsey St., from E. J. Garretson, Orange, 141,660 sq.ft. 5 in. concrete $0.195 per sq.ft., 353 lin.ft. 4 in. house sewers $0.50.

CONTRACTS AWARDED

Massachusetts—State Hy Comn., Boston, paving 19,219 ft. road, 18-20 ft., bituminous macadam, in Rutland, to Lane Constr. Corp., 37 Colony St., Meriden, $175,519. Noted Apr. 12.

R. I., East Providence (Providence, P. O.)—To J. McCormick, East Providence, paving with oil asphalt Roger Williams Ave. $15,374, Taunton Ave. $4,459, Grove Ave. $23,223, Warren Ave., with natural asphalt, $28,287, Waterman Ave., granite block, $18,168. Noted Mar. 8.

Connecticut—State Hy. Comn., Hartford, concrete paving 5,372 ft. road, 42 ft., in West Haven, to W. D. Blakeslee, 58 Waverly St., New Haven, $38,000. Noted Apr. 12.

Conn., New Britain—Patching 10,000 sq. yd. various streets, asphalt, to Robison & Powers, Inc., 35 Colony St., Meriden, $2.56 per sq.yd. Noted Apr. 26.

Conn., South Manchester—For 2.5 mi. curbs and walks, to Ahern Bros., Willimantic, walks $0.18 per sq.ft., curbs $0.70 per ft., gutters $0.24. Engrs. est. $30,000. Noted Apr. 12.

N. Y., Fredoni —Paving Maple Ave., concrete, and Cushing St., brick on sand and concrete cushion, to T. Fitzgerald, Fredonia, $16,270 and $36,333 respectively; Day and Free Sts., brick on sand and concrete cushion, to J. M. Hackett, Fredonia, $13,666 and $15,711 respectively. Noted Apr. 19.

N. Y., Long Island City—See "Sewers."

N. Y., Medina—Paving South Main St., rein.-con., to W. J. Gallagher, Medina, $35,000.

N. J., Cedargrove—G. C. Bergen, purch. agt. Essex Co., Court House, Newark, grading and paving 6,400 sq.yd. Stevens Ave., 20 ft., 8 in. rein.-con., to Francisco Bros., Ridge Rd., Little Falls, $26,685. Engrs. est. $29,199. Noted Apr. 19.

Pa., New Castle—Paving Liberty St., 10 in. rein.-con., to M. J. Scanlon, 215 Liberty St., $62,143. Noted Mar. 22.

Pa., Warren—Paving West 4th St. and Lexington Ave., to E. Beck, Warren, $25,000. Noted Mar. 1.

Maryland—State Hy. Dept., Baltimore, 45,500 sq.yd. Contr. Bc-44, from Hillen to 42nd Sts., and 50,600 sq.yd. Contr. Bc-44, from Hill St. to Greenmount Ave., Baltimore City, both bituminous surface course, to American Paving & Contg. Co., Montebello Ave., Baltimore, $253,721 and $243,661 respectively; concrete surfacing 17,800 sq.yd. Contr. M-38, Montgomery Co., to Gosnell, Russell Co., Frederick (street address not available) $59,170; concrete surfacing 9,500 sq.yd. Contr. xx Co-27, Caroline Co., to Holt Constr. Co., Federalsburg, $27,357; gravel surfacing 16,400 sq.yd. Contr. Ho-39, Howard Co., to E. R. P. Smith, Hyattsville, $15,906. Noted Apr. 12 and 26.

W. Va., Huntington—Paving with brick on concrete 25th, 26th, Adams, 7th, 27th, 28th and Washington Sts., to Harrison & Dean, Old Walton Bldg., $60,000.

S. C., Gaffney—Cherokee Co., topsoiling 8.1 mi. Federal Aid Project 147, to Newell Contg. Co., Anderson, $42,057. Noted Mar. 8.

Fla., Dade City—Pasco Co. paving with vitr. brick East Front, Pasco and College Sts., etc., to Mickler & McLeod, Stovall Bldg., Tampa, 25,000 sq.yd. paving at $1.97 per sq.yd., total $49,250.

Tenn., Byrdstown—Pickett Co., grading and constructing limestone base (hand placed), to Boyd Williams Constr. Co., Murfreesboro, $50,000.

Kentucky—State Hy. Dept., Frankfort, grading, using concrete pipe 4.327 mi. South Carrollton-Calhoun Rd., State Project 10, Sect. D, Muhlenberg Co., and 4.915

Streets and Roads (Continued)

mi. Dixon-Madisonville Rd., Federal Aid Project 34, Sect. D, Webster Co., to J. C. Ellis, Owensboro, $21,803 and $31,136 respectively, 5.905 mi. Harlan-Pineville Rd., State Project 6, Sect. B, Harlan Co., to Eastern Constr. Co., Harland, $77,798, 15.925 mi. Frenchburg-West Liberty Rd., State Project 10, Sect. A, Morgan Co., to Ellis & Smeathers, Owensboro, $198,126, 3.879 mi. Dixon-Henderson Rd., Federal Aid Project 34, Sect. E, Webster Co., to W. W. Carter, Clay, $21,030; concrete surfacing, using concrete pipe, 10.282 mi. Covington-Falmouth Rd., State Project 62, Sect. B, Kenton Co., to H. Hughes Co., Cincinnati, O. (street address not available), $346,685; waterbound macadam surfacing 3.92 mi. New Castle-Eminence Rd., State Project 46, Sect. A, Henry Co., to Berman Adams, Winchester, $37,273, surface treating above road, to R. B. Tyler Co., 114 South 4th St., Louisville, $4,353. Noted Apr. 12.

Kentucky—State Hy. Comn., Frankfort, to R. B. Tyler & Co., 114 South 4th St., Louisville, surfacing roads in Fayette, Boyle, Mercer, Woodford and Montgomery Counties $13,400, in Shelby, Scott, Henry and Oldham Counties $20,055, Hart and Warren Counties $11,064; to Eaton Oil Wks., Sterrett and Louisville and Nashville R.R. Cov., Cincinnati, O., in Bracken, Pendleton and Bourbon Counties $34,155; To Southern Oil and Tar Co., Clay and Fulton Sts., Louisville, in Garrard, Jessamine, Madison and Estill Counties $22,743, Nelson and Marion Counties $7,934, Pulaski, Lincoln, Rockcastle and Bell Counties $27,386. Noted Apr. 5.

O., Akron—S. Porter, clk. Summit Co., to A. F. Wible, 859 Chalker St., grading and paving Hammonds Corners Ira Rd. 46, 11,000 cu.yd. earth excav. $0.65 per cu.yd., 12,000 sq.yd. 3 in. bituminous macadam $1.15, total $38,147, engrs. est. $38,216; to Hollinger & Davidson, 435 South Bway., Akron-Northampton Rd. 27-A-1, 6,000 sq.yd vitr. brick $2.63, 8,000 sq.yd. 5 in. gravel base $0.40, 8,000 sq.yd. 5 in. gravel top $0.40, 6,000 sq.yd. 6 and 7 in. concrete base $1.70, total $49,482, engrs. est. $50,127; to T. E. McShaffrey Constr. Co., 171 South Forge St., Granger-Ghent Rd. 79, $47,214, engrs. est. $50,975. Noted Apr. 26.

O., Cleveland—Grading, curbing and vitr. brick paving 6,130 sq.yd. Grovewood and Darley Aves., to H. G. Herring, Pavers Exch., Society for Savings Bldg., $46,909; 14,470 sq.yd. Eaglesmere, Sylvia and Idarose Aves., to Gould & Maybach, 823 East 150th St., $92,333; East 105th St., to Baldwin Bros., 4500 Euclid Ave., $8,661; Beyerle Rd., to Enterprise Paving & Constr. Co., 8444 Bway., $9,856; asphalt paving 2,880 sq.yd. East 131st St. and 8,050 sq.yd. north side of Public Sq., East 121st and East 127th Sts., to Cleveland Trinidad Paving Co., The Arcade, $24,876 and $46,170 respectively; 61,687 sq.ft. cement sidewalks in southerly and northerly sidewalk districts, to P. H. De Santis, East 22nd St. near Woodland Ave., $61,687; 340,000 sq.ft. cement sidewalk in West Park and westerly sidewalk districts, to M. P. Platten, Engineers Bldg., $90,804. Noted Apr. 26.

O., Cleveland—For 534,700 sq.ft. stone sidewalks in West Park, westerly, southerly and northerly sidewalk districts, to Ohio Quarries Co., Citizens Bldg., $175,457. Noted Apr. 26.

O., Cleveland—Cuyahoga Co., grading and paving 11,350 sq.yd. Riverside Dr., sheet asphalt on concrete, to Highway Constr. Co., 903 Lorain Co. Bank Bldg., Elyria, $71,680. Engrs. est. $71,907.

O., Dayton—Montgomery Co., paving 12,000 sq.yd. Fairview Ave., Kentucky rock asphalt on concrete, to E. A. Smith, 702 Commercial Bldg., $40,234.

O., Maple Heights (Bedford, P. O.)—Grading and laying 72,175 lin.ft. stone sidewalks on Libby Court and Dunham Rd., to Cleveland Stone Co., 1836 Euclid Ave., Cleveland, $21,187; grading Dunham Rd., to Green-Mills Co., Bedford, $5,900.

O., Marion—E. A. Schultz, dir. Pub. Serv., to P. Drake & Sons, Marion, grading, curbing, guttering, laying mains and brick paving Fairground St. $28,679, Uncapher Ave. $65,950, Merchant Ave. $14,493, Forest St. $9,891; to H. P. Streicher Co., 319 Terminal Bldg., Toledo, sheet asphalt paving, etc., Courtland Ave. $6,263. Noted Apr. 12.

Ind., Terre Haute—Vigo Co., paving 25,956 sq.yd. Devonald Rd., concrete, to J. M. Robertson, Terre Haute (street address not available), $57,286. Engrs. est. $77,800. Noted Apr. 19.

Ill., Chicago Heights—Concrete paving, to Central Constr. Co., Chicago Heights. Engrs. est. $25,000.

Ill., Elmhurst—Concrete paving various streets, to Pronger & Black, Blue Island. Engrs. est. $115,000. Noted Apr. 12.

Ill., Harvey—Concrete paving Block 69 and Central Ave. from 155th St. to Park Ave. to Central Constr. Co. and G. H. Summerville, both of Chicago Heights. Engrs. est. $30,000. Noted Apr. 12.

Wisconsin—State Hy. Comn., Madison, concrete surfacing, etc., Lake Shore Rd., Federal Aid Project 318, Ozaukee Co., and Brown Deer-Menomonee Falls Rd., Federal Aid Project 285, Milwaukee Co., to Monad Constr. Co., 122 West Main St., Wauwatosa, $77,750 and $26,047 respectively; Elkhorn-East Troy Rd., Federal Aid Project 230, Walworth Co., to Whitewater Bridge Co., Commercial Bank Bldg., Whitewater, $108,182. Noted Apr. 19.

Wisconsin—State Hy. Comn., Madison, grading, surfacing, etc., Watertown-Hubbleton-Waterloo Rd., Project 316, and Watertown-Hubbleton Rd., Project 314, Dodge and Jefferson Counties, to Hays, Fountain & Hays, 211 Hayes Blk., Janesville, $32,391 and $33,852; Richland Center-Boaz Rd., Sect. 2, to Jones & Hiestand, Lancaster, $37,518. Noted Apr. 12.

Wis., Burlington—City will pave various streets, 8,100 sq.yd. concrete, 5,114 lin. ft. concrete curb and gutter, by day labor. $25,000. Noted Mar. 1.

Wis., Ripon—Rein.-con. paving, curbing and guttering various streets, to C. Johnson, 75 Main St., Oshkosh. Engrs. est. $25,000. Noted Apr. 26.

Wis., Watertown—Rein.-con. paving various streets, to Haues, Fountain & Haues, Hayes Blk., Janesville, $61,145. Noted Apr. 5.

Wis., West Bend—Washington Co. State Road and Bridge Com., improving Allenton-West Bend Rd., concrete, to Froemming Bros., 1326 Humboldt Ave., Milwaukee. $44,008. Noted Apr. 5.

Ia., Cherokee—Cherokee Co., gravel surfacing 22 mi. Primary Rd. Project 295, to M. J. Gilleas Co., Cherokee, furnishing 13,323 cu.yd. gravel $3,997; W. H. McDaniels, Ft. Dodge, hauling 28,860 half-mile units $7,875; A. H. Einung, Jasper, Minn., hauling 179,870 half-mile units, $23,124. Noted Apr. 5.

Ia., Davenport—Scott Co., grading and gravel surfacing roads, 35,540 cu.yd. excav. and 12,250 cu.yd. gravel, to Jenner Bros., Davenport, $46,554.

Ia., Dunlap—For 60,000 sq.yd. paving, 21,000 cu.yd. excav. and 31,000 lin.ft. curb and gutter, to Des Moines Asphalt Paving Co., 2nd and New York Sts., Des Moines. $211,422. Noted Mar. 29.

Ia., Ft. Madison—To Cameron, Joyce Constr. Co., Keokuk, grading, curbing and 3 in. brick paving 22,870 sq.yd. 2nd and Hanover Sts., grading $0.81 per cu.yd., curb and gutter $1.06 per lin. ft., paving $3.41 per sq.yd., paving between street railway tracks, $4.60; widening and cement concrete paving 4,200 sq.yd. Santa Fe Ave., grading $0.68, concrete curb $0.65 and pavement $2.67.

Ia., Manning—To J. S. McLaughlin & Sons, Mankato, Minn., 40,000 sq.yd. paving.

PAVING—CLINTON, IOWA

Following are lowest three bids opened by City, March 27, for grading, curbing and paving various streets, Sects. A to J, (A) McCarthy Improvement Co., 802 Kahl Bldg., Davenport, (awarded contract); (B) Central Eng. Co., Davenport; (C) Wright Contg. Co., Des Moines. The unit bids were as follows:

	A	B	C
78,691 sq.yd. 3 in. sheet asphalt surfacing on 5 in. concrete base	$3.10	$3.15	$3.20
6,277 sq.yd. brick car track construction	4.50	4.60	5.25
3,000 sq.yd. resurfacing with 3 in. asphalt	2.02	2.09	2.10
3,000 sq.yd. resurfacing with 2 in. bitulithic	1.90	2.15	2.10
38,574 lin.ft. 30 in. combined curb and gutter	1.11	1.23	1.20
3,692 lin.ft. 24 in. gutter only	.65	.85	.75
5,175 sq.ft. concrete walks	.25	.20	.25
879 sq.ft. concrete alley paving	2.75	2.80	3.00
305 sq.yd. extra concrete base	12.00	15.00	13.00
1,130 cu.yd. excess grading	.80	1.00	.90
346 lin.ft. 10 in. sewer	1.10	1.20	1.30
2 new manholes, complete	70.00	80.00	75.00
51 new catch basins, complete	70.00	80.00	75.00
17 new inlet basins	27.00	40.00	27.00
17 new manhole castings, in place	15.00	20.00	15.00
1,002 lin.ft. 10 in. catch basin connections	1.10	1.20	1.30
85 sq.yd. old paving adjustment	1.00	.75	1.00
100 cu.yd. rock excavation	3.50	3.00	4.00
Extended totals	$338,083	$350,096	$350,292

SEWERS—PLEASANT RIDGE, MICH.

Bids were opened by Village, March 19, for constructing complete sewerage system from (A) G. Ponterilli, Wolverine Hotel, Detroit (awarded contract); (B) Hammen & Co., 4612 Woodward Ave., Detroit; (C) Scott, Cochran & Scott, Lansing. The unit bids were as follows:

	A	B	C
5955 lin.ft. 12 in. pipe	$2.40	$3.10	$2.84
3130 lin.ft. 15 in. pipe	2.60	3.49	3.60
2874 lin.ft. 18 in. pipe	3.40	4.78	4.60
1305 lin.ft. 20 in. pipe	4.00	5.38	5.05
1437 lin.ft. 22 in. pipe	4.40	7.16	7.20
1954 lin.ft. 24 in. pipe	5.00	7.08	8.05
1213 lin.ft. 27 in. pipe	6.50	7.49	9.60
3013 lin.ft. 30 in. pipe	7.65	9.20	10.70
812 lin.ft. 33 in. pipe	8.30	9.98	12.45
295 lin.ft. 36 in. pipe	8.80	10.80	13.55
603 lin.ft. 42 in. pipe	9.80	13.98	15.20
307 lin.ft. 48 in. pipe	12.85	15.88	16.25
584 lin.ft. 60 in. pipe	22.50	24.07	32.00
971 lin.ft. 66 in. pipe	28.00	29.27	36.00
78 manholes	160.00	115.00	100.00
Extended totals	$156,446	$187,114	$206,000

SEWERS—ALHAMBRA, CALIF.

Following are lowest three bids opened by City, for San Marino Outfall system, Divisions 2, 3, 4, and 5, (A) Hickey & Harmon, East San Diego; (B) G. W. Kemper, 253 South Broadway, Venice; (C) R. H. Downer, Richmond. The unit bids were as follows:

	A	B	C
20,743 lin.ft. 8 in. vitrified pipe	$0.90	$1.25	$1.26
15,095 lin.ft. 10 in. vitrified pipe	1.00	1.50	1.33
4,460 lin.ft. 12 in. vitrified pipe	1.21	1.70	1.50
4,996 lin.ft. 15 in. vitrified pipe	1.50	1.80	1.65
2,894 lin.ft. 18 in. vitrified pipe	2.05	2.10	1.83
9,623 lin.ft. 20 in. vitrified pipe	2.40	2.40	2.28
3,257 lin.ft. 24 in. vitrified pipe	3.40	3.70	3.62
581—8x4 Y branches	1.25	.75	.75
363—10x4 Y branches	1.70	.85	1.00
107—12x4 Y branches	2.25	1.28	1.50
181—15x4 Y branches	3.10	1.80	2.00
85—18x4 Y branches	4.00	2.00	2.20
233—20x4 Y branches	5.00	2.25	2.66
65—24x4 Y branches	8.00	3.50	2.88
185 manholes	85.00	80.00	100.00
2 drop manholes	95.00	95.00	100.00
3 flush tanks	150.00	160.00	110.00
15 standard chimneys	5.00	.75	18.00
Alternate No. 1			
2,509 lin.ft. 30 in. segmental vitrified pipe	6.50	6.50	7.80
Alternate No. 2			
2,509 lin.ft. 27 in. vitrified pipe	4.56	5.00	5.00
Extended totals Alternate No. 1	$123,806	$140,350	$141,409
Extended totals Alternate No. 2	118,939	136,587	134,63[illegible]

Streets and Roads (Continued)

concrete with granite aggregate, $2.35 per sq.yd. and 36,000 lin.ft. concrete curb and gutter, $0.32 per ft., total $125,480. Noted Feb. 1.

Ia., Oskaloosa—To McCarthy Impvt. Co., 802 Kahl Bldg., Davenport, 8,348 sq.yd. asphalt concrete pavement and 5,167 lin.ft. concrete curb and gutter $2.59 per sq.yd., 3,672 sq.yd. concrete resurfacing and 126 lin.ft. concrete curb and gutter $1.42 per sq.yd.

Minn., Buffalo—Wright Co., 3.8 mi. Job 2301, State Rd. 5, 41,201 cu.yd. excav., 37,043 cu.yd. overhaul, 4.8 mi. Job 2302, State Rd. 1, 39,412 cu.yd. excav., 28,051 cu. yd. overhaul; 5.5 mi. Job 2303, State Rd. 6, 50,992 cu.yd. excav., 37,351 cu.yd. overhaul, to Olson & Carlson, 3338 Lyndale Ave. S., Minneapolis, $11,506, $12,788 and $15,077 respectively; gravel surfacing 3 mi. Job 2304, State Rd. 3, to M. D. Rogers, Glencoe, $2,676. Noted Mar. 29.

Minn., Duluth — Concrete paving 18,100 sq.yd. 24th Ave. W., 53,000 cu.yd. excav., 8,080 lin.ft. concrete curbing, etc., to D. H. Clough Co., 405 Palladio Bldg., $58,982. Noted Apr. 12.

Minn., St. Paul—Constructing, relaying and repairing sidewalks in city during 1923, to Standard Stone Co., 98 Garfield St. Noted Apr. 12.

Kan., Holton — Jackson Co. grading, bridging, etc., 8.797 mi. Federal Aid Project 149, grading to Meade Constr. Co., Beloit, $26,428; bridges to N. T. Hopkins, Topeka (street address not available), $16,902; culverts to F. Grundeman & Son, Netawaka, $17,196. Noted Mar. 15.

South Dakota—State Hy. Dept., Pierre, grading 6.11 mi. Project 124, Codington Co., and 10.47 mi. Project 92 A, Day Co., to Dowd Bros. & Schreiber Constr. Co., Watertown, $18,106 and $44,793 respectively; 6.19 mi. Project 20 B, Walworth Co. and 8.95 mi. Project 131, Campbell Co., to Linton Bridge Co., Linton, N. D., $32,-650 and $23,874 respectively; 8.15 mi Project 101, Campbell Co., and 9.74 mi. Project 132, McPherson Co., to Wilmar Constr. Co., Wilmar, Minn., $27,936 and $36,621 respectively; 9.94 mi. Project 122, Deuel Co., to Spencer & Chambers, Marshall, Minn., $44,350; 10.89 mi. project 119, Grant Co., to P. G. Thompson & Son, Summit, $32,163; 6.81 mi. Project 139, Roberts Co., to Jahnig & Davis, Britton, $36,513. Noted Mar. 15.

Wyoming—State Hy. Comrs., Cheyenne, grading, surfacing, etc. 6 mi U-Cross-Double Crossing Rd., Federal Aid Project 116-B-1, Sheridan Co., to F. H. Fraser, Sheridan, $45,322; 11.3 mi. Green River-Peru Rd., Federal Aid Project 58, Sweetwater Co., to F. A. Bundy, Cheyenne, $79,-225; grading, surfacing, subway paving, etc., 2 mi. Cheyenne-Laramie Rd., Lincoln Highway, Federal Aid Project 46, Laramie Co., to J. Davis, Bordeaux, $15,719. Noted Apr. 19.

Mo., St. Louis—Bd. Pub. Serv., City Hall, for following concrete alleys, 6,335 sq.yd. 6 and 8 in., to Eyermann Constr. Co., 1216 South Grand St., $17,982; 5,025 sq.yd. 8 in., to Independent Quarry & Constr. Co., Title Guaranty Bldg., $14,703; 680 sq.yd. 6 in., to Blackburn & Creamer, Syndicate Trust Bldg., $1,847; 3,670 sq.yd. 6 in., to Skrainka Bros. Constr. Co., Security Bldg., $10,852; 615 sq.yd. 6 in., to T. E. Cavanaugh, 6452 Oakland Ave., $1,697; 2,605 sq.yd. 6 in., to W. Hoffner, 715 South Vandeventer St., $6,517; 860 ft. 10-21 in. vitr. sewer in Harlem Creek Sewer 21 and 695 ft. 8 and 12 in. vitr. sewer in Arloe Sewer 4, to Riley Contg. Co., International Life Bldg., $4,067 and $2,509 respectively. Noted Mar. 29.

Tex., Greenville — Hunt Co. surfacing Caddo Mills Rd., Highway 1, to J. E. Ward, 224 South Lancaster St., Dallas, $42,682; county to furnish materials in cars or storage piles (175 working days).

Okla., Saure—Grading and paving Bway. Ave., 5,000 cu.yd. excav., 14,700 cu.yd. concrete, to Pearce Constr. Co., Edmond, $64,-795. Noted Apr. 12.

Nevada—State Hy. Comn., Carson City, grading and concrete paving 1.22 mi. through Fallon, Churchill Co., 1,900 cu.yd. excav., 12,890 sq.yd. concrete pavement, etc., to Strahan, Bishop & Brooks, 201 Hagelstein Bldg., Sacramento Calif., $23,581. Noted Apr. 5.

Nev., Reno—For 573,340 sq.ft. 5 in. and 15,954 sq.ft. 2 in. asphaltic concrete, to Clark & Henery Constr. Co., 38 South Sutter St., Stockton, Calif., $125,023. Noted Mar. 29.

Washington—State Hy. Comn., Olympia, concrete paving 4.5 mi. Pacific Highway from Neals to Toledo, Lewis Co., to Goets & Brennan, Seaboard Bldg., Seattle, $141,-278; 33,800 sq.yd. concrete on Sunset Highway from Wenatchee Bridge north, Douglas Co., to Yakima Paving Co., Yakima, $99,-435; constructing 6.9 mi. Inland Empire Highway from Colville to Myers Falls, crushed rock surface, to Mitchell Bros., East 127 Mission St., Spokane, $43,962, timber truss bridge and timber approaches over Nemah River on Ocean Beach Highway, Pacific Co., to Willapa Constr. Co., Raymond, $16,011. Noted Apr. 5.

Wash., Centralia—For 34,500 sq.yd. concrete, etc., to R. G. Stevenson, 1327 North 34th St., Seattle, $102,640. Engrs. est. $110,000. Noted Apr. 19.

Wash., Seattle—Concrete paving 14,225 sq.yd. Findlay St., et al, 1,020 lin.ft. asphaltic and 9,950 lin.ft. concrete curbing, to Coluccio & Erickson, 517-22 South St., $43,030, engrs. est. $37,000; 20,000 lin.ft. 6 in. and 5,200 lin.ft. 5 in. concrete sidewalk, Atlantic St. et al., to Paduano & Co., 646 West 51st St., $31,532, engrs. est. $38,236. Noted Apr. 26.

Oregon—State Hy. Comn., Salem, broken stone surfacing 7.72 mi. Dallas-California Highway, Wasco Co., 16 ft., to Montague-O'Reilly Co., Commonwealth Bldg., Portland, 8,500 cu.yd. broken stone top $2.34, 6,500 cu.yd. base $2.29, etc., total $38,458.

Ore., Portland — Paving 23,000 sq.yd. East 9th, East 10th, East 21st and East 22nd Sts., Ridgewood Dr. and Ridgewood Ave., 2 in. asphaltic concrete on 4 in. concrete, to A. D. Kern, Exchange Bldg., $35,018.

Calif., Calipatria—Grading and paving Main St., et al., 6,091 cu.yd. earth excav., 26,700 sq.yd. concrete, etc., to Cushing Constr. Co., 1501 Brooks Ave., San Diego, $89,886.

Calif., Chico—Curbing and paving Esplanade, to T. H. Polk, Chico, 183,000 sq.-ft. 4 in. asphaltic macadam at $0.15 per sq.ft., 3,000 lin.ft. concrete curb at $0.55. Noted Apr. 26.

Calif., Chico — City grading, curbing, guttering and paving Dists. 1, 2 and 3, to Chico Contg. Co., Chico, $154,576, $46,048 and $21,044 respectively. Noted Apr. 19.

Calif., Kingsburg — Grading, concrete curbing, guttering, sidewalks and paving Riverside, 19th and 20th Sts., 105,393 sq.ft. 1½ in. warrenite on 2½ in. asphaltic concrete, etc., to California Constr. Co., Mattei Bldg., Fresno, $53,150. Noted Apr. 26.

Calif., Martinez—Grading, curbing, guttering and paving portions Castro, Haven, Mason Sts., etc., to J. T. Sayles, Martinez, $87,305. Noted Apr. 19.

Calif., Palo Alto—Improving Southgate Division, to Shattuck Constr. Co., 525 Market St., San Francisco, 250,000 sq.ft. 5 in. concrete $0.184 per sq.ft., 20,000 sq.ft. cement walks and 20,000 lin.ft. concrete curb, etc. Noted Apr. 19.

Calif., San Diego—Common Council to California Constr. Co., Union Bldg., paving Goldsmith and Evergreen Sts., $16,234, 8th and A Sts., $20,049; to G. R. Daley, 4430 Boundary St., paving Eagle St., $14,-073. Noted Apr. 26.

Calif., Santa Rosa—Grading and warrenite paving portions Davis, Cherry, A and Wilson Sts., to Warren Constr. Co., Bacon Bldg., Oakland, $47,185. Noted Apr. 19.

Quebec—Provincial Hy. Dept., Quebec, 6,450 ft. concrete roadway on Montreal-Sherbrooke Route at Marieville, to Kennedy Constr. Co., 310 Shaughnessy Bldg., Montreal, $35,211.

Ontario—Dept. Pub. Highways, 110 University Ave., Toronto, macadam base course 5 mi. Contr. 800, to G. Farmer & Sons, Ottawa, (street address not available) $50,000, 3.1 mi. Contr. 801, to E. Irvine & Co., Alexandria, $35,000; grading 5 mi. Contr. 802, to J. E. McDonald, Whitby, $25,000, 2.6 mi. Contr. 805, to J. A. Smith and N. Greenlas, Joyceville, $15,000, 4 mi. Contr. 806, to Curran & Briggs, 51 Rusholme Park Crescent, Toronto, $25,000, 9 mi. Contrs. 811 and 812, to G. Campbell, Essex, $45,000, 4 mi. Contr. 813, to W. Beggs, Woodslee, $20,000, 2.6 mi. Contr. 814, to J. McMurren, South Woodslee, $15,000, 6 mi. Contr. 815, to J. J. Dewhearst, Wardsville, $30,000, 5.3 mi. Contr. 807 and 3.1 mi. Contr. 809, to National Tie & Timber Co., Funstrum, $25,000 and $18,000 respectively, 4 mi. Contr. 803 and 1.56 mi. (incl. macadam base course) Contr. 804, to Belanger & Walsh, L'Orignal, $20,-000 and $20,000 respectively.

Industrial Work

PROPOSED WORK

Me., Calais — Hollingsworth & Whitney Co., 185 Devonshire St., Boston, plans 2 story factory, here. $200,000. Engineer and architect not selected.

Mass., East Walpole—Bird & Son, Inc., having plans prepared by Monks & Johnson, 99 Chauncy St., Boston, 1 and 2 story, 90 x 540 ft. factory, brick and steel, plain foundation. $225,000. Noted Jan. 11.

R. I., Providence—Franklin Process Co., 564 Eddy St., having plans prepared by Lockwood Greene & Co., Inc., archts. and engrs., 24 Federal St., Boston, 4 story, 53 x 110 ft. factory, brick and timber.

Conn., Hartford—Tuska Electric Co., 69 Bartholomew Ave., having plans prepared by Greenwood & Moerr, archts. and engrs., 847 Main St., 2 story, 30 x 70 ft. factory, steel and timber, plain foundation, Homestead Ave. $45,000.

Conn., New Britain—Landers, Frary & Clark, Commercial St., having plans prepared by M. J. Unkelbach, 162 Main St., 3 story, brick and steel factory addition. $65,000.

N. Y., Charlotte—Fruit Growers Syndicate having plans prepared by J. Strobel, 52 Lake View Park, Rochester, 3 story and basement, 120 x 140 ft., cold storage warehouse, concrete, brick and steel, Fleming Rd. $150,000-$160,000. A. E. Kelley, pres.

N. Y., Jamestown — Jamestown Metal Desk Co., Blackstone Ave., plans 1 story, 73 x 170 ft. brick addition to plant. $55,-000. Engineer and architect not announced.

N. Y., Rochester—Amer. Lithograph Co. plans 2 story, 20 x 132 ft. brick plant with 35 x 60 ft. wing, Hollenbeck St. $90,000.

N. Y., Rochester—Rochester Gas & Electric Corp., Clinton Ave. N., plans rein.-con. transformer station, 26 Swan St. $40,000-$45,000.

N. Y., Rome—Manufacturers Power Corp. plans concrete and steel power house on barge canal, also high tension transmission lines. $100,000. Address M. J. Larkin, c/o owner.

N. Y., Stewarts Landing (Dolgeville, P. O.)—See "Dams."

N. Y., Tonawanda—National Roofing Co. plans to rebuild portion of plant, Fillmore Ave. $75,000. Engineer and architect not selected.

Pa., Carlisle—C. H. Masland & Sons having plans prepared by Lockwood-Green, engrs. and archts., 101 Park Ave., New York City, 3 story, 100 x 250 ft., brick and steel plant, plain foundation.

Pa., Nanticoke—Susquehanna Collieries Co., Nanticoke, plans to rebuild plant recently destroyed by fire. $150,000. Engineer or architect not announced.

Pa., Spartansburg—Spartansburg Oil & Gas Co. plans new oil refinery. $150,000. Engineer or architect not announced.

Md., Baltimore—Porcelain Enameling & Mfg. Co., 8th and O'Donnell Sts., having plans prepared 1 and 2 story, 100 x 520 ft. factory, brick and steel, Eastern Ave. and 3rd St. $160,000. H. Turk, pres. Private plans. Noted Apr. 26.

Md., Hagerstown — Moller Motor Co., Montgomery Ave., Lewistown, Pa., plans plant, here. $50,000. Engineer and architect not announced.

Ga., Fitzgerald—Union Cotton Oil Co. plans factory. $50,000. Engineer and architect not announced.

Ala., Birmingham—Packard Birmingham Motors Co., 1010 Sycamore St., plans to rebuild factory, recently destroyed by fire. $300,000. Engineer and architect not announced.

O., Cleveland—M. N. Miller, 2036 East 105th St., had plans prepared 1 story, 45 x 190 ft., brick and steel garage, 2134 East 107th St. $40,000. Private plans.

O., Cleveland—Ferro Machine & Fdry. Co., East 66th St. and Hubbard Ave., had plans prepared 1 story, 70 x 100 ft., brick and steel foundry. $40,000. Private plans.

O., Cleveland—L. B. Koblitz, Leader-News Bldg., plans 1 story, brick and steel garage, Cedar Ave. near East 106th St. $50,000. Private plans. Red Top Cab Co., 1532 Lakeside Ave., lessee.

O., Cleveland—Princton Realty & Investment Co., Cleveland Discount Bldg., had plans prepared by E. A. Kraus, Cleveland Discount Bldg., 1 story 37 x 140 ft. garage and 37 x 60 ft. commercial building, brick and steel. $50,000.

O., Youngstown—Dieter Dairy Co., Mahoning Ave., plans 2 story, 40 x 60 ft., brick, rein.-con. and steel plant. Engineer and architect not announced.

Ind., Indianapolis—Chicago, Indianapolis & Louisville Ry., 608 South Dearborn St., Chicago, plans freight terminal, incl. 3 story freight house, team yard and track elevation, here. $500,000. A. S. Kent, ch. engr.

Mich., Springwells—Paige Detroit Motor Co., Fort St. and McKinstry Ave., Detroit, had plans prepared by A. Kahn 1000 Marquette Bldg., Detroit, 1 story, 280 x 988 ft., concrete, brick and steel plant, plain foundation, Warren Ave., here.

Ill., Chicago—Commodore Garage Co., 812 Crescent Pl., plans 2 story, 100 x 176 ft. garage, rein.-con., brick and steel, 4117-25 Bway. $100,000. D. S. Klafter, 64 West Randolph St., archt.

Wis., Iron River—Iron River Light & Power plant plans 1 story, hydro-electric power plant, rein.-con., brick and steel, plain foundation. $50,000. Engineer and architect not selected.

Industrial Works (Continued)

Wis., Madison—J. Petersen, 102 South Orchard St., taking bids 2 story, 99 x 127 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation. $40,000. Private plans.

Wis., Madison—Washington Bldg. Corp., 357 Washington Bldg., plans 2 story, steam heating plant, rein.-con., brick and steel, plain foundation, Washington St. $80,000. C. J. Ellis, mgr. Engineer and architect not selected.

Wis., Milwaukee—School Bd. having preliminary plans prepared by Van Ryn & De Gelleke, 114 Grand Ave., 3 story and basement, 125 x 150 ft., brick and concrete warehouse, plain foundation, 11th St. $100,000.

Wis., Sheybogan — Sheboygan Mattress Co., 1214 Michigan Ave., plans 2 story, 75 x 95 ft., brick, rein.-con. and steel factory, plain foundation, Michigan St. $80,000. J. Matsack, pres. Engineer and architect not selected.

Wis., Sheboygan—Lincoln Plywood Co., South Water St. and New York Ave., having plans prepared by W. C. Weeks, 720 Ontario Ave., 1 story, 90 x 90 ft. factory, incl. dry kilns, milling room, veneer dry room and planer room, rein.-con., brick and steel, plain foundation. $50,000.

Wis., Sheboygan—J. Van der Voort, 533 Pennsylvania Ave., having plans prepared by E. A. Juul, Security Bldg., 4 story, 60 x 120 ft. garage and repair shop, brick, rein.-con. and steel, plain foundation. $70,000. Noted Apr. 12.

Minn., Willmar — Plans electric power plant and waterworks system. $157,000. Cory & LeCocq, Aberdeen, S. D., engrs. Noted Mar. 8 under "Waterworks."

Kan., Arkansas City—Roxana Petroleum Co., Arcade Bldg., St. Louis, Mo., has taken option on site here for large oil refinery. Considering another site at Wichita. $4,000,000. Engineer and architect not announced.

Mo., Lebanon—Rice-Stix Dry Goods Co., 1000 Washington St., St. Louis, plans 3 story and basement, 100 x 125 ft., rein.-con. and brick factory, plain foundation, Main St., here. $75,000. Private plans.

Mo., St. Louis — Landau Cabinet Co., Tower Grove and Folsom Aves., soon takes bids 4 story, 50 x 80 ft., rein.-con. and brick factory addition, plain foundation. $100,000. Engineer and architect not announced.

Tex., Amarillo—Russell & Cockrell had plans prepared by L. A. Kerr and J. C. Berry & Co., archts. and engrs., Amarillo, 2 story, 60 x 140 ft., printing plant, brick, Taylor St. $100,000.

Okla., Ardmore—Pure Oil Co., Pure Oil Bldg., Columbus, O., plans large addition to oil refinery here. $250,000.

Okla., Okmulgee—X-R Gill Co. having plans prepared by Smith & Senter, 401 Commerce Investment Bldg., 3 story and basement, 78 x 118 ft. garage, rein.-con., brick and stone. $125,000.

Okla., Sand Springs—Consumers Ice Co. plans ice plant. $75,000. Private plans.

Washington — City of Tacoma having plans prepared by J. L. Stannard, engr., 702 Balboa Bldg., San Francisco, power houses, one 30,000 hp., other 45,000 hp.; storage dam, probably concrete arch type, 90 ft. at bottom, 290 ft. at top, final height 220 ft. above stream level; transmission lines, etc., at Lake Cushman. Noted Nov. 16.

Wash., Tacoma—Tacoma Gas & Fuel Co., 10th and A Sts., plans 80 x 100 ft. and 30 x 80 ft. buildings. $250,000.

Calif., Los Angeles—F. D. Chase, engr., Title Insurance Bldg., takes bids about May 7, 6 story with 10 story tower, 90 x 140 x 160 x 260 ft., U shape, industrial building, brick, Downey Rd., for Los Angeles Central Mfg. Dist. $750,000.

Calif., San Bernardino — Southern Terminal Warehouse & Storage Co., represented by H. C. Shaw, plans 2 or 4 story warehouse, rein.-con. and steel, Rialto St. To exceed $90,000.

Calif., San Francisco—Paraffine Co., Inc., 34 1st St., having plans prepared by L. S. Rosener, Insurance Exch. Bldg., alterations and additions to 3 story and basement, 275 x 275 ft. paper carton factory, Brannan St. near 3rd St. To exceed $50,000.

Calif., San Francisco—Bass-Hueter Paint Co., 816 Mission St., had plans prepared 4 story, 86 x 100 ft. warehouse, concrete, Kansas and 24th Sts. To exceed $40,000. Private plans.

Calif., San Francisco — Gough Furniture Co., 2301 Mission St., had plans prepared by M. I. Schwartz, Nevada Bank Bldg., 2 story warehouse, rein.-con., Capp St. near 18th St. To exceed $40,000.

Ont., Hamilton—Stanley Steel Wks. of Canada, Ltd., Arthur St., plans extensions to plant. $100,000. A. Hatch, mgr.

Ont., Hespeler—Wood Specialty Co. plans to expend $60,000 for extending and equipping plant.

Ont., London—Starr Phonograph Co., 265 Dundas St., plans plant. $50,000. J. A. Croden, mgr.

Ont., Monteith—Hawk Lake Lumber Co., Monteith, plans mill with 30,000 ft. daily capacity, also pulp rossing drum at Wasack 45 mi. west of Cochrane.

Ont., Toronto—Gowans, Kent & Co. Ltd., 16 Front St. E., plans 8 story, rein.-con. factory, 20-22 Front St. W. $300,000. Architect not selected.

BIDS DESIRED

Conn., Hartford—May 12, by H. Bland, 521 Park St., 1 story 50 x 120 ft. garage, brick and steel, plain foundation. $40,000. Berenson & Moses, 30 Allyn St., archts. Noted Apr. 26.

Conn., Hartford—May 5, by I. A. Allen, Jr., archt., 100 Farmington Ave., 80 x 100 ft. garage, rein.-con. and brick, plain foundation, for Brown, Thomson Co., Main St. $40,000.

Conn., Waterbury—May 9, by Connecticut Brass Fdry., 600 East Main St., 2 story, 30 x 40 ft. factory, brick and steel, plain foundation. $40,000. H. F. Wenzel, 6 Glen Ridge St., archt. Noted Apr. 19.

Pa., Phila.—A. Leibowitz, 4045 Baltimore Ave., taking bids 1 story, 16 ft. high, 63 x 100 ft. rein.-con., brick and steel garage, plain foundation, 63rd and Woodbine Sts. $50,000. F. P. Canavan, 7030 Greenway Ave., archt.

O., Cleveland — Broadhead-Garrett Co., 2835 East 51st St., taking bids and opens same about May 15, 300 x 360 ft. timber warehouse, 40 x 40 ft. brick dry kiln, 40 x 50 ft. timber planing mill, brick boiler house, office and garage building, East 71st St. along tracks of Belt Line R.R. $200,000. Best & Hoefler, 6523 Euclid Ave., archts. Noted Apr. 5.

Wis., Green Bay—A Libert Machine Co., 324 North Roosevelt St., taking bids 1 story, 55 x 100 ft., brick and timber machine shop, plain foundation. $40,000. Private plans.

Wis., Kenosha—White & Co., archts., Pub. Serv. Bldg., taking bids 1 story, 64 x 125 ft., brick, tile and concrete garage, plain foundation, Elizabeth St., for Mantkus Motor Sales Co., 313 Park St. $40,000.

Wis., Milwaukee—H. J. Esser, archt., 82 Wisconsin St., taking bids 100 x 100 ft., brick and timber factory addition, for Manufacturers Box Co., 32 Keefe Ave. $40,000.

Wis., Sheboygan—Dillingham Mfg. Co., Wisconsin Ave. and South Water St., taking bids 1 story, 50 x 60 ft. factory, brick and rein.-con., plain foundation, Water St. $40,000. W. C. Weeks, 720 Ontario Ave., archt.

Kan., Wichita—Engstrom Lumber Co., 318 West Douglas St., taking bids 2 story and basement, warehouse and office, Waco and Douglas Sts. $50,000. H. S. Conrow, 623 Beacon Bldg., archt.

Calif., San Francisco—Engineering Dept., Standard Oil Co., Standard Oil Bldg., receiving bids several rein.-con. buildings, tanks, etc., for oil distributing plant, on block bounded by Beach, Jefferson, Jones and Leavenworth Sts. $500,000. Noted Apr. 19.

Calif., San Pedro—A. G. Bailey, archt., Junior Orpheum Bldg., Los Angeles, receiving bids 2 story, 100 x 122 ft., rein.-con. garage, 9th St., for C. K. Cook, San Pedro. $75,000.

CONTRACTS AWARDED

N. H., Nashua—International Paper Box Machine Co., 315 Main St., 1 story, 50 x 300 ft. factory addition, brick and timber, plain foundation, to S. Belanger & Sons, Inc., 308 Main St. Archts. est. $40,000.

Mass., Cambridge—Ginn & Co., 15 Ashburton Pl., Boston, 5 story and basement, 55 x 325 ft. plant, brick and rein.-con., 1st St., to Evatt Constr. Co., 200 Devonshire St., Boston. Archts. est. $350,000. Noted Mar. 29.

R. I., Harrisville — Stillwater Worsted Mills having plans prepared by Lockwood, Greene & Co., archts. and engrs., 24 Federal St., Boston, 2 story, 47 x 90 ft. storage building, etc. Work will be done by day labor.

Conn., Ansonia—A. V. Pepe, Olivia St., 2 story, 30 x 130 ft. factory, brick and timber, plain foundation, Olivia St., to C. B. Hickey, 350 Hawthorne Ave., Derby. Owner will do carpentry work. Archts. est. $40,000. Noted Apr. 19.

Conn., Bridgeport — Jenkins Bros., 510 Main St., 4 story, 72 x 175 ft. factory addition, rein.-con., brick and steel, Water St., to J. W. Ferguson Co., 253 Broadway, New York City. Archts. est. $250,000. Noted Mar. 15.

Conn., Southington — Southington Hardware Co., Center St., 2 story, 52 x 114 ft. factory, brick and concrete, plain foundation, to H. Wales Lines Co., 143 State St., Meriden. Archts. est. $60,000. Noted Apr. 19.

Conn., Torrington—Union Hardware Co., 535 Migeon Ave., 3 story, 100 x 180 ft. factory addition, brick and timber, plain foundation, to Torrington Bldg. Co., 182 Church St. Archts. est. $150,000. Noted Nov. 23.

Conn., Waterbury—R. F. Worden & Sons Co., Cherry St., 3 story, 50 x 75 ft. factory, brick, plain foundation, Cherry St., to Tracy Bros. Co., 52 Benedict St. Archts. est. $55,000. Noted Apr. 26.

Conn., Waterbury—J. H. Cassidy, 144 Bank St., 2 story, 50 x 60 ft. garage, brick and steel, plain foundation, Mitchell Ave., to M. Scavuzzo, 1208 North Main St. Archts. est. $40,000. Noted Apr. 19.

N. Y., Albany—A. Kupenberg, rein.-con. and steel garage, 41-47 Columbia St., to H. Goodman, 705 Bway., $125,000.

N. Y., Holley—Holley Fruit & Cold Storage Co., 100 x 106 ft. plant, 40 ft. high, rein.-con., to Alexander, Shumway & Utz Co., Rochester (street address not available). Archts. est. $75,000.

N. Y., New York—See "Buildings."

Pa., Greenville—Bessemer & Lake Erie R.R., Union Arcade, Pittsburgh, will build 1 story, 35 x 40 ft. machine shop, steel frame, by day labor. $60,000. T. T. Porter, c/o owner, engr.

Pa., Phila.—I. H. Francis, engr., Otis Bldg., 4 story and basement, 100 x 100 ft. rein.-con. and brick plant, plain foundation, Dauphin and Tulip Sts., to Cramp & Co., Denckla Bldg., for Pollock-Huston Co., Dauphin and Tulip Sts. $200,000. Noted Apr. 5.

Pa., Phila.—J. C. Kahn, Norris Bldg., 2 story and basement, 40 x 160 ft. service building, rein.-con., brick and steel, plain foundation, 1427 North Broad St., to Smith-Hardican Co., 1809 Callowhill St. Archts. est. $250,000.

Pa., Phila.—Ederer Thread Co., Elizabeth and Unity Sts., 3 story and basement, 40 x 50 ft. and 1 story, 40 x 60 ft. rein.-con., brick and steel plant, plain foundation, Elizabeth and Unity Sts., to W. Steele & Sons, 219 North Broad St. Archts. est. $50,000.

Pa., Phila. — Krakstein & Markowitz, 1214 Filbert St., 4 story, 60 x 120 ft. rein.-con. and brick garage, plain foundation, to Long & White, 14 Arnot St. $100,000.

Md., Baltimore—Baltimore Ice Mfg. Co., 2 story, 60 x 175 ft. plant, brick, plain foundation, 409-11 North Asquith St., to J. J. Walsh & Son, Preston and Charles Sts. Archts. est. $150,000. Noted Mar. 15.

W. Va., Wheeling—Hazel Atlas Glass Co., Conservative Life Insurance Bldg., 2 story, 60 x 107 ft., machine shop, to R. R. Kitchen & Co., Natl. Bank of West Virginia Bldg. Archts. est. $40,000.

Tenn., Nashville — Methodist Publishing Bd., Broad St., general contract brick, concrete and steel plant, to Rock City Constr. Co., 150 4th Ave. N. $170,000. Noted Mar. 29.

Ky., Louisville—P. Wells Co., 718 4th St., 3 story, 70 x 200 ft. garage, rein.-con. and steel, 3rd St., to National Concrete Constructing Co., Bd. of Trade Bldg. Engrs. est. $100,000.

O., Cleveland—Cleveland Heater Co., 1905 West 112th St., 1 story, 30 x 240 ft., brick and steel factory addition, Locust Ave. and 112th St., to Hebing Co., 1832 West 54th St. Archts. est. $100,000. Noted Aug. 3.

O., Cleveland—Donley Bros. Co. East 70th St, and Aetna Rd., 1st unit of plant, 1 and 2 story, 100 x 160 ft., brick, steel and concrete, East 138th St. and Miles Ave., to C. Peterson Co., 4500 Euclid Ave. Archts. total est. $300,000. Noted Dec. 14.

O., Cleveland—Star Baking Co., 2000 Carroll Ave., 1 and 2 story, 100 x 174 ft., brick, steel and concrete factory and loading shed, to H. G. Slatmyer & Son Constr. Co., 202 Lakeside Ave. Archts. est. $100,000.

O., Cleveland—See "Buildings."

O., Cleveland—Lake Erie Metal Products Co., c/o J. Strad, pres., 4001 West 25th St., 1 story, 60 x 160 ft., brick and steel factory, East 152nd St., to Cleveland Structural Steel Co., 6600 Park Ave. Archts. est. $60,000. Noted Apr. 26.

O., Cleveland—Ancanster Co., c/o J. V. D. Miller, 7500 Euclid Ave., 1 story, 148 x

Industrial Works (Continued)

250 ft., brick and steel garage and commercial building, 7421 Carnegie Ave., to Drummond-Miller Co., 7500 Euclid Ave. Archts. est. $60,000.

O., Cleveland—J. Rutkowski, 6600 Park Ave., 1 story, 60 x 100 ft., steel forge shop, 6100 Park Ave., to Cleveland Structural Steel Co., 6600 Park Ave. Archts. est. $40,000.

Ill., Blue Island—Federal Refrigerating Co., c/o City Ice and Fuel Co., Cadillac Bldg., Cleveland, O., 1 story, 106 x 123 ft., 60 ft. high, ice storage plant, rein.-con., brick and steel, here, to W. Adams, 867 Rookery Bldg., Chicago. Archts. est. $150,000. Noted Mar. 22.

Ill., Chicago — Chicago Motor Bus Co., 1124 Rosemont Ave., rein.-con., brick and steel garage, 5201-29 Cottage Grove Ave., to Bulley & Andrews, 2040 West Harrison St. Archts. est. $75,000.

Wis., Fond du Lac—Combination Door Co., 180 Ruggles St., brick and timber warehouse, plain foundation, to Hutter Constr. Co., 102 South Main St. Archts. est. $45,000. Noted Apr. 5.

Wis., Kenosha—Simmons Mfg. Co., 160 Exchange St., will build 6 story, 100 x 282 ft., brick and steel factory, plain foundation by day labor; steel, to Kenwood Bridge Co., 38 South Dearborn St., Chicago. $350,000.

Wis., Kenosha—Tri-State Steamship Co., Washington St., 1 story, 70 x 110 ft., brick and steel warehouse, plain foundation, to Austin Co., 16112 Euclid Ave., Cleveland, O. Archts. est. $45,000.

Wis., Madison—Madison Gas & Electric Co., 120 East Main St., 2 story, 60 x 80 ft. power plant addition, brick, rein.-con. and steel, plain foundation, to J. H. Findorff & Son, 601 West Wilson St. Engrs. est. $40,000.

Wis., Madison—S. Sinaiko, 1968 Railroad St., will build 2 story, 60 x 70 ft. feed mill, brick and rein.-con., plain foundation, by day labor. $40,000. Private plans. Noted Apr. 5.

Wis., Milwaukee—Acme Chemical Co., 476 Edison Ave., 2 story, 40 x 100 ft., brick and timber warehouse, plain foundation, Clybourn St., to H. Wallschlaeger, Jr., 1411 Cedar St. Archts. est. $45,000.

Wis., Milwaukee—Salvation Army, 43 Juneau Ave., 2 story and basement, 40 x 85 ft., brick and concrete, to Bonnett Constr. Co., 808 South Pierce St.; plain and wood piling, to W. W. Whitney, 216 West Water St. Archts. est. $55,000. Noted Apr. 12.

Wis., Sheboygan — McNeil Chair Co., South 6th St., c/o J. McNeil, pres., 2 story, 54 x 61 ft., brick, rein.-con. and steel factory, plain foundation, to Verhulst Co., Inc., Sheboygan (street address not available).

Wis., Sheboygan — Eastern Wisconsin Electric Co., 8th St. and Pennsylvania Ave., 2 story, 75 x 200 ft. addition to power house, brick, rein.-con. and steel, plain foundation. D. L. Davis, Sheboygan (street address not available). Engrs. est. $200,000. Noted Feb. 22.

Wis., Sheboygan—C. Zelle & Sons Co., 1216 Michigan Ave., plans to rebuild 2 story, 50 x 80 ft., brick and rein.-con. shop, plain foundation, by day labor. $40,000. C. Zelle, mgr. Engineer and architect not selected.

Wis., Sheboygan—J. W. Jung Co., 720 North 8th St., 1 story, 50 x 100 ft., refrigeration and central heating plant, brick, rein.-con. and steel, plain foundation, to Verhulst Co., Inc., 2220 Calumet Dr. Archts. est. $50,000. Noted Jan. 11.

Wis., Wauwatosa—Forsyth Leather Co., State St., 1 story, 46 x 60 ft. power house, brick, concrete and steel, plain foundation, to P. Riesens Sons, 1018 Humboldt Ave., Milwaukee. Engrs. est. $40,000. Noted Apr. 19.

Minn., St. Cloud—Great Northern R.R., St. Paul, 1 story roundhouse, 300 ft. diam., brick, stone and steel, here, to Peppard & Fulton, 217-18 Bd. of Trade Bldg., Superior, Wis., $400,000.

Mo., Monett—St. Louis & San Francisco R.R., Frisco Bldg., St. Louis, will rebuild round house, machine shops, etc., here, by day labor. $500,000. F. G. Jonah, Frisco Bldg., St. Louis, ch. engr. Noted Apr. 12.

Mo., St. Louis—St. Louis Dairy Co., 2030 Pine St., 3 story and basement, 50 x 110 ft. rein.-con. plant, concrete pile foundation, to Gamble Constr. Co., 620 Chestnut St. Archts. est. $200,000.

Mo., St. Louis—Lowell Bleachery, 7710 Polk Ave., 3 story, 90 x 105 ft. bleachery, brick, plain foundation, to Dickie Constr. Co., Syndicate Trust Bldg. Archts. est. $75,000.

Mo., St. Louis—Walsh Motor Corp., 4919 Delmar Blvd., 2 story, 100 x 170 ft., rein.-con. and brick garage and show room, plain foundation, 5127-5135 Delmar Blvd., to Cornet-Casey Constr. Co., Chemical Bldg. Archts. est. $85,000.

Mo., St. Louis—B. M. Rasmussen Real Estate Investment Co., Liberty Hotel, 1 story, 100 x 144 ft., rein.-con. and brick garage, plain foundation, 2003-09 Lucas Ave. and 703-11 North 20th St., to E. A. Heaney Constr. Co., 4241 John St. Archts. est. $41,000.

Mo., St. Louis—W. Waltke Co., 2nd St. and Grand Ave., 6 story, 100 x 120 ft. factory, rein.-con. and brick, concrete pile foundation, 2nd St., to Erdbruegger & Son, 2909 Natural Bridge Ave. Archts. est. $100,000.

Tex., Amarillo—Green Bros. Co., 4 story, 60 x 140 ft., loft, storage and shop building, etc., 6th and Taylor Sts., to A. Randall, Taylor St., $100,000.

Tex., Houston—D. Wells, Ovid St., 1 story, 100 x 150 ft., brick warehouse, plain foundation, to T. M. Murray, Mt. Vernon St., $40,000.

Calif., Oakland—Foster & Kleiser Co., 287 Valencia St., San Francisco, 1 story garage and warehouse, rein.-con., Market and 22nd Sts., here, to Dinwiddie Constr. Co., Crocker Bldg., San Francisco, $40,000. Noted Jan. 18.

Calif., San Francisco—Baker-Joslyn Co., 1st and Harrison Sts., 3 story and basement warehouse, rein.-con., 2nd and Bryant Sts., to C. W. Gompertz, 403 Mills Bldg., $70,000.

Calif., San Francisco—Rickey & Schimpferman (City Rough Dry Laundry Co.), 1672 15th St., 1 story and mezzanine, rein.-con. laundry, 14th St. near Mission St., to C. T. Merchant, 180 Jessie St., $38,550. Noted Mar. 1.

Ont., London—H. J. Jones & Sons, Dundas St. E., rebuilding plant, to Jones Bros., Hamilton Rd. Archts. est. $200,000. Noted Apr. 26.

Buildings

PROPOSED WORK

Mass., Chicopee — School — School Bd. plans 3 story, 16 room, Hampden St. $250,000. J. J. Desmond, Jr., secy.

Mass., Norwood—High School—School Dept., plans 2 story, brick and steel, Main St. $150,000. Engineer and architect not selected.

Mass., Springfield—High School—School Bd., City Hall, plans 2 story, brick, plain foundation, Central St. $500,000. M. W. Maloney, 145 Chestnut St., archt.

Conn., Bridgeport — Business — Schnee & Schnee, 1115 Main St., having plans prepared by E. B. Caldwell, Jr., 884 Main St., 4 story, brick, steel and concrete, Middle St. $175,000.

Conn., Hamden (New Haven, P. O.)—Masonic—Hamden Masonic Temple Com. having preliminary plans made by Richmond & Smith, 152 Temple St., New Haven, 3 story, brick, Whitney Ave. $150,000. E. P. Stover, 2830 Whitney Ave., chn.

Conn., Hartford—Apartment—P. Coffey, Fairfield Ave., having plans prepared by B. M. Sellew, 712 Main St., three 3 story, 30 x 60 ft., brick and timber, plain foundation, Fairfield Ave. $150,000.

Conn., Hartford — Apartment — H. S. Hooker, c/o Shape, Bready & Peterkin, archts., 50 East 42nd St., having plans prepared 4 story, 200 x 250 ft., brick, plain foundation, Asylum and Gillet Sts. $500,000.

Conn., Hartford—Apartment—J. J. Wall, 401 Farmington Ave., having plans prepared by G. Zunner, 182 High St., 2 and 3 story, 70 x 90 ft., Farmington Ave. $330,000.

Conn., Hartford — Armory — Putnam Phalanx, Pearl and Haynes Sts., plans 60 x 90 ft., probably 3 story, brick and steel, plain foundation, Chapel St. $150,000. C. D. Perkins, Hotel Heublein, chn. building com. Engineer and architect not selected.

Conn., Meriden—Business—M. J. Dubin, 125 Oakland Terrace, Hartford, plans 3 story, 80 x 100 ft., brick, plain foundation, East Main St., here. $150,000. Engineer and architect not selected.

Conn., Meriden—Business—I. H. May, 10 Colony St., B. Krentzman, 150 Pratt St., and F. Atwater, plan 3 story, 90 x 110 ft., rein.-con., plain foundation, East Main St. $160,000. Engineer and architect not selected.

Conn., Middletown—Nurses' Home—Connecticut State Hospital plans 3 story, brick, plain foundation, here. $220,000. R. L. Leak, supt. Engineer and architect not selected.

Conn., New Britain—School—School Com. plans addition to Nathan Hale School, 3 story, brick, plain foundation, Tremont St. $190,000. E. O. Kilbourne, 1600 Stanley St., chn. Engineer and architect not selected.

Conn., New Haven — Masonic — Masonic Temple Assn., 87 Church St., had plans prepared by Norton & Townsend, 839 Chapel St., and soon takes bids 6 story, 80 x 160 ft., brick, concrete and steel, West Chapel St. $500,000.

Conn., Norwalk—Business—S. J. Kantor, 65 Cross St., having plans prepared by A. S. Meloy, 1352 Fairfield Ave., Bridgeport, 4 story, 65 x 100 ft., brick, plain foundation, Main St. $150,000.

Conn., Norwalk—Hotel—S. A. Legato, 4 River St., having revised plans prepared by F. Urso, 453 West Main St., Stamford, 5 story, 60 x 110 ft., brick and steel, Wall St. $150,000. Noted July 20.

Conn., Putnam—Business—J. E. and E. Stoumbelis plan 3 story, 70 x 100 ft., brick, plain foundation, Main St., $150,000. Engineer and architect not selected.

Conn., Thompsonville — High School — School Bd. plans 3 story, brick, plain foundation. $350,000. A. B. Handy, supt. of schools. Engineer and architect not selected.

Conn., Waterbury—Business—T. J. McDonald, Willow St., having plans prepared by H. F. Wenzel, 6 Glen Ridge St., 4 story, 50 x 90 ft., brick, plain foundation, Willow and Plaza Sts. $160,000.

Conn., Waterbury — Church, etc. — Mill Plain Union Church having plans prepared by I. Miller, Southmayd Rd., 3 unit church, incl. main auditorium, departmental Sunday school and assembly hall. $165,000.

Conn., Watertown—High School—School Bd. having plans prepared by F. A. Webster, 51 West Main St., Waterbury, 3 story and basement, 100 x 250 ft., brick, plain foundation. $400,000.

N. Y., Albany—College—Albany College of Pharmacy plans brick, stone, concrete and steel, New Scotland Ave. $250,000. C. Gibson, 415 State St., pres. Bd. Dirs.

N. Y., Brooklyn—Schools—Bd. Educ., 500 Park Ave., New York, plans school East New York Ave. between East 96th and East 97th Sts., $500,000; P. S. 99, Ave. K near 9th St., $244,000, both brick, steel and stone, plain foundations, here. W. H. Gompert, Flatbush Ave. extension and Concord St., archt. and engr.

N. Y., Canton — Bank — First National Bank plans brick, stone, steel, concrete and marble, south side Main St. $150,000-$175,000.

N. Y., Ilion—Schools—May 1 to vote on $395,000 bonds for brick, concrete and steel additions to high school and West Hill school. Address R. B. Redway, Union Free School Dist. 1, pres. Bd. Educ.

N. Y., Newfane—School—Bd. Educ. having plans prepared by W. S. Brickell, 132 Ellicott Sq., Buffalo, 2 story, brick addition. $150,000.

N. Y., New York—Apartment—G. and H. Boehm, archts. and engrs., 587 5th Ave., prepared plans 12 story, 50 x 100 ft., brick, steel and stone, plain foundation, Madison Ave. and 70th St. Owner's name withheld.

N. Y., New York—Apartment Hotel—E. Margolies, 19 East 33rd St., having preliminary plans prepared by E. De Rosa, 110 West 40th St., brick, steel and stone, plain foundation, 11 West 47th St. $200,000.

N. Y., New York—Clubhouse—Knights of Columbus, 244 West 51st St., plans 100 x 150 ft., brick, steel and stone, plain foundation, 51st St. and 8th Ave. Engineer and architect not selected.

N. Y., New York—Exchange—New York Telephone Co., 15 Dey St., having plans prepared by McKenzie, Voorhies & Gmelin, archts. and engrs., 342 Madison Ave., brick, steel and stone, plain foundation, 204 13th St. $700,000.

N. Y., Niagara Falls—Apartment—F. S. Tearney, 3rd St., plans brick, 3rd St. $150,000. White & La Chance, Niagara Falls, (street address not available), archts.

N. Y., Niagara Falls—City Hall—City rejected bids for 3 story and basement, brick, steel and stone, etc., Main St. Plans will be revised and work readvertised. E. J. Fort, city mgr. Noted Nov. 2.

N. Y., Nunda — School — School Dist. 1 plans brick, stone, concrete and steel. $150,000-$160,000.

N. Y., Rochester—Store—McCurdy & Co., Inc., Elm St., plans 6 story, 56 x 181 ft., brick and steel addition. $300,000.

N. Y., Schenectady—Club—Mohawk Golf Club., Schenectady-Troy Rd., plans rebuilding golf club destroyed by fire. $150,000. Engineer and architect not announced.

Buildings (Continued)

N. Y., Syracuse—Chapel—Bd. Trustees First Baptist Church, 215 East Jefferson St., had plans prepared 6 story, stone, concrete and steel addition. $150,000.

N. Y., Syracuse—School—St. John the Baptist Parish plans new school. $200,000. Engineer and architect not selected.

N. J., Jersey City—Apartment—Gronenberg & Leuchtag, archts. and engrs., 450 4th Ave., New York City, preparing plans 5 story, 100 x 110 ft., brick, steel and stone, plain foundation, Bergen and Grant Aves., here. $250,000. Owner's name withheld.

N. J., Jersey City—Church—St. Mary's Roman Catholic Church, c/o R. T. Reilly, archt., 477 5th Ave., New York City, having plans prepared brick and stone top addition, 3rd and Erie Sts., here. $200,000.

Pa., Erie—Exchange—Mutual Telephone Co., plans 75 x 165 ft. exchange, 10th St. $400,000. J. Z. Miller, mgr. Engineer or architect not announced.

Pa., Ebensburg—Hospital—Comrs. Cambria Co. and Johnstown Society for Prevention of Tuberculosis, opens bids about June 1, 1 and 2 story and basement, 90 x 315 ft. main building, 2 story, 94 x 160 ft. service building, 40 x 70 ft. laundry and boiler house, 1 mi. west of here. $300,000. W. R. Myton, 1204 1st Natl. Bank Bldg., Johnstown, archt. Noted Mar. 15.

Pa., Phila.—Apartment and Store—J. E. Fieldstein, archt., Otis Bldg., preparing plans 3 story and basement, 25 x 64 ft., brick, steel and stone, plain foundation, 40th and Lancaster Aves. $150,000. Owner's name withheld.

Pa., Phila.—Clubhouse—University Club, 1510 Walnut St., soon takes bids 23 story and basement, 40 x 100 ft. rein.-con., brick, steel and stone $1,000,000. Simon & Simon, 249 South Juniper St., archts.

Pa., Phila.—Store and Office—Stiegerwalt Boot Shop, 1420 Chestnut St., having plans prepared by W. Steele & Sons, 219 North Broad St., 5 story and basement, 40 x 150 ft. rein.-con., brick, steel and stone, caisson foundation, 1526 Chestnut St. $500,000.

Pa., Scranton—Hotel—F. P. Benjamin, Scranton Life Bldg., plans 3 or 4 story addition, Lackawanna Ave. $150,000. Engineer or architect not announced.

Pa., Shippensburg—High School—Bd. Educ. having plans prepared by J. C. Dempwolf, York, and takes bids about June 1, 3 story and basement, 100 x 110 ft., concrete, brick and steel, North Prince St. $150,000.

Pa., Ridgeway—High School—Bd. Educ. plans 3 story and basement, 100 x 150 ft. brick and steel, Center and Broad Sts. $150,000.

Pa., Uniontown—Nurses Home—Annette Home and School for Nurses having plans prepared by E. R. Johnson, Fayette Bldg., 3 story and basement, 68 x 140 ft. $150,000.

Pa., Woolrich—Hotel—Rich Bros., Woolrich, take bids this summer 3 story and basement, 100 x 110 ft. brick and steel, here. $150,000.

Del., Newark—Library—University of Delaware soon takes bids 2 story and basement, cut stone, brick and steel. $300,000. Day & Klauder, Franklin Trust Bldg., Phila., archts Noted Sept. 28.

D. C., Washington—Home—Home For Incurables, 3200 S St., N.W., having plans prepared by L. Luquer, 819 15th St., N.W., home at 3720 Upton St., N.W. $275,000.

West Virginia—School—Bd. Educ., c/o W. D. Johnson, Wierton, plans 3 story, 110 x 160 ft., in Hancock Co., 5 mi. from Steubenville, O. $185,000. Peterson & Clarke, Steubenville, O., archts.

W. Va., Huntington—Hotel—W. M. Meridith, Robson-Prichard Bldg., having plans prepared by L. J. Dean, 5th Ave., 10 story and basement, 30 x 160 ft., brick, steel and tile, 4th Ave. and 7th St. $200,000.

N. C., Fayetteville—Hotel—Chamber of Commerce promoting hotel company which is having plans prepared by W. G. Rogers, Trust Bldg., Charlotte, for 8 story, brick, limestone and terra cotta. $250,000.

N. C., Greensboro—College—Agricultural and Technical College plans dormitory, combination dining hall, kitchen and laundry. $170,000. J. B. Dudley, pres. H. Barton, Greensboro, engr.

N. C., Greensboro—Schools—Guilford Co. plans school at Guilford College, one at Colfax, one in Summerville Twp. and one for negroes at Jonesboro. $400,000. T. R. Foust, co. supt. instruction. Engineer and architect not announced.

N. C., Lumberton—High School—Will sell $160,000 bonds May 22, for high school. Engineer and architect not selected.

N. C., Newton—Court House—Catawba Co. plans court house. $200,000. J. D. Elliott, Hickory, chn. co. comrs. Engineer and architect not selected.

Fla., Winter Haven—Hotel—D. W. Swarts and associates, Lakeland, having estimates prepared 5 story, 90 x 105 ft., rein.-con. $150,000.

Tenn., Memphis—Office—Memphis Cotton Exch., 66 South Front St., having plans prepared by Gardner & Howe, engrs., Porter Bldg., and Mahan & Broadwell, archts., Amer. Bank Bldg., 12 story, 70 x 100 ft., probably steel frame, terra cotta finish, Front and Union Sts. $500,000.

Tenn., Nashville—Office—H. G. Hill, Cummings Sta., plans office, 8th and Church Sts. Cost to exceed $150,000.

Ky., Barboursville—Court House—Knox Co. plans court house. $150,000.

O., Akron—Dance Hall—East Market Gardens plan 100 x 300 ft. dance hall, East Market and South College Sts. $150,000. I. J. Goldston, 207 Beck Ave., archt.

O., Cincinnati—High School—Bd. Educ. plans Western Hills High School, Price Hill. To exceed $150,000. Garber & Woodward, 2803 Union Central Bldg., archts.

O., Cleveland—Apartment—M. Morris, 1829 Grasmere Ave., had plans prepared by A. F. Janowitz, 811 Prospect Ave., 3 story, 38 x 141 ft., brick and timber, plain foundation, East 79th St. near Euclid Ave. $150,000.

O., Cleveland—Church and Office—Euclid Ave. Baptist Church, c/o W. W. Bustard, pastor, 13679 Fairmount Blvd., having plans prepared by Walker & Weeks, 1900 Euclid Ave., 9 story, brick, steel and concrete, on 130 x 360 ft. lot, East 18th St. and Euclid Ave. $1,000,000.

O., Cleveland—College—St. Ignatius College, c/o T. J. Smith, pres., West 30th St. and Carroll Ave., plans group brick, steel and concrete buildings, plain foundations, Fairmount Blvd. $2,000,000. Engineer and architect not selected.

O., Cleveland—Commercial—H. T. Jeffrey, archt., 621 Hanna Bldg., preparing plans 4 story and basement, 132 x 132 ft., brick, steel and concrete, Chester Ave. $300,000. Owners name withheld.

O., Cleveland—Commercial and Apartment—W. C. Campbell, Swetland Bldg., plans 4 story, 95 x 160 ft., brick and metal lumber, plain foundation, East 106th St. and Carnegie Ave. $200,000. Engineer and architect not selected.

O., Cleveland—Commercial and Recreation—Cleveland Recreation Co., c/o H. T. Jeffrey, archt., Hanna Annex., having plans prepared 10 story, brick, steel and concrete, Prospect Ave. and East 14th St. $600,000.

O., Cleveland—High School—Bd. Educ., East 6th St. and Rockwell Ave., having plans prepared by W. R. McCornack, East 6th St. and Rockwell Ave., 6 story, brick, steel and concrete, University Circle. $3,000,000.

O., Cleveland—Home—Eliza Jennings Home, c/o C. Orr, pres., 10603 Detroit Ave., raising $300,000 for 3 story, brick, steel and concrete. Engineer and architect not selected.

O., Cleveland—Mercantile—J. L. Free Land Co., 1004 Prospect Ave., had plans prepared by Watson Eng. Co., 4614 Prospect Ave., 8 story, 73 x 93 ft., brick, steel and concrete top addition, 1227 Prospect Ave. $300,000.

O., Cleveland—Mercantile—M. Marmorstein, Ulmer Bldg., plans 6 story, 99 x 200 ft., brick, steel and concrete, 2330 Euclid Ave. $300,000. Engineer and architect not selected.

O., Cleveland—Nurses Home, etc.—Fairview Park Hospital, 3305 Franklin Ave., having plans prepared by F. W. Striebinger, 1900 Euclid Ave., 2 story nurses home, also boiler house and laundry, brick, steel and concrete. $150,000.

O., Cleveland—Office—Bd. Educ., East 6th St. and Rockwell Ave., plans 4 or 6 story, brick, steel and concrete, East 6th St. and St. Clair Ave. $500,000. W. R. McCornack, East 6th St. and Rockwell Ave., archt.

O., Cleveland Heights (Warrensville, P. O.)—Library—Cleveland Heights Library Bd., c/o C. A. Adams, pres., plans 2 story, brick, steel and concrete, Superior Rd. $200,000. Engineer and architect not selected.

O., Columbus—Agricultural, etc.—State Legislature appropriated $400,000 rebuilding agricultural and horticultural buildings, etc., destroyed by fire, also for an additional cattle barn and modernizing sewerage, water and electric lighting systems. A. Truax, dir.

O., Portsmouth—Hotel—Hurth Hotel Co. having plans prepared by C. C. Taylor, Portsmouth, 6 story and basement, 90 x 150 ft., brick, concrete and terra cotta, 3rd and Chillicothe Sts. $350,000.

O., St. Clairsville—High School—Bd. Educ. having plans prepared by F. E. Rush, 16 South 3rd St., Columbus, 2 story and basement. $150,000.

O., Springfield—Temple—Masonic Temple Assn. having plans prepared by H. D. Smith, 50 East Town St., Columbus, and Miller & Reeves, 20 South 3rd St., Columbus, 5 story and basement, 120 x 150 ft., brick, stone and concrete. $600,000.

Ind., South Bend—High School—Bd. Educ. plans junior high school, Ewing Ave. and Fellows St. $350,000. Engineer and architect not announced.

Ind., South Bend—School—Bd. Educ. having plans prepared by Freyermuth & Maurer, 654 Farmers Trust Bldg., and takes bids about July 1, brick, plain foundation, East Calvert St. $200,000.

Mich., Detroit—Apartment—W. H. Odell, archt., 4040 West Phila. Ave., preparing plans 3 story and basement, 45 x 145 ft. brick and steel, plain foundation, West Grand Blvd. $150,000. Owner's name withheld.

Mich., Detroit—Apartment-Hotel—A. V. Lee, c/o L. Kamper, archt., Kamper Bldg., having plans prepared 9 story and basement, 60 x 125 ft., rein.-con., brick and steel, plain foundation, Sproat St. and Park Blvd. $350,000.

Mich., Detroit—Hotel—E. Bollin and R. W. McKinney, c/o Kohner & Seeler, archts., 405 Kresge Bldg., having plans completed for 10 story and basement, 100 x 150 ft. rein.-con., brick and steel, plain foundation, John R St. $350,000.

Mich., Detroit—School—Bd. Educ., 1354 Bway. Ave., having preliminary plans prepaerd by Malcomson, Higginbotham & Palmer, 405 Moffat Bldg., 2 story and basement, rein.-con., brick and steel, plain foundation, Perry and Barrett Sts. $150,000.

Mich., Detroit—School—LaSalle Commercial College, 1308 Bway. Ave., plans 2 story and basement, rein.-con., brick and steel, plain foundation, Gratiot and Connors Aves. $250,000. Engineer and architect not selected.

Mich., Detroit—Theatre—Imperial Theatre Co., c/o C. W. Brandt, archt., 1114 Kresge Bldg., having plans prepared 2 story and basement, 140 x 160 ft. brick and steel, plain foundation, May and Gratiot Aves. $150,000.

Mich., East Lansing—College—Michigan Agricultural College had plans prepared by Pond & Pond, 64 East Van Buren Ave., Chicago, 3 story and basement, 175 x 200 ft. brick and steel, on campus. $500,000.

Mich., Highland Park (Detroit P. O.)—Nurses Home—Highland Park General Hospital having plans prepared by G. W. Graves, 233 John R St., Detroit, 3 story and basement, rein.-con., brick and steel, plain foundation. $150,000.

Ill., Chicago—Exchange—Illinois Bell Telephone Co., Franklin and Washington Sts., plans 4 or 5 story, 109 x 208 ft., rein.-con., brick and steel, Erie and North Dearborn Sts. Holabird & Roche, 104 South Michigan Ave., archts.

Ill., Chicago—High School—Franciscan Sisters, c/o St. Josephs Convent, 575 Layton Blvd., Milwaukee, Wis., rejected bids 4 story and basement, 220 x 236 ft., rein.-con. and brick, Byron and Lawndale Aves., here. $700,000. Will readvertise. Brust & Philipp, 405 Bway., Milwaukee, archts. Noted Mar. 29.

Ill., Chicago—Recreation—C. C. Marzano, c/o A. V. Capraro, archt., 64 West Randolph St., having plans prepared 2 story, 100 x 125 ft. addition, rein.-con. brick and steel, West 63rd St. near Homan St. $150,000.

Ill., Upper Alton (Alton, P. O.)—Administration—Shurtleff College had plans prepared by W. T. Trueblood and H. Graf, Chemical Bldg., St. Louis, Mo., and soon takes bids 3 story and basement, 45 x 120 ft., rein.-con., brick and tile, on Campus, here. $150,000.

Wis., Madison—Auditorium, etc.—Bd. Educ. having plans prepared by F. Riley, Conklin Bldg., 2 story, 75 x 150 ft. auditorium, gymnasium and heating plant at East Side High School, rein.-con., steel and brick, plain foundation. $200,000.

Wis., Manitowoc—Hotel—Hotel Williams, South 8th St., rejected bids 5 story, brick and concrete addition, plain foundation. Will readvertise later. Noted Apr. 5.

Wis., Milwaukee—Office—B. E. Nickoll, 109 Wisconsin St., having preliminary plans prepared by Herbst & Kuenzli, 114 Grand Ave., 8 or 10 story, 43 x 100 ft., brick and concrete, plain foundation, Grand Ave. $300,000.

Buildings (Continued)

Wis., Milwaukee—Store—Hartman Furniture & Carpet Co., 286 West Water St., having plans prepared by G. H. Leipold, archt., 160 Martin St., 10 story and basement, 60 x 130 ft., brick and concrete, plain foundation. $500,000.

Wis., Whitewater—School— Bd. Normal Regents, Madison, having plans prepared by A. Peabody, Capitol Bldg., Madison, 4 story, 75 x 200 ft., brick, rein.-con. and steel, here. $250,000. W. S. Kettle, secy.

Ia., Sioux City—Hospital—St. Joseph's Hospital plans rein.-con. and brick addition, 21st and Court Sts. $225,000. Engineer or architect not selected.

Ia., Waterloo—Business—J. E. Johnson, Waterloo Savings Bank, soon takes bids 5 story and basement, 84 x 140 ft., rein.-con., brick and stone, 4th and Commercial Sts. $350,000. J. G. Ralston, 709 L and J Bldg., archt.

Minn., Minneapolis—Church—Hope Lutheran Church, c/o C. S. Thorpe, 1217 South East 6th St., plans rein.-con., brick and tile, 13th Ave. and 6th St. S. E. $150,000. Engineer and architect not announced.

Minn., Minneapolis—Hospital—State Bd. Control, St. Paul, plans 3 or 4 story and basement, rein.-con., brick and tile, here. $200,000. C. L. Pillsbury Co., 1200 2nd Ave. S. engr. C. H. Johnston, 715 Capital Bank Bldg., St. Paul, and J. H. Forsythe, University of Minnesota, Minneapolis, archts.

Minn., Minneapolis—Lodge, etc.—Minnehaha Lodge, A. F. & A. M., No. 165, 1533 East Lake St., having plans prepared by A. M. Lindell, 319 Meyers Arcade, 3 story and basement, 100 x 105 ft., brick and tile, Lake St. and Bloomington Ave. $150,000.

Minn., St. Paul—Office—M. Fink & Son, 417 Merchants National Bank Bldg., having plans prepared by W. E. Melinder and M. D. Boyer, 1012 Guardian Life Bldg., 7 story and basement, 75 x 100 ft. rein.-con., brick, tile, stone and terra cotta. $300,000.

Kan., Emporia—High School—Bd. Educ. having plans prepared by J. H. Felt & Co., 300 Grand Ave. Temple, Kansas City, Mo., for junior high school. $40,000 bonds voted. Noted Mar. 22.

Kan., Ottawa — High School — Election soon to vote on $260,000 bond issue, 3 story, 156 x 162 ft., rein.-con., brick and stone. Washburn & Shookey, 222 Main St., archts.

Kan., Sabetha—Hospital—C. A. Smith, archt., 109½ Sante Fe St., Salina, soon takes bids 3 story and basement, 44 x 150 ft., rein.-con. and brick, for St. Anthony Hospital. $150,000. Noted Apr. 12.

Mont., Helena—Office—Montana Life Insurance Co., Conrad Bank Bldg., having plans prepared 2 story and basement, 60 x 100 ft., brick, tile and terra cotta. $150,000. H. R. Cunningham, vice-pres. Architect and engineer not announced.

Mo., Chillicothe—High School—Bd. Educ. having preliminary plans prepared by R. W. Roberts, Chillicothe, brick, steel and stone. $300,000. Noted Mar. 29.

Mo., Kansas City — Hospital — J. Fairweather, 1005 Scarritt Bldg., is representing owner who plans 3 story and basement, 100 x 125 ft., rein.-con., brick and steel. $100,000. Engineer and architect not selected.

Mo., St. Louis—Apartment—Syndicate headed by S. L. St. Jean, c/o Chouteau Trust Co., 4030 Choteau Ave., plans 6 story, 150 x 166 ft., rein.-con. and brick, plain foundation, Pershing Ave. $400,000.

Mo., St. Louis—Hospital—St. Louis Maternity Hospital, 4518 Washington Ave., plans raising $500,000 for 8 story, rein.-con. and brick, plain foundation, Kingshighway. Engineer and architect not announced.

Mo., St. Louis—Office—G. Cytron, Title Guaranty Bldg., having plans prepared by P. J. Bradshaw, International Life Bldg., 5 story and basement, 66 x 127 ft., rein.-con. and brick, plain foundation, 9th St. $300,000.

Mo., St. Louis—School—Washington University, Skinker and Lindell Aves., had plans prepared by W. T. Trueblood and H. Graf, Chemical Bldg., 9 story, 65 x 112 ft., rein.-con. and brick, plain foundation, Kingshighway. $200,000. Brussel & Viterbo, Arcade Bldg., engrs.

Mo., Springfield—Hospital—Homes Methodist Episcopal Church had plans prepared by E. Dearing, Boston, Mass. (street address not available), 3 story and basement, 42 x 120 ft., rein.-con., brick and stone addition, 1323 Jefferson St. $150,000.

Mo., Trenton—High School—Bd. Educ. having plans prepared by R. H. Sanneman, 519 Lee Bldg., Kansas City, 3 story and basement, 100 x 150 ft., stone. $200,000. Noted Apr. 19.

Tex., Corsicana — Schools — School Bd. having plans prepared by W. B. Ittner, 911 Locust St., St. Louis, Mo., high school and 2 grade schools, 2 and 3 story. $600,000.

Tex., Dallas—Office—C. B. Cohen, 2531 Forest Ave., takes bids in summer 4 story and basement, 25 x 100 ft., rein.-con., plain foundation, 1815 Main St. $200,000. Engineer and architect not announced.

Tex., Dallas — School — Southern Methodist University takes bids in summer 2 story and basement, brick, plain foundation, on Campus. $150,000. De Witt & Lemmon, Southwestern Life Bldg., archts.

Tex., Waco—City Hall—May 29, to vote on $325,000 bonds for erecting and equipping city hall. Address B. C. Richards, mayor.

Okla., Muskogee—Court House and Jail—Muskogee Co. election May 8, to vote on $350,000 bonds for courthouse and jail, rein.-con., brick and stone.

Okla., Sapulpa—Church—First Methodist Episcopal Church plans church. $150,000. R. P. Crawford, pastor. Engineer and architect not selected.

Colo., Denver — Grade School — School Dist. Bd. approved plans for Colombian School, 3 story, 50 ft. high, 80 x 170 ft., brick and stone, Federal Blvd. between West 41st and West 42nd Aves. $157,000. Private plans.

Colo., Denver—School—School Dist. having plans prepared by H. J. Manning, Majestic Bldg., 2 story, 62 x 234 ft., brick, concrete and terra cotta, 3rd and Fox Sts. $227,000.

Idaho, Boise—Depot—Oregon Short Line R.R., Dodge Bldg., Omaha, Neb., plans station, here. $150,000. R. L. Huntley, ch. engr.

Wash., Seattle—Store—S. H. Kress & Co., 114 5th Ave., New York City, having plans completed 5 story and basement, 111 x 116 ft., 3rd and Pike St. $200,000. Private plans.

Calif., Alameda—Apartment—L. Kaliski, c/o A. A. Cantin, archt., 68 Post St., San Francisco, having revised plans prepared 3 story, rein.-con., Central and Grand Aves. Former bids rejected. Noted Apr. 12.

Calif., Alameda—Hospital—Alameda Sanitarium, 2054 Clinton Ave., plans hospital, rein.-con., Willot St. and Clinton Ave. $250,000. Engineer and architect not selected.

Calif., Alhambra — Theatre — F. Andres, 1512 West Main St., plans fireproof theatre, Main St. $150,000.

Calif., Belmont—College—College of the Notre Dame, San Jose, plans group of college buildings, fireproof, here. To exceed $150,000. Engineer and architect not selected.

Calif., Berkeley—Church—Trinity Episcopal Church, c/o G. Rushford, archt., 354 Pine St., San Francisco, having plans prepared church and educational institution for students of University of California, Dana St. and Bancroft Way. $350,000. Noted Sept. 21.

Calif., Lemoore—High School—Lemoore Union High School Dist. voted $325,000 bonds for high school. Engineer and architect not selected. Noted Mar. 29.

Calif., Long Beach—Apartment—Concord Masions Bldg Co. having plans prepared by E. Bergstrom, City Natl. Bank Bldg., Los Angeles, 10 story, 50 x 150 ft., Atlantic St. $600,000.

Calif., Long Beach—Hotel and Apartment—C. H. Leitch, c/o W. H. Austin, et al., archts., 1st National Bank Bldg., had preliminary plans prepared 10 story and basement, rein.-con., 5th and Locust Sts. To exceed $350,000.

Calif., Los Angeles — Apartment — F. Harper, 672 Benton Way, plans apartment building, probably 12 story, fireproof, on 123 x 150 ft. site, Benton Way near 7th St. To exceed $650,000.

Calif., Los Angeles—Apartment—E. A. Wayt, representing syndicate which is having plans prepared by Russell & Alspaugh, Story Bldg., 13 story, 100 x 150 ft., rein.-con., 6th and Carondelet St. $800,000.

Calif., Los Angeles—Bank and Office—First National Bank of Los Angeles, 707 South Spring St., having plans prepared by Curlett & Beelman, Union Bank Bldg., 12 story and basement, fireproof, 6th and Spring Sts. To exceed $300,000.

Calif., Los Angeles — Club — Womens Athletic Club, c/o Allison & Allison, archts., Hibernian Bldg., having plans prepared 7 story and basement, rein.-con., Flower St. To exceed $350,000.

Calif., Los Angeles—Hotel—P. Weger, c/o C. Boller, archt., 531 Douglas Bldg., having plans prepared 4 story, brick, Westlake St. $150,000.

Calif., Los Angeles—Mercantile—Desmonds Store, having plans prepared by A. C. Martin, 430 Higgins Bldge., 5 story, 62 x 154 ft., brick, steel and terra cotta, Bway. $400,000.

Calif., Los Angeles—Office—Los Angeles Gas & Electric Corp., 645 South Hill St., having plans prepared by Parkinson & Parkinson, Title Insurance Bldg., 12 story and basement, probably steel and concrete, Flower St. To exceed $500,000.

Calif., Los Angeles—Store—First National Bank of Los Angeles having plans prepared by A. C. Martin, Higgins Bldg., 5 story and basement, brick and steel, 6th and Spring Sts. To exceed $250,000.

Calif., Los Angeles—Store—May Corp., 801 South Bway., having plans prepared by A. C. Martin, Higgins Bldg., remodel present structure and construct 3 story, 170 x 300 ft., brick and steel addition. To exceed $500,000.

Calif., Los Angeles—Store and Lodge—Odd Fellows Hall Assn., c/o Morgan & Wells, archts., Van Nuys Bldg., having plans prepared 3 story and basement, rein.-con., Flower St. near 11th St. To exceed $175,000.

Calif., Los Angeles—Store and Market—Young Market Co., c/o C. F. Plummer, archt., Story Bldg., having plans prepared 3 story and basement, 130 x 150 ft., brick and steel, Union and 7th Sts. To exceed $150,000.

Calif., Los Angeles—Store and Office—A. C. Blumenthal, Loew State Bldg., having plans prepared by S. T. Norton, Pacific Finence Bldg., 12 story, 120 x 293 ft., Bway. $4,000,000.

Calif., Los Angeles—Theatre and Office—D. Hart, c/o O. H. Neher, archt., Marsh Strong Bldg., having plans prepared 12 story, probably rein.-con., Olive St. near 7th St. To exceed $500,000.

Calif., Monrovia — High School — Plans election to vote on $400,000 bonds to purchase site and construct high school.

Calif., Oakland—Lodge, Store and Office—Elks Hall Assn., c/o W. Knowles, archt., Bacon Bldg., Oakland, and Hearst Bldg., San Francisco, takes bids about July 10, 8 or 9 story and basement, rein.-con., 14th St. near Bway. $750,000. Noted Mar. 1.

Calif., Oakland—Office—Schirmer-Bugbee, archts., Thayer Bldg., preparing preliminary plans 4 story, rein.-con., Bway. $200,000. Owner's name withheld.

Calif., Oakland—Office and Store—Alameda County Title Insurance Co., c/o C. W. McCall and C. T. Davis, archts., Central Bank Bldg., having plans prepared 6 story, basement and mezzanine, brick, rein.-con., steel and terra cotta, 14th and Franklin Sts. $375,000.

Calif., Oakland—Store and Office—E. C. Lyons, c/o E. T. Foulkes, archt., Crocker Bldg., San Francisco, having plans prepared 2 or more stories, brick or concrete, 19th St. and Bway. $150,000.

Calif., Pasadena — Club and Office — American Legion, Pasadena Post, having plans prepared by Marston, Van Pelt and Mayburg, 25 Euclid Ave., club, Morengo Ave. $150,000. Noted Mar. 15.

Calif., Sacramento — Bank and Office — Farmers and Merchants Savings Bank, 8th, J and K Sts., plans 40 x 160 ft. addition, fireproof. $150,000 or more. R. M. Richardson, pres. Engineer and architect not selected.

Calif., San Diego—Office and Theatre—R. E. Hicks, 4250 Arguello St., had plans prepared by W. H. Wheeler, 302 Spreckels Bldg., 5 story, 100 x 150 ft., rein.-con. and steel, 4th and E sts. $350,000. Noted Dec. 14.

Calif., San Diego — Theatre, Store and Office—Balboa Building Corp., c/o W. H. Wheeler, archt., Spreckels Bldg., had plans prepared 5 story and basement, E and 14th Sts. To exceed $150,000.

Calif., San Francisco—Apartment—A. H. Knoll, archt., Hearst Bldg., prepared plans 6 story and basement, rein.-con., Taylor St. near Ellis St. $150,000 or more. Owner's name withheld.

Calif., San Francisco—Apartment—R. J. O'Brien and E. Rhine, 1756 Mission St., plans 5 or 6 story, concrete and steel, Eddy St. near Jones St. $150,000 or more. Engineer and architect not selected.

Calif., San Francisco—Home—St. Marys Hospital, Hayes and Stanyan Sts., having plans prepared by Shea & Shea, Chronicle Bldg., 4 or 5 story, rein.-con., Hayes and Stanyan Sts. $170,000.

Calif., San Francisco—Store and Arcade—Chamberlain & Proctor, c/o Bakewell & Brown, archts., 251 Kearny St., having plans prepared 7 story, probably rein.-con., Powell and Sutter Sts. To exceed $150,000.

Calif., San Francisco — Theatre — A. Pantages, Pantages Theatre Bldg., plans theatre. To exceed $500,000.

Calif., San Jose—Hotel—E. Tropp and W. C. Crittenden, 129 Sutter St., San Francisco, plant 16 story, fireproof. Engineer and architect not selected.

Calif., Stockton—Home—San Joaquin Co. had plans prepared by R. P. Morrell, 41 South Sutter St., 2 story, brick or concrete, county hospital grounds. $150,000.

Calif., Taft — High School — Taft Union High School Dist. having revised plans prepared by W. H. Weeks, 369 Pine St., San

Buildings (Continued)

Francisco, auditorium, gymnasium, science building, shop, etc., rein.-con. $350,000. Former bids rejected. Noted Apr. 19.

Que., Montreal — Church — Westmount Baptist Church, Western Ave., plans 63 x 105 ft. brick and stone, Sherbrooke and Roslyn Aves. $150,000. S. Comber, 127 Stanley St., archt. Noted Oct. 12.

Que., Montreal—Memorial Hall—Imperial Order Daughters of Empire, 615 St. Catherine St. W., plans memorial hall 4,000 seating capacity. $500,000.

Que., Montreal—Schools—Catholic School Comrs. of Northern Dist. adopted $1,150,000 budget to build 10 new schools during 1923-1924. Project will be submitted to Central Bd. of Comrs. for approval. I. P. Labarre, 1946 St. Denis St., secy.

Ont., Toronto—Office—London Life Insurance Co., 72 Queen St. W., plans 7 story, concrete or steel, on Bloor St. W. $250,000. Architect not selected.

BIDS DESIRED

Conn., Hartford — School — May 8, by Whiton & McMahon, archts., 36 Pearl St., 3 story and basement, 130 x 170 ft., brick, plain foundation. Charter Oak Ave., for South School Dist. $400,000.

Conn., New Britain—Business—May 8, by M. J. Unkelback, archt., Main St., 3 story, 50 x 100 ft., brick, plain foundation, 514 Main St., for R. Podesta, 510 Main St. $150,000.

Conn., Waterbury—Business—May 12, by J. W. Hutchinson, 218 Woodlawn Terrace, 4 story, 50 x 90 ft., brick, plain foundation, Witlow and Plaza Sts., for T. J. McDonald. $160,000. H. F. Wenzel, 6 Glen Ridge St., archt.

N. Y., Brooklyn—School—May 8, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., P. S. 142, 5 story, 60 x 100 ft., brick, steel and stone, plain foundation, Henry St. $750,000. Noted Oct. 12.

N. Y., St. Albans (Jamaica, P. O.)—School—May 8, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, P. S. 36, Bell St. from Everitt to Lovingham Aves., here. $850,000.

Pa., Brookline—Clubhouse—Lachman & Murphy, archts., Drexel Bldg., Phila., taking bids 2 story and basement, 160 x 175 ft. and 1 story, 60 x 100 ft., 32 ft. high, rein.-con., brick, steel, stone and stucco, plain foundation, for Brookline Sq. Club, Brookline. $500,000.

Pa., Ferndale—High School—May 19 by G. M. Weller, pres. Bd. Educ., 557 Ferndale Ave., 2 story and basement, 100 x 110 ft. $150,000. J. E. Adams, Nemo Bldg., Johnstown, archt.

Pa., Pittsburgh—Shrine—May 7, by Syria Temple Imp. Assn., Syria Mosque, Bigelow Blvd., 2 side additions. $300,000. R. G. Schmid & Co., West Randolph St., Chicago, archts.

Md., Baltimore—School of Hygiene—May 5, by Archer & Allen, archts., 1 East Lexington St., 9 story, 60 x 170 ft., brick and steel, Wolfe and Monument Sts., for Johns Hopkins Hospital. $750,000. Noted Mar. 16, 1922.

Md., Frederick—Administration—May 7, by Independent Order of Odd Fellows, Cathedral and Saratoga Sts., 2 and 3 story, 60 x 112 ft. administration building, 36 x 206 ft. home for aged, and 36 x 216 ft. cottage, brick, plain foundation. $400,000. J. E. Sperry, Clavert Bldg., Baltimore, archt. H. F. Doelman, 507 North Charles St., Baltimore, engr. Noted Jan. 11.

Fla., Clearwater—High School—May 10, by J. S. McMullen, Chn. Pinellas Co. School Bd., Clearwater, and F. Jonsberg, archt., St. Petersburg, high school. $150,000. Noted Mar. 22.

O., Byesville—High School—May 28, by W. Slay, clk. Bd. Educ., 2 story and basement, 106 x 125 ft., brick, concrete and tile. $150,000. F. S. Rusk, 16 South 3rd St., Columbus, archt. Noted Apr. 19.

O., Cleveland — Library — May 28, by Cleveland Pub. Library Bd., Kinney Levan Bldg., 4 story, 199 x 216 ft., brick, steel, concrete and stone, East 3rd St. and Superior Ave. $4,000,000. Walker & Weeks, 1900 Euclid Ave., archts. Noted Nov. 23.

O., Columbus—Office—May 17, by F. L. Packard, archt., 16 East Broad St., 8 story and basement, 80 x 96 ft., brick, concrete and terra cotta, 4th and Broad Sts., for M. L. Yuster, Parkview Ave. and Broad St. $400,000. Noted Mar. 15.

O., Newcomerstown—High School — May 9, by Bd. Educ., 2 story and basement, 120 x 137 ft., brick and concrete. $170,000. J. Q. Adams, Southern Hotel, Columbus, archt. Noted July 6.

Mich., Detroit—Apartment—F. Swirsky & Co., 428 Murphy Bldg., taking bids and opens same about May 10, 3 story and basement, 40 ft. high, 50 x 180 ft., brick and steel plain foundation. Prentis Ave., for S. Feldman, 1206 Penobscot Bldg. $150,000.

Mich., Holland—Hotel—G. S. Kingsley, archt., 109 North Dearborn St., Chicago, taking bids 6 story and basement, 105 x 106 ft., rein.-con. and brick, plain foundation, here, for Boone Bros. $250,000.

Ill., Chicago—Apartment—K. Hynes, 7930 Bishop St., receiving bids 3 story, 100 x 125 ft., rein.-con., brick and steel, 6600-08 Stewart Ave. $150,000. A. G. Lind, 453 West 63rd St., archt.

Tex., Electra—High School—May 8, by E. M. Friend, pres. School Bd., 3 story, rein.-con., brick and stone. $160,000. C. H. Page & Bros., Austin Natl. Bank Bldg., Austin, archts.

Calif., Alhambra—School—Bd. Educ. receiving bids administration and auditorium, brick. To exceed $200,000. Hunt & Burns, Laughlin Bldg., Los Angeles, archts. Noted Mar. 15.

Calif., Pasadena—School—May 10, by Bd. Educ., group of school buildings, brick, $150,000. Allison & Allison, Hibernian Bldg., Los Angeles, archts. Noted Mar. 22.

Calif., Stockton—City Hall—May 29, by City Council, city hall, fireproof, on block bounded by El Dorado, Center, Fremont and Lindsey Sts. $600,300. J. Pearce, et al., Delta Bldg., archts.

Ont., Oshawa—School—May 9, by W. B. Nott, chn. Bd. Educ., Dominion Bank Chambers, 2 story and basement, 10 room, brick, Center St. $175,000. Hutton & Souter, Bank of Hamilton Bldg., Hamilton, archts.

Ont., St. Thomas—Memorial Hospital—May 12, by Darrach & Findlay, archts., 430 Talbot St., 3 story and basement, concrete, brick and steel, for City. $150,000. Noted Apr. 12.

Ont., Toronto—Hospital—May 15, by C. A. Maguire, chn. Bd. Control, City Hall, 3 story and basement, concrete, brick and steel, Surrey Pl. $400,000. G. W. F. Price, city archt. Noted Apr. 12.

BIDS RECEIVED

D. C., Wash.—Office—Washington Times-Herald, Munsey Bldg., newspaper and office building from P. E. Gormley Co., Union Trust Bldg., $310,548. Noted Mar. 29.

O., Akron—School—I. Moses, clk. Bd. Educ., for Crosby School, 2 story and basement, 68 x 215 ft., brick steel and concrete, from Carmichael Constr. Co., Central Saving & Trust Co., Cleveland, $181,000. Noted Apr. 5.

Ia., Sioux City—Fire and Police Station—Superstructure of 3 story and basement, 133 x 140 ft., rein.-con., brick, tile and stone, 6th and Water Sts., general contract from B. E. Short, 418 Court St., $244,999. Noted Apr. 5.

Tex., Austin — Hotel — Baker Hotel Co. general contract 12 story, 60 x 110 ft., rein.-con., brick and stone, from J. P. Haynes, Moore Bldg., San Antonio, $469,000; elevators from Otis Elevator Co., 7th St., Ft. Worth, $41,000; mechanical equipment from J. L. Martin, 412 Congress Ave., Austin, $180,000. Noted Apr. 5.

Calif., Modesto—Schools—Modesto Grammar School Dist., 2 brick school and remodeling present structure, from Herndon & Finnegan, 1814 17th St., Sacramento, $140,000. Noted Apr. 19.

Calif., Piedmont—High School—Piedmont School Dist., 2 and 3 story, rein.-con., from Hannah Bros., 142 Sansome St., San Francisco, (1) $174,900 (2) $166,400. Noted Apr. 19.

CONTRACTS AWARDED

Mass., Longmeadow — Clubhouse, etc. — Longmeadow Golf Club, c/o M. B. Reach, 229 Atwater Rd., Springfield, 2 story, brick and timber, plain foundation, to Patterson-King Corp., 452 Lexington Ave., New York City, $200,000. Noted Mar. 15.

Mass., Springfield—Apartment—Lincoln Realty Trust, 387 Main St., will build 4 story, brick, plain foundation, Bodowin St., by day labor. $400,000. H. C. Hearne, 387 Main St., archt.

Mass., Springfield—Office—Brown & Von Beren, archts., 185 Church St., New Haven, 6 story, 70 x 111 ft., brick and steel, plain foundation, Vernon St., to E. J. Pinney, 374 Main St., $260,000, for L. W. Besse, 21 Besse Pl. Archts. est. $250,000. Noted Mar. 8.

Mass., Worcester — Business — Hadley Furniture Co., 615 Main St., 5 story, 135 x 150 ft., brick and steel, plain foundation, Main and Madison Sts., to Keefe Bros., Worcester. Archts. est. $225,000. Noted June 1.

Mass., Taunton—School—Public Property Comn., 2 story and basement, 85 x 160 ft., brick and rein.-con., plain foundation, Middleboro Ave., to Greaney & Sherry, 57 North Main St., Fall River. Archts. est. $200,000. Noted Mar. 15.

R. I., Providence—Church—Church of the Mediator, Edgewood Ave., 2 story, 48 x 100 ft., brick and stone, plain foundation, to A. W. Merchant, Inc., Hospital Trust Bldg., Providence. Archts. est. $150,000.

Conn., Bridgeport—School—Bd. Educ., 2 story and basement, 20 room addition, brick and steel, plain foundation, Tesiny Ave., to W. Martin & Sons Co., 164 State St. Archts. est. $150,000. Noted Mar. 15.

Conn., Hartford — Apartment — R. A. D'Avino, archt., 647 Main St., two 3 story, 40 x 120 ft., brick, plain foundations, to Ferrigno & Perrone, 99 Magnolia St. Archts. est. $200,000 each. Owner's name withheld. Noted Apr. 26.

Conn., Hartford—Apartment—M. Shulman, 207 Sisson Ave., 3 story, 40 x 70 ft., brick, plain foundation, 32 Summer St., to F. Kaplan, 225 Vine St. Archts. est. $150,000. Noted Mar. 29.

Conn., Hartford — School — Northwest School Dist., 2 story, brick, plain foundation, Holbomb St., to Curtiss & Dean, 711 Main St. Archts. est. $150,000. Noted Mar. 22.

Conn., Manchester — Business — J. W. Farr, 983 Main St., 3 story, 50 x 100 ft., brick, plain foundation, Main St., to Manchester Constr. Co., 953 Main St. Archts. est. $150,000.

Conn., New Haven—Society—B. Goodhue, archt., 8 West 47th St., New York City, 3 story, 100 x 100 ft., brick, steel and stone, plain foundation, York St., to Jacobs & Youngs, 130 West 22nd St., New York City, for Yale University. Archts. est. $250,000. Noted Apr. 26.

Conn., Stamford — Bank and Office — Fidelity Title & Trust Co., 3 story, 45 x 111 ft., brick and steel, plain foundation, Atlantic St., to C. M. Cruikshank, 17 East 42nd St., New York City. Archts. est. $150,000. Noted Apr. 12.

N. Y., Attica—High School—Bd. Educ. general contract 3 story, 80 x 150 ft., brick and stone, Prospect St., to Morris & Allen, Inc., Prudential Bldg., Buffalo, $277,186; heating and ventilating work, to French & Keith, Randolph, $26,136. Noted Mar. 8.

N. Y., Brooklyn—School—Bd. Educ., 500 Park Ave., New York, P. S. 100, 5 story, 178 x 195 ft., brick, steel and stone, plain foundation, West 3rd St. near Sheepshead Bay Blvd., here, to Concord Constr. Co., 476 Seneca Ave., $679,800. Noted Apr. 26.

N. Y., Mayville—High School—Bd. Educ. general contract brick high school, to C. Haas, 10th and Monroe Sts., Jamestown, $107,870; heating and ventilating work, to Chatfield & Sharp, 304 Pine St., Jamestown, $27,959. Noted Apr. 5.

N. Y., New York—Apartment—H. B. Herts, archt. and engr., 331 Madison Ave., brick, steel and stone, plain foundation, 165 East 60th St., to Fleischmann Constr. Co., 531 7th Ave. Archts. est. $1,000,000. Owner's name withheld.

N. Y., New York—Apartment—F. J. Willets, c/o G. F. Pelham, archt. and engr., 200 West 72nd St., will build 9 story, brick steel and stone, plain foundation, 142 East 49th St., by day labor.

N. Y., New York—Bank—North Side Savings Bank, 3230 3rd Ave., 1 story, brick, stone and marble addition, plain foundation, 162nd St. and 3rd Ave., to W. V. Kiehnle, 3606 Park Ave. Archts. est. $225,000. Noted Mar. 15.

N. Y., New York—Sales, etc.—Studebaker Corp. of America, Main and Bronson Sts., South Bend, Ind., 6 story and basement, 175 x 200 ft. sales and service building, brick and rein.-con., West 131st St., here, to Wharton, Green & Co., 37 West 39th St. Archts. est. $400,000. Noted Jan. 18.

N. Y., New York—School—Bd. Educ., 500 Park Ave., P. S. 70, Weeks Ave., to T. Dwyer, Bway. and 216th St., $1,070,000. Noted Apr. 26.

N. Y., New York—Schools—Bd. Educ., 500 Park Ave., P. S. 66, Jennings St., and P. S. 67, East 179th St., both brick, steel and stone, plain foundations, to G. Dempie, 30 Church St., $1,019,950 and $1,038,000. Noted Apr. 26.

N. Y., New York—School and Chapel—Holy Cross Congregation, 2 story and basement, fireproof construction, Soundview and Taylor Aves., to T. J. Waters Co., 271 West 125th St., $215,000.

N. Y., Rochester—Bank—East Side Savings Bank, Main St. E and Clinton Ave., altering and constructing 53 x 64 x 93 ft., brick addition to A. Frederick & Sons, 710 Lake Ave. Archts. est. $150,000. Noted Apr. 26.

N. Y., Spring Valley—Grade and High School—Bd. Educ., 2 story, brick, steel and stone, plain foundation, to J. B. Schultz, Suffern, $293,000. Noted Apr. 5.

N. J., Haddon Heights — High School — Bd. Educ., 3 story, 75 x 236 ft. and 55 x 77 ft., rein.-con., brick and steel, plain foundation, to Wills-Bill Co., 1706 Sansom St., Philadelphia, $329,923. Noted Apr. 12.

Buildings (Continued)

N. J., West Orange—High School—Bd. Educ., 3 story, 105 x 230 ft., brick and steel, Gaston St., to Barr, Thaw & Fraser, 13th St., Hoboken. Noted Mar. 15.

Pa., Duquesne—School—Bd. Educ., 2 story and basement, 110 x 185 ft. brick, steel and limestone, 6th St., to Moore-Lamb Constr. Co., Stambaugh Bldg., Youngstown, O. Archts. est. $300,000. Noted Mar. 29.

Pa., Forty-Fort (Kingston, P. O.)—Church—Methodist Episcopal Church, building brick church, to J. Curtis & Co., Forty-Fort (Kingston, P. O.). Archts. est. $150,000.

Ga., Atlanta—School—For 4 story, 100 x 200 ft., rein.-con., plain foundation, to Southern Ferro Constr. Co., Trust Co., Georgia Bldg. $461,000. Noted Mar. 1.

Ky., Louisville—Store—Bensinger Outfitting Co., 315 West Market St., 5 story, 50 x 200 ft., brick and steel, Market St., to Platoff & Bush, 122 West Liberty St. Archts. est. $200,000. Noted Apr. 26.

O., Cleveland—Sales, etc.—Pontiac Impvt. Co., c/o A. L. Corlett, pres., 3328 Vega Ave., 2 story 101 x 120 ft., brick, steel and concrete sales building and garage, Ansel Rd. and Superior Ave., to De Hamel Constr. Co., Plymouth Bldg. Archts. est. $150,000. L. L. Carlozzi Co., 1258 East 105th St., lessee.

O., Cleveland—School and Chapel—W. C. Jansen, archt., 402 Electric Bldg., 2 story and basement, 103 x 150 ft., brick, steel and concrete, Libby Rd., to M. B. Parker Constr. Co., 1836 Euclid Ave., for St. Wenceslaus Roman Catholic Church, 2666 East 35th Pl. Archts. est $150,000. Noted Mar. 22.

Mich., Kalamazoo—Library—H. H. Turner, archt., Michigan Trust Bldg., Grand Rapids, 3 story and basement, 93 x 153 ft., rein.-con. and steel, plain foundation, to M. McQuigg, c/o Western State Normal School (owner), $193,875. Noted Mar. 22.

Ill., Chicago—Apartment-Hotel—Belmont Hotel Building Corp., 400 North Michigan Ave., 12 story, 174 x 210 ft., rein.-con., brick and steel, 3156-78 Sheridan Rd., to H. McLennan Constr. Co., 400 North Michigan Ave. Archts. est. $1,250,000.

Ill., Chicago—Apartment—Gammage & Lund, 30 North Dearborn St., 3 story, 150 x 155 ft., rein.-con., brick and steel, 1537-51 Fargo St., to A. Lindstrom, 30 North Dearborn St. Archts. est. $150,000.

Ill., Chicago—Apartment—A. W. Gustafson, 7715 North Paulina St., 3 story, 115 x 132 ft., rein.-con., brick and steel, 7745-55 Haskins St., by day labor. $150,000. E. E. Hall, 123 West Madison St., archt.

Ill., Chicago—Apartment—Poulsen & Weston, 6159 Greenwood Ave., 3 story, 100 x 141 ft., rein.-con., brick and steel, 6116-22 Kimbark Ave., by day labor. $175,000. Kocher & Larson, 6250 South Halsted St., archts.

Ill., Chicago—Apartment—Weinstein & Rizinsky, 1607 South Central Ave., will build 3 story, 60 x 175 ft., rein.-con., brick and steel, 4955-59 West Washington St., by day labor. A. L. Himelblau, 179 West Washington St., archt.

Ill., Chicago—Apartment—B. Wisorsky, 1246 South Turner Ave., 3 story, 119 x 175 ft., rein.-con., brick and steel, 3356-60 West Adams St., to Weinstein & Co., 3620 Lexington Ave. Archts. est. $150,000.

Ill., Chicago—Bank, Store and Office—O'Connor, Burke & McDonnell, 6821 Stony Island Ave., 3 story, 100 x 124 ft., rein.-con., brick and steel, 7850-58 Cottage Grove Ave., to R. S. Wood, 12 West 55th St. Archts. est. $225,000. Noted Apr. 19.

Wis., Madison—Store—S. C. Hanks Co., 1st Central Bldg., 2 story and basement, 80 x 190 ft., brick, rein.-con. and steel, plain foundation, State St., to C. B. Fritz Co., 138 North Frances St. Archts. est. $150,000.

Wis., Madison—Temple—Masonic Lodge, c/o J. D. Mack, Capitol Bldg., 3 story 110 x 132 ft., brick, rein.-con. and steel, plain foundation, East Johnson St., to J. H. Findorff & Co., 601 West Wilson St. Archts. est. $400,000. Noted Apr. 12.

Wis., Milwaukee—Apartment—S. N. Loftus, 3018 Wells St., 3 story and basement, 62 x 107 ft., brick and concrete, plain foundation, to Universal Constr. Co., 915 Chestnut St. Archts. est. $150,000.

Wis., Racine—High School—St. Catherines Academy, 1201 Park Ave., 3 story and basement, 100 x 198 ft., brick, tile and concrete, plain foundation, 12th and Park Sts., to Barry, Byrne & Ryan, 104 South Michigan Ave., Chicago. Archts. est. $300,000. Noted Feb. 8.

Wis., Sheboygan—Hospital—Sisters of St. Francis, c/o J. C. Straub, dir., Springfield, Ill., 2 story and basement hospital addition, rein.-con., steel and brick, plain foundation, to Nack & Borth, 1213 North 17th St., $100,458. Archts. est. $150,000. Noted Apr. 26.

Kan., Wichita—Hotel—O. Shirk, 240 North Topeka St., 7 story, 100 x 140 ft., rein.-con., brick and steel, plain foundation, to G. H. Siedhoff Constr. Co., Broadview Hotel Bldg. Archts. est. $400,000. Noted Apr. 5.

Mo., St. Louis—Hotel—Fairmount Hotel Co., Chemical Bldg., 10 story, 147 x 216 ft., rein.-con. and brick, concrete pile foundation, Euclid Ave., to N. Howard, Arcade Bldg., $500,000.

Mo., University (St. Louis P. O.)—Theatre-Apartment—Parkview Realty Co., 1233 Boatmens Bank Bldg., St. Louis, 3 story, 110 x 193 ft., rein.-con., brick and steel, plain foundation, 6324-6342 Delmar Blvd., here, to M. B. Lippman, 4958 Delmar Blvd., St. Louis. Archts. est. $400,000.

Mo., Wellston (St. Louis P. O.)—High School—Wellston School Bd., 2 story and basement, 75 x 135 ft., rein.-con. and brick, plain foundation, Ella Ave., to W. MacDonald Constr. Co., 816 Olive St., St. Louis. Archts. est. $150,000. Noted Mar. 22.

Okla., Oklahoma City—Office—Alexander Drug Co., 216 West 1st St., 5 story, 75 x 130 ft., brick and concrete, 1st St., to Smizer Constr. Co., Terminal Bldg., $150,000.

Wash., Seattle—Office and Store—Bigelow Bldg. Co., 8 story, 60 x 120 ft., steel and concrete, 4th and Pike Sts., to Sound Eng. and Constr. Co., Lowman Bldg. Archts. est. $250,000. Noted Mar. 1.

Calif., Burbank—Theatre—M. Spazier, 202 East San Fernando Rd., will build theatre, fireproof, San Fernando Blvd., by day labor. $150,000.

Calif., Los Angeles—Loft—M. Harris, c/o H. Hewitt, Van Nuys Bldg., 7 story and basement, 73 x 109 ft., rein.-con., Main and 11th Sts., to J. C. Kubach, Merchants Natl. Bank Bdg. Archts. est. $150,000.

Calif., Los Angeles—Store, etc.—D. E. Foster, c/o contractor, 1 and 3 story, rein.-con., store and garage, Maryland Ave., to G. G. Stewart, Lissner Bldg., $150,000.

Calif., Los Banos—Bank and Office—Bank of Los Banos, 2 story, rein.-con., to M. M. Finlayson, Los Banos, $150,000.

Que., Montreal—Office—Insurance Corp., Ltd., Montreal, 10 story, rein.-con., steel and stone, St. James St., to Anglin-Norcross Co., Victoria St., $1,100,100. Noted Feb. 1.

Que., Montreal—School—Protestant Bd. School Comrs., University Ave., 4 story, 71 x 116 ft. brick, rein.-con. and stone addition to Rosemount School, Rosemount Blvd., to J. MacGregor, 44 Closse St., $185,000.

Ont., Pembroke—School—Bd. Educ., 2 story and basement, 12 room, concrete and brick, general contract to W. Beatty Estate, Pembroke, $137,486. Noted Mar. 22.

Federal Government Work

PROPOSED WORK

Ky., Louisville—Dredges—U. S. Engineer, P. O. Box 72, soon takes bids 2 steel hull dipper dredges 2½ to 4 cu.yd. capacity.

Ky., Louisville—Lumber—U. S. Engineer, P. O. Box 72, plans to purchase 100 pieces 3 or 4 in. x 10 in. x 30 ft. rough oak, 125 pieces 12 x 12 in. x 12 ft. oak, 120 pieces 2 and 6 in. x 12 in. x 14 ft. oak, and 35,000 ft. long leaf yellow pine.

Ky., Pikesville—Hospital—Construction Quartermaster, War Dept., plans hospital buildings, here.

Montana—Roads—U. S. Bureau Pub. Rds., Dept. Agriculture, Wash., D. C., plans gravel surfacing 26 mi. Federal Aid Project 190, Pondero and Glacier Counties, $258,118; 30 mi. Federal Aid Project 196, Glacier Co., $274,615. C. H. Purcell, Missoula, dist. engr.

Mo., Kansas City—Extension—Treas. Dept., Washington, D. C., rejected bids Extension 3 (complete incl. mechanical equipment) to U. S. Post Office and Court House, here. Noted Apr. 12.

Ark., Hot Springs—Quarters—Constructing Quartermaster, Army and Navy General Hospital, National Park, here, rejected bids 1 double set officers' quarters. Will readvertise. Noted Mar. 22.

Tex., Galveston—Dredging—U. S. Engineer, Galveston, plans dredging in Houston Ship Channel. L. M. Adams, dist. engr.

Calif., Mare Island—Reconstructing Dike—Spec. 4776—Bureau Yards & Docks, Navy Dept., Wash., D. C., rejected bids reconstructing Dike 14, here. Noted Mar. 22.

Calif., Salinas—Training Camp—Constructing Quartermaster, Fort Mason, San Francisco, soon takes bids for training camp, incl. deep wells, pumps, 200,000 gal. red wood tank, power lines, roads, sewers, camp buildings, etc., here, on Gihling Reservation, 3.5 mi. from Hilltown.

BIDS DESIRED

Mass., Rutland—Hospital—May 31 at office Quartermaster General, 2306 Munitions Bldg., Wash., D. C., 10 new rein.-con. and tile buildings, central heating plant with distribution main and necessary extensions to water, sewer and light lines, grading and roads, etc., at U. S. Veterans Hospital, here.

R. I., Providence—Dredging—May 31, at office U. S. Engineer, Providence, dredging in Duck Island Harbor, Conn.; adv. this issue. Noted Mar. 29.

Pa., Phila.—Dredging—June 8, at office U. S. Engineer, 815 Witherspoon Bldg., dredging in Delaware River, in Philadelphia Harbor; adv. this issue.

Pa., Phoenixville—Post Office—May 22, by Treas. Dept., Washington, D. C., for U. S. Post Office, here. J. A. Wetmore, acting superv. archt.

Wis., Green Bay—Dredging—May 31 at office U. S. Engineer, Milwaukee, dredging, here; adv. this issue.

Mo., St. Louis—Levee—May 21 by Mississippi River Comn., International Life Bldg., St. Louis, Mo., Louisa Co. Levee Dist. 15, Iowa, 300,000 cu.yd. earthwork.

New Mexico—Road—May 17, by Bureau Pub. Rds., U. S. Dept. Agriculture, 242 West Washington St., Phoenix, Ariz., constructing or improving 11.09 mi. Glenwood-Reserve, Sect. 4, Forest Highway, Datil National Forest, Catron Co., here, 193,430 cu.yd. excav., etc. E. S. Wheeler, dist. engr.

Utah—Roads and Bridge—May 9, by U. S. Bureau Pub. Rds., Colonel Hudson Bldg., Ogden, grading and structures on 5 mi. Bryce Canyon Forest Rd., 13 mi. Cedar Long Valley Rd. and 7.5 mi. Panquitch-Tropic Rd. incl. one bridge, 117,000 lb. steel, etc. B. J. Finch, dist. engr.

Arizona—Bridges—May 12, by Bureau Pub. Rds., U. S. Dept. Agriculture, 242 West Washington St., Phoenix, constructing or improving structures on 23.436 mi. Flagstaff-Angel Forest Highway (Coconino National Forest, Coconino Co. E. S. Wheeler, dist. engr.

Arizona—Road—May 10, by Bureau Pub. Rds., U. S. Dept. Agriculture, 242 West Washington St., Phoenix, grading Prescott-White Spar Forest Highway, Prescott National Forest, 446,170 cu.yd excav., etc. E. S. Wheeler, dist. engr.

Oregon—Roads—May 8, by U. S. Bureau Pub. Rds., Dept. Agriculture, Post Office Bldg., Portland, grading and crushed rock or gravel surfacing 7.9 mi. McKinzie River Highway, National Forest Rd., Belknap, Lane Co., 16 ft., 24 mi. Eugene-Florence Rd., Sinslaw National Forest, 40 ft. wide, incl. 16 bridges and culverts. C. H. Purcell, dist. engr.

Calif., Los Angeles—Dredging—May 18 at office U. S. Engineer, Central Bldg., dredging in Los Angeles Harbor, Area 3, 1,270,000 cu.yd. with maximum allowable overdepth 36,000 cu.yd., Area 4, 610,000 cu.yd. overdepth allowance 20,000 cu.yd., Area 5, 820,000 cu.yd. overdepth allowance 24,000 cu.yd., Area 6, 200,000 cu.yd. overdepth allowance 20,000 cu.yd.

H. T., Pearl Harbor—Fire Protection System—Spec. 4827—Bureau Yards & Docks, Navy Dept., Wash., D. C., receiving bids fire protection system at Naval Ammunition Depot, here. Noted Apr. 19.

BIDS RECEIVED

N. Y., Chelsea—Hospital Buildings—Treas. Dept., Washington, D. C., additional hospital buildings, complete except mechanical equipment, here, (1) work complete, from Northeastern Constr. Co., 101 Park Ave., New York, (1) $699,106 (2) $862,483 (3) $974,630. Noted Apr. 5.

N. Y., Chelsea—Mechanical Equipment—Treas. Dept., Washington, D. C., mechanical equipment in several hospital buildings, here, (1) work complete, from Noland-Clifford Co., 322 28th St., Newport News, Va., Part 1, (1) $81,400 (2) $100,900 (3) $112,500, Part 2 (1) $264,000 (2) $267,800 (3) $271,000. Noted Apr. 5.

Tenn., Memphis—Earthwork—Mississippi River Comn., 1st and 2nd Dists., Custom House, earthwork (a) 315,000 cu.yd. Upper St. Francis Levee Dist. (b) 155,000 cu.yd. Reelfoot Levee List. (c) 1,154,000 cu.yd. Lower St. Francis Levee Dist. (d) 345,000 cu.yd. White River Levee Dist., from Roach, Stansell, Lawrence Bros. & Co., North Memphis Savings Bank Bldg., (a) $101,800 (c) $365,299 (d) $107,380; W. H. Dennison, Cushman, Ark., (b) $63,550. Noted Apr. 5.

Tenn., Nashville—Cement—U. S. Engineer, Custom House, furnishing 18,000 bbl. cement for lock and dam construction, from Atlas Portland Cement Co., 134 South La Salle St., Chicago, $3.52 per bbl. (paper sacks) f.o.b. Carthage. Noted Apr. 5.

Minn., St. Cloud—Dismantling, etc.—Spec. 4829—Bureau Yards & Docks, Navy Dept., Wash., D. C., dismantling tank and tower at Hampton Rds., Norfolk, Va., and transporting same to U. S. Veterans' Hospital, here, (1) work complete, from Chicago Bridge and Iron Co., 30 Church St., New York City (1) $11,190 (180 days), (2) $19,675 (180 days). Noted Apr. 19.

Federal Government Work (Continued)

Utah, Vernal—Post Office—Treas. Dept., Wash., D. C., construction complete incl. mechanical equipment, U. S. Post Office, here, from G. Griffith, Central National Bank Bldg., St. Louis, Mo., $49,987. Noted Apr. 5.

CONTRACTS AWARDED

D. C., Anacostia (Wash. P. O.)—Laboratory—Spec. 4824—Bureau Yards & Docks, Navy Dept., Wash., D. C., photographic laboratory at Naval Station, here, (1) work complete, to A. H. Rogers, 1616 Colorado Bldg., Wash., (1) $12,300 (3 months), (2) deduct $300. Noted Apr. 12.

Va., Hampton Roads—Reroofing—Spec. 4819—Bureau Yards & Docks, Navy Dept., Wash., D. C., reroofing Bldg. 100 at Naval Operating Base, here, to Odenhal-Monks Corp., 23rd St., Norfolk, $15,240 (90 days). Noted Mar. 29.

Va., Norfolk—Wharf—Spec. 4777—Bureau Yards & Docks, Navy Dept., Wash., D. C., extension to timber Wharf C, at Navy Yard, here, to T. A. Tatlerson, 411 West 13th St., $32,320. Noted Apr. 26.

Ala., Florence—Valves, etc.—U. S. Engineer, 6 sets cylinder valves for navigation lock, Wilson Dam, to Steacy-Schmidt Mfg. Co., York, Pa., $22,418. Noted Mar. 29.

Miscellaneous

PROPOSED WORK

Elimination of Grade Crossings—Middletown, Conn.—New York, New Haven & Hartford R.R., New Haven, State Hy. Dept., Hartford, and city, plan to eliminate crossing on Bridge St., here. $150,000. E. Gagel, ch. engr. of railroad.

Bleachers, etc.—New Britain, Conn.—Bd. Park Comrs. plans bleachers and field houses in Willow Brook Park. $25,000. R. Wainwright, supt. of parks.

Gas Holder—Albany, N. Y.—Municipal Gas Co., 126 State St., plans steel gas holder. $250,000.

Park Systems—Albany, N. Y.—Bd. Pub. Wks. plans extending and improving Park systems, incl. grading, sewers, macadam highways and swimming pools. To exceed $200,000. F. A. Raven, comr.

Ornamental Lighting System—Alexandria Bay, N. Y.—Thousand Island Yacht Club Special Lighting Com. plans ornamental lighting system. To exceed $50,000. Address J. L. Kincaid, 643 West Onondaga St., Syracuse.

Gas Holder—Buffalo, N. Y.—Iroquois Gas Co. plans steel gas holder, Baraga and Lackawana Sts. $200,000.

Ornamental Lighting System — Gloversville, N. Y.—Bd. Pub. Wks. plans ornamental lighting system in various streets. $30,000-$35,000.

Grandstand—Old Forge, N. Y.—Building Com. Old Forge Athletic Assn., plans steel and timber grandstand. $30,000.

Paving Plant—Rochester, N. Y.—Rochester Willite Pavement Co. (street address not available), plans paving plant. $50,000.

Gas Main—Schenectady, N. Y.—Adirondack Power & Light Corp., 511 State St., plans gas main in Erie Blvd. $25,000-$30,000.

Drilling Oil Wells — Warren, Pa. — B. Shearer plans to drill oil wells. $25,000.

Mines—Lenoir, N. C.—B. V. Booth, M. R. Warren and C. Guenter, Danville, Va., plan developing kaolin and aluminum mines, near here, incl. small tunnel and development of water power. $50,000.

Heating and Lighting Systems—Chapel Hill, N. C.—See "Sewers."

Pier—Cocoa, Fla.—Plans election to vote on $25,000 bonds for pier and causeway, concrete. J. J. Bracco, city clk.

Transmission Line — Indiana — Indiana Electric Corp., Grand Rapids Savings Bank Bldg., Grand Rapids, Mich., plans transmission line across Wabash River, 9 mi. southwest of Terre Haute, 780 ft. span, heavy steel truss towers. J. H. Brewer, pres.

Track Elevation—Indianapolis, Ind.—See "Industrial Works."

Electric Light Standards—Minneapolis, Minn.—Bd. Park Comrs., City Hall, plans 244 electric light standards along Minnehaha Parkway. $35,000. Private plans.

Steel, etc.—St. Paul, Minn.—Rejected bids opened Apr. 9, 70 pieces 26 x 72 in. and 1,200 pieces 26 x 108 in. corrugated steel painted; 10 bundles No. 24 galvanized sheet metal, 26 x 96 in., for Water Dept. Noted Apr. 5.

Transmission Line — Washington — See "Industrial Works."

Subway—Montreal, Que.—See "Streets and Roads."

Subway—Montreal, Que.—Plans reconstructing subway under Grand Trunk Ry. tracks on Wellington St. $200,000. E. Gauthier, asst. city clk.

Retaining Wall and Concrete Culverts—Fergus, Ont.—Wellington Co. having plans prepared for several rein.-con. culverts and retaining wall. $50,000. A. W. Connor, 34 Victoria St., Toronto, engr.

Subway—Oshawa, Ont.—City and Grand Trunk Ry., McGill St., Montreal, Que., plan concrete subway under tracks at Simcoe St. S. $30,000. W. C. Smith, city engr., F. L. C. Bond, Montreal, ch. engr.

Skating Arena—St. Catharines, Ont.—City plans brick and steel skating arena. $150,000. J. A. Pay, city clk.

BIDS DESIRED

Heating and Ventilating Apparatus, etc. —Astoria, N. Y.—May 7, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, heating, ventilating and temperature regulation apparatus, in P. S. 70, 12th Ave. about 320 ft. southerly from Frand Ave., here.

Heating and Ventilating Apparatus, etc. —Brooklyn, N. Y.—May 7, by W. H. Gompert, archt., Flatbush Ave. estension and Concord St., heating, ventilating and temperature regulation apparatus, in P. S. 161, Crown St., 160 ft. westerly of New York Ave., P. S. 192, 18th Ave. from 47th to 48th Sts., P. S. 193, Ave. L from Bedford Ave. to East 26th St.

Heating and Ventilating Apparatus, etc. —New York, N. Y.—May 7, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, heating, ventilating and temperature regulation apparatus, in P. S. 65, East 141st St. between Cypress and Powers Aves., Bronx Boro.

Pier, etc.—New York, N. Y.—May 7, by Dept. Docks, Pier "A" foot of Battery Pl., North River, temporary pier and pile dolphins north of West 135th St., North River, Contr. 1793.

Subway—New York, N. Y.—May 22, by Transit Comn., 49 Lafayette St., for Sect. 2 of Route 45, part of Bway.-4th Ave. Rapid Transit R.R. G. McAneny, chn.

Underground Fire Alarm System—New York, N. Y.—May 8, by T. J. Drennan, fire comn., Municipal Bldg., portion of underground fire alarm system, Boro of Bronx.

Retaining Walls—Freehold, N. J.—May 16, by Bd. Freeholders Monmouth Co., rein.-con. retaining walls at Bridge W-43 between Avon and Belmar. G. K. Allen, Jr., 60 Broad St., Red Bank, co. engr.; adv. this issue.

Bulkhead, etc.—Newark, N. J.—May 17, at office of T. L. Raymond, dir. Dept. Streets & Pub. Impvts., City Hall, timber bulkhead and culvert at Port Newark Terminal; adv. this issue.

Iron Castings—Baltimore, Md.—May 9, by Bd. Awards, City Hall, 200,000 lb. c.i. manhole sewer inlet and similar iron castings. C. F. Goob, City Hall, highways engr.

Cement, Paving Block, etc.—Wash., D. C. —May 15 by Dist. Comrs., 509 Dist. Bldg., furnishing portland cement, asphalt paving block, sewer brick, repressed vitr. paving block, asphalt paving cement, graphite curb, paving pitch, road oils, tars and bituminous patching material, limestone, limestone dust, sand and gravel.

Rein. Con. Pipe—South Carolina—May 5, by State Hy. Dept., Columbia, furnishing and delivering rein.-con. pipe to contractors to use during May, June and July, incl. 2,550 lin.ft. 15 in., 3,200 lin.ft. 18 in., 3,000 ft. 24 in., 550 lin.ft. 30 in. and 700 lin.ft. 36 in. pipe. C. H. Moorefield, state highway engr.

Gravel—Baton Rouge, La.—May 11, by State Hy. Comn., Reymond Bldg., furnishing 9,400 cu.yd. sand clay gravel not less than 60% stone retained on ¼ in. screen, or alternate bid on 3,133 cu.yd. washed gravel and 6,267 cu.yd. sand clay gravel not less than 40% stone retained ¼ in. screen. J. M. Fourmy, state engr.

Asphalt Cement—Milwaukee, Wis.—May 10, at office Central Bd. Purchases, 100 tons asphaltic cement for Street Construction Dept. D. W. Hoan, chn.

Track Development—Thiensville, Wis.—A. H. Hadler, clk., will receive proposals from engineers and surveyors until May 10 for plotting entire village 2 mi. long 1 mi. wide.

Levee System—Illinois—May 11, by Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, for State Prison Farm Levee System, 128,850 cu.yd. earthwork, etc. C. Older, ch. highway engr.

Road Oil—St. Paul, Minn.—May 14, by G. J. Ries, aud. Ramsey Co., 200,000 gal. road oil. P. N. Coates, co. surv. Noted Nov. 23.

BIDS RECEIVED

Tar, etc.—Trenton, N. J.—Mercer Co. Apr. 24, 130,000 gal. tar, from T. Tobias, Amer. Mechanic Bldg., $35,83[illegible]; 45,000 gal. asphatic oil, from Good Roads Co., Franklin Trust Bldg., Philadelphia, $12,278. Noted Apr. 12.

Storage Tanks, etc.—Phila., Pa.—Dept. Pub. Wks., Apr. 24, furnishing 7 steel storage tanks, from J. B. McHugh, Jr., Bridge and Penn Sts., $47,265.

Stadium—Berkeley, Calif.—University of California, completion of stadium, from Clinton Constr. Co., 923 Folsom St., (1) $511,740; Lange & Bergstrom, Sharon Bldg., San Francisco (1) $565,000 (2) $624,500 (3) $635,000 (4) $695,000; Schuler & McDonald, Builders Exch., Oakland, (1) $593,700 (2) $611,423 (3) $627,170 (4) $648,370. Alternate bids were received on construction of seats on wooden supports and also on large and small team house. Noted Feb. 8.

CONTRACTS AWARDED

Power Development—New York—Power Corp. of New York, Northern New York Trust Co. Bldg., Watertown, for 12,500 cu. yd. earth and 3,000 cu.yd. rock excav., 8,500 cu.yd. earth embankment, also rein.-con. power house and 800 ft. concrete dam, 65 ft. high, 20,000 cu.yd. concrete, at Flat Rock site, on Oswegatchie River, to Burns Bros. & Haley, Inc., Bank Bldg., Watertown, $800,000. Noted Apr. 5.

Heating and Ventilating Apparatus, etc. —Brooklyn, N. Y.—W. H. Gompert, archt., Flatbush Ave. extension and Concord St., heating, ventilating and temperature regulation apparatus, in P. S. 188, Neptune Ave. between West 33rd and West 35th Sts., to D. J. Rice, 42nd St. and Lexington Ave., New York, $79,247; in P. S. 189, East New York Ave. between Rockaway Blvd. and East 96th St., to Austin Eng. Co., 124 West 42nd St., New York, $77,772. Noted Apr. 19 and 26.

Borings—New York, N. Y.—Transit Comn., 49 Lafayette St., borings on site of proposed Coney Island Yard, Board of Brooklyn, proposed Westchester Ave. Yard, Boro of Bronx and along proposed extension to Bway.-4th Ave. Rapid Transit R.R. in Central Park between 7th Ave. and Central Park W., Boro of Manhattan, to P. J. Healey, 25 Church St., $7,380. Noted Apr. 26.

Steam Main—Cleveland, O.—For 2,140 ft. steam main in Carnegie Ave. extension, to Ric-Wil Co., Guardian Bldg., $39,706. Noted Apr. 26.

Dock—Milwaukee, Wis.—Sewerage Comn., 508 Market St., 1,338 ft. pile and concrete dock around west end of sewage disposal plant, to W. W. Whitney, 216 West Water St., $138,768. Noted Apr. 26.

Road Oil—Racine, Wis.—For 175,000 gal. road oil, to Lockwood Oil Co., 1421 Racine St., $.065 per gal. Noted Mar. 29.

Asphalt—St. Paul, Minn.—For 600 tons asphalt, to Minnesota Road Equipment Co., 4536 Dupont Ave. S., Minneapolis, $21.40 per ton. Noted Mar. 1.

Road Oil—St. Paul, Minn.—To Minnesota Road Equipment Co., 4536 Dupont Ave. S., Minneapolis, 700,000 gal. road oil at $0.0653 per gal. and 20,000 gal. at $0.0675. Noted Mar. 29.

Grand Stand—Topeka, Kan.—Kansas Free Fair Assn., Fair Grounds, 385 ft., steel and rein.-con. grand stand, 89 ft. deep, to Pratt Thompson Constr. Co., Republic Bldg., Kansas City, Mo., $162,800. Noted Apr. 5.

Road Oil—Clayton, Mo.—St. Louis Co. supplying road oil for use on roads during 1923, to Cabell Petroleum Co., Arcade Bldg., St. Louis, $0.0542 per gal. Engrs. est. $32,520. Noted Apr. 5.

Grain Elevator—Montreal, Que.—Montreal Harbor Comrs., will build Tarte Pier Grain Elevator by day labor. First unit 2,000,000 bu. capacity, rein.-con., structural steel marine towers, track sheds, receiving houses and shipping houses. $2,347,000. J. S. Metcalfe Co. Ltd., 54 St. Francois Xavier St., archts. Noted Feb. 15.

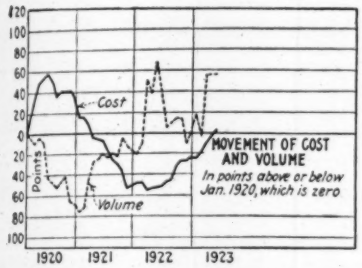
Culverts—Ontario—Dept. Pub. Highways, 110 University Ave., Toronto, concrete culverts Crosby South Twp. Contr. 819, to Wallace & Sons, Smiths Falls, $15,000; Drummond Twp. Contr. 820, to Smith Falls Contr. Co., Smiths Falls, $15,000; Nepean Twp. Contr. 821, to C. O. Wood, 154 Cameron Ave., Ottawa, $15,000; Ross and Osnabruck Twps. Contrs. 822 and 823, to Ontario Bridge Co., Crown Office Bldg., Toronto, $30,000; Lancaster Twp. Contr. 824, to Seymour & Marpaw, Cornwall, $15,000; Sophiasburg Twp. Contr. 825, to R. H. H. Blackwell, 57 Queen St. W., Toronto, $15,000, Sidney Twp. Contr. 826, to W. G. Gibson, Wroxeter, $15,000.

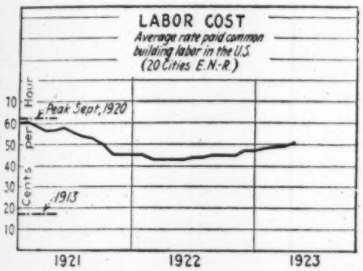
CONSTRUCTION NEWS

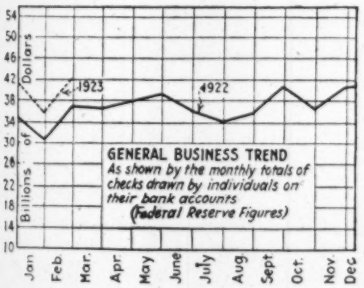
The Construction Barometer

Probably Near Cost Peak — Private Contracts Heavy — Labor Cost Serious

SINCE March, 1922, construction cost has risen steadily and now, at 34 per cent above the minimum since the peak in 1920, shows the first signs of flattening. Materials men appear to realize the danger of a buyer's strike, and will prevent further increases if possible. The most serious factor is the increasing cost of labor. Although demand was slightly higher in April than in March, contracts for roads, bridges and public work in general fell off. The increase is chiefly in industrial building. The individual trends in several classes of construction will be shown here next week.







VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ending	Public Work	Private Work	Total Contracts
Apr. 19	$14,351,000	$24,099,000	$38,450,000
Apr. 26	22,049,000	41,860,000	63,909,000
May 3	30,970,000	18,629,000	49,599,000
Total	$67,370,000	$84,588,000	$151,958,000

LARGE BUILDING CONTRACTS—NUMBER AND VALUE

Week Ending	No.	Public Work	No.	Private Work
Apr. 19	9	$2,651,000	38	$12,898,000
Apr. 26	19	6,646,000	41	22,050,000
May 3	19	6,626,000	41	10,566,000
Total	47	$15,923,000	120	$45,514,000

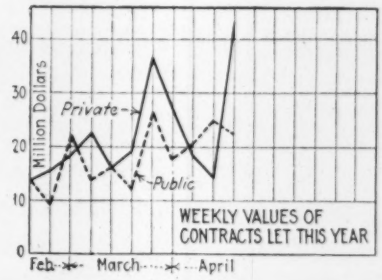
NUMBER OF LARGE JOBS NOW OUT FOR BIDS

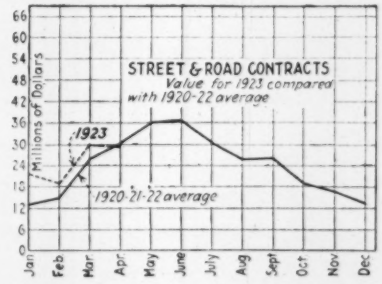
Week Ending	Private	Public: All	Public: Streets and Roads	Public: Water-Works and Sewers	All Buildings
Apr. 19	32	244	103	44	38
Apr. 26	54	233	84	36	63
May 3	29	230	75	39	43

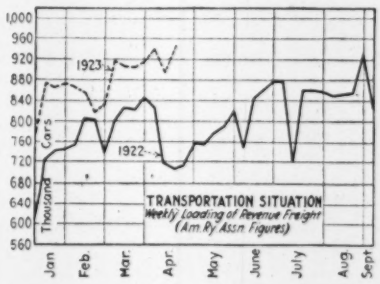
BASE PRICES, EXCEPT STEEL, SHOW GENERAL RISE

	Changed on May 10	From	On
Structurals, Pittsburgh, 100 lb.	$2.50 @$2.70	$2.50 @$2.75	May 3
Cement, Chicago net bbl.	2.20	2.05	Feb. 1
Pine, New York, per M. ft.	60.00	58.00	Apr. 5
Fir, San Francisco, per M. ft.	41.00	39.00	Apr. 5
Common labor, per hr.	0.51	0.50	Apr. 5

PRODUCTION—April pig-iron output heaviest on record. Steel ingot production rate higher than March, 1920. Lumber cut 7½ per cent above normal; 7½ per cent below normal year ago. Cement mills able to meet heavy demand. Fewer burned brick on hand than month ago; increase in orders on books.







PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
May 14	Woodville, Wis.	Apr. 26
May 14	Liberty, N. Y.	May 3
May 14	Canton, Ill.	May 3
May 14	Detroit, Mich.	May 10
May 14	West Allis, Wis.	May 10
May 15	Conrad, Mont.	May 10
May 15	Gaylord, Kan.	May 3
May 15	Harrisburg, Pa.	Apr. 19
May 15	Monticello, Ind.	Apr. 26
May 15	Seaforth, Ont.	May 10
May 15	Tonkawa, Okla.	May 10
May 16	San Francisco, Calif.	Apr. 19
May 16	Baltimore, Md.	May 10
May 18	Sidney, O.	Apr. 26
May 18	Traer, Ia.	May 3
May 18	Mt. Greenwood, Ill.	May 3
May 22	Portland, Me. Adv. Apr. 26 to May 10.	Apr. 26
May 23	Spring Green, Wis.	May 10
May 24	Dubuque, Ia.	May 10
May 25	Wauwatosa, Wis.	May 10
May 25	Cleveland, O.	May 3
May 25	Cleveland, O. Adv. May 10.	May 10
May 28	Bismarck, N. D.	May 10
May 29	Horton, Kan.	May 10
May 31	Easton, Md. Adv. May 10.	May 10
June 4	Talladega, Ala. Adv. May 10.	May 10

SEWERS

Bids Close		See Eng. News-Record
May 14	Mamaroneck, N. Y. Adv. May 3 and 10.	May 10
May 14	Mishawaka, Ind.	May 10
May 14	West Allis, Wis.	May 10
May 14	Fond du Lac, Wis.	May 10
May 15	Williamsport, Pa.	May 10
May 15	Hartford, Conn.	May 3
May 15	St. Petersburg, Fla.	Apr. 19
May 15	South Bend, Ind.	May 3
May 15	Columbus, O.	May 3
May 16	Baltimore, Md.	May 10
May 16	Long Island City, N. Y.	May 10
May 17	Atlantic City, N. J.	Apr. 26
May 21	Pontiac, Mich. Adv. May 10.	May 10
May 21	Akron, O.	May 10
May 21	Creston, Ia.	May 10
May 22	Marion, Wis.	Apr. 26
May 23	Tonawanda, N. Y. Adv. May 10.	May 10
May 25	Detroit, Mich.	May 10
May 29	Wash., D. C. Adv. May 10.	May 10
May 31	Easton, Md. Adv. May 10.	May 10

WASTE DISPOSAL

Bids Close		See Eng. News-Record
May 16	Cleveland, O.	May 10

Bids Close — See Eng. News-Record

BRIDGES

May 12 Woodstock, Ont. .....May 10
May 14 Kenansville, N. C. .....May 3
May 15 Newcastle, Pa. .....Apr. 26
May 15 Monticello, Ind. .....May 3
May 15 Florida .....May 3
May 15 Missouri .....May 10
May 18 Fremont, O. .....May 10
May 21 Marine City Mich. .....Apr. 26
May 22 Walhalla, S. C. .....May 3
May 24 Chicago, Ill. .....May 3
May 25 Ladysmith, Wis. .....May 10
June 5 Grand Haven, Mich. .....May 10
Adv. May 10.
June 5 St. Louis, Mo. .....May 10
July 31 La Center, Wash. .....May 3
Nov. 30 Sydney, Australia .....Apr. 19

EXCAVATION, DRAINAGE, IRRIGATION

May 15 Eudora, Ark. .....May 3
May 15 Pontiac, Mich. .....May 3
May 21 Brooklyn, N. Y. .....May 10
May 23 Crookston, Minn. .....May 10
June 5 Rolling Fork, Miss. .....May 10
Adv. May 10.
June 15 Albert Lea, Minn. .....Apr. 12

STREETS AND ROADS

May 14 East Orange, N. J. .....May 3
May 14 Finley, N. D. .....May 3
May 14 South Bend, Ind. .....May 3
May 14 North Tonawanda, N. Y. .....May 3
May 14 Latrobe, Pa. .....May 10
May 14 Rockwall, Tex. .....May 10
May 14 Birchcliff, Ont. .....May 10
May 14 Michigan .....May 10
May 14 Marshall, Mich. .....May 10
May 14 Cassopolis, Mich. .....May 10
May 14 Cobourg, Ont. .....May 10
May 14 Cornwall, Ont. .....May 10
May 14 East Orange, N. J. .....May 10
May 14 Milwaukee, Wis. .....May 10
May 15 Starke, Fla. .....Apr. 19
May 15 Onawa, Ia. .....Apr. 19
May 15 St. Petersburg, Fla. .....Apr. 19
May 15 St. Louis, Mo. .....Apr. 26
May 15 Maryland .....May 3
Adv. May 3 and 10.
May 15 Georgetown, Tex. .....May 3
May 15 South Bend, Ind. .....May 3
May 15 Burbank, Calif. .....May 3
May 15 Gadsden, Ala. .....May 10
May 15 Alabama City, Ala. .....May 10
May 15 Columbus, O. .....May 10
May 15 Missouri .....May 10
May 15 Wakefield, R. I. .....May 10
Adv. May 10.
May 15 New Hampshire .....May 10
May 15 Bellwood, Pa. .....May 10
May 16 Red Lake Falls, Minn. .....May 3
May 16 Ebensburg, Pa. .....May 3
May 16 New York .....May 3
Adv. May 3 and 10.
May 16 Delaware .....May 3
May 16 San Francisco, Calif. .....Apr. 26
May 16 Lakota, N. D. .....May 3
May 16 Baltimore, Md. .....May 10
May 16 Cleveland, O. .....May 10
May 16 Elizabethtown, Tenn. .....May 10
May 16 Long Island City, N. Y. .....May 10
May 16 Brooklyn, N. Y. .....May 10
May 17 Denver, Colo. .....May 10
May 17 Poughkeepsie, N. Y. .....May 3
Adv. May 3 and 10.
May 17 Minot, N. D. .....May 3
May 17 Newton, N. J. .....May 3
Adv. May 3 and 10.
May 17 Columbus, O. .....May 10
May 17 South Bend, Ind. .....May 10
May 18 South Orange, N. J. .....May 10
May 18 Roselle Park (Elizabeth P. O.), N. J. .....May 10
Adv. May 10.
May 18 Trenton, N. J. .....May 10
May 19 Denver, Colo. .....May 10
May 21 St. Paul, Minn. .....May 3
Adv. May 3 and 10.
May 21 Norfolk, Neb. .....May 10
May 22 Maryland .....May 10
Adv. May 10.
May 22 Florence, Ala. .....May 10
May 22 Kendallville, Ind. .....May 10
Adv. May 10.
May 22 South Bend, Ind. .....May 10
May 22 Plattville, Wis. .....May 10
May 22 Denver, Colo. .....May 10
May 24 Cedar Grove, La. .....May 10
May 28 Akron, O. .....May 3
May 28 Kansas City, Kan. .....May 10
May 29 Louisiana .....May 10
May 29 Kentucky .....May 10
May 29 St. Louis, Mo. .....May 3

INDUSTRIAL WORK

May 12 Hartford, Conn. .....May 3
May 14 Kiel, Wis. .....May 10
May 15 Bethlehem, Pa. .....Apr. 19
May 15 Reading, Pa. .....Apr. 26
May 18 Cleveland, O. .....May 10
May 25 Watertown, N. Y. .....May 10
Adv. May 10.

Bids Close — See Eng. News-Record

BUILDINGS

May 12 Waterbury, Conn. .....May 3
May 12 Huntington, N. Y. .....May 10
May 14 Syracuse, N. Y. .....Apr. 26
May 14 Milwaukee, Wis. .....May 10
May 14 London, Ont. .....May 10
May 15 Hightstown, N. J. .....Apr. 26
May 15 Toronto, Ont. .....May 3
May 15 Green Bay, Wis. .....May 10
May 15 Rockledge, Fla. .....May 10
May 15 St. Petersburg, Fla. .....May 10
May 15 Hightstown, N. J. .....May 10
Adv. May 10.
May 15 Brooklyn, N. Y. .....May 10
May 17 Pulaski, Wis. .....Apr. 26
May 17 Columbus, O. .....May 3
May 17 Pittsburgh, Pa. .....May 10
May 18 Minneapolis, Minn. .....May 10
May 18 Toronto, Ont. .....May 10
May 19 Belfast, Me. .....May 10
May 19 Ferndale, Pa. .....May 3
May 20 Niagara Falls, N. Y. .....May 10
May 22 Old Forge, N. Y. .....Apr. 26
May 25 Verona, Wis. .....May 10
May 26 Columbus, O. .....Apr. 26
May 26 Lakewood, N. Y. .....May 10
May 28 Hamburg, O. .....May 10
May 28 Cleveland, O. .....May 3
May 28 Byesville, O. .....May 3
May 29 Stockton, Calif. .....May 3
June 1 Morgantown, W. Va. .....Apr. 12
June 4 Kansas City, Mo. .....May 10
June 4 El Centro, Calif. .....May 10

FEDERAL GOVERNMENT WORK

May 14 Dredging — Wilmington, Del. .....Apr. 19
Adv. Apr. 19 to May 10.
May 14 Repairs—Perryville, Md. .....Apr. 26
May 15 Roads—Oregon .....May 10
May 15 Roads—Washington .....May 10
May 15 Earthwork—New Orleans, La. .....May 10
May 17 Road—New Mexico .....May 3
May 18 Dredging — Los Angeles, Calif. .....May 3
May 21 Post Office — Houghton, Mich. .....Apr. 26
May 21 Scows—Wilmington, Del. .....Apr. 26
Adv. Apr. 26 to May 10.
May 21 Levee—St. Louis, Mo. .....May 3
May 22 Steel Hull — Vicksburg, Miss. .....Apr. 26
Adv. Apr. 26 to May 10.
May 22 Post Office—Phoenixville, Pa. .....May 3
May 23 Roads—San Diego, Calif. .....Apr. 26
May 23 Storehouse—Pearl Harbor, H. T. .....Apr. 26
May 23 Remodeling—Portsmouth, N. H. .....May 10
May 24 Dredging, etc. — Chicago, Ill. .....Apr. 26
Adv. Apr. 26 to May 10.
May 25 Hull, etc.—Louisville, Ky. .....Apr. 26
Adv. Apr. 26 to May 10.
May 25 Roads and Walks—Oteen, N. C. .....May 10
May 28 Post Office—Saco, Me. .....May 10
May 31 Dredging—Milwaukee, Wis. .....May 3
Adv. May 3 and 10.
May 31 Hospital—Rutland, Mass. .....May 3
Adv. May 3 and 10.
May 31 Dredging — Providence, R. I. .....May 3
Adv. May 3 and 10.
June 1 Jetty—New Orleans, La. .....May 10
Adv. May 3 and 10.
June 1 Dredging — San Francisco, Calif. .....May 10
June 4 Post Office—Leesburg, Va. .....May 10
Adv. May 10.
June 5 Emergency Gates—Montana .....May 10
June 5 Dredging—New Orleans, La. .....May 10
Adv. May 10.
June 5 Dredging — Wilmington, Del. .....May 10
June 6 Gates—Denver, Colo. .....May 10
Adv. May 10.
June 8 Dredging—Phila., Pa. .....May 3
Adv. May 3 and 10.
June 11 Dike—New York, N. Y. .....May 10
Adv. May 10.
June 13 Refrigerating Machinery—Pearl Harbor, H. T. .....Apr. 26

MISCELLANEOUS

May 14 Chimney—Norfolk, Va. .....Apr. 26
May 14 Road Oil—St. Paul, Minn. .....May 3
May 15 Cement, Paving Block, etc. —Wash., D. C. .....May 3
May 16 Retaining Walls — Freehold, N. J. .....May 3
May 16 Sheep Barn — Des Moines, Ia. .....May 10
May 16 Retaining Walls — Freehold, N. J. .....May 10
Adv. May 3 and 10.
May 17 Bulkhead, etc. — Newark, N. J. .....May 3
May 18 Shaft—New York .....Apr. 26

Bids Close — See Eng. News-Record

May 18 Poles, etc.—Cleveland, O. .....May 10
May 22 Subway — New York, N. Y. .....May 3
May 22 Wharf—Blind River, Ont. .....May 10
May 23 Steel Penstock and Accessories —San Francisco, Calif. .....Apr. 19
May 25 Power Development—Watertown, N. Y. .....May 10
June 1 Pier—Charleston, S. C. .....Apr. 26
Adv. Apr. 26 to May 10.

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y., Corning—See "Sewers."

N. Y., Marcellus—Plans addition to water system. $30,000-$35,000. Address J. M. Moir, chn. Advisory Com.

Pa., Erie — General Electric Co. plans reservoir. $15,000. Engineer not announced.

Va., Danville—Making plans rebuilding old filtration plant. $100,000. Hazen & Whipple, 25 West 43rd St., New York City, engrs.

Ala., Albany — Alabama Water Co., Amer. Trust Bldg., Birmingham, plans to issue $120,000 bonds for 3,000 ft. 8 in. rein.-con. main under Louisville and Nashville Ry. shops, etc.

Ala., Anniston — Alabama Water Co., Amer. Trust Bldg., Birmingham, will issue $20,000 bonds to extend mains and laterals, 2,000 ft. 10 in. rein.-con. pipe, etc., here.

Ala., Attala—Alabama Water Co., Amer. Trust Bldg., Birmingham, will issue $15,000 bonds to extend rein.-con. mains, here.

Ala., Girard—Alabama Water Co., Amer. Trust Bldg., Birmingham, will sell $20,000 bonds for extending mains and general improvements, here.

Ala., Greensboro—Alabama Water Co., Amer. Trust Bldg., Birmingham, will issue $15,000 bonds extending mains, 1,000 ft. 8 in. rein.-con. pipe, etc., here.

Ala., Jasper—Alabama Water Co., Amer. Trust Bldg., Birmingham, will issue $15,000 bonds to extend mains, 1,000 ft. rein.-con. pipe, etc., here.

Ala., Oneonta — Alabama Water Co., Amer. Trust Bldg., Birmingham, will sell $15,000 bonds to extend mains, here.

Tenn., Madisonville—Takes bids about May 30, water works system, incl. electrical power driven machinery, storage tank, etc. $35,000. Ambler Eng. Co., Old Dominion Trust Bldg., Richmond, Va., engrs.

O., Sandusky—Erie Co. making preliminary surveys for water lines, pumping station and sewage disposal plant for Castalia Sect. near here. To exceed $25,000. R. E. Garvin, Davis & Farley Bldg., Cleveland, engrs.

Mich., Birmingham—Having plans prepared well 18 in. diam. or larger, and 400 gal. motor driven pump, centrifugal or other type. $15,000. H. E. Clark, city clk.

Ill., Joliet—Soon receives bids, water mains and sewers. A. S. Calkins, city engr.

Wis., Wauwatosa—Making plans 500,000 gal. rein.-con. reservoir, incl. pipe and fittings. $25,000. J. E. Lowther, City Hall, engr.

Ia., Marshalltown—Election soon to vote on $350,000 bonds for waterworks. O. J. Herm, city engr.

N. D., Fargo—Union Light, Heat & Power Co., 612 N. P. Ave., plans double main and turbine engine unit, condenser type. $300,000.

Mo., Platte City—May 15, to vote on $47,000 bonds waterworks and sewer improvements. A. T. Archer & Co., 609 New England Bank Bldg., Kansas City, engrs.

Calif., Alhambra—Election in June to vote on $250,000 bonds for water system and $12,000 for storm water protection.

Calif., San Bruno—City to vote on $200,000 bonds to improve and extend waterworks system. Noted Mar. 1.

Calif., Yuba City—Will vote on $32,000 bonds for extending water system. E. Von Geldern, city engr.

Que., Levis—Plans filtration plant and reservoir. $160,000. E. Hamel, city engr.

Ont., Birchcliff—Pub. Utilities Comn. of Scarboro Twp. plans to lay 16,000 ft. 6-12 in. c. i. mains in Regent Park Subdivision. $58,000. James, Proctor & Redfern, 36 Toronto St., Toronto, engrs.

Waterworks (Continued)

Ont., Eastview—Plans 10,000 ft. 6 and 8 in. c.i. mains, etc. $25,000. J. Wolfe, Cummings Bridge, engr.

Ont., Hamilton — Plans new filter basin and chlorination plant. $50,000. W. L. McFaul, City Hall, engr.

Ont., Islington—Etobicoke Twp. having plans prepared waterworks system in Eastwood Park, 2 mi. 6-12 in. c. i. pipe. $46,000. James, Proctor & Redfern, 36 Toronto St., Toronto, engrs.

Ont., Toronto—Plans 10,000 ft. 6 in. c. i. mains in Huron and Ardagh Sts., Chatham, Heddington, Oakdale, Phin and Oakcrest Aves. $25,000. R. C. Harris, city engr.

BIDS DESIRED

Md., Baltimore—May 16, by Bd. Awards, furnishing and delivering sluice gates for additions to Montebello filters, Contr. 67. $50,000. W. A. Megraw, City Hall, engr.

Md., Easton — May 31, by Mayor, at Council Chambers, extensions to waterworks system. E. G. Kastenhuber, Jr., town engr.; adv. this issue.

N. C., Davidson—City opens bids between May 15 and 30, installing 60,000 ft. water pipes and 30,000 ft. sewer pipes. Mees & Mees, Kinney Bldg., Charlotte, engrs. Noted Dec. 14.

Ala., Talladega—June 4, by City Comrs., constructing water supply system. D. M. Remson, city clk. P. H. Norcross, 1404 Candler Bldg., Atlanta, Ga., consult. engrs.; adv. this issue.

O., Cleveland—May 25, by Commissioner Purchases & Supplies, City Hall, c.i. pipe and special castings for Baldwin-Fairmount Project. A. V. Ruggles, comr. water; adv. this issue.

O., Columbus—See "Streets and Roads."

Mich., Detroit—May 14, by Dept. Pub. Wks., Oakwood pumping station, Pleasant Ave., 60 x 120 ft. rein.-con. pump pit and suction well, 40 ft. deep, brick superstructure incl. steel roof, trusses, etc., 53 x 131 ft., 39 ft. high. J. W. Reid, city engr.

Wis., Spring Green — May 23, by A. Schlasser, clk., laying 2,500 ft. 4-12 in. mains, etc. $15,000. Private plans.

Wis., Wauwatosa—May 25, by A. V. Brigham, secy. Bd. Pub. Wks., rein.-con. reservoir, 65 ft. in diameter, 500,000 gal. capacity. $30,000. J. E. Lowther, City Hall, engr.

Wis., West Allis—May 14, by Bd. Pub. Wks., 18,000 lin.ft. 6 in. c.i. mains. $50,000-$60,000. W. Darby, city engr.

Ia., Dubuque—May 24, waterworks incl. pumping station, centrifugal pump, 2 air compressors, well and 5 air lift well pumps. $200,000. Mead & Seastone, Journal Bldg., Madison, Wis., engrs. Noted Mar. 29.

Kan., Horton — May 29, by Black & Veatch, engrs., 701 Mutual Bldg., Kansas City, Mo., waterworks system, clear well and dam. $150,000.

N. D., Bismarck — May 28, waterworks system, incl. distribution system, pumping station, equipment rein.-con. reservoirs, filtration and softening plants. $704,000. T. R. Atkinson, city engr. L. P. Wolff, 1000 Guardian Life Bldg., St. Paul, Minn., consult. engr. Noted May 3.

Mont., Conrad—May 15, by F. R. Bailey, city clk., distribution system and supply pipe line from reservoir to city, 29,615 ft. 6-10 in. c.i. pipe, 15,165 ft. 12 in. Matheson Joint pipe, etc. C. W. Swearingen, city engr.

Okla., Tonkawa—May 15, by E. E. Davis, city clk., waterworks improvements, incl. 500 gal. per minute tri-plex plunger pump, 289 tons 8 in., 120 tons 10 in. and 5 tons 6 in. c.i. pipe, etc. Ruckel Eng. Co., Hutchinson, Kan, engrs.

Ont., Seaforth—May 15, by J. Wilson, city clk., 3¼ mi. 6 and 8 in. c.i. mains. $60,000. James, Proctor & Redfern, 36 Toronto St., Toronto, engrs.

BIDS RECEIVED

N. Y., Brooklyn—N. J. Hayes, comr. Water Supply, Gas and Electricity, Municipal Bldg., New York, mains in Glenwood Rd., Delamere Pl., etc., here, from Carder Contg. Co., 582 78th St., $43,000. Noted Apr. 5.

N. J., Trenton—For 180 tons 10 in. pipe for Water Dept., from U. S. Cast Iron Pipe & Fdry. Co., Morris Bldg., Phila., $62.25 per ft.

CONTRACTS AWARDED

Conn., Hartford—Colts Patent Fire Arms Co., Huyshope Ave., 40 x 60 ft. reservoir, 7 ft. deep, 100,000 gal. capacity, concrete, to R. G. Bent Co., 183 Ann St. Engrs. est. $60,000. Noted May 3.

PUMPING STATION—POUGHKEEPSIE, N. Y.

Bids were opened by city, Apr. 13, for reconstructing pumping station, (A) L. Chevalier, Inc., 207 East 43d St., New York City (awarded contract), (B) W. W. Kingston, Inc., 1 Washington St., (C) L. M. Neckerman, Inc., 103 Park Ave., New York City. The unit bids were as follows:

	A	B	C
Removing present roof and walls (lump sum)	$3,790.00	$840.00	$3,850.00
2,500 cu.ft. excavation brick masonry	.30	.343	.162
300 cu.ft. excavation concrete masonry	.84	1.30	.268
Excavation earth masonry	.10	.065	.072
Excavation rock masonry	.68	.40	.248
5,500 cu.ft. brick masonry	1.38	1.2809	1.32
1,500 cu.ft. concrete in floor (no forms)	.67	.74	.576
500 cu.ft. all other concrete	2.75	1.45	1.20
6,792 sq.ft. cement tile in roof (lump sum)	2,975.00	3,250.00	2,997.00
6,592 sq.ft. waterproofing on roof (lump sum)	1,800.00	2,856.00	2,502.00
57,000 lb. structural steel	.085	.078	.084
1,200 lb. reinforcing steel	.10	.0614	.072
1,400 lb. floor plates	.15	.0925	.144
Windows and doors (lump sum)	1,680.00	2,262.00	2,197.00
1,450 sq.ft. wainscoting	1.10	2.04	1.74
2,200 sq.ft. tile floors	1.10	1.28	1.14
3,400 sq.ft. plastering	.45	.33	.42
10,000 sq.ft. painting (lump sum)	475.00	1,255.00	1,500.00
Crane (lump sum)	950.00	1,108.00	1,031.00
Appurtenances (lump sum)	1,520.00	1,751.00	1,769.00
Extended totals	$34,882	$34,995	$36,590

O., Euclid — For mains in Emerson, Prasse, Telhurst and Rainbow Rds., to A. Marra Co., Ulmer Bldg., Cleveland, $16,953; Liberty Rd., to Joseph & Co., 877 Orange Ave., Cleveland, $10,255; Liberty Rd. to Consolo & Palermo Constr. Co., Benwood Ave., Cleveland, $12,927. Work includes 9,757 ft. 4, 6 and 8 in. c.i. pipe.

O., Toronto—Bd. Pub. Affairs, filtration plant and waterworks, to J. W. McLaughlin, Park Bldg., Pittsburgh, Pa., and Roberts Filter Mfg. Co., 6th and Columbia Sts., Darby, Pa., $142,100. Noted Mar. 15.

Mich., Grosse Pointe (Detroit P. O.) — Furnishing and laying 12,000 lin.ft. 6 in. c.i. mains, to Coolsaet Bros., 911 Detroit Savings Bank Bldg., Detroit, $26,000. Noted Apr. 26.

Sewers

PROPOSED WORK

Conn., Hartford — Plans laying sewer pipe, 2,000 ft. 36 in. rein.-con. and 3,000 ft. 18 in. vitr. clay in Granby St.; 1,000 ft. 45 in. rein.-con. and 1,000 ft. 15 in. vitr. clay in New Britain Ave. R. N. Clark, city engr.

Conn., West Hartford (Hartford P. O.)—Street Sewer and Water Comn. plans laying 4,000 ft. 15-20 in. vitr. clay storm sewers, 60 manholes, 40 catch basins, etc. $30,000. B. I. Miller, town mgr.

N. Y., Corning—Plans election to vote on $30,000 bonds new sewers and water main extensions. W. C. Drake, city engr. Noted May 3.

Tenn., Ripley—See "Streets and Roads."

O., Marion—Making plans and takes bids after June 1, main sanitary sewer. $200,000. G. B. Gascoigne, Leader-News Bldg., Cleveland, engr.

O., Sandusky—See "Waterworks."

O., Wadsworth—Making surveys to determine if to junk present sewage and waterworks plant or to construct new plants. $100,000. R. E. Garvin, Davis & Farley Bldg., Cleveland, engr.

O., Warren—Plans 8-14 in. vitr. sanitary sewers in 2 streets. $25,000. G. T. Hecklinger, city clk.

Mich., Ann Arbor—Plans storm sewers incl. 2,225 ft. 36 in. segment block or concrete pipe, 440 ft. 22 in., 1,055 ft. 20 in. and 238 ft. 18 in. double strength vitr. pipe, 800 ft. 15 in. and 6,255 ft. 12 in. standard pipe, in Bway. and South Main Sts., Washtenaw and Forest Aves. F. J. Rentschler, pres. Bd. Pub. Wks.

Mich., Detroit—Dept. Pub. Wks., had plans prepared for 46,233 ft. of 12-36 in. vitr. crock sewers in Alleys 3853, 3906 and 3910-3920 inclusive. J. W. Reid, city engr.

Ill., Joliet—See "Waterworks."

Ill., Phoenix (Thornton P. O.)—Plans sewerage system. $200,000. A. W. Hersey, City Hall, Harvey, engr.

S. D., Hartford—Having plans prepared sewer improvements, sewage disposal plant, etc. $35,000; extending watermains, $4,000. Chenoweth, Kennedy & Rettinghouse, Boyce-Greely Bldg., Sioux Falls, engrs.

Calif., Alhambra—See "Waterworks."

Calif., Huntington Park—Voted $250,000 bonds for sewerage system. Noted May 3.

Calif., Los Angeles—Had plans prepared 15.4 mi. outfall sewerage system, 7.2 mi. to be semi-elliptical design, 12 ft. high, 13 ft. wide, 2 mi. of foregoing to be laid in open cut and balance in tunnel, remaining 8.2 mi. to be circular pipe 4 ft. 9 in. to 8 ft. 6 in. Bids will be taken on following kinds of pipe: elliptical sewer, brick arch on concrete base with vitr. brick ring, segmental block for upper quadrant and liner for remainder of interior surface above concrete base; circular sewer (1) brick arch on concrete invert (2) segmental block on concrete base (3) pre-cast rein.-con. pipe with vitr. tile lining on concrete base. W. T. Knowlton, city sewer engr.

Calif., San Pablo—San Pablo Sanitary Dist. had plans prepared sewers in portions Gertrude St., 11,000 lin.ft. 6 in. vitr. pipe, etc. R. L. Calfee, 221 South 22nd St., Richmond, consult. engr.

Ont., Elmira — Plans rein.-con. sewage disposal plant, either sedimentation tanks or activated sludge. $30,000. J. H. Ruppel, city clk. Engineer not selected.

Ont., Hamilton—Gore, Nasmith & Storrie, consult. engrs., Confederation Life Bldg., Toronto, submitted report to city for 3 alternate sewage disposal schemes, Imhoff tank system $1,118,000, activated sludge system $1,447,000, sedimentation system with sludge disposal $814,000. Engineers propose construction of sedimentation system and that (1) existing west end sewage disposal works be remodeled and extended $60,000 (2) Wentworth St., Ferguson and Gage Aves. systems be abandoned (3) all sanitary sewers be connected to new disposal works or to one of existing works.

Ont., Kitchener—Having plans prepared activated sludge plant with gravity system, booster pump and station. $85,000. S. Shupe, city engr. Prices wanted on materials.

Ont., Milton — Having plans prepared sewerage system, 10,000 ft. 8, 10 and 12 in. vitr. pipe. $30,000. Chipman & Power, 272 Bay St., Toronto, engrs.

Ont., Toronto—Plans 20,000 ft. 8 in. vitr. sewer in Belsize Dist. $69,500. R. C. Harris, city engr.

Ont., Toronto — Having plans prepared sanitary sewers in Avenue Rd., Oriole Parkway, Burnaby and Willowbank Blvds. $21,075, Brookdale Ave. $5,250. R. C. Harris, city engr.

BIDS DESIRED

N. Y., Long Island City—May 16, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sewers in Chauncey, Wellington and 86th Sts., Eliot, 102nd and Mt. Olivet Aves., Evelin St. from Fresh Pond Rd. to Azalea St., Evelin St. from Azalea St. to Mt. Olivet Ave.

N. Y., Mamaroneck—May 14, by E. L. Howe, village clk., completing sewage disposal works. J. M. Duffy, village engr.; Fuller & McClintock, 170 Bway., New York City, engrs.; adv. this issue.

N. Y., Tonawanda—May 23, by Tonawanda Town Bd., Village Hall, Kenmore, disposal plant. G. C. Diehl, 575 Ellicott Sq., Buffalo, town engr.; adv. this issue.

Pa., Williamsport—May 15, 4,123 ft. 8 and 10 in. sanitary sewers, 5,830 ft. 10, 12, 15, 18, 20, 24, 27 and 30 in. storm sewers, terra cotta, segmental block, concrete, etc. L. Mussina, city engr.

Md., Baltimore—May 16, by Bd. Awards, 978 lin.ft. 10 in. and 3,858 lin.ft. 8 in. vitr. sewer, 3,552 lin.ft. house connections, 25 manholes, Dist. 7-B, Contr. 193. $70,000. C. F. Goob, City Hall, highway engr.

Sewers (Continued)

Md., Easton—May 31, by Mayor at Council Chamber, extensions to sewerage system. E. G Kastenhuber, Jr., town engr.; adv. this issue.

D. C., Wash.—May 29, by Dist. Comrs., 509 Dist. Bldg., constructing sewer; adv. this issue.

N. C., Davidson—See "Waterworks."

O., Akron—May 21, by W. F. Peters, dir. Pub. Serv., 1,124 lin.ft. 72 in. brick or segmental block sewer in Firestone Blvd. $48,000; 5,665 ft. 8-30 in. vitr. sewer in Cuyahoga Falls and Lexington Aves., et al, $36,000; 7,670 lin.ft. 8-24 in. sewer in Cuyahoga Falls and Birchwood Aves., et al, $38,000; 6,940 ft. 8-24 in. vitr. sewer in Cuyahoga Falls and Big Falls Aves., et al, $51,000; 5,840 ft. 8 in. vitr. sewer in Lakemont Ave., et al, $21,000. J. E. Root, Delaware Bldg., engr.

O., Columbus—See "Streets and Roads."

Mich., Detroit—May 25, by Dept. Pub. Wks., Connors Creek Sewer, Alternate A, 5 centered arch, 5,730 ft. long; Alternate B, 3 barrels sect. 10 x 14 ft., 5,375 ft. long, 57 ft. of 10 ft. 6 in. cylinder. J. W. Reid, city engr.

Mich., Pontiac—May 21, at office H. A. Maurer, city clk., sanitary sewers, Jobs 223, 224, 225 and 226; adv. this issue.

Wis., Fond du Lac—May 14, by J. F. Hohensee, city clk., 5,515 ft. 8 in. vitr. sanitary and 5,620 ft. 10-18 in. vitr. storm sewers in various streets. $35,000. G. H. Stanchfield, City Hall, engr.

Wis., West Allis—May 14, by Bd. Pub. Wks., 19,000 ft. 8 and 10 in. vitr. clay, sanitary and storm sewers. $60,000-$65,000. W. Darby, city engr.

Ia., Creston—May 21, sewage disposal plant incl. 150,000 gal. septic tank, sludge beds, 1,000 ft. sewer, etc. P. K. DeVoe, city engr.

BIDS RECEIVED

Mass., Boston—Pub. Wks. Dept., 352 ft. 9 ft. 10 in. x 8 ft. 10 in. and 235 ft. 6 ft. 8 in. x 6 ft. 1 in. concrete sewer, in East Cottage and Humphrey Sts., from V. Barletto, c/o Pub. Wks. Dept., $58,033. Noted Apr. 19.

N. J., Morris Plains—A. B. Mills, state archt., State Office Bldg., Trenton, sewage disposal plant, incl. 200 ft. concrete tank, 7 ft. deep, etc., at Hospital for Insane, here, from F. M. Arnolt, 699 Clinton St., Newark, $91,000. Noted Apr. 19.

O., Cleveland—Cuyahoga Co. 8,200 ft. 12-18 in. vitr. clay sewers in Sect. 9-B, from Langaham Constr. Co., Marshall Bldg., $100,091. Noted Apr. 19.

Mich., Detroit—Dept. Pub. Wks., Blaine Ave. Arm W. in Blaine Ave., and Warren Ave. Arm East, Sect. 2 of Ashland Ave. Sewer, from J. A. Mercier, 616 Hammond Bldg., $31,914 and $67,534 respectively; Warren Ave. Arm East Sect. 1, Connors Creek Sewer, from Jeynes & Affeld, 1208 Ford Bldg., $53,795; Warren Ave. Arm East Sect. 3, Ashland Ave. Sewer, from Anderson & Campbell, Detroit (street address not available), $48,231; Warren Ave. Arm East Sect. 4, Bedford Rd. Sewer, from Liberty Constr. Co., 1026 Detroit Savings Bank Bldg., $56,687. Noted May 3.

Calif., Riverside — Sewers in various streets, incl. 48,162 lin.ft. 6-24 in. vitr. and 7,930 ft. 18-22 in. rein.-con. pipe, etc., from H. D. Churchill, Co., 350 Merrick St., Los Angeles, $117,348. Noted Apr. 19.

CONTRACTS AWARDED

Mass., Boston—Pub. Wks. Dept., 365 ft. 6 x 6 ft. concrete sewer, Farragut Rd. extension, to C. & R. Constr. Co., 3 Tremont Row, $37,935. Noted Apr. 19.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, sewer in Schenectady Ave., to B. Peconi & Sons, 88% of engrs. est. ($14,150); 84th St., to M. Tozzi, 1362 63rd St., 93% ($6,906); Highlawn and Troy Aves., to Tomasetti & Co., Inc., 1133 60th St., 88.5% ($4,510) and 88% ($3,179) respectively; Empire Blvd., to J. Jennings, Belle Harbor, 107% ($3,554); Lott Ave., to Manmill Constr. Co., 2035 Douglas St., 109% ($1,001); Maple St., to P. Muscio, 2715 East 23rd St., 114% ($892). Noted Apr. 12.

N. Y., Buffalo—A. W. Kreinheder, comr. Pub. Wks., Municipal Bldg., 33 ft. 6 in. and 32 ft. 6 in. rein.-con. storm water drain at Scajaquada Creek, to F. L. Cohen, Inc., Prudential Bldg., $1,379,233. Noted May 3.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sewer in Mitchell Ave., Lawson, Millard and Norwood Sts., etc., to J. Gallo, 203 Division St., Brooklyn, $63,022. Noted Apr. 26.

Md., Baltimore—Mayor and City Council, Storm Water Contr. 57, to Ryan Constr. Co., 735 Real Estate Trust Bldg., Phila., $107,003. Noted May 3.

Ky., Louisville—For 34th St. sewer and laterals, to Cannel-Conrad Constr. Co., Brook St. and Avery Ave., $120,334 and $47,203 respectively. Noted Apr. 5.

O., Cleveland—For 1,430 ft. 24 in. vitr. tile sewer in Melba Ave., to G. Derwish, Cleveland (street address not available), $4,498; 320 ft. 3 C and 320 ft. 2 C brick sewer in Prince Ave., to J. Lahnom, 1133 East 71st St., $26,228. Noted May 3.

O., Cleveland—Cuyahoga Co., 17,613 ft. 18-30 in. vitr. clay sewer in Ridge Rd. Impvt. 9, Sect. A, to D. Zullo, 10614 Frank Ave., $233,272. Noted May 3.

Ind., South Bend—Bd. Pub. Wks., to G. F. Santry Co., 809 South Leavitt St., Chicago, 5,986 ft. 6-12 in. vitr. clay sewer, etc., in Clyde, Kinyon, Anderson, Medora, Lafayette and Marietta Sts., Indiana, and Parkovash Aves., $12,456, engrs. est. $14,629; to Staples & Ackerman, 424 West Madison St., 7,789 ft. 6-15 in. vitr. clay sewers in Fairview, Calvert and Victoria Sts., and Oak Park Court, $15,927, engrs. est. $18,398; to G. McGillicuddy, Valparaiso, 4,995 ft. 6-18 in. vitr. clay in Brookfield and William Sts., $12,241, engrs. est. $12,471. Noted Mar. 8.

S. D., Leola—Lateral sewers and sewage disposal plant, to Phelps-Drake Co., 719 Metropolitan Life Bldg., Minneapolis, Minn., $25,000. Noted Nov. 2.

Mo., Richmond Heights (St. Louis, P. O.)—H. E. Prettyman Co., United Home Bldg., St. Louis, 20,000 ft. 8-24 in. vitr. sewers in Pennsylvania Park subdivision, here, to Myers Constr. Co., Merchants Laclede Bldg., St. Louis. Engrs. est. $30,000. Noted May 3.

Wyo., Laramie—To D. S. Reid, Denver, Colo. (street address not available) outfall sewers and sewage disposal plant, on basis of alternate outfall and 27 in. Lock Joint pipe on outfall $117,094. Noted Apr. 5.

Tex., Navasota—Rein.-con. storm sewers, to Smith Bros., Sumpter Bldg., Dallas, $49,794. Engrs. est. $50,000.

Utah, Ogden — For 14,618 ft. 8-12 in. concrete sanitary sewers, Dist. 147, to Union Constr. Co., Ogden (street address not available), $52,903. Noted Apr. 5.

Calif., Mayfield—Sanitary sewers, incl. 5,500 lin.ft. 6 in. vitr. and 29,000 lin.ft. 4 in. c. i. pipe, etc., to W. J. Tobin, 527 Santa Ray Ave., Oakland, $39,000. Noted May 3.

Waste Disposal

PROPOSED WORK

O., Lakewood (Cleveland, P .O.)—Selling $88,000 bonds for garbage disposal plant. E. A. Fischer, city engr.

BIDS DESIRED

O., Cleveland—May 16, by J. F. Maline, dir. Pub. Serv., City Hall, garbage disposal plant, 400 ton capacity, at Willow, Cuyahoga Heights. $750,000. R. Hoffman, city engr. Noted Apr. 5.

BIDS RECEIVED

Wis., West Allis—Bd. Pub. Wks., Apr. 30, 20 ton garbage incinerator, from Nye Odorless Crematory Co., Georgia Life Bldg., Macon, Ga., $22,500. Noted Mar. 15.

CONTRACTS AWARDED

N. Y., Sea Cliff—Village Trustees, combined garbage incinerator plant and storage building, to Decarie Incinerator Co., 45 Pine St., New York City. Noted Feb. 8.

Wis., Sheboygan — Incinerator, 15 ton daily capacity, to H. Dollarhelde, 1010 South 2nd St., Springfield, Ill., $18,885. Noted Apr. 26.

Bridges

PROPOSED WORK

N. Y., Fine—Had plans prepared 140 ft. rein.-con. and steel bridge, 20 ft., over Oswegatchie River, $35,000, also bridge over Little River, 40 ft. wide, $15,000. Concrete Steel Eng. Co., 21 Park Row, New York, engrs.

Pa., Allentown—Plans bridge over Lehigh River, Tilgham St. $300,000.

Fla., Clearwater — Pinellas Co. election June 10, to vote on $50,000 bonds 4 concrete bridges on Bayshore Rd. at Dunedin and Ozona; $35,500 for bridge and lift over Tarpon Bayou and reconstructing Belair - Anona and Sunset - Coachman Bridges; $125,000 for several steel bridges on Rds. 1, 2, 3, 4, 5, 6 and 7. C. E. Burleson, Clearwater, engr.

Fla., Ft. Pierce—Ft. Pierce Financing & Constr. Co. plans bridge over Indian River here. $300,000. E. Robb, Ft. Pierce, engr.

Fla., Miami—Dade Co. having plans prepared Belle Isle Bridge on location of old pile bridge, 400 ft. long, 27 ft. roadway. $50,000. W. E. Brown, Miami Beach, engr.

Fla., Miami—Dade Co. sold $150,000 bonds concrete bridge over canal. H. Crabtree, 13th St. and Ave. S, engr.

Fla., Tampa—Hillsboro Co. having plans and estimates prepared creosoted wooden bridges, 25 ft. wide, 75 to 100 ft. long, on Ruskin, Temple Terrace and Thonotassa-Plant City Rds., $25,000; on Hopewell-Tampa, Plant City-Picnic and Lithia Rds., $25,000. A. B. Pimm, Tampa, engr.

Louisiana—State Hy. Dept., Baton Rouge, plans 37 concrete bridges to replace wooden ones in West Baton Rouge Parish, $63,000, 2 on Port Allen-Plaquemine Highway and 27 on Port Allen-Rosedale Highway, 3 bridges will have new steel spans with concrete headwalls. J. M. Fourmy, state engr.

La., Algiers (New Orleans, P. O.)—J. Klorer, city engr., New Orleans, preparing plans reconstructing Newton St. viaduct, here. $80,000. Cost to be borne by South New Orleans Light & Traction Co. and Southern Pacific R.R.

Ill., Chicago—Illinois Central R.R., 135 East 11th Pl., plans improving bridge over Big Black River east of Aberdeen Jct. $50,000. F. L. Thompson, ch. engr.

Ill., Highland Park—See "Streets and Roads."

Kan., Iola—Allen Co. had plans prepared Coal Creek Bridge, 20 x 140 ft. concrete through arch span. Marsh Eng. Co., 206 Masonic Temple Bldg., Des Moines, Ia., designing engrs. A. R. Stroup, co. engr.

Kan., Saline—Saline Co. and Dickinson Co. (Abilene) had plans prepared 20 x 150 ft. rein.-con. through arch span. Marsh Eng. Co., 206 Masonic Temple Bldg., Des Moines, Ia., engrs.

Kan., Topeka — Shawnee Co. making plans three 100 ft. span concrete through arch bridges on Dover Rd., Federal Aid Project 141. Marsh Eng. Co., 206 Masonic Temple Bldg., Des Moines, Ia., engrs.

Tex., Rockdale—See "Streets and Roads."

Wash., Kelso—Cowlitz Co. plans 200 ft. steel bridge over Touttle River, to replace Manna Bridge. E. A. Middlebrook, Kelso, engr.

Ont., Arthur — Provincial Dept. Highways, 110 University Ave., Toronto, having plans prepared for rein.-con. arch bridge, 100 ft. long, 30 ft. wide, here. $45,000. G. Hogarth, ch. engr.

BIDS DESIRED

O., Fremont—May 18, by Sandusky Co., 320 ft. concrete arch Bridge, 44 ft., over Sandusky River, on State St. $156,000. Braun, Fleming, Knollman & Prior, 233 South High St., Columbus, engrs. Noted Mar. 22.

Mich., Grand Haven—June 5, at office City Manager, jointly by F. F. Rogers, state highway comr. and City, Bridge 701302; adv. this issue.

Wis., Ladysmith—May 25, by J. A. McLean, engr., 1417 North 12th St., Superior. 245 ft. concrete bridge, 18 ft., on concrete and pile foundation, across Wertgar Creek, for Rusk Co. $28,000.

Missouri—May 15, by State Hy. Dept., Jefferson City, one 70 ft. steel truss span, Texas Co., three 40 ft. I-beam spans, Pemiscot Co., two 140 ft. and two 80 ft. steel truss spans, Hickory Co., one 40 ft. rein.-con. deck girder span, Platte Co., three 16 ft. rein.-con. slab spans, St. Clair Co., one 70 ft. steel truss span, Ripley Co., two 35 ft. rein.-con. deck girder spans, Texas Co., three 20 ft. rein.-con. slab spans, St. Clair Co., one 70 ft. steel truss spans, Ripley Co., all 20 ft. roadways, etc.; two 10 x 12 ft. rein.-con. box culverts, Platte Co. B. H. Piepmeier, state highway engr.

Mo., St. Louis—June 5, by Dept. Pub. Serv., 1,200 ft. rein.-con. and steel bridge, 80 ft., with 550 ft. southern and 200 ft. northern approach, 14th St. $450,000. Noted Feb. 8.

Ont., Woodstock—May 12, by F. J. Ure, engr. Oxford Co., one 78 ft. steel truss, one 42 ft. steel girder bridges, one 30 ft. concrete culvert, one 14 ft. concrete slab culvert, and concrete floors on bridges. $30,000.

BIDS RECEIVED

Alabama—State Hy. Dept., Montgomery, 914 ft bridge on Alexander City-Jacksons Gap Rd., Florida Short Route, near Sturdivant, Tallapoosa Co., superstructure from

Bridges (Continued)

Virginia Bridge & Iron Co., 3900 8th Ave. N., Birmingham, six 150 steel spans $81,528, five 150 steel spans, concrete floor, $69,284; substructure from Columbus Constr. Co., Columbus, Ga., six 150 ft. spans, mass piers, cyclopean mix concrete $82,156, from Hardaway Contg. Co., Columbus, Ga., six 150 ft. spans, dumb-bell type piers, Class B concrete $55,639, alternate design with five 150 ft. spans, and approach of three 40 ft. girders, mass piers and girders $80,622, dump-bell type piers and girders, $67,455. Noted Apr. 12.

Wis., Milwaukee — Dept. Pub. Wks., widening Folsom Pl. Bridge, substructure from W. H. Gillen, 204 Grand Ave., $65,000; superstructure, from Wisconsin Bridge & Iron Co., North Milwaukee, $78,950. Noted Apr. 19.

Ia., Greenfield—Adair Co., 3 span concrete and steel viaduct over Chicago, Rock Island & Pacific R.R. tracks, here, two 55 ft. and one 80 ft. deck arch span, 24 ft. roadway, one 5 ft. sidewalk, from Federal Bridge Co., 1002 Bankers Trust Bldg., Des Moines, $42,263. Noted Apr. 26.

CONTRACTS AWARDED

N. H., Manchester—Bridge over Merrimack River, to T. Stuart & Son, Blake St., Newton, $824,500. Noted Feb. 22.

N. Y., Brooklyn—Transit Comn., 49 Lafayette St., New York, concrete and steel highway bridge, 9th Ave. between 37th and 39th Sts., here, to M. A. Charles, 6831 Ridge Rd., $49,900. Noted Apr. 26.

Pa., Jersey Shore—Comrs. Lycoming Co. (Williamsport) and Clinton Co. (Lock Haven), 130 ft. 3 span concrete arch bridge over Pine Creek, near here, to Whittaker & Diehl, Union Trust Bldg., Harrisburg, $86,467. Noted Apr. 12.

North Carolina—State Hy Dept., Raleigh, rein.-con. bridges and culverts on State Project 835, Henderson Co., to R. C. Stephens, Asheville, $69,476.

Fla., Ft. Lauderdale—Broward Co. rein.-con. arch bridge over Dania Cut-Off Canal on line of Dixie Highway, 55 ft. span, 18 ft. roadway, two 5 ft. walks, to J. A. Saxon, Pompano, $4,373; steel swing highway drawbridge crossing Hillsboro River on line of Ocean Blvd., 16 ft. roadway, to Champion Bridge Co., Wilmington, O., $34,632.

Ia., Bloomfield—Davis Co., 43 rein.-con. box culverts and 5 culvert extensions, 1 I-beam, to Ottumwa Supply & Constr. Co., Ottumwa, $25,555, concrete figures $22.12 per cu.yd.

Ia., Tipton—Cedar Co., to H. and M. Constr. Co., Muscatine, 40 concrete box culverts, $15,253 (concrete $21.64 per cu.yd.); V. L. Hanssen, Monticello, two I-beam spans, $8,645 (concrete $23.03) J. B. Elliott, Independence, 23 box culverts, 1 I-beam span and 1 circular culvert extension, $16,527 (concrete $23.52.)

Ia., Vinton—Benton Co.—to M. O. Burnett, Marengo, 2 pony trusses and 1 slab, $12,775 (concrete $22.66 per cu.yd.); Waterloo Constr. Co., 1 pony truss, 1 I-beam and 29 box culverts, $21,475 (concrete $21.89 and $22.66.) E. D. Troxel & Son, Vinton, 16 box culverts $5,658 (concrete $17.40.)

Missouri—State Hy. Dept., Jefferson City, one 40 ft. and four 25 ft. I beam, twenty 10 ft. rein.-con. slab and one 80 steel truss spans, 20 ft. roadways, etc., Stoddard Co., to Service Constr. Co., Poplar Bluff, $41,457; one 25 ft. rein.-con. deck girder span, 20 ft. roadway, Clay Co., to Highway Constr. Co., Webb City, $7,767. Noted Apr. 19.

Colorado—See "Streets and Roads."

Calif., Fresno—Fresno Co., 4 rein.-con. bridges on state highway in Warthan Canyon, southwest of Coalinga, to Lisher & Carillo, Napa, $36,625.

Ont. Brigden—J. McCallum, road supt. Lambton Co., Alvinston, 150 ft. steel bridge on concrete abutments, 18 ft. roadway, over Bear Creek, concrete work to A. Kirkpatrick, Petrolia, steel work to Sarnia Bridge Co., Sarnia. Engrs. est. $40,000. Noted Mar. 8.

Dams

PROPOSED WORK

Ia., Elkader—Peoples Electric Service Co. plans dam in Turkey River and hydro-electric power plant. Engineer not announced.

Calif., Santa Barbara—See "Miscellaneous."

BIDS DESIRED

Kan., Horton—See "Waterworks."

CONTRACTS AWARDED

N. C., Lenoir—Constructing dam and laying 20,000 ft. 12 in. pipe, gravity line, to Harris & Spalding, Newton, $35,000. City furnishes material. Total cost $100,000.

Railways

PROPOSED WORK

New York—Erie R.R., 50 Church St., New York City, plans 4 tracks on main line between Hornell, N. Y. and Susquehanna, Pa. $326,000. R. L. Dyke, Hornell, div. engr.

New York—Schenectady Ry. Co., 512 State St., plans new trackage and rail renewal on Erie Blvd. To exceed $25,000. W. S. Hamilton, supt.

Kentucky—Louisville & Nashville R.R., 9th St. and Bway., Louisville, plans double tracking 40 mi. from Pineville to Harlan on Cumberland Valley Div. W. H. Courtenay, ch. engr.

Michigan — Detroit Dept. Street Railways, St. Jean Ave., Detroit, approved $5,000,000 bond issue for street railway extensions, double and single tracks with overhead wiring, twin steel tie construction. W. C. Markham, Marquette Bldg., Detroit, ch. engr.

Ontario—City of Brantford will improve, repair and extend street railways, by day labor. $40,000. F. P. Adams, city engr.

Excavation, Drainage Irrigation

PROPOSED WORK

Fla., Miami — Dade Co. sold $100,000 bonds for cutting inlet between Biscayne Bay and Atlantic Ocean, 1,500 ft. long, 200 ft. wide, protected by steel sheet piling and stone jetties, 10,000 cu. yd. earth and 260,000 cu.yd. rock excav. H. Crabtree, 13th St. and Ave. S, engr.

Fla., Miami—Dade Co. plans 10 mi. drainage canal from north of Arch Creek into Biscayne Bay. $425,000. Biscayne Eng. Co., Biscayne Bank Bldg., engrs.

Minn., LeSueur Center — LeSueur and Rice Counties plan Judicial Ditch 2, 29 mi. open ditch, 750,000 cu.yd. excav., 7 laterals, 250,000 cu.yd. excav., 127,771 lin.ft. 6-24 in. tile. $150,000. A. J. Bradshaw, LeSueur Center, engr.

Calif., Chico — Irrigation District being organized, had preliminary plans prepared irrigating 15,000 acres in Butte Co. incl. 20.8 mi. canals, two 24 in. and two 12 in. centrifugal pumps, operated by electric motors of 200 hp. To exceed $1,000,000. J. B. Thompson, Chico, engr.

BIDS DESIRED

N. Y., Brooklyn—May 21, by J. H. Delaney, comr. Docks, Pier "A" foot of Battery Pl., North River, New York, dikes and dredging channel between Mill Basin and Paerdegat Basin, Jamaica Bay, here. Contr. 1797.

Miss., Rolling Fork — June 5, by Bd. Comrs. of Otter Bayou D.D. of Sharkey, Washington and Issaquena Counties, improvements in above district. J. B. Sinai, pres.; adv. this issue.

Minn., Crookston—May 23, by H. J. Welte, aud. Polk Co., Co. Ditch 55, 95,912 cu.yd. excav., 2,200 lin.ft. 24 in. and 1,800 lin.ft. 12 in. tile, 168 ft. 3-5 ft. culvert pipe. $25,000.

CONTRACTS AWARDED

B. C., Penticton—Provincial Government, Victoria, excavating 6 mi. irrigation ditch for Soldier Settlement at Oliver, near here, to D. Keith, Penticton, $40,000.

Streets and Roads

PROPOSED WORK

Conn., Hartford—Plans paving 2,000 ft. Commerce St., 30 ft., and 3,000 ft. Asylum Ave., 45 ft., asphalt on concrete, $25,000 and $100,000 respectively. R. N. Clark, city engr.

N. Y., Herkimer—Plans concrete paving Henry St., Pleasant and Park Aves. $35,000-$40,000. C. Stewart, village pres.

N. Y., Rochester—Monroe Co. plans paving Parma-Clarkson Town Line, Long Pond, Stoney-Lonesome, Carter, Riga-Chester and Telephone Rds., Thomas Ave. in Irondequoit, Colby St. in Ogden and Holt St. in Webster, various materials. $65,000.

N. Y., Waterloo—Plans bituminous macadam paving on 10 streets. $26,000. A. R. Moore, village clk.

Pa., Erie—Plans asphalt pavement on 29th St. $44,700, Lincoln Ave. $35,600. F. G. Lynch, city engr.

Pa., Franklin—Plans paving Eagle St., brick, bitulithic, asphalt or some other material. $25,000.

Pa., Pittston—Plans paving Tompkins St. $25,000, Oak St. and Jenkins Alley $25,000. Engineer not announced.

Pa., Scranton—Plans paving Church St., sheet asphalt on concrete or stone. $25,000.

Pa., Wilkes-Barre—Plans sheet asphalt pavements on Gilligan and Horton Sts. $25,000, New Grove St. $25,000. F. Gates, city clk.

Fla., Jacksonville — Duval Co. election May 15, to vote on $500,000 bonds paving 19.968 mi. St Augustine Rd 1; $600,000 paving 15.853 mi. Atlantic Blvd. No. 2 (2 roadways) from South Jacksonville to Atlantic Ocean at Neptune; $260,000 paving 10.254 mi. Kings Rd. 3; $320,000 paving 12.83 mi. Main St. Rd. 4; $160,000 paving 6.297 mi. Edgewood Ave. No. 12 and Moncried Rd. 9; $138,000 paving 5.51 mi. San Jose Blvd. 26; $50,000 paving 2.086 mi. First Ave. 66, and 3rd St.; $280,000 paving 7.756 mi. Orange Park Rd. 5; $125,000 paving 7.2 mi. Baldwin-Maxwell Rd. 23. F. Brown, clk.

Ala., Birmingham—Plans widening from 30 to 50 ft. and bitulithic paving 1st Ave. north from 41st to 47th Sts. $50,000. A. J. Hawkins, city engr.

Ala., Sheffield—Will sell $150,000 bonds, asphalt paving 10 blocks and laying 100 blocks cement sidewalks.

Tenn., Ripley—Voted $100,000 bonds improving various streets and laying sewers.

Kentucky—State Hy. Dept., Frankfort, plans 8 mi. Dixie Bee Line Rd. out of Henderson, Henderson Co. $127,000. J. S. Boggs, state highway engr.

Ky., Paducah — City takes bids about June 8, for 60,000 sq.yd. concrete or bituminous pavement with concrete base. H. A. Pulliam, comr. pub. wks. and ch. engr.

Ky., Saylersville — Magoffin Co. plans grading 10 mi. Saylersville-West Liberty Rd.

O., Canton—Plans paving 11th St. S. W., 13th St. S. W., 17th St. N. W., Market Ave. S, and Goodman Pl. S. W. W. E. Sarver, city engr.

Ind., Indianapolis—Marion Co. plans concrete paving 78,643 sq.yd. Michigan Rd $204,672. J. J. Griffith, co. engr.

Ind., Jeffersonville—Clark Co. plans 5.7 mi. William Schleicher Rd., Wood Twp. $71,465. K. P. Barnes, co. surv.

Ind., Laporte—Laporte Co. plans grading and graveling 2.3 mi. Harry H. Pinney Rd., 20 ft. $25,989. P. Summy, Laporte, engr.

Ind., Mishawaka—Takes bids early in June, paving East and West 4th, and West Battell Sts. $100,000. J. L. Stevens, city engr.

Ind., Mt. Vernon—Plans concrete surfacing 8,840 sq.yd. 5th St. $29,442. J. E. Anderson, city engr.

Ind., South Bend—Bd. Park Comrs. plans resurfacing Jefferson Blvd. from Eddy St. to St. Joseph River, probably sheet asphalt. $50,000.

Ind., Winchester—Randolph Co. plans grading and graveling 15,725 ft. Heston Rd., 24 ft., $25,702; 13,400 ft. Thornburg Rd., 24 ft., $25,707; concrete paving 36,911 sq.yd. J. J. Bailey Rd., $72,107. A. B. Purdy, Winchester, engr.

Michigan—State Hy. Dept., Lansing, soon takes bids grading and gravel surfacing 4 mi. road, 9 ft. wide, Washtenaw and Wayne Counties. F. F. Rogers, state comr.

Mich., Detroit—Had plans prepared paving 11 streets, incl. 48,838 cu.yd. excav., 84,848 sq.yd 3½ in. sheet asphalt on 8 in. concrete, 43,166 lin.ft. curb. J. W. Reid, city engr.

Mich., Detroit—Having plans prepared grading and paving 132 alleys with 6 in. one course concrete, 16 to 20 ft. J. W. Reid, city engr.

Mich., Springwells — Had plans prepared 200,000 sq.ft. concrete sidewalks on Dix Ave., Villas Subdivision. $35,000. C. W. Hubbell, 2348 Penobscot Bldg., Detroit, engr.

Ill., Highland Park—Plans concrete paving Sheridan Rd. and in Ravinia Woods. Project includes 3 bridges. $2,000,000 Windes & Marsh, 598 Birch St., Winnetka engrs.

Ia., Hull—Making plans paving about 40 blocks. $125,000. W. E. Buell & Co., 205 Davidson Bldg., Sioux City, engrs.

Streets and Roads (Continued)

Ia., Marshalltown—O. J. Herm, city engr., takes bids about June 1, paving 17,000 yd. Main St., brick, concrete, asphaltic concrete or vibrolithic. $100,000.

Kan., Liberal—Seward Co. making plans surfacing, etc., Federal Aid Project 153, Great Plains Rd., 27,000 cu.yd. sand clay, 25,000 cu.yd. excav., etc., J. D. Burwick, Liberal, engr.

Kans., Norton — Norton Co. soon takes bids earth road 7.528 mi. Ocean to Ocean Highway, 30 ft. Kansas Eng. Co., Topeka, (street address not available), engrs.

South Dakota—State Hy. Dept., Pierre, plans grading 7.24 mi. Dewey Co. $43,424, 12.51 mi. Corson Co. $49,706, 5.77 mi. Custer Co. $38,333, 12 mi. Douglas Co. $58,639, 7.06 mi. Lawrence-Mead Counties $65,050; grading and gravel surfacing 7.75 mi. Union Co. $55,173; one 150 ft. steel truss bridge, Ziebach Co. $18,436. F. D. Hudgins, ch. engr.

Tex., Navasota — Making plans paving streets $90,000, and swimming pool $10,000. E. F. Blackshear, mayor.

Tex., Rockdale—Milam Co. election latter part of May to vote on $62,000 bonds for graveling Add Hall Rd. and concrete viaduct over Little River. Total $120,000. A. F. Mitchell, Cameron, engr.

Okla., Norman — Cleveland Co. voted $500,000 bonds grading, bridging and concrete paving 40 mi. roads. State Hy. Dept., Oklahoma City, engrs.

Okla., Oilton—City will vote on $75,000 bonds paving various streets.

Utah, Ogden—Soon takes bids hard surfacing 10½ blocks 32nd St., Dist. 141. $120,000. W. S. Craven, city engr.

California—State Hy. Dept., Sacramento, had plans prepared grading and gravel surfacing 4½ mi. road near Gilroy, San Benito Co., 40,000 cu.yd. excav., 9,000 cu.yd. gravel, etc. R. M. Morton, state highway engr.

Calif., Oroville—Butte Co. plans surfacing 3 mi. Riceton Rd., graveling and surfacing with crushed rock 16 mi. Humboldt Rd., 8 mi. to be heavy grading and 8 mi. light grading; having plans prepared surfacing on existing base 5 mi. Biggs-Princeton Rd., light grading 12 mi. Oroville-Pentz Magalia Rd., grading and surfacing 5.5 mi. Oroville-Quincy Rd., asphalt macadam paving on 3 or 4 in. base 1.4 mi. Oroville-Marysville Rd., 15 ft.; had plans prepared 4.8 mi. 2 course asphaltic concrete, 2 in. base, 1½ in. surface on existing 6 in. gravel base and 4.82 mi. to be regraveled on Gridley-Colusa Rd., 15 ft. H. H. Hume, co. road engr.

Calif., Oroville—Butte Co. soon takes bids paving 1.5 mi. Gridley-Colony Dist., probably asphalt macadam. H. H. Hume co. road engr.

Calif., San Bruno—City Trustees received no bids grading, concrete curbing, guttering, sidewalks and paving portions Acacia, Tucker and Linden Sts., etc., 30,000 cu.yd. grading, 246,000 sq.ft. waterbound macadam with oil and screenings surface, etc. Will readvertise shortly. Noted Apr. 26.

Calif., San Francisco—City and San Francisco Co. had plans prepared curbing and paving 47th Ave., 4,200 sq.ft. vertical fibre brick, 21,200 sq.ft. concrete and 28,886 sq. ft. asphaltic concrete, etc., Kansas St., 16,000 sq.ft. concrete pavement, etc. M. M. O'Shaughnesssy, city engr.

Calif., San Francisco—Had plans prepared improving 29th Ave. between Cabrillo and Fulton Sts., 20,500 cu.yd. fill. $30,750. M. M. O'Shaughnessy, city engr.

Calif., San Rafael—Marin Co. had plans prepared grading portion Lucas Valley Co. Rd., in Dist. 1, 16,728 cu.yd. grading, 1,262 cu.yd. surfacing, etc.

Calif., Stockton — Will take new bids concrete curbing, guttering, sidewalks and paving with 2 in. asphaltic concrete on 3 in. crushed rock portions of East Scotts, Laurel, Ash and Court Sts., etc. Former bid rejected. W. B. Hogan, city engr.

Calif., Vacaville—Having plans prepared paving 25 blocks, asphalt macadam. F. A. Steiger, Fairfield, engr. Noted Apr. 26.

Calif., Visalia—Had plans prepared grading, curbing, guttering and paving portion Willis St., 194,370 sq.ft. 1½ in. warrenite bitulithic on 2½ in. asphaltic concrete, etc. L. H. Gadsby, city engr.

Calif., Yreka—Siskiyou Co. to vote on $500,000 bonds constructing roads. A. J. Parrott, co. surv.

Ont., Alvinston—Brooke Twp. plans 10 mi gravel roads. $30,000. Engineer not selected. W. J. Weed, Inwood, twp. clk.

Ont., Brantford—Having plans prepared 20,000 sq.yd. asphalt and concrete pavements. $84,000. F. P. Adams, city engr.

Ont., Ottawa—Having plans prepared 25,000 sq.yd. wood block and asphalt pavements $112,000, 1,300 sq.yd. tarvia pavement $5,000. A. F. Macallum, city engr.

Ont., Ridgetown—Takes bids about May 15, concrete pavements on Main St. $55,000. Prices wanted on materials. W. G. McGeorge, Queen St., Chatham, engr.

Ont., Toronto—Plans 8,000 sq.yd. asphalt pavements on Connolly St. $33,120, concrete curb and gutters. $2,530. R. C. Harris, city engr.

BIDS DESIRED

New Hampshire—May 15, by State Hy. Comn., Concord, gravel surfacing 4.77 mi. highway in Keene, Walpole, Tuftonboro and Pinkham Notch; 1.12 mi. in Candia and Peterboro, bituminous macadam; 2.42 mi. in Derry, rein.-con.; 5 x 5 rein.-con. box, 108 ft. long, in Claremont. F. E. Everett, state highway comr. Noted Apr. 4.

R. I., Wakefield—May 15, at office of G. I. Kenyon, Wakefield, constructing bituminous macadam road, here, in town of South Kingstown. G. I. Kenyon, J. B. Eldred and E. W. Maine, com. for town of South Kingstown; adv. this issue.

N. Y., Brooklyn—May 16, by E. Riegelmann, boro pres., Boro Hall, grading Bath Ave., sheet asphalt paving on 6 in. concrete Cedar Pl., Clara, East 10th, East 37th, Tapscott, Union, 70th and 78th Sts., 10th, 17th and 19th Aves.; curbing where necessary and preliminary 7 in. concrete paving in strips 16 ft. wide along the sides and for full width at intersections of cross streets of Linden Ave.

N. Y., Long Island City—May 16, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., curbing, recurbing, flagging, reflagging sheet asphalt paving Clinton and Perry Aves.; sheet asphalt paving Ditmars and 4th Aves.; grading, curbing and laying sidewalks on Locust St.

N. J., East Orange—May 14, curbing and paving 21,300 sq.yd. Eaton Pl., Oak St., Greenwood, Freeman, Tremont and Grand Aves., asphalt block, warrenite bitulithic, national or sheet asphalt on 6 in. concrete. $92,000. W. D. Willigerod, city engr.

N. J., Roselle Park (Elizabeth, P. O.)—May 18, by Mayor and Boro Council, improving Walnut St., Clay and Sheridan Aves. J. W. Higgins, 505 Chestnut St., Roselle Park and 52 Vanderbilt Ave., New York City, boro engr.; adv. this issue. Noted Apr. 5.

N. J., South Orange—May 18, by Streets & Highways Com. of Bd. Trustees, curbing and paving 4,000 ft. Prospect St., 30 and 36 ft., asphalt block, warrenite bitulithic, National or sheet asphalt on 6 in. concrete or 8 in. rein.-con. $80,000. I. Redfern, village engr. Noted May 3.

N. J., Trenton—May 18, asphalt paving Bellevue, Prospect, Mulberry, Turell and Chestnut Sts.; granite block on portion of Mulberry, Olden and New York Aves. $240,000. A. Swan, City Hall, engr. Noted Apr. 19.

Pa., Bellwood—May 15, by Boro Council, rein.-con. paving 1,430 sq.yd. Cambria St., 750 lin.ft. concrete curb. J. L. Henry, Hollidaysburg, engr.

Pa., Latrobe—May 14, by Boro. Council, paving 2,200 ft. Jefferson and Gertrude Sts., 30 ft., one course rein.-con. with concrete curb. $40,000.

Maryland—May 22, by State Rds. Comn., Baltimore, building sections of highways as follows: Contr. W-26, Washington Co., macadam; Contr. 45-A, Montgomery Co., concrete shoulders; Contrs. M-39, B-54, D-33 and Wo-28, Montgomery, Baltimore, Dorchester and Worcester Counties, concrete; Contr. BC-43, Baltimore City, sheet asphalt; Contrs. Ch-25 and SM-23, Charles and St. Marys Counties, gravel; J. N. Mackall, chn.; adv. this issue.

Md., Baltimore—May 16, by Bd. Awards, 11,725 sq.yd. concrete and 610 sq.yd. vitr. block, Contr. 235-OCNA; 42,090 sq.yd. sheet asphalt, 595 sq.yd. vitr. block, 14,300 lin.ft. steel paving guard, etc., Contr. 236-OCNA. R. K. Compton, paving comr.

Ala., Alabama City—May 15, by City Clerk, asphaltic concrete paving 1 mi. Kyle Ave., 30 ft. $35,000.

Ala., Florence — May 22, 75,000 sq.yd. paving, various types. $100,000. W. S. Eastip, mayor.

Ala., Gadsden—May 15, by City Clerk, grading and surfacing Kyle Ave., 11,720 sq.yd. asphalt, etc. $35,000.

Louisiana—May 29, by State Hy. Comn., Reymond Bldg., Baton Rouge, 10.36 mi. Project 314, Sects. A and B, Red River Parish, and 9.36 mi. Project 382, Vermillion Parish. J. M. Fourmy, ch. engr.

La., Cedar Grove—May 24 (change of date), by E. T. Archer & Co., engrs., 609 New England Bank Bldg., Kansas City, Mo., paving various streets. $100,000. Noted Apr. 12.

Tenn., Elizabethtown—May 16, by F. A. Taylor, chn. Highway Comn. Carter Co., grading, surfacing, etc., 13 mi. roads, probably limestone macadam.

Kentucky—May 29, by State Hy. Comn., Frankfort, shaping and surfacing to width of 16 and 18 ft. with waterbound macadam 7 mi. Lexington-Maysville Rd., State Project 20, Sect. L, Mason Co., 21,120 sq.yd. scarifying and reshaping, 12,907 tons crushed stone, 3,227 tons screenings; shaping 22.811 mi. roads in Pike and Union Counties, 156,556 cu.yd. earth and 115,502 cu.yd. borrow excav., etc.; shaping, surfacing to width of 18 ft. with bank gravel (unrolled), waterbound macadam or waterbound macadam surface treated 9.36 mi. Hopkinsville-Gracey Rd., Federal Aid Project 93 Christian Co.; shaping and surfacing to width of 14 ft. with river gravel type B, waterbound macadam or waterbound macadam surface treated 12.14 mi. New Castle-Carrollton Rd., State Project 46, Sect. A, Henry, Trimble and Carroll Counties; shaping and surfacing to width of 9 ft. with creek gravel, waterbound macadam or waterbound macadam surface treated 4.284 mi. Albany-Monticello Rd., State Project 27, Sect. A, Clinton Co.; shaping and surfacing to width of 16 ft. with bank gravel, waterbound macadam or waterbound macadam surface treated 13.1 mi. Dawson Springs-Earlington Rd., Federal Aid Project 97, Hopkins Co. J. S. Boggs, state highway engr.

O., Cleveland—May 16, grading, curbing and paving city hospital driveways, Mt. Overlook Ave. S.E., East 106th St., Prospect Ave. S.E. from Ontario St. S.E. to East 9th St., Prospect Ave. S.E. from East 9th to East 22nd Sts. $100,000. R. Hoffman, city engr.

O., Columbus—May 15, by W. H. Duffy, dir. Pub. Serv., grading, curbing, water services and sewer connections and paving 7,043 ft. Dunedin Rd., Capitol St., Medbrook and Irving Ways, Rush and Barth Alleys, alley west of Glen Echo Dr., alley west of Garfield Ave. and 2nd alley north of Oak St., brick, concrete and asphalt.

O., Columbus—May 17, by Franklin Co., paving 3.23 mi. Alkire Rd. 2 and Harbord Rd., 16 ft. bituminous macadam, $92,969; 2.46 mi. Norton and Rose Hill Rds., 16 ft., waterbound macadam, $50,490. C. C. Lattimer, Court House, co. surv.

Ind., Kendallville — May 22, by C. F. Orstadt, city clk., paving and curbing. H. H. Mortorff, city engr.; adv. this issue.

Ind., South Bend—May 17, by Auditor St. Joseph Co., concrete paving 55,424 sq.yd. Enders Rd. $144,135. P. R. Gillis, South Bend, engr.

Ind., South Bend—May 22, by Bd. Pub. Wks., paving 6,917 sq.yd. Huey and Kosciusko Sts., $28,360; grade, curb and walks on California and Elwood Aves., Randolph, Hastings, Johnson, Roberts, Clyde, McCartney, High, Dayton and Bowman Sts., 19,048 lin.ft. 5 ft. sidewalks, 21,112 lin.ft. curb and 26,384 cu.yd. earth excav., $37,921; 622 lin.ft. 3½ ft. sidewalk on Eldora Court $700; 1,130 lin.ft. 5 ft. sidewalk on Medora St. $850. F. J. Anderson, city engr. Noted May 3.

Mich., Cassopolis—May 14, by Cass Co. Rd. Comn., grading and gravel surfacing 7 mi. road, Cass Co. D. P. Smith, co. engr.

Mich., Marshall—May 14, by Calhoun Co. Rd. Comn., grading and surfacing 4.164 mi. road, Calhoun Co., asphalt, concrete or bituminous concrete. R. R. Cox, co. engr.

Wis., Milwaukee — May 14, by W. J. Cary, clk., Milwaukee Co., concrete surfacing 6.52 mi. Lovers Lane Rd., Wauwatosa and Rawson Aves., constructing 22 ft. concrete span bridge and widening 16 ft. concrete bridge, 70,000 sq.yd. 18 ft. concrete surfacing and 34,300 cu.yd. earth excav., etc. $200,000.

Wis., Platteville — May 22, by J. J. Stephenson, city clk., paving 10,400 sq.yd. Benson, Chestnut, 2nd, Mineral, Irving and Pine Sts., rein.-con., brick, asphaltic-macadam, warrenite bitulithic or double seal coat tarvia. $45,000. Private plans.

Kan., Kansas City—May 28, by O. K. Williamson, engr. Wyandotte Co., paving 3½ mi. roads, 16 ft., concrete or bituminous concrete

Neb., Norfolk—May 21, by S. R. McFarland, city clk., paving in Dist. 16, 35,224 sq.yd. asphaltic concrete or concrete paving, etc. Total with asphaltic concrete $99,601, with concrete $90,795. Noted Apr. 5.

Missouri—May 15, by State Hy. Dept., Jefferson City, improving 56.302 mi. roads in Macon, Andrew, Carroll, Franklin, Clay,

Streets and Roads (Continued)

Randolph, Saline, Platte, Hickory, St. Clair, Texas, Ripley, Warren and St. Genevieve Counties, 492,004 cu.yd. earth and 14,753 cu.yd. rock excav., 58,851 sq.yd. gravel surfacing and 12,475 sq.yd. concrete B. H. Piepmeier, state highway engr. Noted May 10.

Tex., Rockwall—May 14, by Rockwall Co., 50,000 sq.yd. concrete paving, etc., on Royse City-Rockwall-Chisholm Rd. $130,000. J. A. Focht, co. engr.

Colo., Denver—May 17, by Dept. Impvts. and Parks, concrete paving 12 blocks Alley Paving Dist. 91, $27,703 and 12 blocks Alley Paving Dist. 94, $25,864, 16-20 ft. A. K. Vickery, City Hall, engr. Noted Feb. 22.

Colo., Denver—May 19, by Dept. Impvts. and Parks, concrete paving 12 blocks Alley Paving Dist. 96, $23,105 and 12 blocks Alley Paving Dist. 93, $21,469, 16-20 ft. A. K. Vickery, City Hall, engr. Noted Feb. 22.

Colo., Denver—May 22, by Dept. Impvts. and Parks, concrete paving 12 blocks Alley Paving Dist. 92, $19,318, and 12 blocks Alley Paving Dist. 95, $19,257, 16-20 ft. A. K. Vickery, City Hall, engr. Noted Feb. 22.

Calif., South San Francisco (San Francisco P. O.)—City Trustees receiving bids and opens same about May 16, improving Swift Ave., 18,000 cu.yd. embankment, 1 mi. Logan rock waste sidewalks, 7 ft. wide, wooden bridges, etc. $25,000 or more. G. A. Kneese, c/o Courthouse, Redwood City, engr.

Ont., Birchcliff—May 14, by C. E. Fraser, engr., Bank Commerce Bldg., Toronto, 4½ mi. 4½ to 6 ft. sidewalks on Ellward Blvd., Byng, Mansion, Kenworthy, Leyton, Madeline and Robinson Aves., Contr. 1; Woodrow Blvd., Preston St. and Maxwell Ave., Contr. 2; Ballahula Blvd., Kingston Rd., Cornell, Queensbury, Haig and Lakeside Aves., Contr. 3, for Scarboro Twp. $30,000.

Ont., Cobourg—May 14, by A. W. Young, city clk., 14,000 sq.yd. bitulithic surface on concrete with concrete curbs and gutters on William and George Sts. $50,000. James, Proctor & Redfern, 36 Toronto St., Toronto, engrs.

Ont., Cornwall—May 14, by J. J. Harkness, town clk., 18,260 sq.yd. bituminous concrete pavement on rein.-con., 10,100 lin. ft. concrete curb, 10,700 lin.ft. steel curb and 20,800 lin.ft. concrete gutters on 2nd St. and in Cornwall Twp. $75,000.

BIDS RECEIVED

N. Y., Auburn—J. P. Jaeckel, city mgr., City Hall, May 1, improving various streets, from F. C. Callahan, Auburn, concrete $31,319; Brayer Bros., Pearson Blk., concrete or bitulithic $192,015. Noted Apr. 19.

N. Y., Batavia—Common Council, paving (1) Bank St. (2) State St., (a) brick (b) concrete (c) asphalt block (d) bituminous macadam, incl. base (e) warrenite bitulithic macadam, from T. Holahan, 163 Lewis St., Rochester, (1a) $4.59 per sq.yd. incl. base (1d) $3.50 per sq.yd. (2a) $4.59 per sq.yd. incl. base (2d) $3.50 per sq.yd.; Rowley & O'Reilly, Lockport (street address not available), (1a) $46,784 (1b) $33,168 (1c) $43,750 (2a) $18,222 (2b) $13,184 (2c) $17,033; O. Costich Co., Rochester (street address not available), (1e) $38,498 (2e) $14,722. Noted Mar. 29.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, May 2, asphalt paving (1) Barrett St. (2) 49th St. (3) 78th St., curbing and asphalt paving (4) Ave. K, grading, curbing and granite paving (5) Kingsland Ave., grading, curbing and flagging (6) Ave. T (7) 56th St., from Borough Asphalt Co., 1301 Metropolitan Ave. (1) $13,104; Cranford Co., 52 - 9th St. (2) $10,577; Uvale Asphalt Paving Co., 1 Bway., New York (3) $9,378; Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave. (4) $18,135; Greico Bros., 172 Russell St. (5) $13,354; G. M. Mandatto, 132 29th St. (6) $11,278 (7) $3,159. Noted Apr. 26.

N. J., Trenton—Mercer Co., paving 3,921 sq.yd. Greenwood Ave., granite block, from J. J. Barrett, 601 Greenwood Ave., $31,606.

Pennsylvania—State Hy. Dept., Harrisburg, May 1, constructing 30,062 ft. Application 2262, Butler and Summitt Twps., Butler Co., 22,705 ft. Route 233, Applications 2311, 2312 and 2313, Worth and Slippery Rock Twps., Slippery Rock Boro., Butler Co., and 19,683 ft. Route 265, Application 2272, North Beaver Twp., Lawrence Co., from Garvey-Weyenberg Constr. Co., 807 College Ave., Appleton, Wis., $263,155; $195,726 and $171,231 respectively; 21,312 ft. Route 271, Applications 2247 and 2251, Rome and Steuben Twps., Centerville Boro, Crawford Co., and 14,438 ft. Route 304, Application 2329, Amity Twp., Erie Co., from J. C. Devine Co., Alliance, O., $165,009 and $115,740 respectively; 23,888 ft. Route 276, Application 2306, Portage and Washington Twps., Portage, Cassandra and Lilly Boros., Cambria Co., from P. C. Azzara Constr. Co., Cresson, $273,042; 21,816 ft. Route 54, Application 2158, White Twp., Indiana Co., from M. Bennett & Sons, Indiana, $219,497; 614 ft. Route 168, Elmhurst Boro., Lackawanna Co., from H. B. Sproul Constr. Co. Inc., 218 Adams Ave., Scranton, $14,535; 31,219 ft. Route 206, West Salem and Green Twps., Jamestown Boro., Mercer Co., from S. Gamble Co., Glass St., Carnegie, $248,564; 4,652 ft. Route 238, Application 2323, Hickory Twp., Mercer Co., from Jamieson & Narlee, Fredonia, $41,737; 5,492 ft. Application 2231, Nazareth Boro., Northampton Co., from Neumeyer Bros., 1416 East 4th St., Bethlehem, $42,379; 5,875 ft. Route 332, Application 2388, Sect. 3, Spring Garden Twp., York Co., from Warren Bros. Co., 9 Cambridge St., Boston, Mass., $45,577; 19,975 ft. Route 230 Application 2177, Heidelberg Twp., York Co., from W. T. Staats, 5403 Diamond St., Phila., $127,825; 26,812 ft. Route 216, Application 2175, Sect. 3, Lower Chanceford Twp., York Co., from Freeland Constr. Co., Freeland, $237,090; 131 ft. rein.-con. plate girder bridge on Sta. 420, Route 59, Pike Twp., Clearfield Co., from Mason & Savage, Warren, $22,656. Noted Apr. 12.

Maryland — State Roads Comn., Baltimore, May 1, gravel surfacing 17,200 sq. yd. Contr. P-36, Prince George Co., from E. H. Schmidt, 27th and Falls Rds., Baltimore, $19,497; concrete surfacing 19,800 sq.yd. Contr. B-55, Baltimore City, from P. F. Reddington & Son, 2 East Lexington St., Baltimore, $69,433, 12,500 sq.yd. Contr. Wi-24, Wicomico Co., from P. D. Phillips & Bro., Salisbury, $31,684; 8,100 tons bituminous macadam surface course, 8,800 tons rein.-con. base course, Contr. W-24, Washington Co., from Bester-Long Co., Hagerstown, $120,373; 29,700 sq yd. bituminous surface course, 36,500 sq.yd. 6 in. concrete base course Contr. Bc-45, Baltimore City, from Baltimore Asphalt Block & Tile Co., 1320 North Monroe St., Baltimore, $146,435. Noted Apr. 19.

Md., Baltimore—Bd. Awards, asphalt paving 9,300 sq.yd. St. Paul St., and 21,010 sq.yd. Contr. 234NA, Baltimore City, from P. Flanigan & Son, Harford Rd. and Baltimore & Ohio R.R., $49,367 and $91,136 respectively; 16,270 sq.yd. Contr. 233NA, Baltimore City, from Baltimore Asphalt Block & Tile Co., 1320 North Monroe St., $66,253 for 4 in. and $73,573 for 6 in. Noted Apr. 26.

S. C., Columbia—Richland Co. topsoiling, etc., 6.9 mi. State Route 3, Federal Aid Project 210, 52,886 cu.yd. common excav., 19,616 cu.yd. gravel, etc., from J. H. H. Ashley, Honea Path, $29,356.

Fla., Sebring—Highlands Co., from McDonald Constr. Co., Tampa, (street address not available), paving 33 mi. from Polk Co. line to Hicoria, 371,920 sq.yd. asphalt oil at $0.28 per sq.yd., 371,920 sq.yd. bituminous macadam base $0.73; 11 mi. road from Hicoria to Glades Co. line, 58,080 sq.yd. asphalt oil at $0.29, 59,080 sq.yd. bituminous macadam $0.73. Noted Apr. 19.

O., Akron—W. F. Peters, dir, Pub. Serv., Apr. 30, grading, laying sidewalks and paving (1) West South St., 3,050 lin.ft. 6 x 18 in. stone curb, 400 lin.ft. brick gutter, 14,630 sq.ft. 4 in. cement sidewalk (a) 4,650 sq.yd. vitr. brick on 6 in. concrete, engrs. est. $37,615, or (b) 2,250 sq.yd. asphalt, engrs. est. $37,260, (2) Storer Ave., 8,060 lin.ft. 6 x 18 in. stone curb, 2,050 sq.yd. brick gutter, 30,990 sq.yd. 4 in. cement sidewalk, 11,300 cu.yd. earth excav., (a) 12,450 sq.yd. vitr. brick on 6 in. concrete, engrs. est. $93,722, (b) 10,400 sq.yd. asphalt $92,462, (3) Delia Ave., 2,885 lin.ft. 6 x 18 in. stone curb, 775 lin.ft. brick gutter, 200 sq.ft. sidewalk, 2,100 cu.yd. earth excav., (a) 5,000 sq.yd. vitr. brick on 6 in. concrete, engrs. est. $30,360 (b) 4,225 sq.yd. asphalt, $29,325, (4) Bishop St., 3,440 lin.ft. 6 x 18 in. stone curb, 800 sq.yd. brick gutter, 81,700 sq.yd. 4 in. cement sidewalk, 3,000 cu.yd. earth excav., (a) 6,015 sq.yd. vitr. brick on concrete, engrs. est. $42,923, (b) 4,325 sq.yd. asphalt, $40,954, (5) Bates and Christie Sts., 7,270 sq.ft. 4 in. cement sidewalk, 1,300 cu.yd. earth excav., 1,750 sq.yd. vitr. brick on 6

ROAD WORK—BALTIMORE, MD.

Bids were opened by State Rds. Comn., Garrett Bldg., Apr. 10, for contructing 2.7 mi. road from end of Contr. S-15 to St. Stephens, Contr. S-17, Somerset Co., (A) Hannaman-Burroughs Co., Salisbury (awarded contract); (B) Roberts Paving Co., Vickers Bldg.; (C) P. D. Phillips & Bro., Salisbury. The unit bids were as follows:

	A	B	C
6,700 cu.yd. excavation	$1.60	$1.60	$2.00
1,200 cu.yd. borrow	1.50	1.00	1.50
24,500 sq.yd. concrete surfacing	3.25	3.45	3.42
25 cu.yd. class A concrete	30.00	27.00	30.00
204 cu.yd. class C concrete	30.00	26.00	28.00
2,272 lb. plain steel reinforcing bars	.10	.10	.10
478 lin.ft. 12-in. corrugated metal pipe	2.00	2.00	2.00
60 lin.ft. 18-in. corrugated metal pipe	3.00	2.50	2.50
120 lin.ft. 24-in. corrugated metal pipe	4.50	3.50	3.25
500 lin.ft. timber piles	.75	.30	1.00
Extended totals	$101,293	$104,327	$107,675

ROAD WORK—OREGON

Bids were opened by State Highway Comn., March 28, for constructing Eugene-Goshen section of Pacific Highway, Lane Co., (A) Force & Currigan, 33rd and Halsey St., Portland; (B) G. F. Pyle, Eugene; (C) Warren Constr. Co., 289 East Salmon St., Portland. The unit bids were as follows:

	A	B	C
3100 sq.yd. preparation of subgrade	$0.10	$0.05	$0.05
250 cu.yd. broken stone or gravel sub-base	2.25	2.50	2.20
11,200 sq.yd. concrete shoulders	2.70	3.00	2.75
5000 cu.yd. bituminous binder	3.00	3.00	3.00
42,500 sq.yd. bituminous concrete surface	1.01	.98	1.30
2500 sq.yd. 5 in. bituminous pavement	1.75	2.00	2.25
1250 sq.yd. preparation of sub-grade	.15	.05	.05
250 cu.yd. bituminous base	7.00	4.25	4.06
1000 sq.yd. bituminous concrete surface	1.75	1.60	1.50
30 cu.yd. broken stone or gravel shoulder	5.00	4.00	5.50
1130 lin.ft. shoulder combination	.05	.05	.06
Extended totals	$100,610	$102,226	$113,580

ROAD WORK—OREGON

Bids were opened by State Highway Comn., March 27, for constructing Otter Rock section of Roosevelt Highway, Lincoln Co., (A) Hetrick, Klein & Gardner, Portland; (B) A. D. Kern, Exch. Bldg.; (C) G. F. Atkinson, Chamber of Commerce Bldg. Contractors all of Portland. The unit bids were as follows:

	A	B	C
Clearing and grubbing (lump sum)	$17,000.00	$13,500.00	$20,000.00
221,000 cu.yd. excavation, (not classified)	.50	.66	.70
484,000 sta. yd. overhaul	.05	.05	.05
1550 lin.ft. 12-in. plain concrete pipe	2.40	2.25	2.00
230 lin.ft. 18-in. reinforced-concrete pipe	4.15	4.00	3.50
360 lin.ft. 24-in. reinforced-concrete pipe	5.00	5.50	4.50
50 cu.yd. class C concrete	35.00	30.00	40.00
5.7 acres extra clearing	100.00	200.00	500.00
140 lin.ft. 3x3 cedar culverts	8.00	11.00	7.00
400 lin.ft. 4x4 cedar culverts	12.00	19.00	8.00
104 lin.ft. 6x6 cedar culverts	18.00	30.00	18.00
514 lin.ft. 8x8 cedar culverts	23.00	40.00	24.00
Extended totals	$181,081	$226,998	$228,563

Streets and Roads (Continued)

in. concrete, engrs. est. $12,654; resurfacing (6) East Market St., 240 sq.yd. vitr. brick, 3,450 sq.yd. asphalt, 500 tons asphaltic binder, engrs. est. $13,249, from DiFoti Constr. Co., 72 Furnace St., (1a) $39,602 (1b) $39,130; McAlonan Bros., 197 West Buchtel Ave., (2a) $96,144 (2b) $95,199 (4a) $42,435 (5) $13,232; T. E. McShaffrey Constr. Co., 171 South Forge St., (3a) $31,-007 (3b) $27,761 (4b) $40,277; Columbus Asphalt Paving Co., 304 Buckeye Bldg., (6) $10,681. Noted Apr. 19.

O., Bay Village—Grading and laying 128,000 sq.ft. (a) concrete (b) stone sidewalks, West Lake Rd., 10,000 cu.yd. earth excav., from V. Q. Galier, Builders Exch., Cleveland, (a) $46,000; Cleveland Stone Co., 1836 Euclid Ave., Cleveland, (b) $49,000.

O., Cleveland—From Baldwin Bros., 4500 Euclid Ave., improving Cypress Ave., 5,970 lin.ft. stone curb and 4 in. tile drain gutter, 4,850 cu.yd. earth excav., 9,055 sq.yd. vitr. brick on concrete, $51,652, East 29th St., 2,100 cu.yd. grading, $4,749; from Roehl Bros. Paving & Constr. Co., West 25th St. and Clark Ave., Bosworth Rd., 8,000 cu.yd. excav., 15,760 sq.yd. brick on concrete, 5,900 lin. ft. stone curb and 4 in. tile drain gutter, $95,079, West 41st St., 800 sq.yd. brick on concrete, $3,266, Behrwald Ave., 1,500 cu.yd. excav., 2,925 sq.yd. brick on 6 in. concrete, 1,930 lin.ft. stone curb and 4 in. tile gutter, $17,890, Tate Ave., 5,350 cu.yd. excav., 7,640 sq.yd. brick on 6 in. concrete, 5,020 lin.ft. stone curb and 4 in. tile drain gutter, $47,970, Mayview Ave., 1,700 cu.yd. excav., 3,400 sq.yd. brick on 6 in. concrete, 2,200 lin.ft. stone curb and 4 in. tile drain gutter, $20,547; from Rieley Bros., The Arcade, Forest Court, 515 sq.yd. brick on 6 in. concrete, $3,160; from H. G. Herring, Pavers Exch., Society for Saving Bldg., London Rd., 5,500 cu.yd. excav., 7,410 sq.yd. brick on 6 in. concrete, 4,100 lin.ft. stone curb and 4 in. tile drain gutter, $53,981; from River Constr. Co., 2402 Mapleside Rd., East 76th St., 1,300 cu.yd. excav., 1,860 sq.yd. brick on 6 in. concrete, 1,300 lin.ft. stone curb and 4 in. tile drain gutter, $13,708; from Enterprise Paving & Constr. Co., 8444 Bway, Linton Ave., 1,100 cu.yd. excav., 2,500 sq.yd. brick on 6 in. concrete, 1,580 lin.ft. stone curb and 4 in. tile drain gutter, $16,613.

Ind., South Bend—Bd. Pub. Wks., May 1, 955 sq.yd. Miner St., concrete, from Hoban & Roach, 502 East Madison St., $2,623; 342 sq.yd. new asphalt and 4,213 sq.yd. resurfacing, etc., Colfax Ave., (1) Trinidad (2) Mexican, from White Constr. Co., Merchants Bank Bldg., (1) $10,663 (2) $9,980; resurfacing Main St., (a) incl. resurfacing with brick along car tracks (b) incl. new base for brick along car tracks, (1) Trinidad (2) Mexican, from White Constr. Co., Merchants Bank Bldg., (a1) $8,034 (a2) $7,501 (b1) $8,168 (b2) $7,634; 1,739 sq.yd. Yukon Ave., asphalt, (1) Trinidad (2) Mexican, from Williston Constr. Co., Citizens Bank Bldg., (1) $5,700 (2) $5,422. Noted Apr. 26.

Mich., Detroit—Paving Brentwood Ave., from G. R. Cooke, 1260 Penobscot Bldg., $31,888; Six Mile Rd., Eastlawn, Genessee, Livernois, Linsdale, Navy and Wager Aves. from Detroit Asphalt Paving Co., 20 McGraw Bldg., $92,332, $12,832, $24,479, $134,253, $6,181, $74,445, and $17,331 respectively; Casper and Glendale Aves., from Cleveland Trinidad Paving Co., 402 Hammond Bldg., $24,173 and $45,196 respectively.

Minn., Minneapolis — Bd. Park Comrs., May 1, paving and curbing Lake of the Isles Blvd. and south and west shores of Cedar Lake, St. Anthony Blvd. and Minnehaha Parkway, 23,500 sq.yd. colored cement walk and 101,000 lin.ft. colored concrete curb, from Chernus Constr. Co., 604 Boston Blk., $1.26 per sq.yd. for walk, Nelson-Endbloom Constr. Co., 917 Plymouth Bldg., $0.45 per lin.ft. for curb.

Calif., Bakersfield — Grading, curbing, guttering and paving with 1½ in. warrenite bitulithic on 3½ in. asphaltic concrete portions 20th, 21st and R Sts., from J. A. Dowling, Call Bldg., San Francisco, $76,-664. Noted Mar. 29.

Calif., Hawthorne—Improving Balona St., oil screenings, from H. Wigman, Hermosa, $34,865.

Calif., Lodi—Grading, curbing, guttering and paving portions Hutchins and Walnut Sts., 152,440 sq.ft. grading, 139,452 sq.ft. 1½ in. warrenite on 2½ in. asphaltic concrete, etc., from Clark & Henery Constr. Co., 38 South Sutter St., Stockton, $34,505.

Calif., Redwood City—Grading, concrete curbing, guttering and paving streets in Redwood Highlands, 154,445 sq.ft. oil macadam pavement, etc., from Tieslau Bros., 2819 Grove St., Berkeley, $35,868.

CONTRACTS AWARDED

Massachusetts—State Hy. Dept., Boston, bituminous macadam paving 3.75 mi. road, 18-20 ft., in Burlington between Woburn and Billerica, to L. Carchia, West Roxbury (Boson P. O.), $131,919.

Conn., Hartford—Bd. Contract & Supply, to E. Balf & Co., State St., paving 6,100 ft. Park St., 3 in. asphalt on 6 in. base, engrs. est. $156,000; 2,613 ft. Broad and Webster Sts., 40 ft. and 30 ft. respectively, 3 in. asphalt on macadam, engrs. est. $42,000; 3,285 ft. Washington and Ann Sts., 41 ft. and 10 ft. respectively, 3 in. asphalt on 6 in. concrete, engrs. est. $65,-000; patching 10,000 sq.yd., engrs. est. $26,000. Noted Apr. 19.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, to Borough Asphalt Paving Co., 1301 Metropolitan Ave., curbing and asphalt paving East 7th St. $6,409, East 19th St. $14,066, East 22nd St. $10,-622, Louisiana Ave. $5,954, asphalt paving East 34th St., $6,470, Bedford Ave. $4,951, Carroll St. $9,888; to Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., curbing and asphalt paving 8th Ave. $22,703, asphalt paving 58th St. $17,110; to F. Persicano, 350 Fulton St., grading and flagging 13th Ave. $12,938; to T. B. Scott, 671 Halsey St., grading and flagging 40th St. $3,699, grading, curbing and flagging Utica Ave. $2,183, West 12th St. $3,856; to Cranford Co., 52 9th St., asphalt paving 56th St. $8,763, 82nd St. $8,677, 85th St. $8,174, East 7th St. $9,782, 55th St. $8,353; to B. M. Mandatto, 139 29th St., grading, curbing and flagging East 15th St. $16,747; to Simonelli & Son, Inc., 26 Conselyea St., curbing and laying cement sidewalks on West 32nd St. $2,230; to Uvalde Asphalt Paving Co., 1 Bway., New York, asphalt paving East 17th St. $21,037; to Cleveland Trinidad Paving Co., Flushing, asphalt paving Ave I $17,311. Noted Apr. 12 and 19.

N. Y., New York—J. Miller, pres., Manhattan Boro, Municipal Bldg., sidewalks on north and south sides of 108th St., to Kramer & Leedecke, 114 East 52nd St., $1,661; regrading, curbing, recurbing, flagging, reflagging and sheet asphalt paving roadway of Haven Ave., to Asphalt Constr. Co., 208 Bway., $8,260; widening and repaving portion Canal St., and curbing, recurbing and paving, etc., Wadsworth Terrace, both granite block, to D. J. McCarthy, 88 Audubon Ave., $12,405 and $18,462 respectively. Noted May 3.

N. Y., Plattsburg—Clinton Co. will construct 6 mi. Jarvis Corners-Pwasileyville Rd., subbase gravel top, $30,000, ½ mi. Cumberland head, subbase gravel $2,500, 2½ mi. Siota Chazy Rd., macadam $22,000, 4 mi. Lyon Mt.-Chazy Lake Rd., 10 ft., macadam $32,000, ½ mi. Saranac-Rousha Rd., crushed stone waterbound $2,500, ½ mi. Barnes School house-Chellis store, gravel $2,500, ½ mi. Lyon Mt.-Chat Lake Rd., gravel $2,500 and ½ mi. Altona-Woods Falls Rd., gravel $2,500, by day labor under supervision of I. E. Featherstone, Jarvis Corners, co. supt.

N. Y., Troy—Bd. Contr. & Supply, repairing asphalt pavements, to Fitzgerald Bros. Constr. Co., Inc., Proctor Bldg., $3.10 per cu.yd. and $13 per ton for binder, total cost to exceed $25,000, concrete paving 2nd Ave., to Belmar Contg. Co., Inc., 401 Proctor Bldg., $157,057. Noted Mar. 1.

Pennsylvania—State Hy. Dept., Harrisburg, Route 216, Application 2175, York Co., 23,566 cu.yd. excav., 46,706 sq.yd. rein.-con., to Comerford Constr. Co., 125 South 5th St., Phila., $212,622; Application 2252, Northampton Co., 2,619 cu.yd. excav., 9,733 sq.yd. rein.-con., to J. E. and J. H. Mills, 325 Drake Bldg., Easton, $38,656; Application 2225, Northampton Co., 2,701 cu.yd. excav., 7,708 sq.yd. rein.-con., to M. Miller & Son, 246 - 9th St., Northampton, $26,-614; Route 271, Applications 2182 and 2183, Crawford Co., 1,920 cu.yd. excav., 41,308 sq.yd. rein.-con., to Smethport Constr. Co., Carlton, $170,402; Route 66, Applications 1939 and 2168, Clarion Co., 10,580 cu.yd. excav., 23,435 sq.yd. rein.-con., to W. H. Hileman Constr. Co., 217 1st Natl. Bank Bldg., New Kensington, $119,199; Route 214, Application 2233, Clarion Co., 16,269 cu.yd. excav., 24,931 sq.yd. rein.-con., to F. S. Wilson, Kittanning, $162,057; Route 204, Application 1942, Beaver Co., 6,581 cu.yd. excav., 16,770 sq.yd. rein.-con., to T. J. Strickler, 508 Church St., Huntingdon, $63,388; Route 200, Application 2124, Crawford Co., 33,461 cu.yd. excav., 61,432 sq.yd. rein.-con., to Fort Pitt Constr. Co., 207 Martin Bldg., Pittsburgh, $328,978; Applications 2010 and 2106, Mercer Co., 22,764 cu.yd. excav., 51,357 sq.yd. rein.-con., and Route 85, Crawford Co., 11,871 cu.yd. excav., 60,269 sq.yd. rein.-con., to H. W. Horst Co., Horst Bldg., Rock Island, Ill., $236,016 and $248,154 respectively. Noted Apr. 12.

Pa., Pittsburgh—Regrading, repaving and recurbing Progress, Heinz and Chestnut Sts., Gazena and Bolin Ways, 1,133 sq.yd. vitr. brick, 5,820 sq.yd. sheet asphalt, 2,759 sq.ft. concrete sidewalk and 3,230 lin.ft. concrete curb, to T. Cronin Co., South 18th St., $52,379.

Maryland—State Rds. Comn., concrete paving 4 mi. Philadelphia Rd., 15 ft. 6 in., Contr. H-27, Harford Co., to D. H. Whitman, Hagerstown, or Hotel Rennert, Baltimore, $124,300; 2.1 mi. Dayton and Simpsonville Rds., Contr. Ho-16, to Robertson Bros., Vickers Bldg., Baltimore, $63,775.

W. Va., Welch—McDowell Co. grading 7.4 mi. road from Bradshaw to Grundy, Sandy River Dist., to Danville Contg. Co., Danville, $65,825; hard surfacing 14½ mi. road from Thorp to Jenkinjones and Jeanette to Leckie, Adkins Dist., to Baldwin & Jennings, Gary, $340,000.

Fla., Jacksonville—To Jacksonville Concrete Products Co., 530 Riverside Ave., 2,150 sq.yd. concrete sidewalks at $1.96 per sq.yd., 20,763 sq.yd. tile sidewalks at $1.62. Noted Mar. 29.

Alabama—State Hy. Dept., Montgomery, grading and surfacing with sand clay and gravel 11.797 mi. road from Barbour Co. line to Abbeville, Henry Co. and 13.537 mi. road from Clayton to Dale Co. line, Barbour Co., to Nixon & Phillips Constr. Co., Lineville, $68,652 and $67,384. Noted Mar. 22.

La., Colfax—Paving 5th St. from Scott to St. Ann Sts., vertical fibre brick on concrete, also storm sewer in 7th St., to A. E. Perry, Colfax, $150,400.

Tenn., Manchester—Coffee Co. Rd. Comn. to Smith-Pitts & Sons, Manchester, grading 14.47 mi. road from Beach Grove to Manchester, 41,527 cu.yd. common excav. $0.43, 15,000 cu.yd. solid rock excav. $1.65, 25,000 cu.yd. borrow $0.43, etc., total $63,-911, 7.51 mi. road from Hillsboro to Manchester, 33,750 cu.yd. common excav. $0.43, etc., total $19,312; to J. W. McLaughlin, Manchester, grading 7.16 mi. road from Manchester to Summitville, 25,493 cu.yd. common excav. $0.40, etc., total $18,351. Noted Apr. 19.

O., Cleveland—Bd. Educ., East 6th St., and Rockwell Ave., grading, cement sidewalks, seeding, sodding and landscape work at Audubon, Lafayette, Mt. Auburn, Rickoff and Warner Rd. Schools, to V. Q. Galier, Builders Exch., $44,670; masonry work, to A. MacDougall Co., Irene Ave., $24,351. Noted Apr. 26.

O., Euclid—Grading, curbing and paving 19,310 sq.yd. on 8 streets, asphalt, to Cleveland Trinidad Paving Co., The Arcade, Cleveland, $102,877. Noted May 3.

O., Lakewood (Cleveland, P. O.)—Asphalt paving 2 streets, to Highway Constr. Co., 903 Lorain Co. Bank Bldg., Elyria, $28,627; 1 street, to W. E. McHugh, Pavers Exch., Society for Savings Bldg., Cleveland, $21,830.

O., Marietta—Bd. Control, asphalt paving 2nd St., to Peters and Rovegno, Marietta, $35,457. Noted Mar. 22.

O., Wauseon—Fulton Co., grading and graveling 3.18 mil. Darby-Ottokee Rd. Impvt. 93, 6,271 cu.yd. earth excav., engrs. est. $15,623 and 1 mi. Lytton Rd., 2,240 cu.yd. earth excav., $6,847, both 10 ft. wide, to H. G. Flickinger, Delta, $12,749 and $6,583 respectively; 0.62 mi. Zone-Southern Impvt. 102, $5,725 and 1 mi. Spiess-Handy Corners Impvt. 101, 1,906 cu. yd. earth excav., $7,886, both 12 ft. wide, to A. J. Quillet and H. D. Bernath, R. F. D. 6, $4,283 and $5,132 respectively; grading and paving 1.25 mi. Stryker-Neapolis Rd. Impvt. 99, 12 ft., 2,936 cu.yd. earth excav. and 9,285 sq.yd. waterbound macadam, $17,608, to A. A. Langenderfer, 319 Spitzer Bldg., Toledo, $14,637.

Ind., Kokomo—Concrete paving, 18,726 sq.yd. Lafontaine St., to Druecker Paving Co., Kokomo, $48,690. Engrs. est. $53,723.

Ind., Logansport—Cass Co., paving 5 mi. Gordon Rd., 18 ft., to D. A. Hyman, Logansport, $37,200. Noted Apr. 19.

Ind., South Bend—Bd. Pub. Wks., to H. N. Barnes, 1026 North Johnson St., paving 4,832 sq.yd. Eckman St., bituminous concrete, etc., $24,444, engrs. est. $30,306, 16,834 lin.ft. of 5 ft. sidewalks, etc., on Washington, McKinley, Jacob, Turnock, Harriet, Otsego Sts., Lasalle and Colfax Aves., $37,069; to H. L. Davis & Sons, 1111 Sorin St., 4,220 lin.ft. sidewalks, etc., Brookfield and College Sts., $14,484; to F. L. Parr, 1013 Altgeld St., 1,514 lin.ft. Miami St., $2,013, engrs. est. $2,117; to F. J. Murray, 216 North Lafayette St., 1,252 lin.ft. sidewalks, etc., on Sancome St., $3,262.

Mich., Dearborn—H. B. Knauff, village clk., 19,000 sq.yd. concrete pavements on Adeline, Francis, Beech, Lapham and Nona

Streets and Roads (Continued)

Aves., to Otis Cement Constr. Co., 806 Hammond Bldg., Detroit, $71,162. Noted Apr. 12.

Mich., Grosse Pointe (Detroit, P. O.)—Grading and paving 18,350 sq.yd. Neff Rd., sheet asphalt on 6 in. concrete with concrete curb, to G. R. Cooke, 1260 Penobscot Bldg., Detroit, $100,000.

Mich., Grosse Pointe Farms (Detroit P. O.)—Grading and paving 6,500 sq.yd. Lake Dr., 9 in. concrete with concrete curbs and gutters, to R. R. Moran, Grosse Pointe Farms, $27,000.

Ill., Waukegan—Lake Co., 6 in. concrete paving Sect. 28 Hainesville-Round Lake Rd., to G. Wade, Kenosha, Wis., $54,674. Noted Apr. 5.

Wis., Milwaukee—Asphalt paving, etc., to Badger Constr. Co., 97 Wisconsin St., 3,329 sq.yd. Clarke St. $15,728, 1,676 sq.yd. 1st Ave. $7,636, 1,486 sq.yd. 47th St. $3,250, 17,130 sq.yd. 4th St. $64,549, 3,499 sq.yd. Kinnickinnic Ave. $7,517, 4,821 sq.yd. Windlake Ave. $15,547.

Wis., Milwaukee—Concrete paving, etc., to Czerwinski Constr. Co., 376 16th Ave., 934 sq.yd. California Ave. $3,081, 3,953 sq.-yd. Ellen St. $12,597, 2,521 sq.yd. Melvina St. $8,465; to A. E. Retzloff, 948 4th St., 1,160 sq.yd. Morton Pl. $5,096; to Clayton Constr. Co., 397 Farwell Ave., 1,200 sq.yd. Northwestern Ave. $3,878.

Wis., Superior—Concrete paving 1,900 ft. 21st St. from Baxter to Grand Aves., 24 ft., to V. Nelson, 2002 Maryland Ave., $28,866.

Ia., Bettendorf—Vibrolithic concrete paving 7,210 sq.yd. Main and 1st Sts., to Central Eng. Co., 809 Putnam Bldg., Davenport, $27,000.

Ia., Carroll—For 12,818 sq.yd. 8 in. concrete paving, City Project C-19, to McLaughlin & Sons, Mankato, Minn.

Ia., Nevada—Grading and paving extensions of Lincoln Highway into city, to Empire Constr. Co., 308 Flynn Bldg., Des Moines, 9,100 sq.yd. concrete paving $2.79, 1,400 cu.yd. excav. $0.50. Noted Apr. 12.

Ia., Sigourney — Keokuk Co., grading 15.42 mi. primary road northeast of here, to Littig Constr. Co., 1st National Bank Bldg., Davenport, 59,618 cu.yd. excav. $23,148; T. Ryan & Sons, Missouri Valley, 260,372 cu.yd. excav., $82,970. Noted Apr. 19.

Minn., Redwood Falls—Redwood Co., Job 2301, State Rd. 3, 65,000 cu.yd. excav., to J. Cosgrave, Algona, Ia., $0.27 per cu.yd.; Job 2302, State Rd. 3, 86,000 cu.yd. excav., to M. Hirsch, Wabasso, $0.24; Job 2303, State Rd. 10, 22,000 cu.yd. excav., to B. J. Schmitz, Wabasso, $0.26; Job 2304, State Rd. 2, 20,000 cu.yd. excav., to H. Leopold, Walnut Grove, $0.27. Noted Apr. 19.

Mont., Great Falls—Cascade Co., gravel surfacing Cascade-Ulm Rd., to Fitzgerald & Staunton, 114 1st Ave., S., $80,366; 2 concrete bridges, to McGuire & Blakeslee, Great Falls, $10,657. Noted May 3.

Missouri—State Hy. Dept., Jefferson City, improving 5 mi. road and 3.655 mi. road from Fulton to Jefferson City, Callaway Co., to T. Ryan & Sons, Missouri Valley, Ia., $22,572 and $13,363 respectively; 3.171 mi. road from North Kansas City to Excelsior Springs, 18 ft., Clay Co., concrete, to Highway Constr. Co., Webb City, $97,197; 2.898 mi. road from Fisk to Dexter, 18 ft., Stoddard Co., concrete, to Service Constr. Co., Poplar Bluff, $104,738. Noted Apr. 12.

Mo., Joplin—Paving 1.75 mi. East 7th St., 6 ft., 1 course concrete, to V. E. Koch, 419 Joplin St., $14,000; 1.75 mi. East 7th St., 18 ft., will be done by Joplin Rd. Dist.

Mo., Kansas City—Paving 15th St., 32,-200 sq.yd. rock asphalt, to M. R. Amerman, 248 North Market St., Wichita, Kan., $2.58 per sq.yd.

Mo., Richmond Heights (St. Louis, P. O.)—H. Prettyman Co., United Home Bldg., St. Louis, 200,000 sq.ft. concrete sidewalks and street paving in Pennsylvania Park subdivision, here, to Hartmann Constr. Co., Odd Fellows Bldg., St. Louis. Engrs. est. $50,000. Noted May 3.

S. D., Yankton — Paving 10,000 sq.yd. Locust St., vibrolithic concrete, to M. L. Flinn Paving Co., 218 Grain Exch. Bldg., Sioux City, Ia., $2.23 per sq.yd. Noted Apr. 12.

N. D., Fargo—For 40,000 sq.yd. bitulithic paving on College St., 9th Ave. N. and 10th St., to Birch & Sons, Fargo, $47,671, $53,353 and $37,824 respectively. Noted Apr. 12.

Tex., Hondo—Medina Co. grading and graveling 7.55 mi. highway through D'Hannis Precinct, part of Old Spanish Trail, to Miller & Farmer, Hondo, $49,888.

Tex., Marshall—Harrison Co. resurfacing 23.41 mi. Jefferson Highway 11, east and west of here, inverted penetration, to J. F. Dexter, 1918 Bennett St., Dallas, $35,000. Noted Apr. 19.

Colorado—State Hy. Dept., Denver, gravel surfacing 2.881 mi. Project 223 A, Grand Co., to H. Shore, Steamboat Springs, $27,-627, 1.853 mi. Project 211, Rio Blanco Co., to Hinman Bros., Kremmling, $31,314; crushed rock surfacing 3,505 mi. Project 81 A, Jefferson Co., to H. C. Lallier Constr. Co., Hudson, $33,878; grading 2.776 mi. Project 705, Montrose Co., to G. F. Wear & Co., Delta, $10,089; 950 ft. timber bridge and approaches over Cherry Creek, Arapahoe Co. ,to Colorado, Bridge & Constr. Co., Denver Gas & Electric Bldg., Denver, $12,-088; timber trestle bridge over Box Elder Creek, Adams and Arapahoe Counties, to A. R. Mackey, Sterling, $14,782. Noted Apr. 12.

Idaho—State Hy. Dept., 202 Pioneer Bldg., Lewiston, grading and gravel surfacing 3.4 mi. Federal Aid Project 64-B, Shoshone Co., 17,980 cu.yd. earth, 17,922 cu.yd. solid rock and 5,222 cu.yd. loose rock excav., 6,034 cu.yd. crushed rock, etc. to Ryberg-McHugh Co., 1315 State St., Boise, $69,133. Noted Apr. 5.

Nevada—State Hy. Dept., Carson City, constructing road from Crystal to West Slope of Mormon Mesa, Clark Co., Contr. 75, to Dodge Bros. and Dudley Contg. Co., Fallon, $185,182.

Wash., Kelso—Paving Improvement Dist. 45, Cowlitz Ave. et al., 2 in. bitulithic on 4 in. crushed rock base, to United Contg. Co., North West Block Bldg., Portland, Ore., $55,323.

Wash., Seattle—Clearing right of way for 100 mi. transmission line from Gorge Creek plant of Skagit project to Seattle, to Beseloff & Brice, 4234 Densmore Ave., $38,880. Engrs. est. $39,000.

Wash., Seattle — Repaving Union St., LID 3571, concrete, to J. L. Smith, Pioneer Bldg., $40,548. Engrs. est. $41,187.

Wash., Walla Walla—Grading and surfacing two course crushed rock, 7 in. deep, Permanent Highway 28, Lower Waitsburg Rd., 36,078 cu.yd. earth excav., 3,895 cu. yd. borrow, 15,423 cu.yd. crushed rock, to H. L. Wilson, Walla Walla (street address not available), $52,792. Engrs. est. $55,000.

Ore., Portland—Paving East 9th, East 30th, East 69th, East 81st, Beach and Jersey Sts., Union Ave., 33rd Ave. S. E. and Roselawn Ave. S. E., 2 in. bitulithic concrete on 4-6 in. crushed rock, to Municipal Paving Plant, City Hall, $57,246. Noted Apr. 19.

Calif., Hanford—Grading, curbing, guttering and paving portion Ivy St., 105,483 sq.ft. grading, 92,622 sq.ft. 1½ in. warrenite on asphaltic concrete, etc., to California Constr. Co., Mattei Bldg., Fresno, $32,932. Noted May 3.

Calif., Long Beach — Improving various streets in Belmont Shore Project, 870,746 sq.ft. 5 in. concrete, 33,610 lin.ft. concrete curb, 168,573 sq.ft. cement walks, etc., to Two Miracle Concrete Co., Ford Bldg., Great Falls, Mont., $486,000. Noted Apr. 26.

Calif., Madera—To Thompson Bros., Divisadero and G Sts., Fresno, grading, concrete curbing, guttering and bituminous paving Yosemite Ave., $38,379; B and 6th Sts., $35,437. Noted May 3.

Calif., Merced—Merced Co. grading and paving Dist. 5, 43,557 lin.ft. sub-grade, 18,712 ft. lumber and 525,904 sq.ft. rock screenings, to Merced Concrete Pipe Co., 16th and H Sts., $49,750. Noted May 3.

Calif., San Bernardino—San Bernardino Co. grading and paving 5 mi. Bear Lake Rd., 8 in. oil macadam, to H. Lienau, 420 Brookside Ave., Redlands, $149,500. Noted Apr. 26.

Calif., San Francisco—Bd. Pub. Wks., grading, retaining wall, etc., on Telegraph Hill Blvd., to L. J. Cohn, 180 Jessie St., $23,238. Noted Apr. 12.

Calif., Santa Ana—Orange Co., paving Richfield Rd., 5 in. asphaltic concrete on 4 in. gravel, to S. Finley, Santa Ana, $38,500. Noted Apr. 26.

Ont., Chatham—Will resurface with asphalt 34,000 sq.yd. Dover, St. Clair, Union and Park Sts., by day labor. $60,000. C. H. R. Fuller, city engr.

Ont., Oshawa — Paving 6,000 sq.yd. Arthur and Bruce Sts. from Drew to Ritson Rd., Division St. from King to Brock Sts., asphalt on concrete, to Standard Paving Co., Central Chambers, Ottawa. Engrs. est. $30,000.

Ont., Guelph—Resurfacing 38,000 sq.yd. asphalt pavement, to Constricting & Paving Co., Confederation Life Bldg., Toronto, $1.86 per sq.yd. 3 in. surface, $1.54 for 2 in. surface.

Industrial Work

PROPOSED WORK

Mass., Gardner—Central Oil & Gas Stove Co., 205 School St., had plans prepared by G. A. Johnson, archt. and engr., Main St., Worcester, and soon takes bids 3 story, 50 x 100 ft. manufacturing building and machine shop, brick and steel, plain foundation. To exceed $40,000.

Conn., East Hartford—E. Cataldi having plans prepared by D. A. Guerriero, 1029 Main St., Hartford, 3 story, 30 x 50 ft. factory, brick and steel, plain foundation. Burnside Ave. $45,000. Address architect.

Conn., East Hartford—D. Ravellese, Village St., having plans prepared by J. E. Marchetti, archt. and engr., 721 Main St., Hartford, 1 story, 60 x 120 ft. garage with 50 x 100 ft. ell, brick and steel, plain foundation, 6 Pleasant St. $65,000.

Conn., Hartford—Capitol Furniture Co., 148 Temple St., having plans prepared by D. A. Guerrion, 1029 Main St., 2 story, 40 x 80 ft. storehouse, rein.-con., plain foundation, 154 Temple St. $40,000.

Conn., Hartford—Herman Gross & Sons, 288 Pleasant St., having plans prepared by Berenson & Moses, 30 Allyn St., 3 story, 40 x 140 ft. warehouse, brick, plain foundation, Market St. $70,000.

Conn., Manchester—E. E. Hilliard Co., Buckland St., had plans prepared 2 story, 80 x 140 ft. factory, brick, plain foundation, Buckland St. $50,000. Private plans.

Conn., Plainville — H. C. Baum, New Britain Ave., plans 3 story, 50 x 90 ft. factory, brick, plain foundation, Railroad Sq. $50,000. Engineer and architect not selected.

N. Y., Carthage—Adirondack Mineral Co., Inc., plans 1 story, 50 x 100 ft., brick, concrete and steel factory. $40,000. C. R. Outterson, pres.

N. Y., Elmira—Elmira Fdry Co., Main St. and Woodlawn Ave., plans 1 story, 116 x 220 ft., brick and steel foundry. $150,000. J. McCann, mgr.

N. Y., Jamestown—Jamestown Gas Stove Corp., Corry, Pa., plans factory, here. $50,000. Engineer and architect not announced.

N. Y., Newburgh — Cornwall Chemical Co. plans to rebuild plant. $100,000. Engineer and architect not announced.

N. Y., Tonawanda—Spaulding & Sons Co., Wheeler St., plans brick, steel and concrete plant addition. To exceed $50,000.

Pa., Smethport—Smethport Garage Co. having plans prepared by S. T. Graham, 301 Jackson Ave., Bradford 2 story and basement, 54 x 120 ft. and 30 x 54 ft. brick and steel garage. $40,000.

W. Va., Mason City—Hutchison Coal Co. plans rebuilding power plant, recently destroyed by fire. $70,000.

N. C., Lexington—C. M. Wall & Son plan 150 x 200 ft. lumber plant, to replace one destroyed by fire.

N. C., Tryon—Blue Ridge Power Co., Hendersonville, plans power plant, here. $875,000.

Fla., Sulphur Springs (Tampa P. O.)—Consumers Ice Co., Polk and Marion Sts., Tampa, having plans prepared 30 ton ice factory, here. $65,000. C. Perry, mgr.

Ala., Alexander City—Avandale Mills Co. plans 4 story, 200 x 300 ft. plant, brick, also 75 cottages for workmen and $60,000 church. $1,000,000. Private plans.

Tenn., Nashville — Sunday School Bd. National Baptist Convention, had plans prepared and soon takes bids 82 x 150 ft. publishing plant, brick, concrete and stone, 4th and Cedar Sts. $300,000. M. McKissack, Cedar St., designing archt. Marr & Holman, Stahlman Bldg., consult. archts.

Ky., Louisville—A. Barth Lumber Co., 10th and Water Sts., plans 2 story, 90 x 150 ft. brick addition to lumber plant, 10th and Water Sts. Engineer and architect not selected.

Ky., Louisville—Louisville Gas & Electric Co., 317 West Chestnut St., having plans prepared by H. M. Byllesby & Co., 208 South La Salle St., Chicago, addition to steam power plant on river front, River Rd. $150,000. L. F. Strang, c/o owner, engr.

Ky., Louisville—Southern Chemical Co., 833 15th St., plans 2 story, 160 x 171 ft. warehouse, 15th and Breckenridge Sts. G. T. Love, pres. Engineer and architect not selected.

O., Canton—Schory & Shellhase Ice Co., 6th St., plans 130 ton plant addition. $50,000.

Industrial Works (Continued)

O., Cleveland—Amer. Tube & Pipe Bending Co., c/o S. Firestone, pres., 880 East 72nd St., plans 1 story, 100 x 120 ft., brick and steel factory, Berea Rd. $50,000. Private plans.

O., Celveland — Mechanical Rubber Co., Lisbon Rd., having preliminary plans prepared by Lockwood, Green & Co., Hanna Bldg., 8 story, brick, steel and concrete factory addition. $300,000.

O., Norwood (Cincinnati, P. O.)—Kemper-Thomas Co., Park Ave., having revised plans prepared by S. Hannaford & Sons, 1024 Dixie Terminal Bldg., Cincinnati, 2 story, 60 x 240 ft., rein.-con. factory, plain foundation. $150,000. Former bids rejected. Noted Apr. 12.

Ind., South Bend—Studebaker Corp., Main and Bronson Sts., had plans prepared by A. Kahn, 1000 Marquette Bldg., Detroit, Mich., 1 story and mezzanine, 660 x 683 ft. foundry, rein.-con. and brick, plain foundation, Prairie Ave.

Mich., Iron Mountain — Michigan Iron Land & Lumber Co. having plans prepared by Mead & Seastone, engrs., Journal Bldg., Madison, Wis., rein.-con., brick and steel power plant, plain foundation. $1,000,000.

Ill.,' Chicago—N. Schoenbrod, c/o Rissman & Hirschfield, archts., 64 West Randolph St., plans 1 story, 50 x 177 ft., auto sales building and garage, rein.-con., brick and steel, 2520-24 South Michigan Ave. $65,000.

Wis., Madison—Gill Bros. Co., c/o A. J. Gill, 452 West Wilson St., having plans prepared by P. Dean, Dean Bldg., 2 story, 66 x 224 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation. $80,000. Address communications to architect.

Wis., Madison—J. Wiesse, 111 King St., having plans prepared by F. L. Kronenberg, Carroll Blk., 1 story, 50 x 100 ft., brick, rein.-con. and stone factory, plain foundation. $40,000. Noted Apr. 26.

Wis., Mason—Lange Canning Co., c/o C. J. Lange, Mill and Madison Sts., Eau Claire, plans 2 story, 50 x 75 ft., brick, rein.-con. and steel plant, plain foundation, here. $50,000.

Wis., Milwaukee—Milwauke Electric Ry. & Light Co., Public Service Bldg., 2 story, 100 x 210 ft. turbine and boiler house, brick and concrete, plain foundation, at Lakeside, to Meredith Bros. Co., 1043 Kinnickinnic Ave. $1,000,000 complete.

Wis., Sheboygan—E. A. Juul, archt., Security Bldg., preparing plans 4 story, 60 x 120 ft. garage and repair shop, brick, rein.-con. and steel, New York St. $60,000. Owner's name withheld.

Ia., Elkader—See "Dams."

Minn., Minneapolis—Minneapolis General Electric Co., 15 South 15th St., plans terminal station, brick and concrete, 1st and Aldrich Aves., N. $75,000. R. F. Pack, vice. pres. and general mgr. Private plans.

Kan., Wichita — Bemis Bag Co., 301 W.-K.-H. Bldg. plans 3 story,, 150 x 250 ft, factory, 2nd and Mosley Sts. $200,000. A. H. Imboden, mgr. Engineer and architect not selected

Mo., Kansas City—Benard & Buchli Motor Co., 4041 Bway., having plans prepared by E. C. Faris, 3908 Central St., 1 story and basement, 65 x 130 ft., rein.-con. and brick garage, Bway. and Schaefer St. $40,000.

Calif., Eureka—Eureka Ice & Cold Storage Co. plans ice and cold storage plant. To exceed $100,000.

Calif., Long Beach—W. H. Austin, archt., 1st Natl. Bank Bldg., preparing plans 3 story, 150 x 150 ft. rein.-con. garage. Owner's name withheld. Richards & Fry, represented by California Garage & Service Corp., lessee.

Calif., Los Angeles — Biltmore Garage Corp. having plans prepared by Stanton, Reed & Hibbard, Metropolitan Bldg., 8 story, 114 x 165 ft. garage, rein.-con., 4th and Olive Sts. $350,000.

Calif., Los Angeles—Continental Furniture Mfg. Co., 1636 Bryant St., San Francisco, having plans prepared by S. Heiman, 57 Post St., San Francisco, group rein.-con. factory buildings, 59th St. and Hanson Ave. $1,000,000.

Calif., Los Angeles—Los Angeles Warehouse Co., 316 Commercial St., had plans prepared by A. C. Martin, Higgins Bldg., 5 story, rein.-con. warehouse, San Pedro St. To exceed $80,000.

Calif., Los Angeles—Los Angeles Railway Co., Los Angeles Ry. Bldg., having plans prepared brick and steel shop, 54th St. To exceed $85,000. Private plans.

Calif., Los Angeles—R. T. Warner, c/o C. F. Skilling, archt., Bradbury Bldg., had plans prepared 1 story, 50 x 150 ft., brick garage, South Figueros St.

Calif., San Francisco — Reinhardt Lumber & Planing Mill Co., 17th and Kansas Sts., having plans prepared 50,000 sq.ft. lumber mill, incl. sash and door factory, dry kiln and lumber sheds, Jerrold Ave. and Napoleon St. To exceed $100,000. Private plans.

Calif., Santa Monica—Redmen Fireproof Storage Co. had plans prepared by R. Hutchinson, 924 Van Nuys Bldg., Los Angeles, 5 story, 53 x 100 ft. rein.-con. warehouse.

Ont., Brantford — Brandon Shoe Co., Brantford, plans to construct building destroyed by fire, incl. separate boiler house, 1 and 2 story, 60 x 160 ft. factory, etc. $75,000. Private plans.

Ont., Tillsonburg—Norfolk Shoe Co. having plans prepared by Watt & Blackwell, Bank of Toronto Bldg., London, brick factory. $50,000.

B. C., South Vancouver—Dominion Creosoting & Lumber Co., Ltd., North Arm of Fraser River, takes bids in about 3 weeks, saw mill. $200,000-$250,000. A. J. Lustig, Lewis Bldg., Portland, Ore., archt. and engr.

BIDS DESIRED

N. Y., Brooklyn—Rubel Coal & Ice Corp., Glenmore Ave., will build 50 x 150 ft. storage plant, rein.-con and brick, plain foundation, Lott and Rockaway Aves. $50,000. Work will be done by separate contracts under supervision of E. M. Adelsohn, archt. and engr., 1778 Pitkin Ave.

N. Y., Brooklyn—Eberhard Faber Pencil Co., 37 Greenpoint Ave., will build 6 story, brick, steel and concrete factory, plain foundation, $350,000. Work will be done by separate contracts under supervision of Ebling, Magnuson & Kleinert, archts. and engrs., 52 Vanderbilt Ave.

N. Y., Watertown—May 25, at office of J. W. Ackerman, city mgr., hydraulic electric plant. P. B. Sutton, city engr.; adv. this issue.

Pa., Johnstown — Trabold Motor Co., Swank Bldg., will build 1 story, 90 x 220 ft. concrete, brick and steel factory, Ferndale Ave. Work will be done by separate contract. Noted Mar. 29.

Pa., Pittsburgh—A. M. Bowman, engr., Bessemer Bldg., taking bids 4 story and basement, 60 x 103 ft. brick and steel factory, Western Ave., for Conroy-Prugh Co., 1414 Western Ave. $80,000.

Pa., Pittsburgh—R. M. Trimble, archt., Ferguson Bldg., taking bids 3 story and basement, 30 x 111 ft. machine shop, brick, Reedsdale St., for M. Hardsogg Co., 916 South Ave.

O., Cleveland—May 18, by A. Greenwald, Society for Savings Bldg., 1 story, 125 x 135 ft., brick and timber warehouse and garage, 1215 Central Ave. $50,000. N. Petti, Williamson Bldg., archt.

Mich., Detroit—F. Swirsky & Co., archts., 155 West Congress St., taking bids and opens same about May 20, 2 story and basement, 85 x 100 ft., brick and steel creamery, plain foundation, Cardoni Ave., for Homestead Creamery Co., c/o archts. $50,000.

Mich., Detroit — Bonnah & Chaffee, archts., 528 Farwell Bldg., taking bids and opens same about May 15, 1 and 2 story, 80 x 150 ft., 80 x 250 ft. and 50 x 150 ft. steel buildings, Fort Blvd., for Detroit Steel Co., 6189 Hamilton Ave.

Mich., Pontiac — A. Kahn, archt., 1000 Marquette Bldg., Detroit, taking bids and opens same about May 15, 1 story and basement, 70 ft. high, 85 x 113 ft. rein.-con., brick and steel power house, plain foundation, two 70 x 70 ft. tanks, Baldwin Ave., for Oakland Body Corp.

Ill., Chicago—Brenner, Monley & Merris, c/o Fox & Fox., archts., 38 South Dearborn St., receiving bids 1 story, 105 x 300 ft. factory, rein.-con., brick and steel, Kedzie Ave. and Drainage Canal. $300,000.

Ill., Chicago—See "Buildings.'

Ill., Chicago—Jobson & Hubbard, archts., 225 North Michigan Ave., receiving bids 3 story, 100 x 117 ft. warehouse, fireproof, 5728-32 South Halsted St., for Goldstein Furnitdre Co., 4810 South Ashland Ave. $150,000.

Wis., Kiel—May 14, by W. F. Neumann, archt., 114 Grand Ave., Milwaukee, 1 story, 62 x 84 ft. machine shop, brick and timber, plain foundation, for Kiel Machine Co. $40,000.

Wis., Madison—M. P. Schneider, archt., 401 West Doty St., receiving bids 2 story, 99 x 127 ft., rein.-con., brick and steel garage, Bedford St., for Wiedenbeck-Doblein Co., 601 West Mifflin St. $40,000.

Wis., Madison—F. L. Kronenberg, archt., Carroll Blk., taking bids 2 story, 60 x 150 ft. garage, rein.-con. and brick, plain foundation, Washington St., for Capitol Garage Co. $80,000.

Wis., Park Falls—Flambeau Paper Co. taking bids 1 and 2 story, about 100 x 150 ft. machine and carpenter shops, etc., brick and concrete, plain foundations. $160,000. Brust & Philipp, 405 Bway. Bldg., Milwaukee, archts.

Wis., Sheboygan — Ebenreiter Lumber Co., 1215 Erie Ave., taking bids 1 story, 58 x 98 ft. woodworking factory, brick, rein.-con. and stone, plain foundation. $40,000. W. C. Weeks, 729 Ontario Ave., archt. Noted Apr. 26.

Calif., South San Francisco (San Francisco P. O.)—Metal & Thermit Corp., c/o Swift & Co., receiving bids rolling mill buildings, Swift Ave. $2,000,000. E. W. Kardos, dist. mgr. Private plans. Contract for steel let to Union Constr. Co., Balfour Bldg., San Francisco.

CONTRACT AWARDED

Conn., Hartford—L. G. Carroll, 24 Allyn St., 3 story, 30 x 90 ft garage, etc., brick and steel, plain foundation, 161 Trumbull St., to Lawrence & Coe Constr. Co., 272 Trumbull St. Archts. est. $50,000. Noted Apr. 26.

Conn., Hartford—T. J. Hurley, 164 Seymour St., 1 story, 60 x 140 ft. garage, brick and steel, plain foundation, 47 Park St., to F. Hendron, 24 May St. Archts. est. $45,000.

Conn., Meriden—O. G. Ost, 42 Stone St., 2 story, 40 x 80 ft. garage, brick and steel, plain foundation, to H. Wales Lines Co., 134 State St. Archts. est. $50,000.

N. Y., Niagara Falls—Gazette Publishing Co., 310 Niagara St., 3 story, 33 x 132 ft., brick and stone plant, to Wright & Kremers, Gluck Bldg. Archts. est. $50,000.

N. J., Newark—Newark News, Market St., 82 x 165 ft., rein.-con., brick and steel plant, 215 Market St., to F. Kilgus, Inc., 13 South 6th St.

N. J., Trenton—Magnetic Pigment Co., 601 Cass St., 4 story, 45 x 65 ft., brick, steel and concrete plant addition, to N. A. K. Bugbee Co., 206 East Hanover st. $40,000.

Pa., Cresson—Link Motor Co., 2 story, part basement, 70 x 100 ft. rein.-con. and steel garage, Laurel Ave., to F. J. Cupples Lumber Co., Cresson, cost plus basis.

Pa., Lancaster—Bayuk Bros., 3rd and Spruce Sts., 3 story and basement, 67 x 182 ft. addition to factory, to H. Wohlsen, Woolworth Bldg., $150,000.

Pa., Pittsburgh — McKinney Mfg. Co., Penn and Preble Aves., 1 story, 120 x 182 ft. addition to storage house, Penn and Preble Aves., to H. Shenk Co., Century Bldg. Archts. est. $150,000. Noted Apr. 19.

Pa., Scranton—J. Notarinna and P. Battista, Wyoming Ave., 1 story, 80 x 150 ft. concrete, brick and steel garage, Wyoming Ave., to Stender Bros., Providence, Rd. and Albright Ave. Archts. est. $60,000.

Pa., Tyrone—West Virginia Pulp & Paper Co., 200 5th Ave., New York City, will build 2 story, 80 x 150 ft. rein.-con. and steel mill here, by day labor. Private plans.

Va., Richmond — Everett Waddey Co., 1105 E. Main St., 6 story factory, 35,000 ft. floor space. South 11th St., to J. T. Wilson Co., Inc., Main St., $150,000.

O., Cleveland—Arnold Creamery Co., 701 Woodland Ave., 3 story, 60 x 90 ft., brick and concrete factory addition, to S. W. Emerson Co., Union Bldg. Archts. est. $60,000. Noted Apr. 19.

Mich., Detroit—U. S. Radiator Corp., Campbell and Anthon Aves., 1 and 2 story, 27 and 40 ft. high, 50 x 250 ft. and 1 story, 40 x 60 ft. rein.-con., brick and steel foundry, plain foundation, Campbell Ave., to Austin Co., 1954 Penobscot Bldg., $105,000.

Mich., Detroit—L. Smith Paper Co., 2168 East Grand Blvd., 3 story, 40 x 150 ft. rein.-con. and brick warehouse, plain foundation, East Grand Blvd. and Duboise St., to W. N. Miller, 1303 Kresge Blvd.

Ill., Chicago—Armour & Co., Union Stock Yards, 4 story, 100 x 150 ft. slaughter house, rein-con., brick and steel, by day labor. $150,000. R. C. Clark c/o owner, archt.

Ill., Chicago—Baers Express and Storage Co., 1927 Milwaukee Ave., 5 story, 50 x 150 ft. warehouse, fireproof, 2229 Milwaukee Ave., to Schmidt Bros. Constr. Co., 22 East Huron St., $150,000. Noted Mar. 22.

Ill., Chicago—Coca Cola Co., Plum St., Atlanta, Ga., 5 story, 100 x 250 ft. fac-

Industrial Works (Continued)

tory, rein.-con., brick and steel, 4000-20 West Filmore St., here, to E. P. Strandberg Co., 232 East Erie St. Archts. est. $250,000.

Ill., Chicago — La Salle Hotel Co., 10 North La Salle St., 6 story, 40 x 180 ft. garage, rein.-con., brick and steel, 209-11 West Washington St., to G. A. Fuller Co., 140 South Dearborn St. Archts. est. $200,000. Noted Apr. 5.

Wis., Delavan—W. H. McCommons, prop. of Overland Motor Co., will build 2 story, 50 x 90 ft. garage, by day labor. $40,000. Private plans.

Wis., Kenosha—Mantkus Motor Sales Co., 313 Park St., 1 story and basement, 64 x 124 ft. concrete and brick garage, plain foundation, to L. Klemm, 1127 Elizabeth St. Archts. est. $40,000.

Wis., Milwaukee—Shadbolt & Boyd Iron Co., 129 West Water St., 1 story, 125 x 250 ft., brick and timber warehouse, plain foundation, Wright St., to A. Buchholz & Son, 907 11th St. Archts. est. $50,000.

Wis., Oconto Falls—Falls Canning Co., 2 story, 50 x 84 ft. and 1 story, 30 x 32 ft. warehouse and boiler house, brick and timber, plain foundation, to H. J. Selmer Co., McCartney National Bank Bldg., Green Bay. Archts. est. $40,000. Noted Apr. 12.

Wis., Sheboygan—F. Hensel Co., Center and North 7th Sts., 3 story, 60 x 100 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation, to Verhulst Co., 2220 Calumet Dr. Archts. est. $40,000. Noted Apr. 5.

Wis., South Milwaukee — Bucyrus Co., 100 x 106 ft., 60 x 65 ft., 40 x 41 ft. and 20 x 30 ft. foundry additions, 42 x 47 ft. shop, etc., all 1 story, brick and steel, plain foundations, to P. Riesens Sons, 1018 Humboldt Ave., Milwaukee. Noted Apr. 12.

Ia., Muscatine—Electric Light Trustees, complete electric light plant and system to Merkle Machy. and Contg. Co., 1733 Walnut St., Kansas City, Mo., $389,000. Noted Apr. 19.

Minn., Virginia—Enlarging central heating station and extending heating mains in 17 blocks, to Range Contg. Co., 412 1st National Bank Bldg., $66,975. Noted Mar. 29.

Tex., San Antonio—Frank-Strauss Co., 221 West Commerce St., 5 story, 80 x 190 ft., rein.-con. and brick factory, concrete pile foundation, South Flores St., to L. T. Wright & Co., City National Bank Bldg., $174,800.

Okla., Antlers — Oklahoma Power Co., Okmulgee, plans hydro-electric power plant on Kiamichi River, here. $500,000. C. H. Kretz, pres. Engineer not selected. Work will probably be done by day labor.

Utah, Salt Lake City—See "Buildings."

Calif., Los Angeles—Dohrmann Commercial Co., 436 South Bway., 5 story and basement, rein.-con. warehouse, Factory St. near Alameda St., to Clinton Constr. Co., 5th and Folsom Sts., San Francisco, $175,000.

Calif., Los Angeles—S. Selig & Co., 5 story and basement, rein.-con. warehouse, Alameda and Vernon Sts., to Macdonald & Kahn, Loew State Bldg., $350,000. Noted Dec. 21.

Calif., Oakland—Western Waxed Paper Co., Monadnock Bldg., San Francisco, 1 story, concrete factory, Doyle St., to Barrett & Hilp, 918 Harrison St., San Francisco, $60,000. Noted Apr. 26.

Calif., San Francisco—S. Schell, 180 Jessie St., will build 3 story, 75 x 100 ft., brick and steel warehouse, Natoma and 9th Sts., by day labor. $55,000.

Calif., San Francisco—Palm Olive Soap Co., 433 Brannan St., 2 story, rein.-con. warehouse, 2nd St. near South Park, to Macdonald & Kahn, 130 Montgomery St., $40,000.

Calif., San Francisco—Bass Heuter Paint Co., 816 Mission St., 4 story, concrete warehouse, 24th and Kansas Sts., to Barrett & Hilp, 918 Harrison St., $54,000. Noted May 3.

Buildings

PROPOSED WORK

Conn., Bristol—Armory—Connecticut National Guard, Broad St., Hartford, plans brick and steel, plain foundation, here. $200,000. L. B. Barbour, brigadier general.

Conn., Hartford—Apartment—I. Mana, 27 Kilbourne St., having plans prepared by J. E. Marchetti, 721 Main St., 2 and 3 story, 60 x 70 ft. and 60 x 90 ft. brick, plain foundation, Retreat Ave. $200,000.

Conn., Hartford—Office—Judd & Co., 750 Main St., having plans prepared by W. F. Brooks, Lewis and Gold Sts., 7 story, 70 x 82 ft., rein.-con., plain foundation, Pearl and Lewis Sts. $250,000. Noted Apr. 4.

Conn., Manchester—Armory—Connecticut National Guard, Broad St., Hartford, plans brick and steel, plain foundation, here. $175,000. L. B. Barbour, brigadier general. Engineer and architect not selected.

Conn., Mystic — Dormitory — Mystic Oral School for the Deaf, plans 3 story, brick, plain foundation. $265,000. W. J. Tucker, supt. Engineer and architect not selected.

Conn., New Haven — Apartment — F. Teitelman, 220 State St., having plans prepared by C. H. Abramowitz, 42 Church St., 4 story and basement, 110 x 155 ft., brick and steel, Congress Ave. $200,000.

Conn., New Haven—Armory—Connecticut National Guard, Broad St., Hartford, plans brick and steel, plain foundation, here. $500,000. L. B. Barbour, brigadier general. Engineer and architect not selected.

Conn., Rockville — Bank, etc. — Peoples Saving Bank, 5 Park St., plans 3 story, 70 x 120 ft., brick and stone, plain foundation, 5 Park St. $155,000. Engineer and architect not selected.

N. Y., Albany—Association—Y. M. C. A., 60 North Pearl St., plans new association building. $500,000 - $1,000,000. Engineer and architect not selected.

N. Y., Albany—Memorial—Fort Orange Post, Amer. Legion, plans 6 story memorial building. $300,000. T. B. Wheeler, Loudenville, Albany, commander. Engineer and architect not selected.

N. Y., Batavia—Theatre—L. H. Lempert & Son, archts., 347 Cutler Bldg., Rochester, preparing plans new theatre, East Main St. $150,000-$190,000. Owner's name withheld.

N. Y., Brooklyn — Bank — Peoples Trust Co., 885 Flatbush Ave., soon takes bids 5 story, brick, steel and stone, plain foundation, Flatbush and Church Aves. $250,000. Ludlow & Peabody, 101 Park Ave., New York, archts. H. G. Balcom, 10 East 47th St., New York, engr.

N. Y., Gouverneur—Office and Theatre—W. Gauthier, owner of Gauthier Theatre, plans 3 story, ornamental brick, steel and concrete. $175,000.

N. Y., Ilion—Schools—Defeated $395,000 bonds additions to high school and West Hill school. Noted May 3.

N. Y. New Rochelle—Theatre and Apartment—M. Geviner, c/o H. R. Burroughs, archt. and engr., 70 East 45th St., New York, having sketches made, brick, steel and stone, plain foundation, Division St., here. $500,000.

N. Y., New York—Hospital—Women's Hospital of Bronx, c/o Bloch & Hesse, archts. and engrs., 18 East 41st St., soon takes bids brick, steel and stone, plain foundation, Manida Ave. $200,000. Noted July 20.

N. Y., New York—School—Bd. Educ., 500 Park Ave., soon takes bids P. S. 73, 3 story, brick, steel and stone, plain foundation, West 166th St. and Woodycrest Ave. $425,000. W. H. Gompert, Flatbush Ave. extension and Concord St., Brooklyn, archt. and engr.

N. Y., New York—Theatre—B. F. Keith, 1564 Bway., soon takes bids 110 x 160 ft., brick, steel and stone, plain foundation, Fordham Rd. $300,000. T. W. Lamb, 644 8th Ave., archt. and engr.

N. Y., Nunda—Schools—Plans election to vote on $150,000 bonds new school. Engineer and architect not selected.

N. Y., Prattsburg—School—Bd. Trustees Franklin Academy having plans prepared by I. E. Hill, 87 Seneca St., Geneva, 2 story, brick, steel and concrete. $150,000. Noted Mar. 15.

N. Y., Scotia—High School—Bd. Educ. Glenville Dist. 2, having plans prepared by J. M. Ryder, 16 Swan St., Schenectady, brick, steel and concrete. $270,000. Noted Mar. 22.

N. Y., Webster—School—Bd. Educ. plans 2 story, concrete, brick and steel. $150,000-$160,000. E. E. Smith, village pres.

N. J., Jersey City — Bank — Greenville Bank & Trust Co., Ocean Ave., having plans prepared by A. C. Bossom, archt. and engr., 680 5th Ave., New York City, 1 story, 60 x 105 ft., brick, steel and stone, plain foundation, Ocean and Lembeck Aves. $175,000.

N. J., Newark—School—Bd. Educ., City Hall, having plans prepared by Guilbert & Bettelle, archts. and engrs., 2 Lombardy St., 3 story, brick, steel and stone, plain foundation, Wilson Ave. $400,000.

N. J., Newark—School—Bd. Educ., Broad St., having plans prepared by Guilbert & Bettelle, 2 Lombardy St., 3 story, brick, steel and stone, plain foundation, Maple and Goldsmith Aves. $600,000.

N. J., Princeton—Hotel—Princeton Inn Co., c/o A. J. Thomas, archt. and engr., 15 East 47th St., New York City, soon takes bids brick, steel and stone, plain foundation, Alexander St., here. $350,000. Noted Dec. 7.

Pa., Cambridge Springs — School — Bd. Educ. plans brick additions. $150,000.

Pa., Clearfield—Hospital—Clearfield Hospital having plans prepared by Howard & Thatcher, Deposit Natl. Bank Bldg., Dubois, 2 story and basement, brick and steel addition. $250,000.

Pa., Dubois—Y.M.C.A., c/o W. Roundsley, having plans prepared by Howard & Thatcher, Deposit Natl. Bank Bldg., 1 and 3 story and basement, 50 x 90 ft. and 80 x 120 ft. brick and tile, Liberty Blvd. $150,000.

Pa., Ellwood City—Hotel—Chamber of Commerce plans modern hotel. $150,000. Engineer or architect not selected.

Pa., Luzerne — School — Sacred Heart Congregation having plans prepared by Schmitt & Schroader, Wilkes-Barre, 2 story, brick, to exceed $150,000.

Pa., Mechanicsburg—High School—Bd. Educ. having plans prepared by C. J. Lappley, Cotterel-Ebner Bldg., Harrisburg, 3 story and basement, 100 x 120 ft. rein.-con. and brick, South High St. Election in November to vote on $150,000 bonds.

Pa., Nanty-Glo—Hospital—Citizens Com., H. Carnahan, chn. and E. Carmel, secy., plan 3 story and basement, 100 x 110 ft., Roberts St. $150,000. Engineer and architect not selected.

Pa., Scranton—Theatre—M. E. Comerford, c/o Comerford Amusement Corp., 303 Lackawanna Ave., plans theatre, Wyoming Ave. To exceed $500,000.

Md., Baltimore—Apartment—C. R. Bealmear and S. R. Boyd, 12 East Lexington St., having plans prepared by C. N. and N. Friz, Lexington Bldg., 5 story, brick, plain foundation, University Parkway and 40th St. $250,000.

Md., Baltimore—Apartment—H. D. Bennett, 2114 Allendale Rd., soon lets contract 4½ story, 90 x 113 ft., brick, Bateman Ave. and Hilton St. $175,000. J. Freund, Jr., 1307 St. Paul St., archt.

Md., Baltimore — Apartment — J. I. Hebrank, Fidelity Bldg., plans 6 story, 50 x 150 ft., brick, plain foundation, Windsor Mill Rd. $200,000. C. H. Hebrank, Strathmore Ave., archt.

Md., Baltimore — Parsonage — St. Johns Evangelical Lutheran Church having plans prepared by O. G. Simonson, Inc., Maryland Casualty Tower, 2 story and basement, 55 x 160 ft., brick, plain foundation, Lombard and Catherine Sts. $150,000.

Md., Baltimore—School—Mayor and City Council having plans prepared by Smith & May, Calvert Bldg., 3 story and basement, 180 x 350 ft., with 1 story and basement, 65 x 160 ft. manual training department, brick and rein.-con., plain foundation, Hilton St. and Edmondson Ave. $650,000.

Md., Baltimore—Store—Excello Gas Illuminating Co., 312 North Eutaw St., had plans prepared by S. Russell, 11 East Lexington St., 4 story, 25 x 167 ft., brick, plain foundation, 411 North Howard St. $150,000.

Md., Catonsville — Church, etc. — Catonsville Methodist Episcopal Church, 4 Melvin Ave., plans 2 story, stone church, Sunday school and parsonage, Frederick Rd. and Melvin Ave. $200,000. W. M. Gieske, Gunther Bldg., Baltimore, archt.

Md., Salisbury — Hospital — Buckler & Fenhagen, archts., 325 North Charles St., Baltimore, soon let contract 2½ story, concrete and brick, plain foundation, here, for Pine Bluff Tuberculosis Sanitarium. $175,000.

D. C., Wash.—Opera House, Bank and Office—Washington Opera Co., c/o G. O. Totten, Jr., archt., 800 17th St., N. W., having plans prepared opera house, bank and office building, Dupont Circle. $1,000,000.

Fla., St. Petersburg — Apartment — Schooley-Murphy Co. having plans prepared by H. E. Wendell, St. Petersburg, 3 story, 50 x 200 ft., 4th Ave. N., between 3rd and 4th Sts. $150,000.

Fla., St. Petersburg—Hotel—E. M. Elliott and associates having plans prepared by G. L. Preacher, Healy Bldg., Atlanta, Ga., 800 room hotel, 5th Ave. N. and Beach Drive. $2,000,000.

Ala., Birmingham—Office—Southern Ry. Co., Amer. Trust Bldg., plans 10 story, 50 x 100 ft., rein.-con. and steel, I Ave. and 22nd St. N. $750,000.

Ala., Ensley — Chapel, etc. — Echols & Angwin, Ave. F, plans 2 story, 75 x 100 ft. chapel, morgues, offices, etc., brick and

Buildings (Continued)

stone. $150,000. Engineer and architect not selected.

Ala., Tuscaloosa—Schools—Election June 18, to vote on $500,000 bonds building high school, remodeling old buildings and other improvements.

Tenn., Nashville—Office—R. Caldwell, 214 Union St., having plans prepared by Marr & Holman, Stahlman Bldg., 10 story, 4th and Union Sts. $500,000.

Ky., Louisville — Hotel — Citizens Hotel Co., soon takes bids 18 story, 124 x 150 ft., brick and steel, 5th and Walnut Sts. $2,300,000. B. B. Davis, Norton Bldg., engr. and archt. Noted Mar. 29.

Ky., Louisville — Office — Avery Building Assn., 525 West Market St., plans 3 story, West Market St. $150,000. Engineer and architect not selected.

Ky., Louisville—Temple—Scottish Rite Assn., 438 6th St., having plans prepared by Nevin, Wischmeyer & Morgan, engrs. and archts., Starks Bldg., temple, 4th and Breckenridge Sts. $750,000.

O., Canton—Hotel—Pythian Castle Co. plans 7 story, brick and steel addition to Hotel Northern, 6th St. and Market Ave. N. $300,000.

O., Cleveland — Commercial — Phoenix Mortgage Co., c/o F. A. Foyle, 947 Chester Ave., plans 4 story, brick, steel and concrete, East 17th St. and Superior Ave. $150,000. Private plans. Noted Feb. 8.

O., Cleveland—Commercial—J. W. Wilson, 8314 Euclid Ave., having preliminary plans prepared by A. W. Harris, Discount Bldg., 3 story, brick, steel and concrete, 5205 Euclid Ave. $150,000.

O., Dayton—Bank and Office—Market Savings Bank, Wayne Ave., plans 4 story and basement, 86 x 135 ft., rein.-con. and brick, plain foundation, Wayne and Richard Aves. $150,000. Engineer and architest not selected.

O., Dayton—Club—Dayton City Club, 1st and Main Sts., having plans prepared by Schenck & Williams, Mutual Home Bldg., 4 story, 78 x 104 ft., brick, rein.-con. and stone, plain foundation. $600,000.

O., Mineral Ridge—Schools—Plans election to vote on $150,000 bonds for 12 room addition to high school and $50,000 bonds addition to Evansville St. school. Engineer and architect not announced.

O., Youngstown — Store and office — McCrory Stores Corp. plans 6 story, brick and steel, West Federal St. $1,000,000. C. F. Owsley, Mahoning Bank Bldg., archt.

Ind., Indianapolis—Memorial Shrine—State, City and Marion Co. plan war memorial, base 208 ft. square, 20 ft. high, supporting 96 x 96 ft. shrine, 170 ft. high. $2,000,000. Walker & Weeks, 1900 Euclid Ave., Cleveland, O., archts.

Mich., Adrian—High School—Bd. Educ. having preliminary plans prepared by B. C. Wetzel & Co., 2317 Dime Bank Bldg., Detroit, 2 story and basement, 90 x 300 ft., rein.-con., brick and steel, plain foundation. $450,000.

Mich., Battle Creek—Auditorium, Lyceum, etc.—F. Brigham, c/o L. Y. Post, Post Tavern, having plans prepared by A. B. Chanel, Post Bldg., 2 story and basement, 40 x 60 ft. rein.-con., brick and steel auditorium, lyceum, observatory and greenhouses on Country Club grounds. $500,000.

Mich., Detroit—Apartment—M. Satovsky & Son, 654 East Kirby Ave., having plans prepared by M. H. Finkel, 919 Majestic Bldg., 4 story and basement, 120 x 150 ft., brick and steel, plain foundation, Dumbarton Rd. $350,000.

Mich., Detroit—Clubhouse—Lakeside Park Club, 610 Farwell Bldg., having plans prepared by Beckett & Akitt, 73 Monroe Ave., 2 and 3 story, 60 x 200 ft., brick and steel, plain foundation, Lake St. $150,000.

Mich., Detroit—Schools—Bd. Educ. having plans prepared by Malcomson, Higginbotham & Palmer, 405 Moffatt Bldg., 13 rein.-con., brick and steel schools as follows: Morley School on Beaumont Ave., McMillan School on West End Ave., Brady School on Joy Rd., Custer School on Linwood Ave., Noble School on Fullerton Ave., Winterhalter School on Broad St., Roosevelt School on Grand River Ave., Western High School on Scotten Ave., Davison School on Davison Ave., Lawley School on Dequindre Ave., also Minden, Hazelridge and Foch Intermediate Schools on new sites. $4,382,217.

Mich., Highland Park (Detroit, P. O.)—Apartment—Balfour Manor Bldg. Corp., c/o C. N. Agree, archt., 1133 Book Bldg., Detroit, having plans prepared 3 story and basement, 151 x 241 ft. brick, steel and stone, plain foundation, Glendale Ave. $350,000.

Mich., Ironwood—Church—St. Ambrose Congregation soon takes bids 2 story, brick and tile, plain foundation. $150,000. J. Hollinger, pastor. E. Brielmaier & Sons Co., 432 Bway., Milwaukee, Wis., archts. Noted Apr. 5.

Ill., Chicago—Apartment—M. A. Bender, 7325 Fargo Ave., plans 3 story, 100x120 ft., rein.-con., brick and steel, 1421-29 Birchwood Ave. $200,000. M. L. Bein, 139 North Clark St., archt.

Ill., Chicago—Apartment—R. C. Harris, c/o Harris & Jillson, archts., 190 North State St., plans 3 story, 39 x 174 ft., rein.-con., brick and steel, 1226-28 Pratt Blvd. $150,000.

Ill., Chicago — Apartment — Holzman & Kout, c/o Rissman & Hirschfield, archts., 64 West Randolph St., plans 3 story, 100 x 125 ft., rein.-con., brick and steel, Monroe and St. Louis Sts., $150,000.

Ill., Chicago—Apartment—W. D. McJunkin c/o Kocher & Larson, archts., 6250 South Halsted St., plans 3 story, 80 x 150 ft., rein.-con., brick and steel, Wilson St. and Bway. $250,000.

Ill., Chicago—Hotel—H. Mack, c/o Lexington Hotel, 2135 Michigan Ave., plans 7 story and basement, 90 x 136 ft., rein.-con., brick and steel, North Clark St. and North Park Ave. $1,500,000. W. W. Ahlschlager, 65 East Huron St., archt.

Ill., Chicago—Hotel and Store—Abbott Investment Co., 179 West Washington St., plans 13 story and basement, 62 x 132 ft., rein.-con., brick and steel, 1533-45 North Dearborn St. $1,000,000. C. E. Frazier, 30 North Dearborn St., archt.

Wis., Fond du Lac—Hotel—Hotel Wisconsin Realty Co., 86 Michigan St., Milwaukee, having plans prepared by M. Tulligren & Sons Co., 425 East Water St., Milwaukee, 8 story and basement, 60x100 ft., brick, tile and concrete, plain foundation, (second unit), here. $300,000.

Wis., Milwaukee—Church—Sherman Blvd. Congregational Church, 728 46th St., having preliminary plans prepared by Buemming & Guth, 521 Jackson St., 2 story, brick and tile, plain foundation, Sherman Blvd. $150,000.

Wis., Milwaukee—Temple—Milwaukee Elks Lodge, 448 Jefferson St., rejected bids brick and concrete, plain foundation, Juneau Pl. $1,000,000. Will revise plans and readvertise. R. Messmer & Bro., 221 Grand Ave., archts. Noted Apr. 5.

Wis., Oconomowoc—School and Dormitory—A. C. Eschweiler, archt., 141 Wisconsin St., Milwaukee, takes bids about May 14, 3 story and basement, 2 wings each 42 x 126 ft., brick, tile and concrete, plain foundation, here, for Redemptionist Fathers. $300,000-$400,000.

Wis., Stevens Point—Courthouse—Portage Co. plans 3 story and basement, brick and concrete addition, plain foundation. $150,000. R. McCallum, co. clk. Engineer and architect not selected.

Ia., Boone—High School—Bd. Educ. having plans prepared by Dougher, Rich & Woodburn, 320 Valley National Bank Bldg., Des Moines, junior high school and repairs to grade schools. $225,000 bonds voted. Noted Mar. 22.

Ia., Sioux City — Hospital — St. Joseph Mercy Hospital having plans prepared by H. W. Pipp, Ann Arbor Savings Bank Bldg., Ann Arbor, Mich., 6 story and basement, rein.-con., brick and steel addition, 21st and Court Sts. $250,000. Noted May 3.

Ia., Winfield—School—Bd. Educ. having plans prepared by Dougher, Rich & Woodburn, 320 Valley National Bank Bldg., Des Moines, for school. $160,000. J. M. Lindley, secy.

Minn., Brainard—Hotel—J. W. Kopp and C. O'Brien having plans prepared by Fisher & Jackson, archts. and engrs., Bemidji, 5 story and basement, 50 x 140 ft., concrete and steel. $180,000.

Minn., Hopkins—School—Bd. Educ. having plans prepared by C. T. McElroy, 606 Jewelers Exch., Minneapolis, 2 story and basement, rein.-con., brick and tile. $200,000.

Minn., Slayton—School—Bd. Educ. plans 2 story and basement, rein.-con., brick and tile. $150,000. C. C. Peterson, clk. Engineer and architect not announced.

Kan., Iola—High School—Bd. Educ. having preliminary plans prepared by T. W. Williamson & Co., 312 Central National Bank Bldg., Topeka, 2 story and basement, 90 x 140 ft., rein.-con., brick and stone. Election soon to vote on $150,000 bonds.

Kan., Lawrence—Store and office, etc—R. E. Scamell, archt., 614 New England Bldg., Topeka, takes bids about July 29, 3 story and basement, 110 x 117 ft., rein.-con., brick and stone, for I. O. O. F. Lodge. $150,000.

Kan., St. Francis—Court House—Cheyenne Co. having preliminary plans prepared by T. W. Williamson & Co., 312 Central National Bank Bldg., Topeka, 3 story and basement, rein.-con. and brick. $150,000.

Kan., Topeka—Office—National Reserve Life Insurance Co., 811 Kansas Ave., having plans prepared by R. E. Scamell, 614 New England Bldg., 12 story and basement, 84 x 130 ft., rein-con., brick, steel and terra cotta.

Kan., Wellington — High School — Defeated $200,000 bond issue for 3 story and basement, rein.-con., brick and stone. T. W. Williamson & Co., 312 Central National Bank Bldg., Topeka, archts. Noted Mar. 15.

Mo., Excelsior Springs — High School — Plans election soon to vote on $200,000 bonds new Senior High School and addition to Lincoln Bldg. Engineer and architect not selected.

Mo., Kansas City — Hospital — Italian American Hospital Assn. had plans prepared by E. P. Madorie, 1105 Republic Bldg., 4 story and basement, 150 x 200 ft., rein.-con., brick and stone. $150,000.

Mo., St. Louis—Hotel—D. Israel, Southeast 18th and Chestnut Sts., plans to add 2 story to present 3 story Princess Hotel and construct 5 story rein.-con. and brick addition, concrete pile foundation, on adjoining half-block, Chestnut St. from 17th to 18th Sts. $500,000. Engineer and architect not selected.

Mo., St. Louis—Hotel—Milly Realty Co., c/o Princess Hotel, plans 12 story, 73 x 90 ft., rein.-con. brick and steel, concrete pile foundation, Market St. $750,000. Engineer and architect not selected.

Tex., Dallas—Sanatorium—North Texas Conference Methodist Episcopal Church South, 807 Mercantile Bank Bldg., having plans prepared by De Witt & Lemmon, 507 Southwest Life Bldg., and soon takes bids 6 story and basement (1st unit) rein.-con., brick and stone, Ballard and Grover Sts. $400,000. Total $1,500,000.

Tex., Denton — High School — Election soon to vote on $200,000 bonds for senior high school.

Tex., Ft. Worth—Y. M. C. A., 914 Monroe St., having plans prepared by Clarkson & Gaines, 601 First National Bank Bldg., 4 story and basement, rein.-con., brick and stone. Noted Dec. 21.

Tex.—Groesbeck—Courthouse—Limestone Co. soon lets contract 3 story and basement, 104 x 168 ft., brick, steel, and concrete. $400,000. Joor Eng. Co., 601 Slaughter Bldg., Dallas, engrs. Midwest Eng. Co., Amarillo, archts, and engrs. Noted Dec. 21.

Tex., San Antonio—Auditorium—City takes bids about June 15, 2 story, 110 x 140 ft., rein.-con., brick, steel and stone, Romana Sq. $500,000. R. H. Cameron, 1115 City National Bank Bldg., archt. W. E. Simpson Co., National Bank Commerce Bldg., engrs. Noted Nov. 25.

Tex., San Antonio—Medical Arts—R. H. Cameron, archt., 1115 City National Bank Bldg., takes bids within 60 days, 12 story, 90 x 100 ft., rein.-con., steel, terra cotta and stone, East Houston and Losoya Sts. $650,000. Owner's name withheld. W. E. Simpson Co., National Bank of Commerce Bldg., engr.

Okla., Oklahoma City—Schools—Plans 6 new buildings or additions to present ones. Bond issue of $1,900,000 voted over year ago declared legal by Supreme Court, Apr. 24. J. G. Stearly, clk. Bd. Educ. Layton, Smith & Forsythe, Southwest Natl. Bank Bldg., archts.

Calif., Easton—High School—Washington Union High School Dist., having plans prepared by Coates & Traver, Rowell Bldg., Fresno, group of buildings, incl. administrative, academic, commercial, arts and science groups, brick. $155,000. Noted Apr. 5.

Calif., Eureka — Auditorium — City will vote on $200,000 bonds for auditorium. A. W. Kildale, city clk.

Calif., Fillmore—High School—Fillmore Union High School Dist. to vote on $200,000 bonds for high school.

Calif., Hanford—Lodge, Club and Store—Hanford Lodge 1250 B.P.O.E., plans lodge, club and store on 100 x 150 ft. site, West 7th and Redington Sts. $150,000.

Calif., Hollywood — Church — Crescent Heights Methodist Espiscopal Church, c/o H. L. Pearce, archt., Wright-Callendar Bldg., Los Angeles, having plans prepared church, frame and plaster. $175,000.

Calif., Long Beach—Hotel and Club—C. J. Harper, c/o Sea Gull Apartments, having plans prepared by H. L. Gogerty, 239 East Bway., 10 story and basement, concrete and steel, Ocean Blvd. and Locust St. To exceed $500,000.

Buildings (Continued)

Calif., Long Beach — Office — Interests represented by W. Horne Co., 38 American Ave., having plans prepared by Walker & Eisen, Pacific Finance Bldg., Los Angeles, 13 story, rein.-con., 3rd St. and American Ave. To exceed $500,000.

Calif., Long Beach—Office—R. D. Marshall, et al., 238 East 1st St., plan 5 story, probably rein.-con., Locust Ave. and 1st St. To exceed $250,000.

Calif., Los Angeles—Apartment—A. C. Blumenthal, Loew State Bldg., plans 8 story, rein.-con., 7th St. To exceed $250,000.

Calif., Los Angeles—Hotel—A. Mortimer, 818 Chapman Bldg., had plans prepared by L. A. Smith, 3rd St. and Western Ave., 5 story and basement, rein.-con., 2nd St. To exceed $200,000.

Calif., Los Angeles—Hotel—H. A. Stange, 1043 West 6th St., had plans prepared by H. W. Charlton, San Fernando Bldg., 4 story and basement, brick, West 6th St. $150,000.

Calif., Los Angeles — Office — Southern California Gas Co., 709 East 1st St., having plans prepared by Curlett & Beelman, Union Bank Bldg., 4 or 8 story, rein.-con. on 140 x 250 ft. site, Santa Fe and 7th Sts. To exceed $300,000.

Calif., Los Angeles—Theatre—Syndicate represented by J. M. Bowen, Van Nuys Bldgs., having plans prepared by G. A. Lansburgh, Junior Orpheum Bldg., rein.-con., Highland Ave. $200,000.

Calif., Los Angeles—Theatre and Store—West Coast Theatre Co., c/o Milwaukee Bldg. Co., archts., Wright-Callendar Bldg., having preliminary plans prepared theatre and store, fireproof, probably rein.-con., vicinity Vermont and Washington Sts. To exceed $500,000.

Calif., Oakland—Hospital—Oakland Hospital Assn., c/o M. I. Diggs, archt., 1901 Telegraph Ave., having plans prepared 8 story and basement, 131 x 175 ft., fireproof, northwest Telegraph and 31st St. $750,000.

Calif., Oakland — Hospital — Providence Hospital Assn., c/o R. A. Herold, archt., Forum Bldg., Sacramento, had sketches made 4 story, fireproof, Webster and Summit Sts. $500,000 or more.

Calif., Oakland — Office — Corporation headed by H. C. Hadden, Bank of Savings Bldg., having plans prepared by M. I. Diggs, 1901 Telegraph Ave., 5 story and basement, brick, vicinity of Telegraph Ave. and 31st St. $180,000.

Calif., Riverside—City Hall—Will vote on $150,000 bonds for city hall. L. Nafager, city engr.

Calif., San Bernardino—Hotel and Store—Platt Investment Co., plans 6 story, fireproof, E and 5th Sts. To exceed $150,000.

Calif., San Diego—Academy—Academy of Our Lady of Peace had plans prepared by J. C. Austin, Detwiler Bldg., Los Angeles, 2 story and basement, rein.-con. and steel. To exceed $150,000.

Calif., San Jose—Temple—C. Werner, archt., Humboldt Bank Bldg., San Francisco, takes bids in 3 months 4 story and basement, rein.-con., 3rd and James Sts., here, for San Jose Masonic Temple Assn. $250,000.

Calif., San Pedro—Club—Army & Navy Y.M.C.A., plans club, fireproof. To exceed $500,000.

Calif., Santa Ana—School—Voted $150,000 bonds for grammar school.

Calif., Taft—Store and Theatre—Valley Investment Co., c/o O. L. Clarke, archt., Brower Bldg., Bakersfield, had preliminary plans prepared, stores and theatre, brick, 4th and North Sts. $150,000.

Que., Sherbrooke — Hospital — Communante des Soeurs Grises, St. Vincent de Paul Hospital, plan addition. $600,000. J. W. Gregoire, 16 Wellington St. S., Montreal, archt.

Ont., Kitchener — Hospital — Watt & Blackwell, archts., Bank of Toronto Bldg., London, open bids about June 7, 3 story and basement, 150 x 185 ft. brick, King St., here, for Sisters of St. Joseph, Hamilton. $450,000.

Ont., London — Nurses' Home — Watt & Blackwell, archts., Bank of Toronto Bldg., open bids about May 31, 4 story and basement, 125 x 180 ft. brick, Grosvenor St., for Sisters of St. Joseph. $175,000.

Ont., Toronto—Clubhouse—St. Clair Recreation Club, 7 Boon Ave., plans 2 story, brick, Dufferin and St. Clair Sts. $200,000. B. Sykes, pres. Engineer or architect not selected.

Ont., Toronto — Clubhouse — Parkdale Canoe Club, Sunnyside Ave., plans 2 story, 150 x 200 ft., to replace one recently destroyed by fire. $150,000. Architect and engineer not selected.

Ont., Toronto—Office—General Building Corp., 366 Adelaide St. W., plans 14 story and basement, concrete, brick, steel and tile, King and York Sts. $1,000,000. Private plans.

Ont., Toronto—Office London Life Insurance Co., 72 Queen St. W., having plans prepared by Dowswell & Dolphin, 58 Wellington St., 7 story and basement, 52 x 180 ft. concrete, brick and steel, Bloor St. W. $250,000.

Ont., Toronto — Office — Manufacturers Life Insurance Co., Dominion Bank Bldg., plans 8 story, rein.-con. or steel, Bloor St. E. $1,500,000. Engineer or architect not selected.

Ont., Toronto—Parish Hall—Rogers Presbyterian Church, 29 East Lynn Ave., having plans prepared by J. N. Boulter, 307 Grace St., 2 story and basement, concrete, brick and steel. $230,000.

Ont., Toronto—Y. W. C. A., 21 McGill St., plans 3 story and basement, 100 x 130 ft. concrete, brick and steel, McGill St. $350,000. Architect not selected.

Ont., York Mills—College—St. Andrew's College, Rosedale Ave., having plans prepared by Sproatt & Rolph, 36 North St., Toronto, and takes bids in summer, 3 story, concrete, brick and steel. $400,000. Noted Apr. 19.

BIDS DESIRED

Me., Belfast—High School—May 19, by School Com., 3 story, 135 x 147 ft., rein.-con. and brick, plain foundation. To exceed $150,000. Kilham, Hopkins & Greely, 9 Park St., Boston, engrs. Noted Aug. 31.

N. Y., Brooklyn—School—May 15, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., addition to P. S. 99, East 9th St. between Ave. K and Ave. L. Noted May 3.

N. Y., Hamburg—High School—May 28, by Bd. Educ., rein.-con. and brick, Pleasant Ave. $350,000. F. A. Spangenberg, 250 Delaware Ave., Buffalo, archt. Noted Apr. 19.

N. Y., Huntington—School—May 12, by Bd. Educ., 68 x 150 ft., Woodbury Ave. $200,000. A. B. Sammis, Bank Bldg., archt.

N. Y., Lakewood—School—May 26, by Bd. Educ., 2 story, 60 x 168 ft., brick. $150,000. Johnson & Ford, Fenton Bldg., Jamestown, archts.

N. Y., Niagara Falls—Hotel—May 20, by Niagara Falls Hotel Corp., 11 story and basement, rein.-con., brick and steel, 1st and Jefferson Sts. $1,000,000. Kirkpatrick & Gannon, Gluck Bldg., archts. Noted Jan. 11.

N. J., Hightstown—School—May 15, by Bd. Educ., brick, steel and stone, plain foundation, Stockton St. $250,000. Guilbert & Bettelle, 2 Lombardy St., Newark, archts. and engrs.

Pa., Pittsburgh—School—May 17, by Bd. Educ., Fulton Bldg., constructing David B. Oliver School, 3 story and basement, 100 x 400 ft., Brighton Rd. $800,000. J. T. Steen & Son, Vandergrift Bldg., archts.

Pa., Phila. — Clubhouse — Phila. Rifle Club, 8th St. and Tabor Rd., taking bids 2 story and basement, 80 x 213 ft. brick, steel and stone, plain foundation. $300,000. C. P. Berger, 1512 Walnut St., archt.

Fla., Rockledge—Hotel—May 15, by H. R. Shares, secy. New Hotel Indian River Co., 4 story, 220 ft. front, metal lath and timber, on site of old Indian River Hotel. $200,000. R. D. Rummell, Rockledge, archt.

Fla., St. Petersburg—Office—May 15, by M. L. Elliott, archt., Citizens Bank Bldg., Tampa, 6 story, 50 x 100 ft., steel, 4th St., here, for E. M. Hall Development Co. $150,000.

O., Akron—Commercial—C. W. and G. L. Rapp, archts., State Lakes Theatre Bldg., Chicago, taking bids and open same about May 15, brick, steel and concrete, Main St., here, for B. F. Keith Theatre Co., Palace Theatre Bldg., New York City. $300,000. Noted Nov. 30.

O., Cleveland Heights (Warrensville, P.O.)—Church—J. H. MacDowell, archt., 510 Bulkley Bldg., Cleveland, taking bids and open same about May 15, 2 story, brick, steel and concrete, Fairmount Blvd., here, for Fairmount Blvd. Presbyterian Church, 13047 Cedar Rd., Cleveland. $150,000. J. B. Haydon, pastor. Noted Nov. 2.

Mich., Detroit—Apartment—J. A. Martin-Cooke, archt., 17732 Woodward Ave., taking bids 8 story and basement, 165 x 165 ft. brick and steel, plain foundation, Chene St. and Grand Blvd. Owner's name withheld.

Mich., Detroit — Clubhouse — Stratton & Snyder, archts., 1103 Union Trust Bldg., taking bids and opens same about May 15, 6 and 9 story, 90 x 120 ft. rein.-con., brick and steel, plain foundation, Park and Elizabeth Sts., for Womens City Club, 141 Bagley Ave. $500,000. Noted Mar. 1.

Ill., Chicago—Apartment—E. Forrester, 103 South Parkside Ave., receiving bids 3 story, 100 x 140 ft., fireproof, 238-46 North Parkside Ave. $175,000. W. C. Krieg, 105 North Clark St., archt.

Ill., Chicago—Apartment—D. M. Reid, 140 South Dearborn St., receiving bids 3 story, 130 x 135 ft., rein.-con., brick and steel, Kenneth St. and West End Ave. $350,000. R. F. France, 155 North Clark St., archt.

Ill., Chicago—Apartment-Hotel—Olsen & Urbain, archts., 155 North Clark St., receiving bids 3 story and basement, 100 x 150 ft., fireproof, 525-29 Arlington Pl., $750,000. Owner c/o F. D. Mateer, 420 Fullerton Ave.

Ill., Chicago—Store, Apartment and Office—A. M. Ruttenberg, archt., 64 West Randolph St., receiving bids 2 story, 65 x 287 ft., store, apartment, office and garage building, fireproof, Lincoln Ave. $200,000. Owner's name withheld.

Ill., Niles—(Chicago P. O.)—Dormitory—E. Brielmaier & Sons Co., archts., 432 Bway., Milwaukee, Wis., receiving bids 3 story and basement, brick, tile and concrete, here, for St. Hedwig's Industrial School. $300,000. Noted Nov. 2.

Wis., Fond du Lac—School—Stepnoski & Mehner, archts., Forest Ave., taking bids 2 story and basement, 138 x 140 ft., brick, tile and concrete, plain foundation, for St. Patricks Congregation, 19 East Follett St. $150,000. Noted Feb. 22.

Wis., Green Bay—May 15, by Foeller, Schober & Stephenson, archts., Nicollet Bldg., 2 story and baseemnt, 62 x 130 ft. plant, brick and concrete, plain foundation, for Green Bay Newspaper Co., 315 Cherry St. $150,000. Noted Apr. 5.

Wis., Madison—Church—F. L. Kronenberg, archt., Carroll Blk., taking bids 2 story and basement, 69 x 135 ft., rein.-con. and brick, plain foundation, St. James Court, for St. James Catholic Church, 1128 St. James Court. $150,000.

Wis., Manitowoc—Hotel—W. J. Roluber, archt., 8th and Joy Sts., taking bids 5 story, 50 x 85 ft., brick, rein.-con. and steel, plain foundation, for Manitou Hotel Co. $150,000. A. D. Dickson, prop.

Wis., Milwaukee—Store—May 14, by Brust & Philipp, archts., 405 Bway., 3 story, 150 x 202 ft. concrete and brick addition, plain foundation, Vliet Ave., for E. Schuster & Co., 12th and Vliet Sts. $400,000. Noted Jan. 25.

Wis., Verona—Asylum—May 25, by Dane Co., c/o M. Sommers, secy. Bldg. Com., 512 West Wilson St., Madison, 4 story and basement, 100 x 140 ft., brick and concrete, plain foundation. $150,000. A. D. Conover, Tenney Bldg., Madison, archt. Noted Feb. 1.

Minn., Minneapolis—Electrical—May 18, by State Bd. Control, St. Paul, 3 story and basement, rein.-con., brick and tile. State U. here. $300,000. C. H. Johnston, 715 Capital Bank Bldg., St. Paul, archt. C. L. Pillsbury Co., 1200 2nd Ave. S., engrs. Noted Jan. 19, 1922.

Mo., Kansas City — Memorial — June 4, (change of date) by Liberty Memorial Assn., R. A. Long Bldg., rein.-con., brick and steel, Station Rd. $2,000,000. H. Van Buren Magonigle, 101 Park Ave., New York City, archt. and engr. Noted Mar. 22.

Tex., San Antonio—Church—Catholic Church taking bids 1 story and basement, rein.-con., brick and stone, concrete pile foundation, St. Marys and College Sts. $300,000. F. B. Gaenslen, 331 Bedell Bldg., archt. M. L. Diver, Calcasieu Bldg., engr. Noted Mar. 15.

Ore., Portland—Office—Aug. 1 by Houghtaling & Dougan, archts., Elks Bldg., 6 story, 100 x 200 ft., rein.-con., 10th and Taylor Sts., for Medical Society, Medical Bldg. $650,000. Noted Mar. 1.

Calif., El Centro—Court House—June 4, by Supervs. Imperial Co., courthouse, rein.-con. To exceed $150,000. D. W. Wells, et al., El Centro, archts. Noted Apr. 5.

Calif., San Francisco — Church — Fifth Church of Christ Scientist, receiving bids rein.-con. and steel, O'Farrell St. near Shannon Pl. $150,000. C. Werner, Santa Fe Bldg., archt. Noted Oct. 19.

Ont., London — Exhibition — May 14, by Watt & Blackwell, archts., Bank of Toronto Bldg., 2 story and basement, 185 x 350 ft. brick and steel, on fair grounds, for Western Fair Assn. $150,000. Prices wanted on materials.

Ont., Toronto—Office, etc.—May 18, by H. H. Couzens, mgr., Toronto Transportation Comn., 35 Yonge St., 2 story, brick office building and 1 story rein.-con. car barn. $750,000. Private plans.

Buildings (Continued)

BIDS RECEIVED

N. Y., Niagara Falls—City Hall—For 3 story and basement, brick, steel and stone, etc., Main St., general contract from Braas Bros., 1110 Whitney Ave., $381,391; heating and ventilating from E. H. Monin, 70 Delaware Ave., Buffalo, $34,193. Noted May 3.

Pa., Phila. — High School — Bd. Educ., 19th and Chestnut Sts., 3 story and basement, 148 x 180 ft. rein.-con., brick and steel, plain foundation, Anne and Tulip Sts., from Ketchum & McQuade, 1029 Brown Ave., $872,000. Noted Apr. 26.

Md., Baltimore—School—Mayor and City Council, 3 story and basement, 60 x 227 ft., rein.-con. and brick, plain foundation, Nevada and 1st Sts., from J. L. Robinson Constr. Co., 1130 West Lafayette Ave., $555,317. Noted Apr. 19.

Ia., Ames—High School—Bd. Educ., general contract for 1 school, and additions to Welch and Beardshear Schools, from R. C. Elvin & Co., Plymouth Bldg., Minneapolis, Minn., $150,600; heating, plumbing and ventilating, from E. Gates, Ames, $27,860. Noted Mar. 1.

Ore., Portland—School—Bd. Educ., general contract Gregory Heights School, 3 story and basement, rein.-con., pile foundation, from Stebinger Bros., 626 Bway., $128,124. Archts. est. $175,000.

Calif., Sacramento — Hospital — Sisters Hospital, c/o R. A. Herold, archt., Forum Bldg., 5 story and basement, rein.-con and terra cotta, 40th and J Sts., general contract from W. C. Keating, Capitol Natl. Bank Bldg. $398,800. Noted Apr. 19.

Calif., San Francisco—Apartment—A. G. Boggs, 1266 Washington St., 4 story and basement, concrete, Washington St. near Jones St., from Grace & Bernieri, Claus Spreckels Bldg., $150,000.

Calif., Yuba City—High School—Yuba City Union High School Dist., 2 story, hollow tile and brick, general contract from Holdener Constr. Co., 2310 J St., Sacramento, $132,966; heating from Booth & Herboth, 304-3rd St., Marysville, $30,100; mechanical equipment from Lattourette-Fical Co., 907 Front St., Sacramento, $64,-800. Noted Nov. 2.

CONTRACTS AWARDED

Conn., Bristol—Business—W. J. Tracy, 2 Riverside Ave., and J. E. Condon, 38 Laurel St., 3 story, 65 x 110 ft., Main St., to F. P. Helming, 60 Pleasant St. Archts. est. $150,000. Noted Apr. 19.

N. Y., Larchmont—Club—Bonnie Briar Country Club, brick and stone, plain foundation, to H. H. Vought & Co., Grand Central Terminal, New York City. Archts. est. $250,000.

N. Y., New York—Apartment—Mack & Goldstein, c/o Springsteen & Goldhammer, archts. and engrs., 31 Union Sq., will build 5 story, 100 x 100 ft., brick, steel and stone, plain foundation, Academy St., by day labor. $200,000.

N. Y., New York—Loft—E. Tribelhorn, c/o G. and E. Blum, archts. and engrs., 505 5th Ave., will build 10 story, 50 x 100 ft., brick, steel and stone, plain foundation, West 97th St., by day labor.

N. J., Trenton—Bank—Trenton Trust Co., State St. and Chancery Lane, 14 story, 62 x 189 ft., stone, steel and concrete, general contract to Karno-Smith Co., Broad St. Bank; structural iron, to N. A. K. Bugbee Co., 206 East Hanover St.; electrical work, to J. A. Morrissey, 342 West 46th St., New York City. Archts. est. $1,000,000. Noted Apr. 19.

Pa., Indiana — Church — Zion Lutheran Church, 2 story and basement, 110 x 115 ft. rein.-con., stone and steel, Church and 6th Sts., to Berkebile Bros., Swank Bldg., Johnstown, $175,000.

Pa., Mount Union—School—Bd. Educ., 3 story and basement, 110 x 133 ft., rein.-con., brick and steel, Market St., general contract to L. F. Swinter Contg. Co., Ebensburg, $127,000. Total est. $200,000.

Pa., Phila.—Bank—Phila. Savings Fund, 7th and Walnut Sts., 1 story and basement, 40 x 140 ft. brick, steel and stone, Broad and McKean Sts., to G. A. Fuller & Co., Morris Bldg., $350,000.

Pa., Phila.—Hotel—LeTrianon Hotel Co., 1520 Spruce St., 26 story, basement and sub-basement, 100 x 260 ft. rein.-con., brick and steel, to G. P. Pawling & Co., 1432 South Penn Sq., $7,000,000.

D. C., Wash.—Office—Sanitary Grocery Co., 52 O St., N. W., office building and warehouse, 4th and T Sts., N. E., excavation to W. F. Brenizer, 101 New York Ave.; general construction to C. H. Tompkins, 1612 Park Rd., Archts. est. $400,000.

N. C., Asheville—Hotel—G. Vanderbilt and Battery Park Hotel Companies, constructing hotel, brick, stone and steel, to W. M. Sutherland Bldg. and Contg. Co., Compton Bldg., St. Louis, Mo. Archts. est. $1,500,-000. Noted Apr. 25.

Fla., Ft. Myers—Hotel—Franklin Hotel Co., 7 story and basement, 50 x 100 ft., rein.-con. and steel, on site of Franklin Arms Hotel, to Doullut & Williams Co., 811 Howard Ave., New Orleans, La., $200,000.

La., Baton Rouge—Administration—Bldg. Comn. Louisiana State University, two 1 story 50 x 100 ft. administration buildings, also Boyd Memorial Hall and Academic Law Bldg., both 2 story, 54 x 103 ft., to Caldwell Bros., 859 Carondelet St., New Orleans, $232,000. Noted Apr. 12.

Tenn., Jackson—Bank and Office—Peoples Bank, brick and concrete, to E. G. Holliday Constr. Co., 22 Noel Blk., Nashville, $185,000.

Tenn., Memphis—Office—Security Building Co. c/o McKim, Mead & White, archts., 101 Park Ave., New York City, 12 story, brick, steel and stone, Madison Ave., here, to E. W. Minter & Co., 115 Bway., New York City. Archts. est. $700,000.

O., Cleveland — Commercial — Euclid-Twenty-Ninth Co., c/o A. A. Chilcote, pres., 2140 Superior Ave., 2 story, 80 x 100 ft., brick, steel and concrete, 2902 Euclid Ave., to A. A. Lane Constr. Co., 1869 East 55th St. Archts. est. $150,000.

O., Cleveland—Commercial, Theatre and Apartment—Four Way Impvt. Co., c/o R. B. Thullen, mgr., National City Bldg., 4 story, brick, steel and concrete, Detroit Rd. and Blount St., to Central States Eng. & Constr. Co., 318 Euclid Bldg. Archts. est. $150,000.

O., Lakewood (Cleveland, P. O.)—Library—Lakewood Library Bd., c/o G. W. Grill, secy., 1470 Warren Rd., 2 story, 50 x 85 ft., brick, steel and concrete addition, 15425 Detroit Ave., to Schrader Constr. Co., 1643 East 40th St., Cleveland, $128,700. Noted Apr. 12.

O., Lima—High Schools—Bd. Educ., two 2 story and basement, 32 x 90 ft. wings, brick and concrete, to Franklin Junior High School, to Orr & Miller, Lima (street address not available), $118,550; 2 story and basement, 126 x 164 ft., brick and concrete addition to South High School, to O. Green, 325½ North Elizabeth St., $227,711. Noted Apr. 11.

O., Lorain — Clubhouse — Slovenian National Home Co., c/o W. L. Grills, 554 Bway., 3 story and basement, 60 x 110 ft., brick and steel, Pearl St., to A. Vle and Graupner Bros., East Erie St. Archts. est. $150,000. Noted Mar. 29.

O., Oxford—Dormitory—Miami University, 3 story, 80 x 250 ft., brick and concrete, to Woods Constr. & Supply Co., 427 Holland Bldg., Lima. $280,798. Noted Apr. 26.

Mich., Ann Arbor — Physical Science — University of Michigan will build 4 story and basement, 136 x 146 ft. rein.-con., brick and stone, plain foundation, East University Ave., by day labor under supervision of building superintendent. $500,000. A. Kahn, 1000 Marquette Bldg., Detroit, archt. Noted Mar. 15.

Mich., Detroit—Mercantile—Redell Co., 19 West 34th St., New York City, 10 story and basement, 60 x 100 ft., rein.-con., brick and steel, plain foundation, Woodward Ave., to Walbridge-Aldinger Co., 2356 Penobscot Bldg. Archts. est. $350,000.

Ill., Chicago—Apartment—A. F. Jacobs, 4833 North Avers Ave., 3 story, 120 x 177 ft., rein.-con., brick and steel, 5020-24 West Washington St., to L. Rubin, 2413 North Albany Ave. Archts. est. $150,000.

Ill., Chicago — Apartment and Store — Rissman & Hirschfield, archts., 64 West Randolph St., 3 story and basement, 107 x 125 ft., rein.-con., brick and steel, Cicero Ave. and Gladys St., to N. Flyer, 737 Independence Blvd. Archts. est. $180,000. Owner's name withheld.

Ill., Chicago—Apartment—J. P. Severin, 7701 South Union Ave., 3 story, 85 x 125 ft., rein.-con., brick and steel, 6753-9 Paxton Ave., to Turnquist Bros. Constr. Co., 217 East 69th Pl. Archts. est. $150,000.

Ill., Chicago — Club — Abbott Investment Co., 179 West Washington St., 13 story and basement, 49 x 149 ft., rein.-con., brick and steel, 1244 North Dearborn St., to Fitzgerald Constr. Co., 105 West Monroe St. Archts. est. $1,500,000.

Ill., Chicago — Hotel — A. Johnson, 331 Diversey Parkway, 12 story and basement, 100 x 150 ft., rein.-con., brick and steel, 7751-65 Pine Grove Ave., to J. A. Lundstrom, 1401 Balmoral Ave. Archts. est. $1,500,000. Noted Jan. 25.

Ill., Chicago — Hotel — V. G. Williams, 3257 Warren Ave., 3 story and basement, 125 x 170 ft., rein.-con., brick and steel, 3250-64 Park Ave., by day labor. $500,000. E. N. Brydges, 64 East Van Buren St., archt.

Ill., Chicago—Office—National Bond and Mortgage Co., 3146 Lincoln Ave., 4 story, 72 x 141 ft., rein.-con., brick and steel, 3309-23 Lincoln Ave., to A. Brundage, 119 South Dearborn St. Archts. est. $150,000.

Ill., Evanston—Apartment—W. H. Bell, two 3 story, 150 x 175 ft., rein.-con., brick and steel, Ridge and Hall Sts., to Whyte & Bell Constr. Co., 356 Ridge Ave. Archts. est. $600,000. Noted Mar. 22.

Wis., Green Bay — High School — School Bd., 2 story and basement, 120 x 400 ft., brick, tile and concrete, plain foundation, to Bartelson & Ness, Minot, N. D., $419,500. Noted Apr. 5.

Wis., Green Bay—Office—J. J. Bellin, Bellin Bldg., 80 x 100 ft., brick, concrete and steel addition, to Pinchard Bros., 685 St. George St. Archts. est. $150,000.

Wis., Manitowoc — Temple — Masonic Lodges, 2 story, 90 x 170 ft., brick, rein.-con. and steel, plain foundation, to G. Levenhagen, 1211 South 12th St. Archts. est. $150,000.

Wis., Milwaukee — Store-Office — Dorsen Realty Co., c/o M. Tullgren & Sons Co., archts., 425 East Water St., 3 story and basement, 100 x 100 ft., brick and concrete, plain foundation, 3rd St., to S. M. Siesel Co., 160 Ogden Ave. Archts. est. $200,000.

Ia., West Union—Court House—Fayette Co., general contract 3 story and basement, 90 x 116 ft., rein.-con. and stone, old public square, to Tapagher Constr. Co., Albert Lea, Minn., $141,800. Noted Apr. 12.

Minn., Minneapolis — Apartment—Young & Kennedy, 807 Andrus Bldg., two 3 story and basement, rein.-con., brick and tile, at 1368 and 1417 La Salle Ave., general contract to Madsen Constr. Co., 848 Builders Exchange. Total $300,000. Noted Apr. 26.

Utah, Salt Lake City — Office — N. O. Nelson Mfg. Co., 928 Chestnut St., St. Louis, Mo., 5 story, office and warehouse, concrete, brick and steel, 3rd St. W and 2nd St. S., to J. J. Burke & Co., Kearns Bldg., $150,000.

Calif., Fresno—Store—F. B. Black, 1025 Van Ness Ave., 2 story, 101 x 150 ft., brick and concrete, Van Ness Ave., to R. F. Felchlin Co., Bank of Italy Bldg., $150,000. Noted Nov. 2.

Calif., Los Angeles—Apartment—P. M. Rutherford, 4 story and basement, 83 x 181 ft., brick, general contract to L. T. Mayo, 531 Black Bldg., $230,000.

Calif., Los Angeles—Hotel—E. B. Squires, 6 story, rein.-con., Coronado St., to Davies Constr. Co., I. W. Hellman Bldg., $175,000.

Calif., Sacramento — Store — E. Tropp and W. C. Crittenden, 129 Sutter St., San Francisco, 3 story and basement, rein.-con., K St., here, to Cahill Bros., 110 Sutter St., San Francisco, $700,000.

Calif., Santa Ana—High School—Santa Ana Junior High School Dist., 2 story, rein.-con., to Daniels & Farris, 818 North Holliston St., Pasadena, $161,275.

Ont., Toronto—Store—R. Simpson Co. Ltd., Yonge and Queen Sts., 6 and 8 story, 50 x 210 ft. concrete, brick, steel and stone addition, general contract to Jackson-Lewis Constr. Co. Ltd., Ryrie Bldg., structural steel to McGregor & McIntyre Ltd., 1139 Shaw St. Noted Mar. 29.

Federal Government Work

BIDS DESIRED

Me., Saco—Post Office—May 28 by Treas. Dept., Wash., D. C., for U. S. Post Office, here. J. A. Wetmore, acting superv. archt.

N. H., Portsmouth—Remodeling—Spec. 4795—May 23 by Bureau Yards & Docks, Navy Dept., Wash., D. C., remodeling Marine Barracks, here. Noted Mar. 8.

N. Y., New York—Dike—June 11, at office U. S. Engineer, 616 Army Bldg., timber dike, north of Shooters Island, New York and New Jersey; adv. this issue.

Del., Wilmington—Dredging—June 5, at office U. S. Engineer, dredging in harbor, here; adv. this issue. Noted Feb. 8.

Va., Leesburg—Post Office—June 4, by Treas. Dept., Wash., D. C., for U. S. Post Office, here. J. A. Wetmore, acting superv. archt.; adv. this issue.

N. C., Oteen—Roads and Walks—May 25 by Treas. Dept., Wash., D. C., roads and walks at U. S. Veterans Hospital, here. J. A. Wetmore, acting superv. archt.

La., New Orleans—Dredging—June 5, at office U. S. Engineer, 329 Custom House. Federal Government Work (Continued) dredging Calcasieu-Sabine Section, Intracoastal Waterway; adv. this issue.

La., New Orleans—Earthwork—May 15 at office U. S. Engineer, Custom House. 1,907,100 cu.yd. earth work in Atchafalaya and surrounding levee districts.

La., New Orleans—Jetty—June 1, at office U. S. Engineer, 329 Custom House.

Federal Government Work (Continued)

jetty construction at South Pass, Mississippi River; adv. this issue.

Montana—Gates—June 5 at office U. S. Recl. Serv., Denver, Colo., two 2 ft. 6 in. x 3 ft. 6 in. emergency gates for Hubbart Dam, Flathead Project, here. E. E. Weymouth, acting dir.

Mo., Kansas City — Extension — Treas. Dept., Wash., D. C., receiving bids on revised plans for Extensions 3, 2 wings, each 67 x 73 ft., cast stone, granite and rein.-con., complete incl. mechanical equipment, U. S. Post Office and Court House, here. J. A. Wetmore, acting superv. archt. Noted May 3.

Mo., St. Louis—Earthwork—May 21 at office Mississippi River Comn., 1311 International Life Bldg., 645,000 cu.yd. hydraulic earthwork in Iowa River-Flint Creek Levee Dist. 16, Iowa.

Colo., Denver—Gates—June 6, at office U. S. Recl. Serv., Denver, metal spillway gates for Black Canyon Dam, Boise Project, Idaho, and Tieton Dam, Yakima Project, Wash. F. E. Weymouth, acting dir.; adv. this issue.

Washington—Roads—May 15 by C. H. Purcell, dist. engr., Bureau Pub. Rds., New Post Office Bldg., Portland, Ore., grading, surfacing, etc. 2.5 mi. Randle-Yakima, Randle Sect. National Forest Rd., Lewis Co., 9,700 cu.yd. rock and 15,700 cu.yd. common excav. 5,500 cu.yd. surfacing, etc., 14.7 mi. Mt. Baker Highway, Glacier Shuksan National Forest, Whatcom Co., 2,000 cu.yd. rock and 40,000 cu.yd. common excav., 14,-500 cu.yd. surfacing, etc.

Oregon—Roads—May 15 by C. H. Purcell, dist. engr., Bureau Pub. Rds., New Post Office Bldg., Portland, constructing and improving 5.5 mi. Devils Lake Rd., Siletz National Forest, Lincoln Co., 20,000 cu.yd. rock and 138,000 cu.yd. common excav., etc.; 8.7 mi. Trail-Crater Lake Sect. 1, National Forest Rd., Jackson Co., 19,500 cu.yd. crushed rock, etc.

Calif., San Francisco—Dredging, etc.—June 1, at office U. S. Engineer, Custom House, 885,000 cu.yd. excav., 2,000 ft. retaining wall, incl. 22,000 tons stone.

BIDS RECEIVED

N. Y., Plattsburg—Monument—U. S. Engineer, Army Bldg., 39 Whitehall St., New York. MacDonough Memorial, here, from Harrison Granite Co., Inc., 200 5th Ave., New York, (1) monument complete $135,-600 (2) new brick or concrete manhole $75, total $135,675. Noted Mar. 22.

N. C., Oteen — Boilers — Treas. Dept., Wash., D. C., removing 2 boilers, furnishing and installing new ones in U. S. Veterans Hospital, here, from Union Electric Co., 625 Poydras St., New Orleans, La., (1) $12,250 (2) $24,250. Noted Apr. 12.

Fla., Pensacola — Pump House, etc. — Spec. 4793—Bureau Yards & Docks, Navy Dept., Wash., D. C., pump house, timber trestle, equipment and piping at Naval Air Station, here, (1) work complete, from A. Pope, 1722 15th St., N. W., Wash., D. C., (1) $22,900 (2a) add $1 (2b) add $0.80. Noted Apr. 19.

Tenn., Nashville—Steel Gates—U. S. Engineer, Custom House, steel gates for Lock 8, Cumberland River, from Nashville Bridge Co., foot of Shelby St., $36,490. Noted Apr. 5.

Nevada—Road—C. H. Sweetser, dist. engr., U. S. Bureau Pub. Rds., Mills Bldg., San Francisco, Calif., grading, surfacing, etc., 13.6 mi. Currant Creek Forest Rd., 36 mi. southwest Ely, Nye and White Pine Counties (1) contractor furnishing explosives (2) Government furnishing explosives, from Rieves & Cook, Ogden, Utah, (1) $71,-988 (2) $71,229. Noted Apr. 12.

CONTRACTS AWARDED

N. J., Lake Denmark—Standpipe—Spec. 4759—Bureau Yards & Docks, Navy Dept., Wash., D. C., standpipe and piping at Naval Ammunition Depot, here, to Donald Zane Co., 233 Bway., New York City, $17,248 (160 days). Noted Apr. 19.

Ala., Florence—Boilers—U. S. Engineer, installing steam boilers, etc., on U. S. Towboat General John Coffee, to C. Hegewald Co., New Albany, Ind., $17,890. Noted Apr. 5.

Tenn., Memphis—Earthwork—Mississippi River Comn., 1st and 2nd Dists., Custom House, earthwork to Roach, Stansell, Lawrence Bros. & Co., North Memphis Savings Bank Bldg., Upper St. Francis Levee Dist. $101,800, Lower St. Francis Levee Dist. $365,299 and first 2 stations White River Levee Dist. $80,980; to Rodgers, Burt, Denison & Brown, Memphis, last station White River Levee Dist. $26,-300; W. H. Denison, Cushman, Ark., Seefoot Levee $63,550. Noted May 3.

H. T., Pearl Harbor—Dredging—Spec. 4798—Bureau Yards & Docks, Navy Dept., Wash., D. C., dredging Piers 3 and 4, and quay-wall at Naval Operating Base, here, to Hawaiian Dredging Co., 854 Kuhuhuana St., Honolulu, $0.70 per cu.yd., total $59,-500 (120 days). Noted Mar. 22.

Miscellaneous

PROPOSED WORK

Grain Elevator — Farmington, Conn. — Winchell Smith Inc., plans grain elevator. $150,000. Address A. W. Hall, Garden St., Farmington.

Gas Holder—Geneva, N. Y.—Empire Gas & Electric Co., 103 Castle St., plans large gas holder, 100 ft. high, 96 ft. in diameter, 500,000 cu.ft. capacity. $150,000.

Ice Rink—Niagara Falls, N. Y.—Niagara Falls Arena Co., Inc., plans large ice rink, capacity 4,500 persons, incl. 60 ton ice plant, Victoria Ave. $150,000-$175,000.

Docks—North Tonawanda, N. Y.—Tonawanda Iron Wks., c/o Amer. Radiator Co., Elmwood Ave., Buffalo, plans docks along Niagara River. To exceed $50,000. A. A. Landon, pres.

Swimming Pool, etc.—Watervliet, N. Y.—Building Com. of Germain Memorial Presbyterian Church plans swimming pool and bowling alleys in Barclay Germain gymnasium. $30,000.

Pavilion, etc. — Sea Girt, N. J. — Boro Council, rejected bids May 1, pavilion, open air pool and bathing group, Ocean Ave. and Chicago Blvd. Will readvertise. Noted Apr. 19.

Golf Course — Stroudsburg, Pa. — Wolf Hollow Golf Club plans complete 9 hole golf course here. $25,000.

Pavilion—Detroit, Mich.—Michigan State Fair Assn., Bowles Bldg., having plans prepared by L. W. Fry, Ann Arbor, 2 story, 150 x 150 ft. concrete, brick and steel pavilion, plain foundation, on State Fair grounds. $150,000.

Stadium — Milwaukee, Wis. — Marquette Alumni Assn., c/o Marquette University, 15th St. and Grand Ave., plans rein.-con. stadium, Claybourn St. $250,000. W. J. Abel, secy. Engineer and architect not selected.

Elevator—Turner, Kan.—Armour Grain Co., 322 Glover Bldg., Kansas City, Mo., having plans prepared rein.-con. addition to plant here, to increase capacity from 150 to 300 cars per day. $600,000. Private plans.

Swimming Pool—Navastota, Tex.—See "Streets and Roads."

Car Barnes — Los Angeles, Calif. — Los Angeles Railway Co., Los Angeles Ry. Bldg., having plans prepared 300 x 500 ft. car barn, brick and steel, 54th St. near South Park Ave. To exceed $300,000. Private plans.

Tunnel, etc. — Santa Barbara, Calif. — Montecito County Water Dist., having plans prepared 6,000 ft. tunnel, 7 x 8 ft. wide, dam 135 ft. high, 300 ft. long on top, 50 ft. long on bottom, concrete construction. To exceed $500,000. C. Wyant, 29 San Ysidro Rd., engr. Noted Mar. 22 under Waterworks.

Wharf — Haileybury, Ont. — Dept. Pub. Wks., Ottawa, plans to rebuild wharf destroyed by fire last year.. $26,400. K. M. Cameron, acting ch. engr.

Revetment Wall and Dock — Hamilton, Ont.—City Council and Harbor Bd. plan revetment wall and dock at foot of Ottawa St., concrete and earth fill with 2,000 ft. boat slip. $400,000. W. F. McFaul, city engr. W. Ainslee, 47½ Main St. E., chn. Harbor Bd.

Skating Arena—Niagara Falls, Ont.—Having plans prepared 1 story, concrete, brick and steel ice skating and hockey arena. $150,000. James, Proctor & Refern, 36 Toronto St., Toronto, engrs.

Wharf—Sturgeon Falls, Ont.—Dept. Pub. Wks., Ottawa, plans new wharf, here. $30,000. K. M. Cameron, acting ch. engr.

Arena — Toronto, Ont. — Ravina Ice Arena, Jennings St. and Rowland Ave., plans 1 story, concrete, brick and steel. $150,000. Engineer and architect not selected.

BIDS DESIRED

Power Development—Watertown, N. Y.—May 25, by J. W. Ackerman, city mgr. and P. B. Sutton, city engr., power development at Delano Island. $400,000. Former bids rejected. Noted Mar. 22.

Retaining Walls—Freehold, N. J.—May 16, by Bd. Freeholders Monmouth Co., rein.-con. retaining walls at Bridge W-43 between Avon and Belmar. G. K. Allen, Jr., 60 Broad St., Red Bank, co. engr.; adv. this issue.

Poles, etc.—Cleveland, O.—May 18, 300 cedar poles and 500 No. 2 manhole rings and covers. To exceed $25,000.

Roof Covering—Milwaukee, Wis.—Clas, Shepherds & Clas, archts., 445 Milwaukee St., taking bids 600 squares new roof covering of copper composition or galvanized steel; structural steel, gypsum covering over steel, etc., for Auditorium Bd., 5th and Cedar Sts. $50,000.

Ornamental Lighting System—Waukesha, Wis.—Bd. Pub. Wks. taking bids extending ornamental lighting system on Bway., Madison, Grand, Main, Clinton and South Sts. $25,000. A. P. Kuranz, city engr.

Sheep Barn—Des Moines, Ia.—May 16, by Keffer & Jones, archts., 204 Masonic Temple Bldg., 2 story and basement, 14 x 250 ft., rein.-con., brick and steel, for State.

Wharf—Blind River, Ont.—May 22, at office R. C. Desrochers, secy. Dept. Pub. Wks., Ottawa, reconstructing superstructure of timber pilework wharf here.

Car Barns—Toronto, Ont.—See "Buildings."

BIDS RECEIVED

Road Oil — Buffalo, N. Y. — Furnishing road oil for year 1923, (1) f.o.b. Buffalo, full tank, car lots (2) f.o.b. Buffalo, barrels, carload lots (3) f.o.b. Buffalo, barrels, less carlots, from Standard Oil Co. of New York, Star Oil Wks., 520 Fidelity Bldg., No. 4 road oil (1) $0.0725 per gal. (2) $0.11 (3) $0.14, non asphaltic road oil (1) $0.0685 (2) $0.1185 (3) $0.145; Atlantic Refining Co., 1211 Chestnut St., Phila., (1) $0.071; Texas Co., 17 Battery Pl., New York City, Texaco No. 45 (1) $0.0708 (2) $0.1191, Texaco No. 55 (1) $0.0698 (2) $0.1181; Barrett Co., 17 Battery Pl., New York, Tarvia B (1) $0.1025 (2) $0.161 (3) $0.201.

Structural Steel—New York, N. Y.—Bd. Purch., Municipal Bldg., May 2, structural steel to Dept. Plant & Structures, from P. J. Constant, Inc., 280 Bway., $7,860.

Heating and Ventilating Work—Niagara Falls, N. Y.—See "Buildings."

Tunnel—Seattle, Wash.—City opened bids Apr. 27, constructing tunnel under Duwamish Waterway, 1st Ave. S., from R. L. Sparger, Colman Bldg., sinking 137.5 ft. shaft $200, driving 400 ft. tunnel, $108, 400 cu.yd. shaft lining $30, lining 500 cu. yd. tunnel $35, total $107,582. Noted Apr. 19.

Steel Pipe — Montreal, Que. — Supplying 1,500 ft. 48 in. riveted steel pipe, from Horton Steel Wks., Ltd., St. James St., $23.20 per ft.

CONTRACTS AWARDED

Granite Paving Blocks — Minneapolis, Minn. — For 9,000 sq.yd. granite paving blocks, to Wisconsin Granite Co., 1013 Chamber of Commerce Bldg., Chicago, $3.10 per sq.yd. Noted Apr. 26.

Heating Mains — Virginia, Minn. — See "Industrial Works."

Crushed Rock, etc.—St. Louis, Mo.—For 500 squares crushed rock, to Independent Quarry & Constr. Co., Title Guaranty Bldg., $7.43 per sq.; 1,000 tons gravel f.o.b. cars and 250 tons delivered, to Missouri-Portland Cement Co., Post Dispatch Bldg., $1.50 and $1.80 per ton respectively. Engrs. est. $5,665.

Electric Standards—St. Louis, Mo.—Bd. Pub. Serv., City Hall, will install 500 concrete electric light standards, by day labor. $15,000. Former bids rejected. Noted Mar. 22.

Oil Tank — Portland, Ore. — Pub. Dock Comn., Spalding Bldg., one 5,000 bbl. steel oil tank, to King Bros. Boiler Wks., 314 Spalding Bldg., $6,650.

Stadium—Berkeley, Calif.—University of California, completion of stadium, to Clinton Constr. Co., 923 Folsom St., San Francisco, $511,740. Noted May 3.

Car Carns — Kitchener, Ont. — City car barns for street railway system, general contract to Ball Bros., Kitchener, $40,765; steel contract to Hamilton Bridge Co. Ltd., General Accident Bldg., Toronto, $12,755.

Telephone Cable Work—Toronto, Ont.—Bell Telephone Co., 76 Adelaide St. W., will erect telephone cable in Memorial School Dist., by day labor. $95,000. F. Kennedy, mgr.

Grain Elevator — Winnipeg, Man. — N. Bawlf Terminal Elevator Co., Grain Exch. Bldg., rein.-con. grain elevator, 1,500,-000 bu., to Carter-Halls & Aldinger, Union Bank Bldg., $750,000.

Power Line—North Vancouver, B. C.—British Columbia Electric Ry. Co., 425 Carroll St., Vancouver, clearing right of way for 23 mi. power line, to Rolston & Montizambert, 9040 Standard Bank Bldg., Vancouver, $38,000. Power line and poles, etc., will be done by day labor. Total est. $150,000.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ADVERTISEMENTS ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE.

OFFICIAL PROPOSALS

Bids: May 15.

Highway Work

Baltimore, Md.

Sealed proposals for building 10 sections of State Highway, as follows:

Garrett Co. Cont. G-25: One section of State Highway between Gortner and Red House for a distance of 2.0 miles. (Concrete.)

Washington Co. Cont. W-25: One section of State Highway between Hagerstown and Leitersburg, a distanc of 5.3 miles. (Mac. Recon.)

Montgomery Co. Cont. M-41: One section of State Highway from Clarksburg toward Hyattstown for a distance of a 1.0 mile. (Concrete.)

Montgomery Co. Cont. M-37: One section of State Highway from Dawsonville toward Seneca for a distance of 1.0 mile. (Concrete.)

Montgomery Co. Cont. M-25-A: One section of State Highway along the Rockville Pike from the Dist. Line to Bethesda, a distance of 3.0 miles. (Concrete Shoulders.)

Howard Co. Cont. Ho-33: One section of State Highway from West Friendship toward Ivory for a distance of 1.4 miles. (Concrete.)

Anne Arundel Co. Cont. AA-32: One section of State Highway between the Defense Highway and Iglehart, a distance of 1.0 mile. (Concrete.)

Kent Co. Cont. K-22: One section of State Highway from Chestertown toward Pomona for a distance of 2.0 miles. (Concrete.)

Cecil Co. Cont. Ce-44: One section of State Highway through Port Deposit for a distance of 1.4 miles. (Concrete.)

Cecil Co. Cont. Ce-46: One section of State Highway along the Glascow Road from Elkton to the Delaware Line, a distance of 2.0 miles. (Concrete.)

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on the 15th day of May, 1923, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of $1.00, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of five hundred ($500) dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 26th day of April, 1923.

JOHN N. MACKALL, Chairman.
L. H. STEUART, Secretary.

Bids: May 15.

Road Construction

South Kingstown, R. I.

Sealed proposals for the construction of about 7,500 sq.yd. of bituminous macadam road at Wakefield, in the Town of South Kingstown, will be received up to 4 p.m., day-light time, at the office of Grafton I. Kenyon, Wakefield, R. I., on Tuesday, May 15, 1923. Blank forms for the bids, plans, specifications, etc., may be seen at the office of T. G. Hazard, Jr., Engineer, Narragansett Pier, R. I., on and after May 8. The right to reject any or all bids is reserved.

GRAFTON I. KENYON,
JOHN B. ELDRED,
ERNEST W. MAINE,
Committee for Town of South Kingstown.

OFFICIAL PROPOSALS

Bids: May 25.

C. I. Pipe and Special Castings

CONTRACT 40, BALDWIN-FAIRMOUNT PROJECT.

Cleveland, Ohio.

Sealed proposals will be received at the office of the Commissioner of Purchases and Supplies, Room 219, City Hall, until 12:00 o'clock noon, official Cleveland time, Friday, May 25, 1923, for furnishing and delivering cast iron pipe and special castings for the Baldwin-Fairmount project, Division of Water, and will be opened and read in the Council Chamber immediately thereafter.

Each bid must be accompanied by a certified check on a solvent bank for five thousand ($5,000.00) dollars, drawn payable to the City of Cleveland, as surety for the acceptance of the contract.

Each bid must be made in accordance with the plans and specifications which may be obtained at the Division of Water drafting room, 213 City Hall, Cleveland, Ohio.

No proposal will be entertained unless made on the blank forms furnished by the Division of Water, and delivered at the office of the Commissioner of Purchases and Supplies previous to 12 o'clock noon on the day above specified.

The city reserves the right to reject any or all bids.

This contract contains 750 tons of 48-inch Class E. B. & S. pipe; 520 tons of B. & S. pipe, Classes B & C, 24-inch to 60-inch; 75 tons B. & S. fittings, 16-inch to 48-inch; 330 tons of fittings, 16-inch to 48-inch, flanged at one or both ends.

A. V. RUGGLES,
Commissioner of Water.

Bids: May 16.

Highway Work

OFFICE OF STATE COMMISSION OF HIGHWAYS

Albany, N. Y.

Sealed proposals will be received by the undersigned at their office No. 55 Lancaster Street, Albany, N. Y., at one o'clock p.m., advanced standard time, which is 12 o'clock noon Eastern Standard Time on Wednesday, May 16, 1923, for the improvement of highways in the following counties:

Cayuga .....(One highway: 3.28 miles)
Columbia .....(One highway: 2.52 miles)
Jefferson .....(One highway, 3.38 miles)
Montgomery ....(One highway: 0.92 miles)
Warren .....(One highway: 3.94 miles)
Wayne .....(One highway: 4.90 miles)

Also for the reconstruction of the following:

Jefferson .....(One contract: 2.95 miles)
Oneida .....(One contract: 1.44 miles)
Schuyler .....(One contract: 1.35 miles)
St. Lawrence ....(One contract: 3.83 miles)
Sullivan .....(One contract: 4.82 miles)
Ulster .....(One contract: 3.14 miles)

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the Division Engineers in whose division the roads are to be improved or reconstructed. The addresses of the Division Engineers and the counties in which they are in charge will be furnished upon request.

The especial attention of bidders is called to "General Information for Bidders" in the itemized proposal, specifications and contract agreement.

FREDERICK STUART GREENE,
Commissioner.
W. A. PATTON, Secretary.

OFFICIAL PROPOSALS

Bids: May 18.

Street Improvements

Roselle Park, N. J.

Sealed proposals will be received by the Mayor and Council of the Borough of Roselle Park, Union County, N. J., at 8:30 p.m. (Daylight Saving Time), on Friday, May 18, 1923, at the Borough Hall in said borough, for the improvement of the following named streets in said borough with reinforced concrete paving and bluestone curbing: Clay Avenue from Walnut Street to Sheridan Avenue, Sheridan Avenue from Grant Avenue to Clay Avenue, Walnut Street from Westfield Avenue to Grant Avenue.

The estimated amount of surface pavement required is 12,420 square yards; curbing, 6,730 lineal feet.

Drawings, specifications and forms of proposal for the above work prepared by the Borough Engineer are on file in the office of the said engineer, No. 505 Chestnut Street, Roselle Park, N. J., and No. 52 Vanderbilt Avenue, New York City, and may there be inspected by prospective bidders. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of the sum of $5.00.

Bids must be made on the standard proposal forms in the manner required by the specifications; must be enclosed in sealed envelopes bearing the name and address of the bidder on the outside, addressed to the Mayor and Council, Borough of Roselle Park, Union County, N. J., and must be accompanied by a certificate of a surety company guaranteeing the furnishing of a bond on the work, and also accompanied by a certified check for not less than 5 per cent of the total bid, and be delivered at the place and on the hour above named.

The Council reserves the right to reject any or all bids, to waive any or all defects or informalities, or to accept any bid as they deem for the best interests of the borough.

By order of the Mayor and Council of the Borough of Roselle Park, N. J.

J. WALLACE HIGGINS,
Borough Engineer.

April 27, 1923.

Bids: May 17.

Paving

Poughkeepsie, N. Y.

Sealed proposals will be received by the Board of Public Works until 4:00 p.m., May 17, 1923, at Eastman Park Mansion in the City of Poughkeepsie for the following approximate items:

38,000 square yards Asphalt Pavement on concrete foundation.
10,000 square yards Granite Block Pavement on concrete foundation.
100 square yards Brick Pavement adjusted.
3,000 lineal feet New Blue-stone Curb set in concrete.
10,000 lineal feet of Old Blue-stone Curb re-set in concrete.

A certified check for five (5) per cent of the amount of the bid must accompany each proposal.

Specifications may be examined at the office of the Board of Public Works or will be forwarded on receipt of five dollars, which amount will be refunded when the specifications are returned in good condition. The Board reserves the right to reject any or all bids.

By ORDER OF THE BOARD
OF PUBLIC WORKS
THOMAS F. LAWLOR, Superintendent.
April 28, 1923.

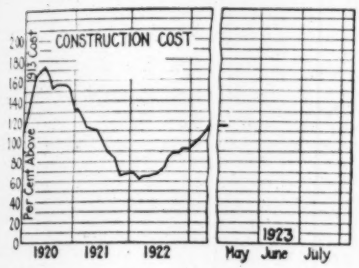
CONSTRUCTION NEWS

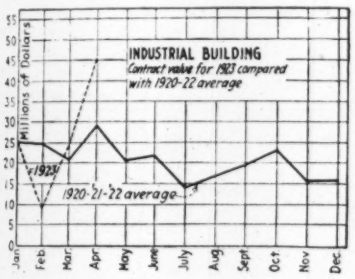
The Construction Barometer

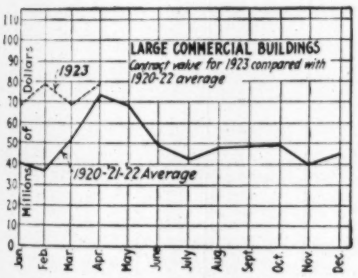
Cost Curve Flattened — All Metals Weaker — Contract Volume Given

THE most significant development is the softer tone of the iron and steel market. Unfilled orders on the books of the U. S. Steel Corporation were 114,823 tons less on April 30 than on March 31, and the premium has practically disappeared in price quotations. Lumber, cement and brick are generally stationary. Labor continues to rise. The general cost curve has flattened.

This week's charts show that contracts awarded this year are far heavier than last. Industrial work was particularly heavy in April. Value of contracts let for buildings, bridges, streets and roads for the first four months of 1923 are compared with the 1920-22 average over the same period. Later, construction will be analyzed by sections.







VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ending	Public Work	Private Work	Total Contracts
April 26	$22,049,000	$41,860,000	$63,909,000
May 3	30,970,000	18,629,000	49,599,000
May 10	14,414,000	24,211,000	38,625,000
3 weeks	$67,433,000	$84,700,000	$152,133,000

LARGE BUILDING CONTRACTS—NUMBER AND VALUE

Week Ending	Public No.	Public Work	Private No.	Private Work
April 26	19	$6,646,000	41	$22,050,000
May 3	19	6,626,000	41	10,566,000
May 10	9	2,059,000	36	20,276,000
3 weeks	47	$15,331,000	118	$52,892,000

LARGE BRIDGE CONTRACTS—NUMBER AND VALUE IN 1922 AND 1923

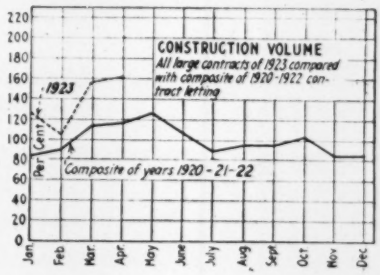
	1922 No.	1922 Value	1923 No.	1923 Value
January	24	$2,994,000	31	$6,900,000
February	19	1,095,000	26	2,723,000
March	22	1,137,000	40	5,779,000
April	30	1,525,000	26	3,310,000
4 months	95	$6,751,000	123	$18,712,000

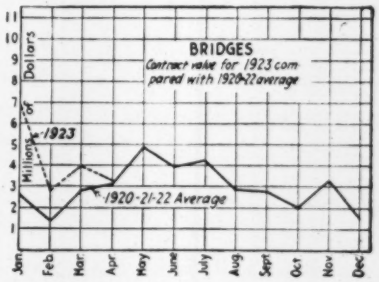
LARGE STREET AND ROAD CONTRACTS IN 1922 AND 1923

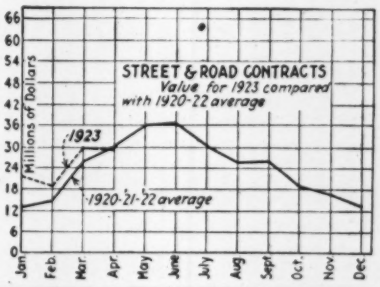
	1922 No.	1922 Value	1923 No.	1923 Value
January	92	$14,424,000	131	$21,691,000
Febru'ry	69	9,052,000	84	18,781,000
March	183	39,669,000	219	37,706,000
April	226	32,354,000	206	29,641,000
4 months	570	$95,499,000	640	$107,819,000

STEEL LOWER—OTHER BASE PRICES STABLE IN LAST FEW WEEKS

	Quoted On May 17, at	Price Was	On
Structurals, Pittsburgh, 100 lb.	$2.50 @$2.65	$2.50 @$2.70	May 10
Cement, Chicago, net bbl.	2.20	2.05	Feb. 1
Pine, New York, per M. ft.	60.00	58.00	Apr. 5
Fir, San Francisco per M. ft.	41.00	39.00	Apr. 5
Common labor, per hr.	0.51	0.50	Apr. 5







PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
May 19	Cleveland, O.	May 17
May 22	Portland, Me. Adv. Apr. 26 to May 17.	Apr. 26
May 22	Toronto, Ont.	May 17
May 22	El Segundo, Calif.	May 17
May 22	Redwood Falls, Minn.	May 17
May 22	Long Island City, N. Y.	May 17
May 22	New York, N. Y.	May 17
May 23	Spring Green, Wis.	May 10
May 24	Platte Center, Neb.	May 17
May 24	Dubuque, Ia.	May 10
May 25	New York, N. Y.	May 17
May 25	Brooklyn, N. Y.	May 17
May 25	Long Island City, N. Y.	May 17
May 25	Wauwatosa, Wis.	May 10
May 25	Cleveland, O.	May 3
May 25	Cleveland, O.	May 10
May 28	Bismarck, N. D.	May 10
May 29	Horton, Kan.	May 10
May 29	Homestead, Pa. Adv. May 17.	May 17
May 29	Claremont, N. H. Adv. May 17.	May 17
May 29	Belmar, N. J. Adv. May 17.	May 17
May 29	Watertown, S. D.	May 17
May 31	Grand Forks, N. D.	May 17
May 31	Easton, Md. Adv. May 10 and 17.	May 10
June 1	Hammond, Ind. Adv. May 17.	May 17
June 4	Talladega, Ala. Adv. May 10 and 17.	May 10

SEWERS

Bids Close		See Eng. News-Record
May 21	Pontiac, Mich.	May 10
May 21	Akron, O.	May 10
May 21	Creston, Ia.	May 10
May 21	Euclid, O.	May 17
May 22	Marion, Wis.	Apr. 26
May 22	Madison, Wis.	May 17
May 22	Erie, Pa. Adv. May 17.	May 17
May 22	Chicago, Ill.	May 17
May 23	Tonawanda, N. Y. Adv. May 10 and 17.	May 10
May 23	Brooklyn, N. Y.	May 17
May 24	Shaker Heights (Cleveland P. O.), O.	May 17
May 24	Bridgeport, Conn. Adv. May 17.	May 17
May 25	Detroit, Mich.	May 10
May 25	Durham, N. C.	May 17
May 26	Brooklyn Heights (Independence P. O.), O.	May 17
May 29	Wash., D. C.	May 10
May 31	Easton, Md. Adv. May 10 and 17.	May 10
May 31	New York Mills, N. Y. Adv. May 17.	May 17
May 31	Akron, O. Adv. May 17.	May 17

Bids Close		See Eng. News-Record
June 1	Hartford, S. D.	May 17
June 4	Kansas City, Mo.	May 17
June 4	Hackensack, N. J. Adv. May 17.	May 17
June 5	Hightstown, N. J. Adv. May 10 and 17.	May 17

BRIDGES

May 21	Marine City, Mich.	Apr. 26
May 22	Walhalla, S. C.	May 3
May 22	Santa Rosa, Calif.	May 17
May 22	Wyoming	May 17
May 22	South Dakota	May 17
May 22	Newark, N. J.	May 17
May 23	Wellington, Kan.	May 17
May 24	Hutchison, Kan.	May 17
May 24	Chicago, Ill.	May 3
May 25	Ladysmith, Wis.	May 10
May 28	Norwich, N. Y. Adv. May 17.	May 17
May 28	California	May 17
June 5	Grand Haven, Mich.	May 10
June 5	St. Louis, Mo.	May 10
July 31	La Center, Wash.	May 3
Nov. 30	Sydney, Australia	Apr. 19

EXCAVATION, DRAINAGE, IRRIGATION

May 21	Brooklyn, N. Y.	May 10
May 23	Crookston, Minn.	May 10
May 31	New Jersey	May 17
June 5	Rolling Fork, Miss. Adv. May 10 and 17.	May 10
June 15	Albert Lea, Minn.	Apr. 12

STREETS AND ROADS

May 18	Phila., Pa.	May 17
May 21	Russell, Kan.	May 17
May 21	St. Paul, Minn. Adv. May 3 to 17.	May 3
May 21	Norfolk, Neb.	May 10
May 21	Cheyenne, Wyo.	May 17
May 21	Indianapolis, Ind.	May 17
May 21	Red Bank, N. J. Adv. May 17.	May 17
May 21	Mimico, Ont.	May 17
May 21	New Haven, Conn.	May 17
May 21	Wapello, Ia.	May 17
May 21	Kaufman, Tex.	May 17
May 21	Dallas, Tex.	May 17
May 21	Euclid, O.	May 17
May 21	Milwaukee, Wis.	May 17
May 21	Geneva, Ala.	May 17
May 22	Newark, N. J.	May 17
May 22	Stockton, Calif.	May 17
May 22	Cleburne, Tex.	May 17
May 22	Maryland Adv. May 10 and 17.	May 10
May 22	Florence, Ala.	May 10
May 22	Kendallville, Ind. Adv. May 10 and 17.	May 10
May 22	South Bend, Ind.	May 10
May 22	Plattville, Wis.	May 10
May 22	Denver, Colo.	May 10
May 22	Audubon, N. J. Adv. May 17.	May 17
May 22	Lockport, N. Y.	May 17
May 22	Connecticut Adv. May 17.	May 17
May 22	Wyoming	May 17
May 22	Carrington, N. D.	May 17
May 22	South Dakota	May 17
May 22	Ottawa, Ont.	May 17
May 22	Grand Rapids, Mich.	May 17
May 22	New York, N. Y.	May 17
May 22	St. Therese, Que.	May 17
May 23	St. George, N. Y.	May 17
May 23	Havana, Ill.	May 17
May 23	Minnewaukan, N. D.	May 17
May 23	Ohio	May 17
May 23	Massillon, O.	May 17
May 23	Cleveland, O.	May 17
May 23	Wisconsin	May 17
May 23	San Francisco, Calif.	May 17
May 24	New York, N. Y.	May 17
May 24	Newark, N. J.	May 17
May 24	Cedar Grove, La.	May 10
May 24	Bottineau, N. D.	May 17
May 24	Garber, Okla.	May 17
May 24	Laporte, Ind.	May 17
May 24	Rock Rapids, Ia.	May 17
May 24	East Rockaway, N. Y.	May 17
May 24	Shaker Heights (Cleveland P. O.), O.	May 17
May 25	Mohall, N. D.	May 17
May 25	Larned, Kan.	May 17
May 25	Cincinnati, O.	May 17
May 25	Ohio	May 17
May 25	Clinton, Ia.	May 17
May 25	Tennessee	May 17
May 25	Washington, Pa.	May 17
May 25	Leamington, Ont.	May 17
May 25	Greenville, Tex.	May 17
May 28	Dallas, Tex.	May 17
May 28	Rockwood, Pa.	May 17
May 28	St. Paul, Minn.	May 17
May 28	Akron, O.	May 3
May 28	Kansas City, Kan.	May 10
May 28	Los Angeles, Calif.	May 17
May 29	Louisiana	May 10
May 29	Kentucky	May 10
May 29	St. Louis, Mo.	May 3
May 29	Maryland Adv. May 17.	May 17
May 29	Florida	May 17
June 1	Paducah, Ky. Adv. May 17.	May 17
June 4	Red Bank, N. J. Adv. May 17.	May 17
June 4	New Jersey Adv. May 17.	May 17
June 4	Ely, Minn.	May 17
June 5	Williamsport, Pa. Adv. May 17.	May 17
June 5	Bellaire, O.	May 17
June 6	Abilene, Tex.	May 17
June 7	Shelbyville, Ky.	May 17
June 8	Bradentown, Fla.	May 17

INDUSTRIAL WORK

May 21	Middletown, Conn.	May 17
May 22	Spartanburg, S. C.	May 17
May 25	Campbellford, Ont.	May 17
May 25	Watertown, N. Y. Adv. May 10 and 17.	May 10

BUILDINGS

May 19	Phila., Pa.	May 17
May 19	Baltimore, Md.	May 17
May 21	Sioux City, Ia.	May 17
May 21	Greensboro, N. C.	May 17
May 21	Bloomfield, N. J.	May 17
May 22	Old Forge, N. Y.	Apr 26
May 22	Roosevelt, N. Y.	May 17
May 22	Woodward, Ia.	May 17
May 23	Williamsport, Pa.	May 17
May 23	New York, N. Y.	May 17
May 24	Columbus, O.	May 17
May 25	Milwaukee, Wis.	May 17
May 25	Springfield, Mass.	May 17
May 25	Verona, Wis.	May 10
May 25	Fond du Lac, Wis.	May 17
May 26	Columbus, O.	Apr 26
May 26	Lakewood, N. Y.	May 10
May 28	Hamburg, N. Y.	May 10
May 28	Cleveland, O.	May 3
May 28	Byesville, O.	May 3
May 29	Stockton, Calif.	May 3
June 1	West Hartford (Hartford P. O.), Conn.	May 17
June 1	Morgantown, W. Va.	Apr 12
June 1	Tulsa, Okla.	May 17
June 1	Norman, Okla.	May 17
June 1	Cleveland, O.	May 17
June 1	Haworth, N. J. Adv. May 17.	May 17
June 4	Kansas City, Mo.	May 10
June 4	El Centro, Calif.	May 10
June 5	Mount Morris, N. Y. Adv. May 17.	May 17

FEDERAL GOVERNMENT WORK

May 21	Post Office — Houghton, Mich.	Apr. 26
May 21	Scows—Wilmington, Del. Adv. Apr. 26 to May 17.	Apr. 26
May 21	Levee—St. Louis, Mo.	May 3
May 21	Lumber—Louisville, Ky.	May 17
May 22	Steel Hull — Vicksburg, Miss. Adv. Apr. 26 to May 17.	Apr. 26
May 22	Post Office—Phoenixville, Pa.	May 3
May 23	Storehouse—Pearl Harbor, H. T.	Apr. 26
May 23	Remodeling—Portsmouth, N. H. Adv. May 17.	May 10
May 24	Dredging, etc. — Chicago, Ill. Adv. Apr. 26 to May 17.	Apr. 26
May 25	Hull, etc.—Louisville, Ky. Adv. Apr. 26 to May 17.	Apr. 26
May 25	Roads and Walks—Oteen, N. C.	May 10
May 28	Post Office—Saco, Me.	May 10
May 29	Levee Work—Vicksburg, Miss. Adv. May 17.	May 17
May 31	Dredging—Milwaukee, Wis. Adv. May 3 to 17.	May 3
May 31	Hospital—Rutland, Mass.	May 3
May 31	Dredging — Providence, R. I. Adv. May 3 to 17.	May 3
May 31	Road Repair—Oceanport, N. J. Adv. May 17.	May 17
June 1	Jetty—New Orleans, La. Adv. May 3 to 17.	May 10
June 1	Dredging—Richmond, Calif.	May 17
June 2	Dredging, etc.—San Diego, Calif.	May 17
June 4	Post Office—Leesburg, Va.	May 10
June 5	Emergency Gates—Montana	May 10
June 5	Dredging—New Orleans, La. Adv. May 10 and 17.	May 10
June 5	Dredging — Wilmington, Del. Adv. May 10 and 17.	May 10
June 6	Gates—Denver, Colo.	May 10
June 6	Barracks—San Diego, Calif. Adv. May 17.	May 17
June 6	Roads—San Diego, Calif.	May 17
June 8	Dredging—Phila., Pa. Adv. May 3 to 17.	May 3
June 11	Dike—New York, N. Y. Adv. May 10 and 17.	May 10
June 13	Refrigerating Machinery—Pearl Harbor, H. T.	Apr. 26
June 13	Stack—St. Cloud, Minn.	May 17
June 15	Recreation, etc. — Dawson Springs, Ky. Adv. May 17.	May 17

MISCELLANEOUS

May 18	Paving Blocks—New York, N. Y.	May 17
May 22	Subway — New York, N. Y.	May 3
May 22	Wharf—Blind River, Ont.	May 10
May 23	Steel Penstock and Accessories —San Francisco, Calif.	Apr. 19
May 24	Electric Transmission Line — Seneca, Mo.	May 17
May 25	Power Development—Watertown, N. Y.	May 10
May 26	Transmission Line, etc. — Modesto, Calif.	May 17
June 1	Pier—Charleston, S. C. Adv. Apr. 26 to May 17.	Apr. 26

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Ky., Jackson—Plans waterworks system. $25,000.

Ky., Louisville—Louisville Water Co., 435 3rd St. plans 2,650 ft. of 18 in. mains along Eastern Parkway from Shelby St. to Ashbottom Rd. $78,678. C. W. Smith, pres.

Ill., Springfield—Rejected bids centrifugal pumps and settling basin for pumping station. Will hold new bond election next month. Burns & McDonnell, 402 Interstate Bldg., Kansas City, Mo., engrs. Noted Apr. 5.

O., Columbus—See "Streets and Roads."

Wis., Little Chute—Making plans waterworks, incl. deep well, pumping station, rein.-con. mains, etc. $120,000. A. E. McMahon, Menasha, engr. Noted Apr. 26.

Wis., Mosinee—City plans pumping station, pumps and equipment. E. A. Bachman, clk. Engineer not selected.

Wis., Reeseville — Making plans new waterworks system, incl. rein.-con. mains. $15,000. E. B. Parsons, Jefferson, engr.

Ia., Lanesboro—Plans to improve water supply system. $15,000. O. E. Van Horn, city clk.

Minn., St. Cloud—Plans waterworks extensions, about 13 blocks. $15,000. M. E. Lang, city engr.

Wyo., Douglas—Plans gravity water system, incl. 21 mi. 16 in. pipe line, 300 ft. head. $250,000. F. T. Cummings, city engr.

Mo., Farmington—See "Sewers."

Tex., Spearman—Attorney General, Austin, approved $43,000 bonds for complete waterworks system and $12,000 for electric light plant. Address Mayor.

Okla., Antlers—Having plans prepared rapid sand filtration plant, pipe line extensions and new pumps. $30,000. H. G. Olmstead & Co., Oklahoma Bldg., Oklahoma City, engrs.

Okla., Cushing—Election latter part of month to vote on $500,000 bonds for waterworks improvements, incl. filtration plant, pumps, mains and rein.-con. reservoir. Benham Eng. Co., 512 Gumbel Bldg., Kansas City, Mo., engrs.

Okla., Stillwater—Election May 22, to vote on $150,000 bonds for waterworks. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

BIDS DESIRED

N. H., Claremont—May 29, by Bd. Water Comrs., concrete dam and c.i. water pipe, etc. E. E. Davis, Northampton, Mass., engr.; adv. this issue.

N. Y., Brooklyn—May 25, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Ave. K, Dumont, 7th and 8th Aves., Carroll Montgomery, 46th, West 13th, East 51st and East 26th Sts., here.

N. Y., Fairport — May 25, to vote on $325,000 bonds constructing 10 mi. 12 in.

Waterworks (Continued)

and 1 mi. 16 in. mains, 1 m.g. rapid sand filter plant, 2 low adjacent earthen dams with concrete cores, and 300,000 gal. standpipe about 45 ft. high. J. P. Wells, consult. engr., Cutler Bldg., Rochester, preparing plans. Noted May 3.

N. Y., Long Island City—May 22, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Trains Meadow Rd., Bway., McClellan, Murison, Hancock and Hicks Places, Caldwell, Eliot, Hebberd, Anable, Nelson, Jansen, Mt. Olivet, Patterson, Polk, Rowan, 34th, Ditmars, Potter, 7th and 8th Aves., Barclay, Crescent, Davidson, Hallett, Bliss, Carolin, Gosman, Forest, Ferguson, Grove, Horton, Mary, McIntosh, Toledo and Tory Sts., here.

N. Y., Long Island City—May 25, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Constantia and 98th Places, Alstyne, Corona, Colonial, Lenox, Lewis, Marlowe and Way Aves., Bronson, Granger, Martense, Middagh, Saultell, Waldron, Vanderan, 41st and 45th Sts., here.

N. Y., New York—May 22, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in Albany Post Rd., Van Courtlandt Park E., Davidson, Rochambeau, Riverdale, Tyndall, Waldo and Webb Aves., Doughty, East 157th, Exterior, East 147th, East 189th and West 252nd Sts., Bronx Boro.

N. Y., New York—May 25, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in Unionport, Gun Hill and White Plains Rds., Allerton, Fenton, Morgan, Mayflower, Newbold, Pierce, Plymouth, Rhinelander, Rombouts, and Waterbury Aves., Mansion and Mead Sts., Bronx Boro.

N. J., Belmar—May 29, by Mayor and Boro Council, improving water system. F. V. Thompson, boro. clk.; adv. this issue.

Pa., Homestead — May 29, at office J. Schlick, boro. clk., furnishing and laying pipe line. J. M. Rice, 411 Oliver Bldg., Pittsburgh, engr.; adv. this issue.

Ind., Hammond—June 1, by Bd. Pub. Wks., condenser, etc., snow for pumping engine, also rebuilding and removing old pumping engines to new pumping station. A. J. Swanson, chn.; adv. this issue.

O., Cleveland—May 19, Cuyahoga Co., 21,300 ft. 12 in. c. i. mains in Impvt. 28 of Co. Sewer Dist. R. F. MacDowell, Court House, engr.

O., Euclid—See "Sewers."

O., Shaker Heights (Cleveland, P. O.)—See "Sewers."

Neb., Platte Center—May 24, by Henningson Eng. Co., engrs., National Bldg., Omaha, new well, pumps, 50,000 gal. steel tank on 100 ft. steel tower, 6 blocks 4 and 6 in. c.i. mains, for city $17,000.

N. D., Grand Forks—May 31, improving filtration plant, incl. 60 x 142 ft. concrete slab roof over sedimentation basin D. $15,000. C. J. Evanson, city clk.

S. D., Watertown—May 29, by Utilities Comn., concrete substructure and brick superstructure for filtration plant, complete filter, pumping equipment, etc. $55,000. W. T. Cochrane, city engr.

Calif., El Segundo—May 22, by City Clerk, 25,560 lin.ft. 4-10 in. c. i. water pipe, 26,000 lb. c. i. water pipe fittings, one 100,000 gal. steel tank with tower, 2 horizontal centrifugal pumping units with electric motors, etc. Olmstead & Gillelen, Hollingsworth Bldg., Los Angeles, engrs.

Ont., Toronto—May 22, by C. A. Maguire, mayor, 36 and 42 in. c. i. special water main castings, Tender 42. $15,000. R. C. Harris, city engr.

BIDS RECEIVED

O., Cleveland — Concreting pockets at Crib 3, Lake Erie, 3,900 cu.yd. rubble concrete, from Amer. Constr. Co., Marion Bldg., $89,000. Noted Apr. 26.

Wis., La Crosse — Mains in various streets, from Mankato Constr. Co., Mankato, Minn., $44,795.

CONTRACTS AWARDED

Conn., Manchester — Orford Soap Co., Hilliard St., rein.-con. reservoir, 200,000 gal. capacity, to R. G. Bent Co., 183 Ann St., Hartford. Engrs. est. $60,000.

N. Y., Keeseville—Bd. Water Comrs. 5,000 ft. 10 in. Universal c.i. pipe, to Aird-Don Co., Plattsburg, $2 per ft.; excavating, hauling and laying above pipe, to J. J. Fitzpatrick & Sons, Plattsburg, $0.675 per ft., average haul 3½ mi. Noted Apr. 19.

O., Brooklyn Heights (Independence P. O.)—See "Sewers."

WATER-WORKS AND SEWERS—MARIEMONT, OHIO

Following are successful contractors for water supply, sewerage and drainage systems, bids for which were opened on Apr. 18, (A) John L. Walker Co., 231 Court St., Hamilton, (awarded contract for sewers and drains); (B) Crumley, Jones & Crumley, 2301 Concord St., Cincinnati, (awarded contract for water supply). The unit bids were as follows:

	A	B
3,000 lin.ft. 4 in. c.i. pipe lines	$1.50	$1.45
21,000 lin.ft. 6 in. c.i. pipe lines	1.75	1.85
33,000 lin.ft. 8 in. c.i. pipe lines	2.35	2.45
450 lin.ft. 10 in. c.i. pipe lines	3.75	3.25
14,000 lin.ft. 12 in. c.i. pipe lines	4.00	3.95
3,100 lin.ft. 16 in. c.i. pipe lines	7.00	6.25
50-4 in. gate valves	25.00	25.00
70-6 in. gate valves	35.00	37.00
110-8 in. gate valves	55.00	53.00
4-10 in. gate valves	80.00	75.00
22-12 in. gate valves	100.00	92.00
2 16-in. gate valves	500.00	255.00
125 hydrants	150.00	135.00
13,000 lin.ft. ¾ in. service pipe lines	1.40	1.10
3,000 lin.ft. 1½ in. service pipe lines	1.75	1.50
950-¾ in. service connections	10.00	12.00
270-1½ in. service connections	17.00	22.00
30 gate valve chambers	50.00	58.00
27,000 lin.ft. 6 in. vitrified pipe sewers	1.00	1.10
46,000 lin.ft. 8 in. vitrified pipe sewers	1.25	2.10
2,000 lin.ft. 10 in. vitrified pipe sewers	1.75	8.70
100 lin.ft. 12 in. vitrified pipe sewers	2.00	5.00
2,100 lin.ft. 15 in. vitrified pipe sewers	2.50	6.00
1,500 lin.ft. 18 in. vitrified pipe sewers	3.25	3.60
280 lin.ft. 10 in. c.i. pipe sewers	3.50	4.00
12,000 lin.ft. 6 in. vitrified pipe drains	1.00	1.00
9,500 lin.ft. 10 in. vitrified pipe drains	1.75	1.50
4,500 lin.ft. 12 in. vitrified pipe drains	2.00	1.85
7,100 lin.ft. 15 in. vitrified pipe drains	2.25	2.20
7,600 lin.ft. 18 in. vitrified pipe drains	3.25	2.90
3,300 lin.ft. 20 in. vitrified pipe drains	4.00	3.35
2,800 lin.ft. 24 in. vitrified pipe drains	5.50	4.60
4,400 lin.ft. 30 in. vitrified pipe drains	6.50	7.00
2,400 lin.ft. 33 in. reinforced concrete pipe drains	6.50	8.00
2,200 lin.ft. 42 in. reinforced concrete pipe drains	7.50	10.00
2,500 lin.ft. 48 in. reinforced concrete pipe drains	8.50	13.50
800 lin.ft. 66 in. reinforced concrete pipe drains	15.00	20.00
390 manholes on vitrified pipe	85.00	105.00
32 manholes on concrete pipe	150.00	200.00
320 type A inlets	50.00	21.00
7 type B inlets	60.00	25.00
2 type C inlets	40.00	15.00
1,000 lin.ft. 6 in. vitrified pipe underdrains	.75	1.00
500 lin.ft. 8 in. vitrified pipe underdrains	1.10	1.50
*150 cu.yd. class A concrete masonry	30.00	17.00
*300 cu.yd. class B concrete masonry	20.00	15.00
*50 cu.yd. brick masonry	20.00	30.00
*1,000 lb. reinforcing steel	.08	.10
*200 cu.yd. earth excavation below grade	1.00	3.00
*600 cu.yd. rock excavation	6.00	6.00
*500 cu.yd. gravel filling to be furnished	4.00	4.00
Removing culvert (lump sum)	1,000.00	200.00
*8,000 sq.yd. restoring roadway pavement	3.50	.90
*500 sq.yd. concrete paving	2.50	3.00
Connection to Cincinnati Water Works (lump sum)	3,000.00	100.00
2-12 in. supply meters	1,500.00	1,440.00
2 supply meter chambers	250.00	350.00
15 air valves and chambers	50.00	50.00
Extended totals (sewers)	$375,085	
Extended totals (water-works)		$281,127

* These items divided between two contractors.

Mich., Detroit—Bd. Water Comrs., furnishing 150 tons 4-24 in. special castings D.W.W. specifications and 187.5 tons A.W. W.A. specifications, from Russel Wheel & Fdry. Co., Chene St., $100 per ton.

Ia., Walnut—For 13,820 lin.ft. 1-4 in. c.i. mains, etc., to C. Robeck, 1539 Park Ave., Omaha, Neb., $14,812. Noted Apr. 12.

S. D., Conde—Waterworks system, incl. 2 mi. 4-8 in. c.i. pipe, 60,000 gal. elevated tank, 75,000 gal. rein.-con. reservoir, and one 6 x 8 triplex pump, to Phelps-Drake Co., 719 Metropolitan Life Bldg., Minneapolis, $33,000.

Tex., Greenville—To Janes Contg. Co., Southwestern Life Bldg., Dallas, 4,750 ft. 4 in., 12,979 ft. 6 in. and 18,978 ft. 8 in. Class B c.i. mains, fittings, etc. $64,294; 14,390 ft. 6 in. and 12,490 ft. 8 in. vitr. sewer pipe, $16,560. Noted Mar. 29.

Ont., Lansing—H. D. Goode, clk. North York Twp., concrete and brick pumphouse, concrete filtration plant and concrete dam, to A. R. Campbell & Co., Toronto (street address not available) $39,230; pumps, motors, etc., to Bawden Machine Co., 163 Sterling Rd., Toronto, $12,117; filter equipment, to Canadian International Filter Co., Confederation Life Bldg., $12,050; elevated steel tank, to Horton Steel Co., Bridgeburg; c.i. pipe, to Natl. Iron Pipe Co., Cherry St., Toronto, $19,000; laying mains, to Ruscica Bros. & Co., 256 Ontario St., Toronto, $4,426; tank foundations, to Roco & Co., c/o James, Proctor & Redfern, Ltd., 36 Toronto St., Toronto, $2,065. Contracts for valves and hydrants amounting to $35,000, still unawarded. Noted Apr. 5.

Sewers

PROPOSED WORK

Conn., Norwich—State Legislature, Hartford, appropriated $25,000 for new sewerage system for Norwich State Sanatorium. H. B. Campbell, supt.

N. Y., Endicott—Bd. Village Trustees rejected bids sanitary and storm sewers in Union Dist. Will readvertise. C. F. Hunt, village engr.

N. Y., Rochester — See "Streets and Roads."

S. C., Spartanburg—Plans sewer extensions in Woodland, Poplar, Palmetto, St. John and West Columbia Sts., et al., concrete and vitr. clay pipe. $50,000. P. J. O. Smith, supt. streets.

Tenn., Sweetwater—Voted $50,000 bonds for sewerage system.

O., Columbus—See "Streets and Roads."

O., Upper Arlington (Columbus, P. O.)—See "Streets and Roads."

Mo., Bolivar—Making preliminary surveys complete sanitary sewerage system and electric light improvements. A. T. Archer & Co., 609 New England Bank Bldg., Kansas City, engrs.

Mo., Farmington — Making plans new sewerage system and extensions to water works. $100,000. C. A. Haskins, 517 Finance Bldg., Kansas City, engr.

Mo., Gallatin—Shockley Eng. Co., engrs., 800 Graphic Arts Bldg., Kansas City, takes bids about June 1, sewerage system and pavements, here. $60,000.

Mo., Sikeston—Plans election to vote on $55,000 bonds for several miles 16 in. vitr. trunk sewers and Imhoff settling tank. If bond issue passes, $60,000 worth of lateral sewers will be installed (to be paid by special assessments). W. A. Fuller Co., 1917 Railway Exch., St. Louis, engrs.

Tex., Hearne—Making plans sewer extensions. $60,000. Municipal Eng. Co., 715 Praetorian Bldg., Dallas, engrs.

Calif., Santa Clara—Having plans prepared outfall sewerage system, 4,900 lin.ft. 24 in., 3,100 lin.ft. 22 in. and 20,400 lin.ft. 18 in. pipe, vitr. or concrete. To excess $25,000. H. B. Fisher, Growers Bank Bldg., San Jose, engr. Noted Mar. 29.

Sewers (Continued)

BIDS DESIRED

Conn., Bridgeport—May 24, by Sewer Com. of Common Council, City Hall, 18,000 lin.ft. 8-48 in. pipe, manholes, etc. J. A. McElroy, city engr.; adv. this issue.

N. Y., Brooklyn—May 23, by E. Riegelmann, boro pres., Boro Hall, sewers in Vermont St. between Highland Blvd. and Jamaica Ave., etc.

N. Y., New York Mills—May 31, sanitary sewerage system. W. G. Stone & Son, 24-31 Mann Bldg., Utica, engrs.; adv. this issue.

N. J., Hackensack—June 4, by Hackensack Impvt. Comn., sewers, pumping stations, equipment, etc., Contrs. 5 and 6. L. Lozier, Bank Bldg., Main and Mercer Sts., engr.; adv. this issue.

N. J., Hightstown—June 5, alterations and additions to sewage disposal plant. G. P. Dennis, boro clk.; adv. this issue. Noted Mar. 1.

Pa., Erie—May 22, by City Council, constructing sewers. F. C. Lynch, city engr.; adv. this issue.

N. C., Durham—May 25, by R. W. Rigsbee, city mgr., sanitary sewers, 20,000 ft. 8 in. terra cotta pipe and 10,000 ft. 6 in. iron services.

O., Akron—May 31, at office of W. F. Peters, dir. Pub. Serv., trunk intercepting sewer in Hawkins Ave.; adv. this issue.

O., Brooklyn Heights (Independence P. O.)—May 26, sewers in West 11th St. and Schaaf Rd. To exceed $25,000. W. H. Evers Eng. Co., Engineers Bldg., Cleveland, engrs.

O., Euclid—May 21, vitr. clay sewers and c. i. water mains in East 264th St., Hartland, Colburn and Alberton Rds. To exceed $25,000. F. A. Pease Eng. Co., Marshall Bldg., Cleveland, engrs.

O., Shaker Heights (Cleveland P. O.)—May 24, sewers, water mains, grading and laying sidewalks on East 156th St. and Milverton Rd. To exceed $25,000. F. A. Pease Eng. Co., Marshall Bldg., Cleveland, engrs.

Ill., Chicago—May 22, by Bd. Local Impvts., 207 City Hall, for sewers. $43,000. C. D. Hill, ch. engr.

Wis., La Crosse — Sewers in various streets, from C. W. Noble, 206 State Bank Bldg., $69,387.

Wis., Milwaukee—Sewerage Comn., 508 Market St., structural steel for filter and drier house on Jones Island, to Milwaukee Bridge Co., 1400 34th St., $114,800.

Mo., Kansas City—June 4, by P. Hartung, engr., City Hall, disposal plant and 7 mi. of 7 ft. rein.-con. or concrete sewers in Blue Valley. $2,225,000. Noted Mar. 1.

Kan., Madison—May 22, by G. F. Fellay, city clk., sanitary sewerage system, outfall sewers and disposal plant, incl. 2,600 ft. 12 in., 9,000 ft. 10 in. and 11,000 ft. 8 in. vitr. clay pipe, 16,000 cu.yd. earth trenching, etc., in 1st to 6th Sts., inclusive, Main and Sherman Rds., Central, Boone, Davis, Hamson, Madison West, North, South and Dutch Hollow Sts. $59,795. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, Okla., engrs. Noted May 3.

S. D., Hartford—June 1, sanitary sewerage system and disposal plant $35,000, extending watermains, $4,000. Chenoweth, Kennedy & Rettinghouse, Boyce-Greely Bldg., Sioux Falls, engrs. Noted May 10.

BIDS RECEIVED

Mich., Detroit—Laterals 3910 and 3912, from W. Blanck & Co., 827 Ford Bldg., $29,767 and $16,755; Lateral 3913 from P. Cappello, Detroit (street address not available) $1,075; Laterals 3914 and 3918, from Rennie & Dibble, Lincoln Park (Wyandotte P. O.) $14,806 and $11,977; Laterals 3916 and 3920, from Hammen & Co., 4612 Woodward Ave., $9,473 and $15,978; Lateral 3919 from Detroit Drainage Constr. Co., 5099 LeMay Ave., $17,395; Lateral 3917, from C. R. Lennane, 2631 Woodward Ave., $12,906; Storm Sewer 3853, from C. Tusco Co., Detroit (street address not available) $9,982. Noted May 10.

Wash., Seattle—Bd. Pub. Wks., May 4, from F. N. Badolato, Box 561, sanitary sewers in Brandon St. et al., (a) clay (b) concrete, 10,235 ft. 8 in. (a) $2.35 (b) $2.30, 3,090 ft. 10 in. (a) $2.75 (b) $2.70, 362 ft. 12 in. (a) $3 (b) $2.90, 1,210 ft. 15 in. (a) $4.75 (b) $4.65, 410 ft. 18 in. (a) $6 (b) $5.75, 752 ft. 21 in. (a) $7.50 (b) $7, total with (a) $70,984 with (b) $69,683; East Marginal Way, 3,824 ft. 12 in. clay sewer pipe $1.87, 3,242 ft. 15 in. $2.50, 4,214 ft. 18 in. $2.80, 4,310 ft. 21 in. $3.30, 2,348 ft. 24 in. $4, 1,574 ft. 27 in. $5.10, 1,828 ft. 32 in. $7, 304 ft. 36 in. $14, etc. Total $124,321, engrs. est. $135,000.

Calif., Whittier—Outfall sewers and sewage disposal plant incl. 15,623 lin.ft. 18-27 in. pipe, rein.-con. Imhoff tanks and filter beds, 1,000,000 gal. capacity, etc. (a) complete construction of outfall system and disposal works (b) portion of outfall to be built at this time (c) portion of disposal works to be constructed at this time, from De Waard & Cobham, Granger Bldg., San Diego, (a) $137,904 (b) 48,965 (c) $46,250.

SEWERS—TOLEDO, OHIO

Bids were opened by city, Apr. 10, for constructing West Side and Swan Creek Intercepting Sewer, Contr. No. 6, (A) Harris & Tansey, 504 Nasby Bldg., (awarded contract); (B) Graham & Henderson, Cleveland; (C) Byrne Bros., Chicago. The unit bids were as follows:

	A	B	C
Junction manhole No. 37 (lump sum)	$1,100.00	$1,131.50	$810.00
City Park Avenue inverted siphon (lump sum)	40,000.00	49,000.00	50,562.50
Junction manhole No. 44 (lump sum)	1,300.00	980.00	269.15
Junction Avenue inverted siphon (lump sum)	11,000.00	15,700.00	15,045.60
Standard Manholes (concrete) (alternate), 900 ft. of depth	10.00		10.00
Standard manholes (brick) (alternate), 900 ft. of depth	10.00	11.00	11.00
25 standard manhole frames and covers	25.00	25.00	35.50
100 cu.yd. additional earth excavation (open cut), 0 to 10 ft. cut	2.00	1.00	1.50
100 cu.yd. additional earth excavation (open cut) 10 to 15 ft. cut	3.00	1.00	2.00
100 cu.yd. additional earth excavation (open cut), 15 to 20 ft. cut	4.00	2.00	2.50
100 cu.yd. additional earth excavation (open cut), 20 to 25 ft. cut	4.00	2.00	3.00
50 cu.yd. additional earth excavation (open cut), 25 to 30 ft. cut	4.00	3.00	3.50
300 cu.yd. additional earth excavation (tunnel)	1.00	4.00	6.00
50 cu.yd. rock excavation	1.00	8.00	8.00
100 cu.yd. additional class A concrete	15.00	15.00	15.00
300 cu.yd. additional class B concrete	10.00	12.00	14.00
40 cu.yd. additional brick masonry	25.00	20.00	20.00
250 M. ft. B.M. sheeting and timbering left in place	50.00	50.00	50.00
20 M. ft. B.M. timber in foundations	1.00	20.00	50.00
1,500 lin.ft. piles	1.00	.50	1.00
2,000 lb. additional steel reinforcement	.08	.06	.06
100 lin.ft. 8-in. vitrified pipe	1.00	.50	.60
100 lin.ft. 10-in. vitrified pipe	1.00	.85	.80
75 lin.ft. 12-in. vitrified pipe	1.50	1.25	1.10
50 lin.ft. 15-in. vitrified pipe	3.00	1.50	1.50
50 lin.ft. 18-in. vitrified pipe	3.50	2.50	2.00
55 lin.ft. 20-in. vitrified pipe	3.50	3.00	2.50
50 lin.ft. 24-in. vitrified pipe	5.00	4.50	3.25
10 8-in. vitrified specials	2.00	2.50	2.25
10 10-in. vitrified specials	2.00	3.00	2.50
10 12-in. vitrified specials	3.00	3.50	3.00
10 15-in. vitrified specials	5.00	4.50	4.50
5 18-in. vitrified specials	6.00	5.00	5.50
5 20-in. vitrified specials	7.00	6.00	7.50
2 24-in. vitrified specials	10.00	8.00	10.00
5,000 cu.yd. special tamping	1.00	.75	1.00
300 lin.ft. removing and relaying or rebuilding curb and gutter	.50	1.00	1.25
2,200 sq.ft. removing and relaying or rebuilding sidewalk	.25	.25	.30
225 sq.yd. removing and relaying or rebuilding brick pavement on concrete base	6.00	4.00	4.00
25 sq.yd. removing and relaying or rebuilding brick pavement on no foundation	1.00	.00	2.00
10 sq.yd. removing and relaying or rebuilding granite block pavement on concrete base	6.00	6.00	5.00
75 sq.yd. removing and rebuilding asphalt pavement on concrete base	6.00	5.00	4.50
25 sq.yd. removing and relaying or rebuilding cablestone pavement	1.00	1.00	2.00
2,295 lin.ft. 75-in. circular sewer tunnel, using monolithic concrete	29.50	27.00	29.40
2,155 lin.ft. 72-in. circular sewer tunnel, using monolithic concrete	29.50	26.50	28.15
4,940 lin.ft. 69-in. circular sewer tunnel, using monolithic concrete	24.50	25.00	25.60
1,970 lin.ft. 66-in. circular sewer tunnel, using monolithic concrete	24.50	24.50	26.85
4,575 lin.ft. 51-in. circular sewer tunnel, using monolithic concrete	19.50	19.00	17.90
1,050 lin.ft. 39-in. circular sewer tunnel, using monolithic concrete	11.00	18.50	17.35
450 lin.ft. 39-in. circular sewer, open cut, using monolithic concrete	12.00	22.00	16.00
Extended totals using brick manholes	$500,253		$524,147
Extended totals using concrete manholes	$500,253	$513,573	$525,047

CONTRACT AWARDED

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., to D. Bonnacci, 672 Degraw St., Brooklyn, sewers in Bliss St. $8,194, 95th St. $6,101, 95th Ave. $22,853, 84th St. $29,369; to Seaside Contg. Co., 193 Beach 108th St., Rockaway Beach, Kimball Ave. $9,663. Noted May 3.

New Jersey—Comrs. of Jersey City, City Hall, constructing Sect. 1 sewage disposal works, to J. L. Sigretto, Bernardsville, N. J., $1,104,401; Sect. 3, 10 mi. sewers from Dover to Boonton, to C. F. Goeringer Constr. Co., 51 South Washington St., Wilkesbarre, Pa. Noted Apr. 19.

Ky., Louisville—Comrs. of Sewerage, constructing Portland Relief sewer, to F. C. Williams, Fairmont Hotel, Jersey City, N. J., $143,686. Noted Apr. 5.

O., Brooklyn Heights (Independence P. O.)—For 5,320 ft. 12-30 in. vitr. clay sewers and 4,330 ft. 4-8 in. c.i. mains, to F. Philipps Co., Engineers Bldg., Cleveland, $34,000. Noted Apr. 26.

Ill., Park Ridge—Sewers, to American Eng. and Constr. Co., 2816 North Washtenau Ave., Chicago. Engrs. est. $25,000. Noted May 3.

Ill., Urbana — Urbana-Champaign Sanitary Dist., Flat Iron Bldg., intercepting sewers, sewage disposal plant and appurtenances, to English Bros., Lincoln Bldg., Champaign, $489,073. Noted Mar. 15.

Kan., Maryville—Extending sewers, 13,000 ft. 8 in. vitr. clay pipe, to Reed & Weedlock, Clay Center, $29,249.

Neb., Humboldt—Sewers in Dists. 2 and 3, to Asplund Constr. Co., Tecumseh, Neb., $28,552. Noted Feb. 15.

Tex., Greenville—See "Waterworks."

Calif., Riverside — Sewers in various streets, 48,162 lin.ft. 6-24 in. vitr. and 7,930 ft. 18-33 in. rein.-con. pipe, etc., to H. D. Churchill Co., 350 Merrick St., Los Angeles, $117,348. Noted May 10.

Bridges

PROPOSED WORK

North Carolina—State Hy. Comn., Raleigh, having plans prepared and soon takes bids rein.-con. bridges and culverts in Caldwell, Scotland, Rowan, Mitchell, Buncombe, Bladen, Iredell, Randolph, Guilford, Martin, Halifax, Edgecombe and Gates Counties, $887,300. C. M. Upham, state highway engr.

Fla., Ft. Myers—Lee Co. plans 400 ft. concrete and timber bridge, steel draw span, over Caloosahatchee River, 5,200 lin. ft. earth approach and fill, etc. $150,000. J. E. Garner, clk.

Alabama—State Hy. Dept., Montgomery, had plans prepared 512 lin.ft. concrete girder bridges on Oneonta Village Springs Rd., Blount Co. W. S. Keller, state highway engr.

Ky., Louisville—Bd. Park Comrs. plans Bridge 6, near Barnet Hill in Cherokee Park, concrete with stone coping. $25,000. Olmsted Bros., Brookline (Boston P. O.), Mass., archts.

Ky., Madisonville—Hopkins Co. plans 110 ft. steel truss highway bridge over Pond River on Calhoun-Ashbysburg Rd. $35,000. J. E. Hopkins, Ashbysburg, secy. Bd. Comrs.

Indiana—State Hy. Comn., Indianapolis, had plans prepared 227 bridges in 59 counties. $3,214,400 of which $1,045,660 is Federal aid. W. J. Titus, bridge engr.

Wis., Milwaukee—Rejected bids widening Folsom Pl. Bridge. $130,000-$150,000. Will readvertise soon. J. Schwada, City Hall, engr. Noted May 10.

Minnesota—See "Streets and Roads."

Kan., Marion—Marion Co. had plans prepared Mill bridge, steel and concrete, 120 ft. Marsh arch span, 20 ft. roadway. Marsh Eng. Co., 205 Masonic Temple Bldg., Des Moines, Ia., engrs.

Tex., Brownwood—Brown Co. election May 26, to vote on $35,000 for bridge. R. A. Nichols, Georgetown, engr.

Bridges (Continued)

BIDS DESIRED

N. Y., Norwich—May 28, by S. C. Nelson, Jr. clk. joint bodies, town board of town of Norwich and Common Council of city of Norwich, City Hall, constructing South Broad St. bridge, over Canasawacta Creek. E. F. Musson, city engr.; adv. this issue. Noted Apr. 5.

N. J., Newark—May 22, by G. C. Bergen, purch. agt. Essex Co., Court House, rein.-con. I-beam bridge over Canoe Brook, Northfield Rd., Livingston, also rein.-con. extensions to bridge on Hobart Gap Rd. 200 ft. south of South Orange Ave., Livingston. $25,000. W. A. Stickel, Court House, engr. Noted May 3.

Tennessee—See "Streets and Roads."

Ohio—See "Streets and Roads."

Kan., Hutchinson—May 24, at office F. R. Lutz, clk. Reno Co., Haven Bridge, Project 156, twelve 40 ft. deck spans, 1,550 cu.yd. concrete, 132,842 lb. reinforcing, etc., alternate bid for six 80 ft. arch spans, 1,281 cu.yd. concrete, 107,475 lb. reinforcing, etc.; constructing 9.4167 mi. approaches to Haven Bridge.

Kan., Wellington—May 23, at office A. E. Alexander, clk. Sumner Co., bridges on Meridian Highway, Sect. W, Project 35, Chikaskia Bridge 1, Alternate 1 six 50 ft. deck girder spans, Alternate 2 three 100 ft. through arch spans; Ninnescah Bridge 2, Alternate 1 six 50 ft. deck girder spans, Alternate 2 four 65 ft. through arch spans, Alternate 3 three 100 ft. steel truss spans; Bluff Creek Bridge 3, Alternate 1 four 45 ft. deck girder spans, Alternate 2 two 90 ft. through arch spans.

South Dakota — May 22, by State Hy. Dept., Pierre, one 34 ft. concrete viaduct Davison Co., one 45 ft. concrete viaduct and one 30 ft. I beam bridge, Lake Co., one 104 ft. concrete and steel viaduct McCook Co., one 45 ft. concrete viaduct Aurora-Brule Counties, 5 concrete and steel bridges Lawrence-Meade Counties, two 45 ft. viaducts, Miner Co. F. D. Hudgins, state engr.

Wyoming—See "Streets and Roads."

Wyoming—May 22, by State Hy. Comn., Cheyenne, 133 ft. timber trestle and 80 ft. steel span, on Federal Aid Project 139, Lusk-Newcastle Rd., Niobrara Co. $25,000. J. F. Seiler, state bridge engr.

California—May 28, by State Hy. Comn., Sacramento, bridge across Arroyo Seco Creek near Shellville, Sonoma Co., two 40 ft rein.-con. girder spans, 28,000 lb. reinforcing, etc. R. M. Morton, state highway engr.

Calif., Santa Rosa — May 22, by City Council bridge over Santa Rosa Creek on A St., 28,000 cu.ft. concrete with necessary excavation and paving approaches. $27,000. L. L. Mills, city engr.

BIDS RECEIVED

Ohio—See "Streets and Roads."

Mich., Lansing—Rein.-con. arch bridge over Grand River on Seymour St., from Townsend, Shuttleworth & Balmer, 306 South Capitol St. $52,203. Noted Apr. 19.

Colorado — State Hy. Dept., Denver, bridge on Sta. 45, Gunnison Co., from Winterburn & Lumsden, Grand Junction, $48,248. Noted May 3 under Streets and Roads.

Calif., San Anselmo—For bridges in various sections of town, from W. L. Proctor, Rosenberg Bldg., Santa Rosa. $55,393. Noted Apr. 12.

CONTRACTS AWARDED

Alabama—State Hy. Dept., Montgomery, 624 ft. bridges on Evergreen-Belleville Rd., Conecuh Co., one 65 ft. steel span, remainder treated timber on treated timber piles, 18 ft. roadways, to Bosworth-Smith Co., Montgomery, $35,021; 342 bridges on road from Dale Co. line to Florida State Line, Houston Co., treated timber on treated timber piles, 18 ft. roadways, and 638 ft. bridges on Florala-Opp-Audalusia Rd., Covington Co., one 80 ft. steel span, remainder treated timber on treated timber piles, 18 ft. roadways, to Stanley & Singer Constr. Co., Lafayette, $23,794 and $33,339 respectively. Noted Apr. 19.

Alabama—State Hy. Dept., Montgomery, 914 ft. bridge on Alexander City-Jacksons Gap Rd., Florida Short Route, near Sturdibant, Tallapoosa Co., six 150 ft. steel spans complete in place with concrete floor, to Virginia Bridge & Iron Co., 3900 8th Ave. N., Birmingham, $81,528; concrete piers for above, to Hardaway Contg. Co., Columbus, Ga., (street address not available), $55,638. Noted May 10.

Wis., Conrath—Rush Co., constructing bridge, three 128 ft. steel spans, rein.-con. foundation, at junction of Flambeau and Chippewa Rivers, here, to H. E. Warden Co., Eau Claire, $32,654.

Ia., Cherokee—Cherokee Co., to Miller & Johnson, Humboldt, 38 box culverts, 12 I-beams and 2 pony trusses, $47,935; to Humphrey & Son, Cherokee, one I-beam, $6,949, concrete figures $20,07.

Ia., Greenfield—Adair Co., 3 span concrete bridge to have two 55 ft. and one 80 ft. deck arch spans, 24 ft. roadway, over Chicago, Rock Island & Pacific R.R. tracks, here, to Federal Bridge Co., 1001 Bankers Trust Bldg., Des Moines, $42,263. Noted May 10.

Ia., Manchester—Delaware Co., 8 concrete box culverts, 3 I-beam and 1 pony truss span, to Parsons & Meyer, Dyersville, $25,693, concrete figures $21.04.

Ia., Sigourney—For 67 concrete box culverts and extensions on Primary Bridge Project 149, to Currie-Simpson Co., 218 L and J Bank Bldg., Waterloo, $33,119 (concrete figures $21.24).

Ia., Waukon — Allamakee Co., Primary Bridge Project 141, one 20 x 175 ft. high truss with one 20 x 80 ft. approach and one 20 x 100 ft. skew pony truss with two 20 x 40 ft. approaches, to Currie-Simpson Co., 218 L. & J. Bldg., Waterloo, $47,600 (concrete figures $29.68).

Ia., Webster City—Hamilton Co., Primary Bridge Projects 9, 41, 103 and 104, to J. R. Stevens Co., Anamosa, 1 deck girder, and 1 slab bridge, 1 box culvert $6,812; to Hirt & Wilson, Woolstock, 12 box culverts $6,020; to A. Swanson Co., Webster City, 16 box culverts, 3 I-beams and 1 deck girder span $20,300, concrete figures $18.97 to $24.65.

South Dakota—State Hy. Dept., Pierre, three 94 ft. through Howe truss spans, on Project 72, Fall River Co. and one on Project 88B, Meade Co., to Concrete Eng. Co., Rapid City, $18,951, and $2,514 respectively; bridge on Project 126, Kingsbury Co. and one on Project 136, Hamlin Co., to Great Northern Bridge Co., 225 Kasota Bldg., Minneapolis, Minn., $4,746 and $4,184 respectively; bridge on Project 74, Corson Co., to Western Bridge & Constr. Co., 748 Peters Trust Bldg., Omaha, Neb., $5,373; bridge on Project 49B, Lyman Co., to D. D. Bidwell, Eagan, $17,168; bridges on Project 129, Turner Co., to Babcock Bros., Winnebago, Minn., $25,099.

Dams

PROPOSED WORK

Pa., Phila.—Fairmount Dam in Schuylkill River, from McLean Constr. Co., Pier 5, N. Wharves, $628,000. Noted Apr. 26.

N. Y., Phila.—See "Miscellaneous."

Mich., Iron Mountain—See "Industrial Works" under Contracts Awarded.

Wis., Chippewa Falls—See "Industrial Works."

Calif., Oakdale—Oakdale and South San Joaquin Irrigation Dists. plan to vote on $112,500 bonds to purchase site for Melones Dam.

Quebec—See "Miscellaneous."

BIDS DESIRED

N. H., Claremont—See "Waterworks."

Railways

PROPOSED WORK

Illinois—Chicago, Burlington & Quincy R.R., 547 West Jackson Blvd., Chicago, plans railroad from Frederick to Vermont. $1,800,000. A. W. Newton, ch. engr.

New Brunswick—Beaver Coal & Ry. Co., Beersville, plans 15 mi. line from Adamsville to Coalville. H. Burchell, ch. engr.

Ontario—Temiskaming & Northern Ontario Ry., North Bay, takes in June, 20 mi. branch line from Swastika to Lardner Lake, and in July or August for extending main line north to James Bay. S. B. Clement, ch. engr.

CONTRACTS AWARDED

Minnesota — Great Northern Ry., 175 East 4th St., St. Paul, to Baumgardner & McMenemy, 302 Central Bank Bldg., St. Paul, enlarging yards at Willmar, $25,000, also broadening road bed from 60 to 80 ft., between Kandiyohi and Atwater, 8 mi. Cost of second track laying $300,000. Company furnishes steel.

California—Southern Pacific Co., Southern Pacific Bldg., San Francisco, excavation for 12 mi. track, 85,000 cu.yd., from Mojave to Cameron (Kern Co.), to Utah Constr. Co., Phelan Bldg., San Francisco.

Excavation, Drainage Irrigation

PROPOSED WORK

Okla., Eufaula—Deep Fork Dist. 1, having plans prepared deepening, straightening and widening Deep Fork Creek for 30 mi. in McIntosh Co., 2,000,000 yd. floating dredgework. $500,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Okla., Pauls Valley—Wildhorse D. D. having plans prepared ditching and straightening 20 mi. Wildhorse Creek, 600,000 yd. floating dredgework. $140,000. R. J. Wheeler, Wynnewood, engr.

Calif., Tracy—Banta-Carbona Irrigation Dist. having report prepared by W. D. Harrington, consult. engr., Tracy, for system to irrigate 20,000 acres.

BIDS DESIRED

New Jersey—May 31, by T. J. Headlee, executive officer, Entomology Bldg., Bleecker Pl., New Brunswick, cutting 50,000 lin. ft. 10 in. ditch in salt marshes, Ocean Co.; 70,000 lin.ft. 10 in. ditch, 30 in. deep, Cape May Co.

BIDS RECEIVED

Calif., Meridian—Recl. Dist. 70, 141,313 ft. ditch and lateral excav., 18,000 ft. main canal excav., etc., from H. T. Reupke, Box 421, Los Banos, $33,222.

CONTRACTS AWARDED

Mont., Red Lodge—Red Lodge—Rosebud Irrigation Dist., canal and laterals, 300,000 cu.yd. excav., 2,500 sq.yd. paving, 2,000 lin. ft. corrugated metal pipe, 700 lin.ft. vitr. pipe, 3,600 lin.ft. flume, etc., to J. S. Haley, 119 West Lamme St., Bozeman, $216,381. Noted Jan. 18.

Tex., Houston—Harris Co. D. D. 12, Court House, 27,000,000 cu.yd. excav., ditch on Brays Bayou, to Howard Kenyon Constr. Co., Forrest Hill Blvd., $400,000. Noted Apr. 19.

Ore., Eugene—Widening city power plant canal, 135,000 cu.yd. wet earth and 15,000 cu.yd. rock excav., to Morrison-Knudsen, Railroad and Reclamation Ave., Boise, Idaho, $55,727.

Streets and Roads

PROPOSED WORK

Maine—State Hy. Comn., Augusta, plans gravel surfacing 2.92 mi. road in Washington Co., $63,828, Federal aid $31,914. P. D. Sargent, ch. engr.

New Hampshire—State Hy Comn., Concord, plans paving 0.55 mi. road, bituminous macadam on crushed stone, in Belknap Co., $15,000, Federal aid $7,500; 0.82 mi. bituminous macadam, in Rockingham Co., $20,357, Federal aid $10,179; 0.43 mi. gravel, in Coos Co., $17,000, Federal aid $6,988. F. E. Everett, state highway engr.

Rhode Island—State Bd. of Pub. Roads, Providence, plans rein.-con. paving 5.55 mi. road, Washington Co. $293,688. Federal aid $90,188.

Connecticut—State Hy. Dept., Hartford, appropriated $2,000,000 for repair of highways. C. J. Bennett, state highway comn.

Conn., Wethersfield — Fire Dist. Comn. plans laying 2.7 mi. concrete walks. $27,000. E. H. Ferr, member of comn.

N. Y., Hornell — Plans macadamizing Armory Pl., Preston Ave., Fulton, West Genessee, Wells, East Elm and Ontario Sts. also brick paving Park and Taylor Sts. $150,000. F. H. Robinson, city engr.

N. Y., Perry—Making plans concrete paving 7 streets. $50,000. R. H. How, village engr. Noted Apr. 5.

N. Y., Rochester—Plans paving Riverbank Pl., Barton and Coventry Sts., willite, $48,200; Union, Hamilton, Chandler and Marion Sts., asphalt, $77,000; resurfacing Reynolds St., Buena Pl. and Avondale Park, asphalt, $34,800; widening Main St. 12 ft. asphalt, $63,300; Tarvia surface treatment on Latta Rd., $2,500; walks and grading Bradfield St., $9,500; sewer in Portland Ave., $8,200. C. A. Poole, city engr.

N. Y., Saranac Lake—Bd. Village Trustees plans brick or concrete pacing Cedar and Helen Sts. $35,000-$40,000.

New Jersey—State Hy. Dept., Trenton, plans concrete paving 4 mi. road between Bordentown and Crosswicks Creek, known as part of Route 2, Burlington Co. $220,000. W. G. Sloan, Broad St. Bank, engr.

N. J., Camden—Camden Co. plans concrete paving 5.5 mi. River Rd. and Cuthbert St., 20 ft., $210,000. J. J. Albertson, co. engr.

N. J., Flemington—Hunterdon Co. plans repairing 63 mi. roads. $94,907. G. Davis, Whitehouse Sta., engr.

N. J., Princeton—State Hy. Dept., Trenton, plans concrete paving 0.6 mi. Bayard Lane, here, $36,000. W. G. Sloan, Broad St. Bank, Trenton, engr.

Pa., Erie—Plans asphalt pavements on 21st and 31st Sts. $25,400. F. G. Lynch, city engr.

Pa., Johnstown—City Comrs. open bids about June 20, paving 17 streets and alleys, 10,000 ft. concrete and brick. H. L. Wilson, city engr.

Va., Richmond—Plans paving Broad St. and Oakwood Ave. $500,000 bond issue authorized.

Streets and Roads (Continued)

W. Va., Philippi—City Council plans concrete paving and curbing Mason, Bosworth, Wabash and Maple Sts., et al. $48,500. I. R. Murphy, clk.

North Carolina—State Hy. Comn., Raleigh, had plans prepared and soon takes bids, clearing, grading and concrete or asphaltic paving 105.38 mi. roads in Green, Perquimas, Franklin, Harnett, Guilford, Montgomery, Randolph, Iredell, Rockingham, Edgecombe, Richmond, Rowan, Scotland and Burke Counties, $3,627,400; clearing, grading and topsoiling or gravel surfacing 232.35 mi. roads in Edgecombe, Beaufort, Nash, Martin, Halifax, Gates, Northampton, Bladen, Robeson, Granville, Warren, Caldwell, Stokes, Alleghany, Mitchell, Surry, Person and Orange Counties, $1,414,100; clearing, grading and waterbound or bituminous macadam surfacing 16.97 mi. roads in Guilford, Yancey and Buncombe Counties, $402,000. C. M. Upham, state highway engr.

North Carolina—State Hy. Comn., Raleigh, having surveys made clearing and grading 16 mi. road from Hayesville to Macon Co. Line, Route 28, State Project 922, Clay Co., $80,000, 15.9 mi. road from Clay Co. line to Franklin on Route 28, State Project 965, Macon Co., $78,000. Work will be done by counties. C. M. Upham, state highway engr.

North Carolina—State Hy. Comn., Raleigh, having surveys made grading and concrete or asphaltic paving 21.8 mi. roads in Pamlico and Greene Counties, $685,000; reconstructing 16.6 mi. road from Asheboro to Chatham Co. line, Route 75, State Project 582, Randolph Co., $30,000. C. M. Upham, state highway engr.

N. C., Durham—Bd. Aldermen authorized $300,000 bonds for additional street paving. R. W. Rigsbee, city mgr.

S. C., Gaffney—Cherokee Co. Highway Comn. having surveys made grading and topsoiling 10 or 12 mi. road. C. W. Wannamaker, co. engr.

S. C. Gaffney—Had estimates prepared concrete curbing, guttering and sidewalks in Wards 1, 3 and 5, 24,500 lin.ft. combined concrete curb and gutter, 8,400 sq.yd. 4 in. concrete sidewalks, etc. $54,000. H. Beebe, Spartanburg, engr.

S. C., Spartanburg—Plan to vote on $75,000 bonds curbing, guttering and sidewalks on Bomar, Holmes, Palisade, Smith, Seay and Spring Sts., et al. P. J. O. Smith, supt. streets.

Ala., Atmore—Having plans prepared paving streets and sidewalks. $50,000. R. L. Totten & Co., B-M Bldg., Birmingham, engrs.

O., Columbus—Making plans grading, curbing, laying necessary water services and sewer connections and paving 2,152 ft. Southwood and Washington Aves., brick or asphalt; 248 ft. 8 in. sanitary sewer in alley west of Taylor Ave. R. H. Simpson, city engr.

O., Dover—Plans resurfacing 3rd and Factory Sts., $21,250; paving 11th St., sheet asphalt or Kentucky rock asphalt on concrete, $20,000.

O., Lisbon—Columbiana Co. plans resurfacing 4 mi. Canton-Lisbon Rd.; surfacing 1.25 mi. East Rochester-Georgetown Rd., 14 or 16 ft., macadam, $28,000; grading 2.23 mi. Summitville-Milport-Gavers Rd., 16 ft., Franklin Twp., $26,500. L. C. Kirk, Court House, engr.

O., Montville—Montville Twp. plans improving North and South Montville Center Rd., here. $25,000. W. H. Lehman, clk.

O., Upper Arlington (Columbus, P. O.)—Making plans grading, laying sewers and asphalt paving 31,250 ft. Arlington Ave., Kensington and Southway Drives, North and South Parkways, Andover, Waltham, Wickford, Oxford, Club, Westover, and Guilford Rds., 18-37 ft. wide. $282,000. D. Sayre, 52 West Gay St., engr.

Ind., Indianapolis—Marion Co. received no bids grading and graveling 7 mi. Schaefer Rd., 18 ft. $78,489. Will revise and readvertise. J. J. Griffith, co. engr. Noted Apr. 19.

Ind., Jeffersonville—Clark Co. plans gravel surfacing 8.81 mi. Wm. D. Taylor County Rd., in Owen and Washington Twps. $85,186. K. P. Barnes, co. surv.

Ind., Laporte—Laporte Co. plans grading and graveling 2.75 mi. Rogers Rd. and 2.9 mi. Bluhm Rd., 18 ft., $25,994 and $26,530 respectively. P. Summy, Laporte, engr.

Mich., Detroit—Having plans prepared paving 5 streets, 14,990 sq.yd. sheet asphalt on concrete, $87,960, also 5 alleys, 9,260 sq.yd., 1 course 6 in. concrete, $23,800. J. W. Reid, city engr.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, plans grading 15.102 mi. and hard surfacing 35.195 mi. $715,034 (Federal aid $203,739) and $1,051,400 (Federal aid $525,700) respectively. C. H. Older, ch. highway engr.

Ia., Cresco—Howard Co. plans gravel surfacing 10.486 mi. Federal Aid Project 190, Howard Co., $84,965 (Federal aid $42,000).

Ia., Elkader—Clayton Co. plans grading 9.25 mi. Federal Aid Project 166, $29,658 (Federal aid $14,800).

Ia., Le Mars—Plymouth Co. plans grading 17.8 mi. Federal Aid Project 192, $167,426 (Federal aid $83,700).

Ia., Shenandoah—Making plans paving 50 blocks, asphalt or concrete. R. L. Keltner, Shenandoah, engr.

Minnesota—Following are county appropriations for road and bridge construction during 1923: Becker Co., $24,976, P. Gunstad, Detroit, engr.; Cook Co., $24,939, J. E. Smith, Grand Marais, engr.; Douglas Co., $65,290, A. Webster, Alexandria, engr.; Koochiching Co., $64,965, A. B. Peterson, International Falls, engr.; Sherburne Co., $28,150, E. E. Chase, Elk River, engr.; Sibley Co., $59,942, E. R. Patterson, Gaylord, engr.; Stevens Co., $25,038, W. A. Hunt, Morris, engr.; Wabasha Co., $89,372, G. A. Larson, Wabasha, engr.

Minn., Duluth—St. Louis Co. making plans and takes bids about July 6, concrete surfacing State Rds. 1, 2, 3, 6 and 35 from Duluth to iron mining districts. $1,500,000. A. W. Acton, co. engr.

Minn., St. Paul—Plans paving 1 mi. 6th St. from Summit Ave. to bridge over Mississippi River. $152,750. G. M. Shepard, city engr.

Kan., Emporia—Lyons Co. making plans paving 2 mi. Neosho Rapids Spur, 18 ft., brick or concrete. W. S. Ruggles, co. engr.

Kan., Oswego — Labette Co. had plans prepared surfacing 7.9 mi. Project 126, Sect. A, Joplin-Denver Rd., gravel or bitulithic macadam, 33,130 cu.yd. excav., etc.

Mo., Gallatin—See "Sewers."

Okla., Davis — Having plans prepared grading and paving 7 blocks Main St., 40 ft. 15,000 sq.yd. concrete. $65,000. E. T. Archer & Co., New England Bldg., Kansas City, Mo., engrs.

Okla., Tulsa—Tulsa Co. election June 12, to vote on $2,000,000 bonds for 700,000 sq. yd. concrete paving. D. W. Patton, Court House, engr.

Okla., Wynnewood—Plans grading, curbing and paving with brick and concrete 7 blocks Commercial Ave. and Averytt St., 26 ft. $75,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Colo., Denver—Plans paving 12 blocks in Alley Paving Dist. 99, $27,360; 12 blocks Alley Paving Dist. 100, $25,486; 12 blocks Alley Paving Dist. 101, $25,338; all foregoing 16-20 ft. A. K. Vickery, City Hall, engr.

Nevada—State Hy. Dept., Carson City, plans gravel surfacing 2.4 mi. Federal Aid Project 76, Humboldt Co. $49,363. (Federal aid $43,054).

Wash., Kelso—Soon takes bids concrete paving Oak, Grade, 3rd, 4th, 5th and Academy Sts., 13 blocks. $39,543. M. J. Lord, city clk.

Oregon—State Hy. Comn., Salem, plans grading and surfacing 5.75 mi. Federal Aid Project 98, Lincoln Co. $243,157 (Federal aid $105,461).

Calif., Alameda—Having plans prepared re-oiling, scarifying and resurfacing 8 mi. streets. B. Hamilton city engr.

Calif., Berkeley—Had estimates prepared continuing Tunnel Road through Berkeley. $61,000. C. L. Huggins, city engr.

Calif., El Cerrito—Had plans prepared grading, concrete curbing, guttering, sidewalks and paving portion Potrero Ave., 14,234 sq.ft. cement walks, 30,554 sq.ft. 8 in. oil macadam paving, etc. W. S. Farley, Monadnock Bldg., San Francisco, engr.

Calif., Huntington Beach—Soon takes bids paving 2 mi. Ocean Blvd., 1 mi. 80 ft. wide, other 20 ft. To exceed $100,000. Noted Jan. 25.

Calif., Los Angeles—Had plans prepared grading and paving 3,200 lin.ft. road between Hyperion Sewage Treatment Plant and Coast Blvd., 34,133 cu.yd. excav., 63,766 sq.ft. concrete.

Calif., Redwood City—Soon takes new bids grading, concrete surbing, guttering and oil macadam paving streets in Redwood Highlands. Former bids rejected. Noted May 10.

Calif., Santa Cruz—Had plans prepared grading and paving Younglove Ave., 38,840 sq.ft. grading, 34,840 sq.ft. concrete pavement, etc. J. K. James, city engr.

Ont., Kingston—Frontenac Co. plans to spend $78,000 on grading, graveling and macadamizing roads, etc. Some of work will be done by day labor and some by contract. R. H. Fair, co. engr.

BIDS DESIRED

Connecticut—May 22, by C. L. Bennett, state highway comr., Hartford, concrete paving 7,166 lin.ft. road in Berlin, West Hartford, Groton and Winchester; 11,700 lin.ft. 7 in. native stone macadam in Groton and Danbury; 2,400 lin.ft. bituminous macadam in Waterford; adv. this issue.

Conn., New Haven—May 21, at office of E. S. Nettleton, city engr., paving State St., 2,600 sq.yd. with sheet asphalt and 1,900 sq.yd. with granite block.

N. Y., East Rockaway—May 24, by Bd. Village Trustees, approximately 36,000 sq. yd. concrete paving. C. E. Marshall, Hempstead, consult. engr.

N. Y., Lockport—May 22, by F. Krull, clk. Bd. Supervs. Niagara Co., concrete paving 17.648 mi. Roads 48, 44, 42, 47, 43, 45 and 9, $235,000; bituminous macadamizing 4.644 mi. Road 46 in town of Newfane, $60,000. T. Brennan, co. engr.

N. Y., New York—May 22, by J. Miller, pres. Manhattan Boro. Municipal Bldg., sidewalks around subway grating on southerly portion of island at intersection of Bway. and 7th Ave. from 46th to 47th Sts.; curbing, recurbing, flagging, reflagging and sheet asphalt paving West 213th St.

N. Y., New York—May 24, by Park Bd., Municipal Bldg., constructing road and paths, etc. from Eastern Blvd. to City Island Rd., in Pelham Bay Park, Bronx Boro. F. D. Gallatin, pres.

N. Y., St. George—May 23, by J. A. Lynch, pres. Richmond Boro. Boro Hall, grading and granite block paving, etc. Marginal St.

New Jersey—June 4, by State Hy. Dept., Trenton, rein.-con. paving roads in Monmouth, Middlesex, Morris and Warren Counties. A. L. Grover, ch. clk.; adv. this issue.

N. J., Audubon — May 22, by Boro Comrs. concrete paving various streets. J. J. Albertson, Court House, Camden, boro engr.; adv. this issue.

N. J., Newark—May 22, by G. C. Bergen, purch. agt. Essex Co., Court House, supplying and applying asphaltic road oils on designated roads, not less than 10,000 gal. nor more than 60,000 gal. W. A. Stickel, Court House, engr.

N. J., Newark—May 24, at office of T. L. Raymond, dir. Dept. Streets and Pub. Impvts., City Hall, grading, curbing, flagging and asphalt paving Caroline and Vassar Aves., $74,600; asphalt paving 20,550 sq.yd. Maple Pl., Leslie and Boylan Sts., Vermont, Lindsley, 13th and Irving Aves., $133,530.

N. J., Red Bank—May 21, by A. L. Miller, mayor, and Boro Council, reconstructing Beach St., Wharf Ave., Bergen and Irving Places, rein.-con. G. D. Cooper, 60 Broad St., civil engr.; adv. this issue.

N. J., Red Bank—June 1, Boro Council, concrete paving Branch Ave. G. K. Allen, Jr., 60 Broad St., boro engr.; adv. this issue.

Pa., Phila.—May 18, by Director Pub. Wks., asphalt and granite block pavement on various streets. $300,000. F. C. Dunlap, City Hall, engr.

Pa., Rockwood—May 28, by Boro. Council, grading, paving and curbing 3,000 ft. Market St., concrete or brick. $50,000. Fluck & Smith, Somerset, engrs.

Pa., Washington—May 25, by Supervs. Jefferson Twp., paving 16,158 ft. Jefferson Twp. Rd., bituminous macadam on rein.-con., 16 ft. $25,000. M. D. Ridgeway, Eldersville, engr.

Pa., Williamsport — June 5, by Comrs. Lycoming Co., grading and surfacing 4.2 mi. road. M. C. Krause, Williamsport, consult. engr.; adv. this issue.

Maryland—May 29, by State Rds. Comn., Baltimore, paving 3.17 mi. Contrs. G-23, M-44, Wo-30, Garrett, Montgomery and Worcester Counties, concrete; 5 mi. Contrs. 141-A and 46-A, Montgomery and Baltimore Counties, concrete shoulders; 11.6 mi. Contr. W-27, Washington Co., macadam rein.-con. J. N. Mackall, chn; adv. this issue.

Florida—May 29, by State Rd. Dept., Tallahassee, constructing 8 in. rock base on 11.81 mi. Rd. 125, Project 534, Brevard Co.; hard surfacing 2 mi. Rd. 125, Project 584, Osceola Co. W. F. Cocke, state highway engr.

Fla., Bradentown — June 8, paving Cherokee and Central Sts., asphalt blocks or other asphaltic materials, $25,000; paving Sunset Dr., East Court, Ohio and Sarasota Aves., tarvia coating on shell base compacted, $25,000; curbing, sidewalks, relaying and widening paving on various streets, $25,000. Kirley & Myler, Bradentown, will probably be engineers.

Ala., Geneva—May 21, 40,992 sq.yd. concrete sidewalks, 7,111 lin. ft. curb and

Streets and Roads (Continued)

gutter, 22,558 sq.yd. sheet asphalt, concrete or bitulithic paving. A. S. Hendricks, clk.

Ky., Paducah—June 1, by H. A. Pulliam, comr. Pub. Wks., 67,000 sq.yd. street paving; adv. this issue. Noted May 10.

Ky., Shelbyville—June 7, by Bd. Council, reconstructing Main St. from 1st to 4th Sts. and from 11th St. to Adair Ave., concrete or rock asphalt on concrete. $25,000. G. Wright, city councilman.

Tennessee—May 25, by State Dept. Highways & Pub. Wks., Nashville, grading and bridging 19.9 mi. State Aid Project 114, Grundy Co., 96,320 cu.yd. common excav., etc. J. C. Creveling, Jr., Nashville, comr.

Ohio—May 23, by Comrs. Franklin and Delaware Counties, at Columbus, grading and macadamizing with waterbound macadam (bituminous surface treatment) 4.69 mi. Franklin-Delaware Co. line Rd., 16 ft. $76,508. M. W. Westlake, clk. of joint bd.

Ohio—May 25, by Dept. Highways and Pub. Wks., Columbus, grading, bridging, curbing and paving 62.486 mi. roads in Ashland, Clark, Hancock, Harrison, Henry, Hocking, Holmes, Huron, Lake, Logan, Jefferson, Mahoning, Miami, Ottawa and Shelby Counties, brick, rein.-con., bituminous macadam asphalt or tar, bituminous gravel, or plain concrete; bridges in Lorain and Van Wert Counties, $31,212. L. C. Herrick, dir.

O., Bellaire—June 5, by G. T. Kreglow, dir. Pub. Serv., grading, curbing, vitr. brick paving, etc., South Belmont St. $50,000. H. C. Althar, Bellaire, engr.

O., Cincinnati—May 25, Bd. Comrs. Hamilton Co., paving, etc., 6,691 ft. Liston Ave., 24 ft., 6,400 lin.ft. granite curb, 33,000 sq.ft. cement sidewalks, 1,250 lin.ft. 30 in. brick and 4,460 lin.ft. vitr. sewers, 17,550 sq.yd. bitoslag or bitulithic, 18,180 sq.yd. concrete base. $181,827. E. A. Gast, Court House, co. surv.

O., Cleveland—May 23, grading, curbing and paving Buckeye Rd., East 82nd and East 17th Sts., Euclid and Woodland Aves. $300,000. R. Hoffman, City Hall, engr.

O., Euclid—May 21, grading and laying stone or concrete sidewalks on Fordview, Hartland, Colburn and Alberton Rds. To exceed $25,000. F. A. Pease Eng. Co., Marshall Bldg., engrs.

O., Massillon—May 23, repaving 32,000 yd. Main St., brick, sheet asphalt or asphaltic concrete. C. E. Rice, engr.

O., Shaker Heights (Cleveland, P. O.)—See "Sewers."

O., Shaker Heights (Cleveland, P. O.)—May 24, grading, and brick or asphalt paving East 157th and East 159th Sts., Norwood, Normandy and Daleford Rds. $100,000. F. A. Pease Eng. Co., Marshall Bldg., Cleveland, engrs.

Ind., Indianapolis—May 21, by Auditor Marion Co., concrete paving 78,643 sq.yd. Michigan Rd. $204,672. J. J. Griffith, co. engr. Noted May 10.

Ind., Laporte—May 24, by Auditor Laporte Co., grading and graveling 2.3 mi. H. H. Pinney Rd., 20 ft. $25,989. P. Summy, Laporte, engr. Noted May 10.

Ind., Jeffersonville—Bd. Comrs. Clark Co. taking bids and opens same about May 26, constructing 4.78 mi. George Lindemeyer Rd., Oregon Twp. $46,776. K. W. Barnes, co. surv. Noted May 3.

Mich., Grand Rapids—May 22, by Kent Co. Rd. Comn., grading and surfacing 2.783 mi. road, Kent Co., 16,472 cu.yd. excav., 26,497 sq.yd. gravel. O. S. Hess, co. engr.

Ill., Havana—May 23 by Bd. Local Impvts., grading and concrete paving Dists. H, I, J and K, 8,798 cu.yd. excav., 22,091 sq.yd. pavement, 12,286 lin.ft. outside curb, etc. G. Coleman, member. Noted Apr. 26.

Wisconsin—May 23, by State Hy Comn., at div. office 7, Court House, Rhinelander, grading and surfacing Rhinelander-Cassian-Tomahawk Rd., Oneida Co., 4,395 cu.yd. topsoiling, 7,975 cu.yd. gravel, etc.; Rhinelander-Prentice Rd., Price Co., 8,305 cu.yd. gravel; Koepenick-Pelican Rd., Langlade Co., Sect. A, 5,728 cu.yd. gravel, Sect. B, 5,737 cu.yd. gravel, Sect. C, 7,589 cu.yd. gravel; Kempster-Summit Lake Rd., Langlade Co., 3,536 cu.yd. gravel; Minocqua-Mercer Rd., Iron Co., Sect. A, 4,241 cu.yd. gravel, Sect. B, 6,500 cu.yd. gravel. A. R. Hirst, Madison, state highway engr.

Wis., Milwaukee—May 21, paving Clinton, Jefferson, Lake and 3rd Sts., 14,000 sq.yd. granite block, 10,600 sq.yd. sandstone. G. Staal, city engr.

Ia., Clinton—May 25, by Auditor Clinton Co., grading 4 mi. Lyons-Hauntown Rd. and 2 mi. primary road, northwest of Delmar, 26 ft., 114,488 cu.yd. earth and 2,000 cu.yd. solid rock excav. $30,000. E. B. Lorenzen, co. engr.

Ia., Rock Rapids—May 24, by Auditor Lyon Co., grading 15.547 mi. Doon-Big Sioux River Rd., 26 ft., 230,000 cu.yd. excav., etc. $55,000. R. H. Fuller, co. engr.

Ia., Wapello—May 21, paving, curbing, etc. about 30 blocks. $200,000. E. T. Archer & Co., 609 New England Bldg., Kansas City, Mo., engrs.

Minn., St. Paul—May 28, by G. J. Ries, aud. Ramsey Co., paving White Bear Rd., 25,475 cu.yd. excav., 36,135 cu.yd. overhaul, alternate bids on asphaltic concrete, 1 course concrete and bituminous concrete, 62,465 sq.yd. and 60,920 sq.yd., $200,000; Centerville Rd. to east county line, 19,014 cu.yd. excav., 31,543 cu.yd. overhaul, alternate bids on asphaltic concrete, 1 course concrete, bituminous macadam and plain cement, 45,853 sq.yd. and 48,248 sq.yd., $160,000. P. N. Coates, co. surv.

Kan., Hutchinson—See "Bridges."

Kan., Larned — May 25, by V. Stuart, engr. Pawnee Co., grading and surfacing 11.212 mi. Project 134, Fort Larned-Burdette Rd., 48,337 cu.yd. excav. and 19,184 yd. sand clay. Noted Mar. 29.

Kan., Russell—May 21, by J. W. Murphy, city clk., 6,050 sq.yd. 3 in. vertical fibre brick, asphaltic concrete or 2 course concrete pavement on Main St., 1,640 cu.yd. excav., 1,510 lin.ft. 8 in. curb and gutter. Black & Veatch, Mutual Bldg., Kansas City, Mo., consult. engrs.

South Dakota — May 22, by State Hy. Dept., Pierre, grading 65.08 mi. road in Davison, Lake, McCook, Aurora, Brule, Minnehaha, Lawrence, Mead and Miner Counties; graveling 37.02 mi. Miner, Grant, Deuel, Walworth, and Lake Counties. F. D. Hudgins, state engr.

N. D., Bottineau—May 24, by Auditor Bottineau Co., preparing subgrade and gravel surfacing 12.512 mi. road, 17,079 cu.yd. gravel, 10,987 mi. earth road, 72,328 cu.yd. excav. W. G. Black, c/o State Hy. Dept., Bismarck, engr.

N. D., Carrington—May 22, by Auditor Foster Co., graveling 5.008 mi. road north of here, 12,000 cu.yd. excav., 6,859 cu.yd. gravel. W. G. Black, c/o State Hy. Dept., Bismarck, engr.

N. D., Minnewaukon—May 23, by Auditor Benson Co., preparing subgrade and gravel surfacing 30.757 mi. roads, 42,131 cu.yd. gravel; 6,472 mi. earth road, 36,651 cu.yd. excav. W. G. Black, c/o State Hy. Dept., Bismarck, engr.

N. D., Mohall—May 25, by Auditor Renville Co., 5.234 mi. earth road, 34,846 cu.yd. excav. W. G. Black, c/o State Hy. Dept., Bismarck, engr.

Wyoming—May 22, by State Hy. Comn., Cheyenne, grading and surfacing 8.4 mi. Lincoln Highway, Federal Aid Project 152, north of Laramie, Albany Co., $43,000; grading, surfacing and bridge construction on 5.5 mi. Lingle-Lusk Rd., Federal Aid Project 150, Goshen Co., $35,000; grading, surfacing and building 85 ft. rein.-con. bridge on 8 mi. Yellowstone Highway, Federal Aid Project 144, Laramie Co., $75,000; grading and building 3 treated timber pile bridges on 8 mi. Worland-Tensleep Rd., Sect. D, Federal Aid Project 108, Washakie Co., $30,000; crushed rock surfacing 12 mi. Sundance-Beulah Rd., Federal Aid Project 25, Crook Co., $32,000 (all foregoing 24 ft.); widening and plac-

ROAD WORK—DELAWARE

Following are lowest three bids opened by State Highway Comn., Dover, Apr. 11, for constructing Boyd's Cor.-St. Georges Rd., Contr. No. 32. (A) Sutton & Corson, Ocean City, N. J.; (B) M. Staub, 21 Wildwood St., Pitman, N. J.; (C) Development & Constr. Co., American Bldg., Baltimore. The unit bids were as follows:

	A	B	C
20,000 cu.yd. excavation	$2.00	$1.33	$1.50
3,800 cu.yd. borrow	1.30	.73	1.25
180 ton base course	5.50	4.45	6.00
6,760 cu.yd. concrete pavement	17.00	17.90	14.95
18,250 lin.ft. long metal joint	.20	.14	.16
250 cu.yd. class A concrete	35.00	24.00	25.00
120 cu.yd. class B concrete	35.00	22.00	23.00
12,500 lb. reinforcement	.08	.09	.12
500 lin.ft. 16 in. c.i. pipe	4.60	4.50	6.50
126 lin.ft. 18 in. c.i. pipe	6.80	5.50	7.50
124 lin.ft. 24 in. c.i. pipe	11.00	9.00	10.00
124 lin.ft. 30 in. c.i. pipe	15.00	11.00	17.50
12 lin.ft. 36 in. c.i. pipe	23.75	16.00	25.00
500 lin.ft. 15 in. reinforced-concrete pipe	2.90	3.25	2.50
126 lin.ft. 18 in. reinforced-concrete pipe	3.80	4.00	3.00
124 lin.ft. 24 in. reinforced-concrete pipe	6.80	5.25	4.00
124 lin.ft. 30 in. reinforced-concrete pipe	10.25	9.50	6.00
12 lin.ft. 36 in. reinforced concrete pipe	12.75	13.50	7.50
1,800 lin'ft. 4 in. underdrain	.95	.70	1.20
2,400 sq.yd. concrete gutter	2.30	2.60	2.50
8,200 lin.ft. cable guard rail	.50	.55	1.00
3,000 lin.ft. wide shoulder curb	.20	.20	.40
1,050 lin.ft. timber piling	1.75	1.50	1.50
Extended totals, c.i. pipe	$166,712	$174,320	$179,999
Extended totals reinforced-concrete pipe	$164,962	$169,373	$178,504

ROAD WORK—KENTUCKY

Bids were opened by State Highway Comn., Frankfort, Apr. 4, for constructing Louisville-Bardstown Rd., Bullitt, Spencer and Nelson Counties, Federal Aid Project No. 86A. (A) Wilmore Constr. Co., Wilmore; (B) Billeter & Wiley, Covington; (C) Henry Bickel & Co., 143 Garden St., Louisville. The unit bids were as follows:

2 acres clearing and grubbing	$150.00	$100.00	$100.00
142 removing trees and stumps	5.00	5.00	5.00
59,709 cu.yd. earth excavation	.47	.52	.65
30,780 cu.yd. solid rock excavation	1.10	1.25	1.75
42,393 cu.yd. borrow excavation	.47	.52	.60
595 cu.yd. excavation for structures	.75	1.25	1.25
184 cu.yd. foundation excavation, wet earth	2.00	3.00	2.50
550 cu.yd. foundation excavation, dry earth	.75	1.25	1.25
60 cu.yd. foundation excavation, wet rock	1.00	10.00	5.00
183 cu. yd. foundation excavation, dry rock	1.10	5.00	3.00
297 lin.ft. removing existing pipe	.50	1.00	.50
243 cu.yd. riprap	2.50	4.00	5.00
308,470 sta.yd. overhaul	.025	.025	.02
1118.63 cu.yd. cement rubble masonry	10.00	15.00	11.50
565.14 class A concrete	21.00	26.00	27.00
25.22 cu.yd. class B concrete	21.00	26.00	25.00
14.38 cu.yd. class D concrete	60.00	50.00	80.00
97,469 lb. reinforcement	.06	.07	.065
1000 cu.yd. relaying Telford	.75	.90	.75
8281 cu.yd. removing Telford	.90	.80	1.00
84,780 sq.yd. rock asphalt surfacing			
89,767 sq.yd. 6½ in. concrete base			
89,767 sq.yd. rock asphalt surfacing	1.15		
20,197 ton crushed limestone	3.00		
89,767 sq.yd. 7½-in. modified Telford base	.80		
5611 ton binder stone	3.00		
29,454 ton crushed limestone	3.00	3.02	2.85
14,961 cu.yd. napped limestone base	2.25	3.20	2.60
14,488 ton binderstone	3.00	3.02	2.85
648 lin.ft. 18-in. standard vitrified pipe	2.25	2.75	3.00
710 lin.ft. 24-in. standard vitrified pipe	3.00	3.75	4.50
137.78 cu.yd. 1:3:6 encasing concrete	17.00	20.00	22.00
648 lin.ft. 18-in. reinforced-concrete pipe	2.65	3.75	4.00
710 lin.ft. 24-in. reinforced-concrete pipe	3.75	4.75	6.00
Extended totals modified Telford base and vitrified pipe	$389,839		
Extended totals modified Telford base and concrete pipe	$388,288		
Extended totals limestone base and vitrified pipe	$376,090	$419,434	$426,151
Extended totals limestone base and concrete pipe	$374,539	$418,037	$424,833

Streets and Roads (Continued)

ing bituminous concrete wearing course on 5 mi. Casper-Salt Creek Rd., Federal Aid Project 19. Natrona Co., 16 ft., $54,000. Z. E. Sevison, state highway engr.

Wyo., Cheyenne—May 21, grading, curbing, paving, etc., 3,360 ft. Capitol Ave. from 15th to 24th Sts., 50-80 ft., 20,600 sq.yd. paving, 5,000 lin.ft. concrete curb and 5,000 lin.ft. concrete gutter. Alternate bids on various types of pavement. $60,000. Bruce & Grupe, 408 Finance Bldg., Omaha, Neb., engrs. Noted Apr. 19.

Tex., Abilene—June 6, by City Comn. paving 15 blocks Mulberry, Dallas, Cypress, North 4th and 2nd Sts., 30 ft., bituminous or brick. $25,000. H. H. Batjer, city engr.

Tex., Cleburne—May 22, by O. B. McPherson, judge Johnson Co., grading, gravel surfacing, etc., 10.86 mi. Highway 2-E, 18 ft., $117,244; 14.98 mi. State Highway 2, 18 ft., $202,363. R. E. Keller, co. engr.

Tex., Dallas—May 21, by C. E. Gross, aud. Dallas Co., 4,500 lin.ft. 5½ in. waterbound macadam on Beckley Rd., $25,000; grading and bituminous topping, etc. 5 mi. Belt Line Rd. 3, 20 ft., cost to exceed $25,000. Nagle, Witt & Rollins, Court House, co. engrs.

Tex., Dallas—May 28, by C. E. Gross, aud. Dallas Co., paving 3.03 mi. East Pike, 20 ft., bituminous or concrete. $135,000. Nagle, Witt & Rollins, Court House, co. engrs.

Tex., Greenville—May 25, by O. B. McWhirter, judge Hunt Co., placing gravel sub base, and bituminous topping on waterbound macadam 3.3 mi. State Highway 11, 16 ft. $25,000; 3.7 mi. State Highway 39, 16 ft., $26,500; 9.66 mi. State Highway 1, 16 ft., $55,000. J. D. Metcalfe, c/o A. D. Duck, co. engr., Greenville, engr.

Tex., Kaufman—May 21, by J. E. Yates, aud. Kaufman Co., grading 6.75 mi. highway, 18 ft. $25,000. C. A. Anderson, co. engr.

Okla., Garber—May 24, by G. L. Matteson, city clk., grading and paving 6 blocks Main St., 14,700 sq.yd. asphalt, etc. $75,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs. Noted Apr. 5.

Calif., Los Angeles—May 28, by Supervs. Los Angeles Co., improving 5.77 mi. Alameda St. (Rd. Dist. 4). 90,417 sq. ft. shaping roadbed, 90,417 sq.yd. cement concrete, 1,050 sq.yd. asphaltic concrete, etc., county to furnish 32,089 bbl. cement and 4,400 tons disintegrated granite.

Calif., San Francisco—May 23, by Bd. Pub. Wks., grading and surfacing intersection of Sloat Blvd. and Great Highway, 73,100 sq.ft. 1½ in. asphaltic concrete on 6 in. concrete, etc., for city and San Francisco Co. $48,000. M. M. O'Shaughnessy, city engr.

Calif., Stockton—May 22, by City Council, grading, concrete curbing, guttering and surfacing portions Harrison, Lincoln, Clay and Anderson Sts., etc., 194,928 sq.ft. 2 in. asphalt macadam on 4 in. cement gravel, 45,049 sq.ft. cement walks, etc. W. B. Hogan, city engr. Noted Apr. 19.

Calif., Visalia—City Trustees receiving bids grading, curbing, guttering, sewers and paving portion Willis St., 194,370 sq.ft. 1½ in. warrenite bitulithic on 2½ in. asphaltic concrete, etc. L. H. Gadsby, city engr. Noted May 10.

Que., St. Therese—May 22, by J. L. Boulanger, deputy minister of highways, Quebec, resurfacing 3.22 mi. road in St. Therese Parish, 16 ft., macadam with application of liquid bitumen. M. Nectkar, engr. Dept. Rds.

Ont., Leamington—May 25, by R. M. Selkirk, clk., 10,560 sq.yd. rein.-con. pavement. $30,000. J. J. Newman, Davis Blk., Windsor, engr.

Ont., Mimico—May 21, by C. J. Telfer, town clk., 6,000 sq.yd. bituminous concrete pavement, concrete base, concrete curb and gutters. $30,000. W. B. Redfern, Excelsior Life Bldg., Toronto, engr.

Ont., Ottawa—May 22, by Suburban Rd. Comn., paving 4.5 mi. Metcalfe, Bowesville and Merivale Rds., asphaltic concrete or bituminous macadam. $50,000. A. K. Hay, 279 Carling Ave., engr.

BIDS RECEIVED

N. Y., Binghamton—Paving (1) Chenango St. (2) Center St. (3) State St. (a) plain concrete (b) rein.-con. (c) asphaltic concrete (d) bitulithic (e) sheet asphalt (f) sandstone (g) granite block (h) vitr. block, from Montville Constr. Co., Binghamton, (1a) $29,823 (1b) $30,357 (1f) $29,795 (1g) $37,080 (2a) $5,902 (2b) $6,212 (2f) $6,212 (2g) $6,832 (2h) $7,142 (3c) $45,950 (3e) $45,950 (3f) $43,512 (3g) $49,637 (3h) $51,450; Municipal Constr. Co., Binghamton, (1c) $30,152 (1d) $30,508 (2c) $5,791 (2d) $5,928 (2e) $6,076 (3a) $60,190 (3d) $58,687; E. V. Chappell, 27 Wall St., (1e) $34,359.

N. Y., Buffalo—A. W. Kreinheder, comr. Pub. Wks., Municipal Bldg., May 3, repaving (1) Delaware Ave. from Virginia to North Sts., etc. (2) Delaware Ave. from North St. to Gates Circle (a) not incl. concrete base (b) incl. 6 in. concrete base, from Rock Asphalt & Constr. Co., Inc., Morgan Bldg., (1a) $30,742 (2a) $99,258 (2b) $161,867; H. P. Burgard Co., 1968 Fillmore Ave., (1b) $50,125. Noted Apr. 26.

New Jersey—State Hy. Comn., Trenton, May 7, concrete paving 5,494 sq.yd. Route 6, Sect. 15, Bway., in Gloucester City, Gloucester Co., from M. Staub, Pitman, 117% engrs. est. ($29,523); 2,665 sq.yd. concrete and 6,836 sq.yd. granite block paving Route 5, Sect. 7, Mine Hill, Morris Co., from Pub. Serv. Production Co., 80 Park Pl., Newark, 104.72% engrs. est. ($94,506). Noted Apr. 26.

Kentucky—State Hy. Dept., Frankfort, grading using (a) vitr. pipe (b) concrete pipe, 19,618 mi. Louisa-Paintsville Rd., State Project 6, Sect. B, Lawrence Co., from Hatfield Constr. Co., 418½ 10th St., Huntington, W. Va., (a) $356,172 (b) $362,860; 8.867 mi. Mayo Trail, State Project 6, Sect. B, Pike Co., from Sutton Constr. Co., Ashland, (a) $161,787 (b) $159,734; 4.42 mi. Mayo Trail, State Project 6, Sect. A, Floyd Co., from Hunts Forbes Constr. Co., Ashland, (a) $100,188 (b) $96,677; 11.297 mi. Paintsville-Louisa Rd., State Project 6, Sect. A, Johnson Co., from M. A. Wheeler, 405 East Scott St., Knoxville, Tenn., (a) $217,402 (b) $212,189. Noted Apr. 26.

Ohio—Dept. Highways and Pub. Wks., Columbus, May 8, grading, bridging and paving with (a) waterbound macadam (b) brick (c) rein.-con. (d) macadam, asphalt or tar (e) macadam, asphalt (f) macadam, tar (g) gravel (h) bituminous macadam, asphalt (i) bituminous macadam tar (j) bituminous macadam, lake (k) bituminous macadam, oil (l) Kentucky rock asphalt (m) bituminous concrete (n) asphaltic macadam (o) tar macadam (p) plain concrete (q) macadam, oil, (1) 5.698 mi. Sect. "C" West Union-Hillsboro Rd., Adams Co. (2) 2.962 mi. Sect. "D" Ashland-Medina Rd., Ashland Co. (3) 1.545 mi. Sect. "B" Dayton-Lakeview Rd., Clark Co. (4) 2.06 mi. Sect. "L-2" Springfield-Washington C. H. Rd., Clark Co. (5) 1.999 mi. Sect. "G" Celina-Greenville Rd., Darke Co. (6) 1.57 mi. Sect. "R" Milan-Elyria Rd., Erie Co. (7) 2.766 mi. Sect. "D" Cincinnati-Zanesville Rd., Fairfield Co. (8) 3.8066 mi. Sect. "H-1" Gallipolis-Jackson Rd., Gallia Co. (9) 1.628 mi. Sect. "J" Findlay-Kenton Rd., Hardin Co. (10) 1.81 mi. Sect. "I" Findlay-Kenton Rd., Hardin Co. (11) 2.996 mi. Sect. "K" Findlay-Kenton Rd., Hardin Co. (12) 2.381 mi. Sect. "L-1" Mansfield-Millersburg Rd., Holmes Co. (13) 3.541 mi. Sect. "P" Columbus-Sandusky Rd., Huron Co. (14) 3.776 mi. Sect. "A" Celina-Van Wert Rd., Mercer Co. (15) 0.252 mi. Sect. "A" Celina-Van Wert Rd., Mercer Co. (16) 1.357 mi. Sect. "G" Oak Harbor-Genoa Rd., Ottawa Co. (17) 2.602 mi. Sect. "A" Ottawa-Defiance Rd., Putnam Co. (18) 2.121 mi. Sect. "B" Ottawa-Defiance Rd., Putnam Co. (19) 0.556 mi. Sect. "H" Ottawa-Defiance Rd., Putnam Co. (20) 2.624 mi. Sect. "C" Mansfield-Wooster Rd., Richland Co. (21) 3 mi. Sect. "A" Canton-Canal Dover Rd., Tuscarawas Co. (22) 2.299 mi. Sect. "B" Canton-Canal Dover Rd., Tuscarawas Co. (23) 2.093 mi. Sect. "E" Canton-Canal Dover Rd., Tuscarawas Co. (24) 0.464 mi. Sect. "G-3" McArthur-Athens Rd., Vinton Co. (25) 0.87 mi. Sect. "Mason" Cincinnati-Columbus Rd., Warren Co. (26) 1.001 mi. Sect. "L" Youngstown-Salem Rd., Mahoning Co., grading (27) 0.565 mi. Sect. "Salineville" Wellsville-Salineville Rd., Columbiana Co. (28) 2.38 mi. Sect. "J" Mansfield-Millersburg Rd., Holmes Co. (29) 2.59 mi. Sect. "F-2" Ravenna-Louisville Rd., Portage Co. (30) Sect. "M" McArthur-Gallipolis Rd., Vinton Co., widening and paving (31) 1.805 mi. Sect. "D" Columbus-Wooster Rd., Delaware Co., bridge in (32) Sect. "D" Ashland-Medina Rd., Ashland Co., from Miller & Miller, Martinsville, (a1) $92,053; D. A. Phillips & Son, Ashland (b2) $140,729 (c2) $117,276 (d2) $88,408; C. Bird, Springfield (street address not available (b3) $47,855 (g3) $28,156 (g4) $26,228; H. E. Pratt Constr. Co., Mt. Blanchard (e3) $39,569 (b20) $149,976; R. Stone Co., Lima (street address not available) (f3) $40,461; W. H. Ringwald Co., Chillicothe, (h4) $44,839 (i4) $45,999 (i7) $92,010 (j7) $92,010; Hinton & Smalley, Celina, (c5) $58,281 (j5) $52,147 (l14) $82,715 (j14) $82,715 (o14) $87,234 (l15) $5,607 (j15) $5,607 (o15) $5,867; E. L. Reeb, Lima (street address not available), (i5) $51,094 (k5) $50,529; J. E. Karsch Co., Celina, (e6) $57,638; Radebaugh-Graham Co., 209 South Cassidy Ave., Bexley, Columbus, (b7) $132,018 (c7) $105,326; Miller Bros., Gallipolis, (i8) $112,170; Laubis Stone Co., Kenton, (j9) $36,670 (m9) $50,024 (l10) $40,007 (m10) $43,499 (n10) $31,036 (o10) $32,745 (h11) $[illegible] (i11) $66,50 (l11) $82,240 (m11) $[illegible] (h14) $82,663; P. B. Putnman, Van Wert, (i9) $37,828 (l9) $45,627 (l13) $7[illegible] (l26) $99,382; G. B. Smith Co., Youngstown (street address not available), (h12) $40,871 (i12) $40,871; Scott Constr. Co., Toledo (street address not available), (h13) $142,565; C. V. Rector, Lima (street address not available), (q13) $77,[illegible]; H. E. Witte & Son, Elmore (c16) $37,207; Muldoon & Bergman, Genoa, (h16) $22,832 (i16) $23,765; Acton Bros., Vaughnsville, (h17) $54,357 (i17) $54,357 (l17) $62,845 (c18) $61,418 (h18) $49,351 (i18) $49,351 (l18) $55,176 (h19) $11,181 (i19) $11,181 (l19) $13,201; R. Doanst, Defiance, (c17) $71,772 (c19) $14,848; W. K. Drake, Marion (c20) $122,025; Smith Constr. Co., Youngstown (street address not available), (h20) $101,424; C. G. Fuller, Canal Dover, (c21) $93,877 (c22) $68,650; Wilson-Miller Co., Barnesville, (h21) $61,236 (i21) $60,593 (h22) $42,679 (i22) $42,187; P. Christensen Sons, Canton, (c23) $64,628; Reedy Bros., Warren, (h23) $47,408 (i23) $47,408 (i26) $11,363; Mariner & Sands, Athens, (c24) $16,233; J. C. McCann, 191 Belvidere Ave., Columbus, (m25) $27,552 (n25) $27,552; C. W. Milan & Co., Youngstown (street address not available), (i26) $17,859; W. Young, Warren (h26) $16,742; Kane Bros., Lisbon, (27) $17,151; L. C. Bell & Son, West Mansfield, (28) $15,703; W. G. Reimund, Holgate, (29) $8,957; Anderson & Brown, Chillicothe, (30) $25,593; A. B. Shaw, Delaware, (b31) $34,912; D. A. Phillips & Son, Ashland, (32) $14,076. Noted Apr. 26.

O., Euclid—Cement curbing and asphalt paving Monterey, Renwood, Albey, Nauman, Ormiston and Tyrone Rds., from Cleveland Trinidad Paving Co., The Arcade, Cleveland. $159,796. Noted Apr. 26.

O., Wauseon—Fulton Co. grading and concrete paving 1.75 mi. Winameg-Lyons Impvt. 100, 16 ft., from Lyons Constr. Co., Lyons, $39,299.

Indiana — State Hy. Dept., Indianapolis, May 1, concrete paving 41,609 sq.yd. Federal Aid Rd. 52, Sect. B, Vigo Co., from Kerr & Murphy, Bloomington, $77,273. 48,308 sq.yd. Federal Aid Rd. 49, Sect. B, Steuben Co., from J. C. O'Connor & Son, Ft. Wayne (street address not available), $99,611; 21,719 sq.yd. 8 in. gravel, etc., and Federal Aid Rd. 34, Sect. A, Spencer Co., from W. R. Hines, Frankfort, $32,399. Noted Apr. 19.

Ind., Greencastle—Putnam Co., Apr. 28, paving 30,660 sq.yd. S. W. Hunter Rd., waterbound macadam, from Hoffstetter, Martin & Higham, Greencastle, $63,723, engrs. est. $68,980; 28,440 sq.yd. C. H. Crosby Rd., waterbound macadam, from W. Dorsett, Greencastle, $50,768, engrs. est. $54,956. Noted Apr. 19.

Michigan — State Hy. Dept., Lansing, grading and surfacing 5.3 mi. Project 65-6, Sect. A, Monroe Co., 18,423 cu.yd. excav., 56,319 sq.yd. concrete, from Hilding Constr. Co., 363 Ball Park Blvd., Grand Rapids, $145,654. Noted Apr. 19.

Michigan—State Hy. Dept., Lansing, May 8, grading and surfacing 4.853 mi. Project 76, Macomb Co., 9,506 cu.yd. excav., 51,492 sq.yd. concrete, from T. E. Currie, 20 McGraw Bldg., Detroit, $88,536. Noted Apr. 26.

Ill., Elmhurst—Concrete paving various streets, from Standard Paving Co., 326 West Madison St., Chicago. Engrs. est. $150,000. Noted May 3.

Minn., Ortonville—Big Stone Co., May 1, 4.5 mi. Job 2301, State Rd. B, 29,000 cu.yd. excav., 4,250 cu.yd. gravel surfacing, from Morris Constr. Co., Morris, grading and graveling combined $15,166; from D. Savage, Merritt, grading only $4,726; from G. L. Mowery, Ortonville, graveling $3,990; 8.25 mi. Job 2302, State Rd. F, 23,000 cu.yd. excav. and 3,250 cu.yd. gravel surfacing, from R. C. Shoen, Ortonville, grading $6,392; from G. L. Mowery, Ortonville, graveling, $4,297. Noted Apr. 19.

Colorado—State Hy. Dept., Denver, gravel surfacing 2.179 mi. State Project 782, Moffat Co., from Northwestern Constr. Co., Craig, $21,267; 568 ft. masonry flume at Blackhawk, Gilpin Co., from Stroehl Mchy. & Supply Co., Blackhawk, $12,042; paving 2.5 mi. Federal Aid Project 256A, Logan Co., concrete, from La Nier, Selander & White., Ft. Morgan $72,639, bituminous concrete, from Western Paving & Constr. Co., 46th and Delgany Sts., Denver, Topeka type $82,939, coarse graded type $81,692; grading 3.924 mi. Federal Aid Project 157B, Chaffee Co., from J. V. Stryker, 1507 Blake St., Denver, $59,741; surfacing 2.708 mi. Federal Aid Project 125, Gunnison Co., from D. Hinman, 3358 Race St., Denver, $33,452. Noted May 3.

Calif., Los Angeles—Grading and paving Badger Ave. and Dock St. approach to new drawbridge (a) lump sum for grading

Streets and Roads (Continued)

and filling (b) 317,775 sq.ft. 2 in. warrenite bitulithic on 7 in. concrete, from Independent Paving Co., 316 East 4th St., Long Beach, (a) $31,775 (b) $0.3891; Warren Constr. Co., Bacon Bldg., Oakland, (a) $14,747 (b) $0.59. Noted Apr. 26.

Calif., Los Angeles—Paving Highland Ave. between Cahuenga Ave. and Sunset Blvd., 160,059 sq.ft. asphalt and 1,401 sq.ft. concrete pavement, etc., from Griffith Co., Los Angeles Ry. Bldg., $77,551.

Calif., Sacramento — Concrete curbing, guttering and paving 18th St. from alley between B and C Sts. to R St., and D St. from 18th St. to point 101 ft. east, from Clark & Henery, Ochsner Bldg., 8,548 ft. concrete curb and gutter at 1.75, 948 ft. concrete curb $0.48, 1,098 ft. concrete gutter $1.30, 235,264 ft. asphaltic concrete $0.12, etc.

Calif., San Diego—Common Council, improving Goldfinch, Bush and Igis Sts., from Griffith Co., 25 14th St., 152,432 sq.ft. 1½ in. asphaltic concrete on 2½ in. bituminous at $0.1575, etc., total $24,347. Noted Apr. 26.

Calif., San Jose—From R. S. Crummey, 5th and Keyes Sts., grading and paving 7th St., between William and Reed Sts., 34,318 sq.ft. 1½ in. warrenite on 3 in. asphaltic concrete and grading at $0.25, etc.; 6th St. between Keyes and Humboldt Sts., 26,189 sq.ft. 1½ in. warrenite bitulithic on 3 in. asphaltic concrete and grading $0.25, 1,378 sq.ft. concrete gutter $0.24.

Calif., Stockton—From Clark & Henery Constr. Co., 38 South Sutter St., grading, curbing, guttering, sidewalks and paving portions East Main, A, C, D and E Sts., etc., 155,448 ft. 2 in. asphaltic concrete on 3 in. crushed rock, 16,803 sq.ft. 2 and 2½ in. asphaltic concrete on 2½ in. crushed rock, etc., $39,292; portions F, East Main, East Washington, East Lafayette Sts., etc., 191,912 sq.ft. 2 in. asphaltic concrete on 3 in. crushed rock, etc., $60,595; streets in City Park Terrace, 163,408 sq.ft. 2 in. asphaltic concrete on 3 in. crushed rock, etc., $53,591. Noted Apr. 5 and May 3.

CONTRACTS AWARDED

Mass., Lee—Paving road, concrete each side of car tracks and bituminous macadam between tracks and 18 in. outside of same, to F. T. Ley & Co., 495 Main St., Springfield. Engrs. est. $35,000-$37,000.

N. Y., Batavia—A. Russell, city clk, bitulithic macadam paving State and Bank Sts., to O. Costich Co., Rochester (street address not available), $38,498. Noted Apr. 26.

N. Y., Buffalo—To Rock Asphalt Paving & Constr. Co., Morgan Bldg., paving Genesee St. $41,001, Wellington Rd. $14,-779, Sterling Ave. $31,482, West Peckham St. $11,443, Park Lake Ave. $8,677 and Beard Ave. $5,570, all specification B standard asphalt on concrete; to B. F. Spire, Colonial Circle, Mississippi St., dressed block Medina sandstone with concrete filler and base, $11,500.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., grading, curbing, laying sidewalks, etc., on Alburtis Ave., to Peace Bros., Inc., 15 Lawrence St., Flushing, $30,731; 88th St. to Kennedy & Smith, Inc., 93 Amity St., Flushing, $11,612; sheet asphalt paving Alburtis Ave., to W. J. Fitzgerald, 547 West 45th St., New York, $45,135; guttering, grading sidewalk space and laying sidewalks on Bragaw St. and grading sidewalk space and laying sidewalks on east side of Union Hill St., to J. J. O'Brien, Williams St., Jamaica, $1,730 and $1,344 respectively. Noted May 3.

N. Y., Olean—Commissioners Pub. Wks., improving King St., rein.-con., to J. F. Morgan, 526 Tompkins St., $46,070. Noted Apr. 26.

N. Y., Oneonta—Bd. Pub. Wks., curbing, guttering, asphaltic concrete and rein.-con. pavements, etc., to W. P. McDonald Constr. Co., 17 West 42nd St., New York City, $204,337. Noted Apr. 26.

N. Y., Penn Yan — Vitr. brick paving Liberty St., to C. N. Kelly, Penn Yan, $25,-400. Engrs. est. $25,000.

N. Y., Troy—Bd. Contr. & Supply, bitulithic paving 8th Ave. from 110th to 115th Sts., to Fitzgerald Bros. Constr. Co., Inc., Proctor Bldg., $47,635.

N. Y., Utica—Bd. Contr. & Supply, concrete paving Burrstone Rd. and St. Joseph St., to H. W. Roberts & Co., 622 South St., $40,000. Noted Apr. 26.

N. Y., Warwick—President and Village Trustees, 22,000 sq.yd. pavement, to Scheunnemunk Constr. Co., Highland Mills, $71,843. Noted Apr. 12.

N. J., Boonton—Morris Co. Court House (Morristown), reconstructing 14,000 sq.yd. East Main St., concrete, here, to Standard Bitulithic Co., 50 Church St., New York City, $59,720. Noted April 19 under "Morristown."

N. J., Morristown—Morris Co. paving 2¼ mi. Valley Rd., amesite on concrete, to C. H. Winans Co., 205 Broad St., Elizabeth, $118,773.

N. J., Somerville—Somerset Co. paving West End Ave., asphalt, to P. Sangiovanni, Hoyt St., Newark, $27,629.

Maryland—State Rds. Comn., Baltimore, concrete surfacing 19,800 sq.yd., Contr. B-55, Baltimore City, to P. Reddington & Son, 2 East Lexington St., Baltimore, $69,-433; 29,700 sq.yd. asphalt, 36,500 sq.yd. 6 in. concrete base, Contr. Bc-45, Baltimore City, to Baltimore Asphalt Block and Tile Co., 1320 North Monroe St., Baltimore, $146,435; 6,500 sq.yd. bituminous macadam, 8,800 tons concrete base, Contr. W-24, Washington Co., to Bester-Long Co., Hagerstown, $120,373; gravel surfacing 17,200 sq.yd., Contr. P-36, Prince Georges Co., to E. H. Schmidt, 27th St. and Falls Rd., Baltimore, $19,497; concrete surfacing 12,500 sq.yd., Contr. Wi-24, Wicomico Co., to P. D. Phillips & Bro., Salisbury, $31,684. Noted May 10.

Md., Baltimore—Bd. Awards, 21,010 sq.yd. Contr. 234NA, asphalt, to P. Flanigan & Son, Harford Rd. and Baltimore & Ohio R. R. $91,136. Noted May 10.

W. Va., Logan—Logan Co. paving 3.4 mi. road from Monitor Junction to Holden, 7 in. concrete, to P. Minotti, Logan, $116,316.

S. C., Gaffney—Cherokee Co. Highway Comn. topsoiling 8 mi. road from Blacksburg south to York Co. line, near Smyrna, 85,000 cu.yd. common and 5,000 cu.yd. rock excav., etc., to Newell Constr. Co., Anderson, $43,000. Noted Apr. 5.

Florida — State Hy. Dept., Tallahassee, constructing broken stone base course on 5 mi. road between Sharpes and Titusville, Brevard Co., 5 mi. road between Bonaventure and Eau Gallie, Brevard Co., and 14.4 mi. between Bunnell & Volusia Co. line, Flagler Co., to Barber-Fortin Co., Gainesville, $89,326, $87,930 and $186,900 respectively. Noted Apr. 12.

Alabama—State Hy. Dept., Montgomery, grading and gravel surfacing 25 mi. road from Opp to Florala, Covington Co., to Stanley & Singer, Lafayette, $244,291. 10 mi. between Evergreen and Bellville, Conecuh Co., to Keenan & Kyser, Selma, $96,772; grading and surfacing with gravel and sand 22 mi. between Dale Co. line and Florida line, Houston Co., to Freeman & House, Atlanta, Ga. (street address not available), $140,424. Noted Apr. 19.

Ky., Irvine—Paving Bway., Main, Upper and Short Sts., Kentucky rock asphalt and concrete, to Irvine Constr. Co., Irvine. Cost to exceed $25,000. Noted Apr. 12.

Ky., Whitesburg—Letcher Co. constructing 8 mi. highway from Whitesburg to Harlan, to Commofori Constr. Co., Whitesburg, $112,000. Noted Apr. 26.

O., Akron—W. F. Peters, dir. Pub. Ser., to T. E. McShaffrey Constr. Co., 171 South Forge St., grading, laying sidewalks and paving Bishop St., sheet asphalt and brick, asphalt fill, Trinidad, on 6 in. concrete, $40,277, Delia Ave. $27,761 and Storer Ave. $90,647 both sheet asphalt, Plain B Trinidad on 6 in. concrete; to McAlonan Bros., 506 Woodland Ave., South Bates St., standard brick on 6 in. concrete, asphalt filler, $13,407; to Columbus Asphalt Paving Co., 394 Buckeye Bldg., Market St., sheet asphalt, Plan A (Trinidad) $10,681; to Di Foti Constr. Co., 72 Furnace St., West South St., standard brick, asphalt fill on 6 in. concrete, $40,532. Noted May 10.

O., Bexley (Columbus, P. O.)—S. W. Roderick, village clk., to A. G. Pugh, Commerce Bldg., Columbus, grading, curbing and asphalt paving 1,700 ft. Roche Ave. $31,213, 2,200 ft. Remington Rd. $36,757, 2,336 ft. Fair Ave. $45,646; to Grant-Boulton Co., Central National Bank Bldg., Columbus, 2,300 ft. Ardmore Rd. $45,670, 2,000 ft. Cassingham Rd. $37,716, 550 ft. Seneca Park Pl. $7,981, 650 ft. Bexley Dr. $9,423, all 24 ft. wide. Noted Apr. 26.

O., Cincinnati—C. F. Hornberger, dir. Pub. Serv., City Hall, repaving 1,200 ft. Guilbert Ave. viaduct, 50 ft., granite blocks, to M. F. Quill & Son, 409 Gerke Bldg., $53,003. Noted Apr. 26.

O., Cleveland—Curbing, guttering and vitr. brick paving 9,055 sq.yd. Cypress Ave., to Baldwin Bros., 4500 Euclid Ave., $47,-679, 9,170 sq.yd. West 35th St., West 41st Pl. and Mayview Ave., to Roehl Bros. Paving & Constr. Co., West 25th St. and Clark Ave., $60,331, Linton Ave., to Enterprise Paving & Constr. Co., 8444 Bway., $16,613; asphalt paving Bosworth Rd., to Cleveland Trinidad Paving Co., The Arcade, $83,774. Noted May 10.

O., Massillon—To General Asphalt Paving Co., Canton (street address not available), paving Henry, Duncan, North, Cherry and Center Sts., $100,808, resurfacing Tremont and Mill Sts., $28,569, all sheet asphalt; to E. Vogt Paving Co., Massillon, sheet asphalt paving Erie St., $153,489; to Urban Bros., Massillon, brick paving Akron St., $7,994. Noted May 3.

Indiana—State Hy. Dept., Indianapolis, concrete paving 22,495 sq.yd. Federal Aid 35C, Virgo and Sullivan Counties, to Carpenter Constr. Co., Terre Haute (street address not available), $162,234; 23,015 sq.yd. State Aid 6H (formerly Federal Aid Rd. 40C), Marion Co., to G. T. Miller, Lebanon, $40,991; 90,624 sq.yd. Federal Aid Rd. 21A, Jackson Co., to Wabash Constr. Co., Vincennes, $173,015; 51,130 sq.yd. Federal Aid Rd. 49A, Steuben Co., to J. C. O'Connor & Sons, Ft. Wayne (street address not available), $135,116; 15,611 sq.yd. Federal Aid Rd. 6B, Putnam Co., to Kerr & Murphy, Bloomington, $27,039; 39,392 sq.yd. Federal Aid Rd. 19B, Perry Co., to Ellis & Scamahorn, Rockport, $31,937; 49,968 sq.yd. gravel base, Federal Aid Rd. 19A, Perry Co., to Harshman & Jarrell, Frankfort (street address not available), $41,245. Noted Apr. 19.

Ind., South Bend—Bd. Pub. Wks., to White Constr. Co., Merchants' Bank Bldg., asphalt paving, etc., 28,294 sq.yd. Bowman, Lafayette, Eddy and Fox Sts., Hudson, Marquette and Wakewa Aves., $74,422, engrs. est. $98,830; to Williston Constr. Co., Citizens' Bank Bldg., bituminous concrete paving 5,355 sq.yd. Marine St., Woodward and Angella Aves., $19,582, engrs. est. $27,344; to H. N. Barnes, 1026 North Johnson St., concrete paving 659 sq.yd. alley west of Scott St., $2,117, engrs. est. $2,700; to J. A. Barnes, South Michigan Rd., 3,197 lin.ft. sidewalk, 3,403 lin.ft. curb and 2,401 cu.yd. excav., on Donmoyer Ave., O'Brien, Frederickson and Prast Sts., $6,078, engrs. est. $6,139. Noted Apr. 26.

Mich., Springwells — Dix-Ferndale Land Co., 200,000 sq.ft. concrete sidewalks on Dix Ave., Villas Subdivision, to R. J. Powelson, 6415 Iroquois Ave., Detroit, $32,000. Noted May 10.

Wisconsin—State Hy. Comn., Madison, to Universal Eng. Co., Ingram Blk., Eau Claire, surfacing Stevens Point-Wausau Rd., Portage Co., 51,160 sq.yd. 18 ft. concrete surfacing $1.44, etc., total $106,106, Manitowoc-Sheboygan Rd., Manitowoc Co., 31,-216 sq.yd. concrete $1.33, etc., total $62,758; to McKusick Constr. Co., 330 Temple Court, Minneapolis, Minn., Fremont - Weyauwega Rd., Waupaca Co., concrete, lump sum $114,-852, 11,833 sq.yd. with curb $1.75, etc., total $184,425.

Wisconsin—State Hy. Comn., at div. office 6, 213 South Barstow St., Eau Claire to A. F. Lehrer Constr. Co., Bay Port, Minn., grading and surfacing Plum City-Ellsworth Rd., Federal Aid Project 234, Pierce Co. and Red Wing-Ellsworth Rd., Federal Aid Project 1014, Pierce Co., $20,-805 and $18,858 respectively; R. C. Jens, Eau Claire, Chelsea-Westboro Rd., Federal Aid Project 331, Taylor Co., $17,778; Isaacson Bros., Spring Valley, Ellsworth-River Falls Rd., Project 122 B, Pierce Co., $21,-489. Noted Apr. 19.

Wis., Shawano—Paving Main St., bitulithic on old base, also Andrews, Center, Richmond and Franklin Sts., bitulithic on new base, to F. P. Caughlin, 30 North La Salle St., Chicago, $45,674 and $51,510, respectively.

Wis., Two Rivers—Paving various streets, vibrolithic concrete, to E. J. Streu, Two Rivers, $27,650. Noted Apr. 26.

Ia., Creston—Union Co. grading 3.725 mi. road between Afton and Talmage, 26 ft., 100,469 cu.yd. excav., to J. H. Miller & Sons, Corydon, $26,926.

Ia., Ida Grove—Ida Co. to A. O. Shelsmess, Gilman, gravel surfacing 8.66 mi. road, 13,492 cu.yd. 1 mi. haul, 193,000 units ½ mi. haul, $25,472; to G. W. Condon, 510 Farnam Bldg., Omaha, Neb., grading 7.7 mi. road, 96,950 cu.yd. excav., $22,299.

Ia., Rock Rapids—Lyon Co., grading 23.5 mi. road, 184,460 cu. yd. excav., to I. Cox, 800 North Duluth Ave., Sioux Falls, S. D., $51,617.

Minn., Glencoe—McLeod Co., grading and graveling 5 mi. road from Hutchinson to Dessel, excav. to Hosford & Engstrom, Glencoe; graveling to Senescall & Kasper, Glencoe. $26,000.

South Dakota—State Hy. Dept., Pierre, graveling 3.4 mi. Project 14 B Stanley Co. and 11.89 mi. Project 56 Sully Co., to C. J. Wheelock, Pierre, $8,386 and $12,613 respectively, 6.61 mi. Project 99 Brown Co. and 17.65 mi. Project 34 and 94 Spink Co., to H. Pickus Constr. Co., 2316-3rd St. Sioux

Streets and Roads (Continued)

City, Ia., $10,052 and $37,464 respectively, 7.32 mi. Project 138 A, Lawrence Co., to Sheehan & Bjerkness, Sioux Falls, $49,563, 14.62 mi. Project 83, Kingsbury Co., to W. R. Larson, 519 Secy. National Bank Bldg., Sioux Falls, $18,857, 14.39 mi. Project 45 Grant Co., to R. R. Wiley, Summit, $19,610, 11.67 mi. Project 82, Brookings Co., to C. H. Atkinson Paving Co., Watertown, $14,707; grading Project 88 B, Meade Co., to Parrish Constr. Co., Rapid City, $57,288, 3.71 mi. Project 49 B Lyman Co., to R. P. England, Murdo, $32,149, 9.86 mi. Project 126 Kingsbury Co., to Kingsbury Co., De Smet, $34,058, 8.76 mi. Project 136 Hamlin Co., to Dowd Bros. & Schreiber, Watertown, $30,092; 9.63 mi. Project 129 Turner Co., to P. M. Thompson, Sioux City, Ia., $36,998.

S. D., Elkpoint—For 20,000 sq.yd. concrete to Booth & Olson, 120 Victoria St., Sioux City Ia., $50,000. Noted Apr. 19.

N. D., Devils Lake—Auditor Ramsey Co., 13 mi. earth road, 92,000 cu.yd. excav., etc., to Stevens Bros., Garrison, $64,520. Noted Apr. 19.

N. D., Grafton—Walsh Co., grading 15 mi. Project 165, 75,939 cu.yd. excav., to W. Schultz, Fergus Falls, Minn., $31,910.

Neb., Beatrice—Paving Dist. 47, to Abel Constr. Co., 318 Terminal Bldg., Lincoln, vitr. brick $3.35 per sq.yd., asphaltic concrete $2.49, sheet asphalt $1.51. Engrs. est. $80,000.

Missouri—State Hy. Dept., Jefferson City, 1.403 mi. State Project Route 51, Sect. 3, Perry Co., to Energy Coal & Supply Co., Poplar Bluff, $10,356; 4.469 mi. State Project Route 7, Sect. 78, Texas Co., 4.886 mi. State Project Route 7, Sect. 77, Texas Co. and 4.018 mi. State Project Route 16, Sect. 61, Carter Co., to Coopers Constr. Service Co., Federal Reserve Bank Bldg., St. Louis, $10,025, $23,284 and $42,189 respectively. Noted Apr. 19.

Wyoming—State Hy. Comrs., Cheyenne, grading, surfacing, etc., 9 mi. Greybull-Cody Rd., Federal Aid Project 125, Natrona Co., to P. Sawyer, Scotts Bluffs, Neb., $43,943. Noted Apr. 19.

Tex., Anson—For 15,600 sq.yd. brick paving to Vallent & Toomey, F and M Bank Bldg., Ft. Worth $2.97 per sq.yd.

Tex., Columbus—Colorado Co. surfacing 8.7 mi. Highway 3, to Ben Hooper, Louise, $7,027; 8,833 cu.yd. shipped gravel furnished by county $17,246. Engrs. est. $27,000 incl. material, engineering and contingencies. Noted May 3.

Tex., Corsicana—Navarro Co. concrete surfacing 34,066 sq.yd. Highway 31, to F. P. McElwrath, Corsicana, $85,998. Engrs. est. $94,597 incl. 10 per cent for engineering and contingencies. Noted Apr. 26.

Tex., Dallas—Dallas Co. grading and base on 8.8 mi. Coppell Carrelton Belt Line Rd., 20 ft., to Hill, Wilson & Watson, North Texas Bldg., $25,154; rawhide type surfacing above road, to Dallas Constr. Co., North Texas Bldg., $23,180. Noted Apr. 26.

Tex., Liberty—Linerty Co. 25 mi. rawhide road, 18 ft., to Houston Constr. Co., 3102 McKinney Ave., Houston, $8,500 per mi. Engrs. est. $210,000.

Tex., Palo Pinto—Palo Pinto Co. grading and gravel surfacing 7 mi. Graford Rd., 16,602 cu.yd. gravel, 12,203 lb. reinforcing, 49,167 cu.yd. roadway, 3,614 cu.yd. loose and 6,662 cu.yd. solid rock excav., to Smith Bros., 311 Central State Bank Bldg., Dallas, $31,328. Engrs. est. $50,000.

Colo., Denver — Grading and concrete curbing 10 mi. North Denver Impvt. Dist. 30, to J. Collier, 63 South Logan St., $70,162. Engrs. est. $81,000. Noted Apr. 19.

Utah, Provo — Curbing, guttering and paving 20 blocks, 1st St. S., 2nd St. S., 1st St. E., 2nd St. E. and 5th St. W., 13,000 lin.ft. concrete curbing and gutter, 1,800 cu.yd. excav., 2,000 sq.yd. concrete, to Mullins & Palm, Kearns Bldg., Salt Lake City, $41,374.

Washington—State Hy. Comn., Olympia, clearing 85,580 cu.yd. and grading 6.89 mi. Pacific Highway from Bellingdale to Ferndale, Whatcom Co., to J. Ottison, 2523 32nd St. S., Seattle, excav. $0.40 per cu.yd., etc., total $67,371; 8.7 mi. Olympic Highway from Agnew to Port Angeles, Clallam Co., to K. L. Goulter & Co., Ilwaco, 287,760 cu.yd. excav. $0.50, etc., total $181,164; grading and graveling 4.2 mi. Sunset Highway from Preston to Falls City, King Co., to Dowell & Clark, Securities Bldg., Seattle, 69,135 cu.yd. earth excav. $0.45, 6,080 cu.yd. gravel $1.40, etc., total $76,006; paving 4.85 mi. Sunset Highway from Spokane County line to Reardon, Lincoln Co., to C. M. Payne, Constr. Co., East 127 Mission St., Spokane, 50,912 sq.yd. concrete at $2.70, 9,000 cu.yd. earth excav. $0.40, etc., total $161,375. Noted Apr. 19.

Wash., Centralia—Paving 24,000 sq.yd. L. I. D. 61, 6 in. concrete, to Neilan Bros., Sedro Woolley, $66,623.

Wash., Longview—Long-Bell Lumber Co., 100,000 sq.yd. 8 in., 27,000 sq.yd. 6 in. and 3,500 sq.yd. 7 in. concrete, 50,000 lin.ft. curbing, 32,000 lin.ft. curbs and gutters, 500,00 sq.ft. concrete sidewalk, to Bonnell & Savage (street address not available), Tacoma, $50,000.

Wash., Seattle—King Co., paving 11,842 sq.yd. 16th Ave. S. W. Highway from White Center south, one course concrete, 6-8 in. thick, to Fiorito Bros., 3950 60th Ave. N. W., $31,400. Engrs. est. $30,000. Noted Apr. 26.

Wash., Tacoma—Pierce Co., paving 26,248 sy.qd. Spanaway-McKenna Rd., concrete, to Goetz & Brennan, Seaboard Bldg., Seattle, $62,210. Noted Apr. 26.

Ore., Portland—For 2 in. bitultihic on 4 in. concrete on East 52nd, East 70th and East 40th Sts., to Municipal Asphalt Paving Plant, City Hall, $1.55 per sq.yd., $10,875; East 69th and Burrage Sts., to A. D. Kern, Exch. Bldg., $1.52 per sq.yd., total $22,221. Noted Apr. 19.

Calif., Lodi—Concrete curbing, guttering and paving portions of Walnut St., etc., to Clark & Henery Constr. Co., 38 South Sutter St., Stockton, 139,452 sq.ft. 1½ in. warrenite on 2½ in. asphaltic concrete $0.185, 152,440 sq.ft. grading $0.03, 7,250 lin.ft. concrete curb $0.48, 9,062 sq.ft. concrete gutter $0.25. Noted May 10.

Calif., Los Angeles—Los Angeles Co. paving highway from Palmdale southeast to Shoemakes Ranch, 10.7 mi. 6 in. asphaltic concrete, 18 ft., 6.5 mi. 5 in. asphaltic concrete, 18 ft., 3.1 mi. disintegrated granite paving and 3.3 mi. grading roadway, 24 ft., to G. H. Oswald, 366 East 58th St., $615,000. Noted Mar. 22.

Calif., Santa Ana—Orange Co. concrete curbing, guttering and paving Rd. Dist. 20, 558,495 sq.ft. 1½ in. warrenite bitulithic on 3½ in. asphaltic concrete, etc., to S. Finley, Santa Ana, $199,640.

Ont., Brantford—Brant Co. will construct gravel and macadam roads, by day labor. $48,000. A. E. Watts, County Bldg., clk.

Ont., Toronto—Toronto and York Good Roads Comn., 57 Adelaide St. E., concrete base with asphalt top, concrete curbs and gutters in Agincourt, and Browns Rd., to Standard Constr. Co., Mimico Beach; concrete base with penetration top, concrete curbs and gutters at Schomberg, to Curran & Briggs, Orillia; concrete base with asphalt top on Scarlett Rd., to Construction & Paving Co., Confederation Life Bldg.; concrete base with Warrenite top on Sutton and York Rds., to Warren Bituminous Paving Co., University Ave.; concrete base, Penetration top on Kennedy Rd., to A. E. Jupp Constr. Co., 170 Berkley St.; concrete base, Penetration top, on Vaughan Rd., to R. Honsberger, Vineland; concrete base, Penetration top, on Don Mills Rd., to Law Constr. Co., 107 Hillsdale Ave.; waterbound macadam on Sutton Rd. and Blantyre Diversion, to Orr & Clark, The Oaks; waterbound macadam on Weston Rd., to E. S. Dogg, Kleinburg. Total cost $400,000.

Industrial Work

PROPOSED WORK

Conn., Meriden—Connecticut School for Boys plans power house, $50,000, and 3 story, 50 x 100 ft. building to contain laundries, etc., $150,000, both brick, plain foundations. E. S. Boyd, supt. Engineer and architect not selected.

N. Y., Fort Miller—Fort Miller Paper & Pulp Co. plans rebuilding mill, recently destroyed by fire. $100,000. Engineer and architect not announced.

N. Y., Long Island City—Superior Piece Dye Wks., 37 Moultrie St., soon lets contract brick, steel and rein.-con. factory, plain foundation. $100,000. L. A. Abramson, 46 West 46th St., New York City, archt. and engr.

N. Y., Perrysville—Worlock Stone Crushing Co. plans to rebuild plant recently destroyed by fire. $100,000. Engineer and architect not announced.

N. Y., New York—Cushmans Sons, Inc., 461 West 125th St., soon takes bids 6 story, 100 x 100 ft., brick, steel and concrete top addition to bakery, Lawrence St. and Amsterdam Ave. $250,000. L. S. Beardsley, 116 West 39th St., archt. and engr. Noted Apr. 26.

N. Y., Phila.—See "Miscellaneous."

N. Y., Watertown—Standard Oil Co. of New York, 26 Bway., New York City, plans garage, service, oil and gasoline filling stations, 410 State St., here. $50,000.

N. J., Kearny (Arlington P. O.)—Western Electric Co., 195 Bway., New York City, having plans prepared by J. G. White, engr., 43 Exch. Pl., New York City, power plant, here.

N. J., Kearny (Arlington P. O.)—Western Electric Co., 195 Bway., New York City, soon takes bids cable building, here. McKenzie, Voorhies & Gmelin, 347 Madison Ave., New York City, archts. O. C. Spurling, 195 Bway., New York City, engr.

N. J., Keyport—Standard Motor Trading Co. having plans prepared by J. S. Crane, consult. engr., 41 Park Row, New York City, 1 story, 171 x 196 ft. warehouse, fireproof construction. $75,000.

N. J., Waldwick—Waldwick Coal & Lumber Co. plans to rebuild mill recently destroyed by fire. $150,000. Engineer and architect not announced.

Pa., Burnham—Bd. Dirs. Burnham Medicine Co. opens bids about June 15, 3 story and basement, 50 x 120 ft. concrete factory, 4th Ave. $60,000.

Pa., Franklin—Eclipse Oil Wks. plans to rebuild portion of refinery recently destroyed by fire. $50,000. Engineer and architect not announced.

Pa., Franklin—Franklin Steel Wks. plans 1 story, 45 x 425 ft. addition to plant. Private plans.

Pa., Johnstown—Commonwealth Playing Card Co., plans 2 story and basement, 65 x 100 ft. brick and steel factory, Strayer St. $50,000. J. W. Culp, vice pres. and genl. mgr.

Pa., Mahoney City — Ball Lumber Co. plans to rebuild plant recently destroyed by fire. $100,000. Engineer and architect not announced.

Pa., Scranton—H. G. and W. A. Smith, Wyoming Ave. and Walnut St., plans 87 x 155 ft. factory, Wyoming Ave. $60,000. Engineer and architect not announced.

Pa., Warren — Conewango Refining Co. plans to rebuild refinery, North Warren Ave., recently destroyed by fire. $500,000. Engineer and architect not announced.

Md., Baltimore—Motor Finance Co., Inc., 15 Mt. Royal Ave., plans 1 and 2 story, brick and steel garage, Fulton and Pennsylvania Aves. $75,000. R. M. Stein, pres. Engineer and architect not selected.

Md., Baltimore—Standard Sanitary Mfg. Co., Bessemer Bldg., Pittsburg, Pa., having plans prepared by S. Diescher & Sons, Farm Bldg., Pittsburg, Pa., manufacturing plant, brick and steel, concrete pile foundation, 5th Ave., here. $2,500,000.

W. Va., Clarksburg—Clarksburg Automobile Co. having plans prepared by F. D. McEnteer, Clarksburg, 3 story and basement, garage. $75,000.

N. C., Lexington—Poneemah Mills Co. plans cotton mill. $100,000. C. A. Mountcastel and J. E. Williams, Lexington, interested.

N. C., Statesville—Sherill-Green Furniture Co., recently incorporated, plans factory. $45,000-$100,000. J. L. Sherill, T. L. Green and S. Wallace, Statesville, interested.

S. C., Fairmont—Fairmont Mfg. Co. having plans prepared by Lockwood, Greene & Co., engrs., Piedmont Bldg., Charlotte, N. C., 3 story, 106 x 267 ft. mill.

S. C., Greenville—Southern Worsted Co. having plans prepared by Lockwood, Greene & Co., engrs., Piedmont Bldg., Charlotte, N. C., 1 story, 180 x 579 ft. plant, mill construction.

S. C., Union—Flexible Saw Works plans factory. $90,000. Engineer and architect not announced.

Ala., Heflin—W. M. Dodson, Wedowee, plans electric light and power plant, here. $40,000.

O., Akron—Taplin-Rice-Clerkin Co., 177 South Bway., having plans prepared by Carmichael Constr. Co., 524 Hamilton Bldg., rebuilding 2 story, foundry, Bettes Corners, recently destroyed by fire. $125,000.

O., Canton—Union Metal Mfg. Co., 1410 Maple Ave. N. E., plans large plant addition. $120,000. Engineer and architect not announced.

O., Zanesville—Adams Transfer & Storage Co., Muskingum Ave., plans 3 story and basement, 87 x 100 ft., brick and concrete warehouse. $57,000.

Mich., Detroit—C. M. Hall Lamp Co., 1035 East Hancock Ave., having plans prepared by Baxter, O'Dell & Halpin, 1024 Hammond Bldg., 2 story, 80 x 172 ft. rein.-con. and brick addition to factory, plain foundation, Hancock Ave. $75,000.

Mich., Grand Rapids—Valley City Milling Co., 217 Michigan Ave. N.W., rejected bids 7 story, 78 x 134 ft., rein.-con. and steel mill, eight 20 ft. rein.-con. tanks 121 ft. high, etc. $600,000. May revise plans or postpone until 1924. A. F. Baxter, 16 Hanover St., Buffalo, N. Y., engr.

industrial Works (Continued)

Mich., Lansing — Wynkoop-Hallenbeck-Crawford Co., 119 East Ottawa St., having sketches made by S. D. Butterworth, Prudden Bldg., 5 story and basement, 135 x 185 ft. concrete, brick and stone, plant and office building. $200,000.

Ill., Chicago—Union Stock Yards plans 8 and 9 story, 62 x 240 ft., live stock exchange, rein.-con., brick and steel, Union Stock Yards. $1,000,000. A. Epstein, 2007 West Pershing Rd., archt.

Wis., Ashland—Ashland Paper Co. having plans prepared by Smith & Reynolds, Dempsey Bldg., Manitowoc, 2 story, 75 x 200 ft. mill addition, brick and rein.-con. $50,000.

Wis., Burlington — Patefield Bros. Co. making plans 1 or 2 story, 50 x 70 ft. garage and repair shop, brick, rein.-con. and steel, plain foundation. $40,000. Private plans.

Wis., Chippewa Falls—City plans power house and dam, rein.-con., brick and steel, at Brunet dam site. L. J. Felix, clk. Engineer and architect not selected.

Wis., Madison—Madison Nash Co., 155 East Wilson St., plans 2 story, 66 x 122 ft. garage, rein.-con., brick and steel, plain foundation. $40,000. Engineer and architect not selected.

Wis., Madison—A. J. Sweet, 639 West Wilson St., having plans prepared by R. A. Phillips, Beaver Bldg., 1 story, 60 x 90 ft. rein.-con., brick and steel storage plant, plain foundation, Wilson St. $40,000.

Wis., Monroe—J. P. Bruecker, archt., 482 Frederick Ave., Milwaukee, preparing plans 2 story, 40 x 100 ft. garage, brick and concrete, plain foundation, here. $40,000. Owners name withheld.

Wis., Port Washington—Schmit Bros. having plans prepared by F. Graf, 307 Grand Ave., Milwaukee, 1 story, 52 x 100 ft. garage addition, brick, plain foundation. $40,000.

Wis., West Allis—Burbach Auto Service Co., 5225 Greenfield Ave., rejected bids 2 story, 62 x 87 ft. garage, brick and concrete, plain foundation, 53rd Ave. $40,000. Will readvertise. Hunt & Grissold, 445 Milwaukee St., Milwaukee, archts. Noted Feb. 22.

Tex., Dallas—Dallas Textile Mills Co., c/o J. P. Burrus, pres., Interurban Bldg., had plans prepared and takes bids in summer, 2 story, brick, concrete and steel, plain foundation, 150,000 sq.ft. floor space, in Love Field Industrial Dist. $1,000,000. L. W. Robert, Jr., Tufts Bldg., Atlanta, Ga., engr.

Calif., Exeter—W. F. Humphreys, attorney, Mills Bldg., San Francisco, representing syndicate which plans cement plant. $2,000,000 (ultimately $4,000,000).

Calif., Manteca—Milk Producers Assn. of Central California, 510 - 9th St., Modesto, plans plant, here. $100,000.

Calif., Oakland — Oakland Refrigerator and Butchers Supply Co., 2766 Grove St., had plans prepared by A. W. Smith, 1010 Bway., 1 story, brick, factory, 12th St. $40,000.

Calif., San Jose—Merritt Concrete Products Co., 727 Chapman St., plans plant, Monterey Rd. To exceed $40,000.

Calif., San Rafael—Pacific Gas & Electric Co., 445 Sutter St., San Francisco, having plans prepared group 1 story service buildings, incl. meter shop, garage, warehouse, paint shop, etc., frame and plaster, here. $41,500. Private plans.

Quebec—See "Miscellaneous."

BIDS DESIRED

Conn., Middletown—May 21, by Frissel Fabric Co., 26 Frissel St., 1 story and basement, 60 x 200 ft. factory, rein.-con. and brick, plain foundation, Silver St. $60,000. Bilderbeck & Langdon, 159 State St., New London, archts. Noted Apr. 5.

N. Y., Brooklyn—S. Abels, c/o M. A. Cantor, archt. and engr., 371 Fulton St., will build 1 story, brick, steel and concrete garage, plain foundation, Bridge St. $65,000. Work will be done by separate contracts.

N. Y., Lyons—Bashford Cider & Vinegar Co., Water St., taking bids concrete and brick plant addition. $50,000-$60,000. J. E. Jennings, mgr. Noted Mar. 29.

Pa., Ebensburg — Gardner Calculating Machine Co. taking bids 2 story and basement, 90 x 100 ft. plant, High St., $70,000. Private plans.

Pa., Pittsburgh—J. McSorley, 5526 Hobart St., will build 2 story and basement, 80 x 100 ft. concrete and brick garage, Millwood and Center Sts. $40,000. Work will be done by separate contract.

Pa., Pittsburgh—B. H. Prack, archt., Keystone Bldg., taking bids 4 story and basement, 62 x 143 ft., rein.-con., brick and tile factory, Braddock Ave., for Mine Safety Appliance Co., Chamber of Commerce Bldg. $150,000.

S. C., Spartanburg—May 22, by Lockwood, Greene & Co., Piedmont Bldg., Charlotte, N. C., 3 story, 125 x 280 ft., textile mill, mill construction, for Acadia Mfg. Co. Noted Apr. 5.

O., Cleveland — Cleveland Electric Illuminating Co. taking bids superstructure 4 story 108 x 194 ft., brick, steel and concrete substation, foot of East 170th St. $750,000. E. J. Cook, Illuminating Bldg., archt. J. C. Spencer, Engineers Bldg., engr.

Mich., Detroit—H. J. Farwell, archt., 35 Ford Ave., Highland Park, (Detroit P. O.) taking bids and opens same about May 26, 3 story 40 x 125 ft. rein.-con. and brick garage and service station, plain foundation, Hamilton Blvd., for Kohn & Michelson, 13806 Woodward Ave. $50,000.

Wis., De Pere—F. Bloom taking bids 1 story, 40 x 60 ft. garage and repair shop, brick and rein.-con., plain foundation, 3rd and Oneida Sts. $40,000. Private plans.

Wis., Delavan—H. C. Hengels, archt. 445 Milwaukee St., Milwaukee, taking bids 2 story, 34 x 60 ft. garage and 20 x 62 ft. filling station, brick and concrete, plain foundation, for A. H. Schumacher, Delavan. $50,000.

Wis., Madison—F. L. Kronenberg, archt., Carroll Blk., taking bids 2 story, 60 x 150 ft. garage and repair shop, brick, rein.-con. and steel, plain foundation, Washington St., for Capitol Garage Co., South Pickney St. $80,000.

Wis., Milwaukee—H. L. Kuehnel, archt., 4625 Woodlawn Court, Wauwatosa, taking bids 1 story, 42 x 120 ft., concrete factory, plain foundation, Keefe Ave., here. $40,000. Owners name withheld.

Wis., Milwaukee—E. R. Liebert, archt., 432 Bway., taking bids 1 story, 42 x 140 ft. boiler house, brick and steel, plain foundation, Marshall St., for Western Leather Co., 878 Marshall St. $40,000.

Tex., Ft. Worth—World Publishing Co., 606 Commerce St., taking bids 2 story and basement, 100 x 220 ft., rein.-con. and brick plant, plain foundation, Jones St. at 2nd and 3rd Sts. $200,000. O. H. Atkinson, 806 Taylor St., engr. and archt.

Tex., Lubbock—J. L. Dow taking bids 2 story, printing plant, rein.-con. and brick, plain foundation. $50,000. Engineer and architect not announced.

Calif., Los Angeles — W. J. Saunders, archt., Laughlin Bldg., receiving bids 3 story, 50 x 100 ft., rein.-con. laundry, 6th St., for City Towel Supply Co., 413 East 6th St. To exceed $40,000.

Calif., Los Angeles—Walker & Eisen, archts., Pacific Finance Bldg., receiving bids 5 story and basement, brick and steel warehouse, 15th and Los Angeles Sts., for Los Angeles Rubber Stamp Co., 131 South Spring St. To exceed $50,000.

Ont., Campbellford—May 25, by Hydro Electric Power Comn., 190 University Ave., Toronto, excav. and concrete work for power plant, incl. 90,000 cu.yd. rock excav., 2,700 cu.yd. rein.-con. with reinforcing steel, at Dam 8 on Trent River, here. $1,066,408. F. A. Gaby, ch. engr.

BIDS RECEIVED

Calif., Sacramento—Dean & Dean, archts., City Library Bldg., 1 story and basement, rein.-con. warehouse, 3rd and Q Sts., from Campbell Constr. Co., Builders Exch., $79,864, for Lindley Co., 220 K St. Noted Apr. 26.

CONTRACTS AWARDED

Me., South Portland — Maine Central R.R., Portland, locomotive and car repair shops, engine house, power plant, etc., rein.-con., brick and steel, plain and concrete pile foundation, here, to J. W. Gulliver Co., 120 Exchange St., Portland, F. A. Rumery Co., 21 Portland St., Portland, and J. J. Prindiville Co., South Framingham, Mass. Archts. est. $1,250,000. Noted Jan. 25.

N. J., Trenton—Trenton Packing Co., Inc., packing house, Escher and Behm Sts., to S. Teitz, 225 Jackson St., $52,000.

Pa., Galeton—Keystone Garage Co. will build 1 story and basement, 75 x 120 ft. garage, by day labor. $40,000. H. Haskell, Hulett Bldg., Elmira, N. Y., archt.

W. Va., Raleigh—Raleigh Transportation Equipment Constr. Co., Beckley, will build 1 story, 60 x 130 ft. garage, here, by day labor. $40,000. Private plans.

N. C., Concord—Gibson Mfg. Co., Charlotte, finishing plant, mill construction, here, to T. C. Thompson & Bro., 609 South Smith St., Charlotte, $56,000.

N. C., Concord—Hobarton Mfg. Co., 1 story, half basement, 80 x 220 ft., textile mill construction, to T. C. Thompson & Bro., 609 North Smith St., Charlotte, $40,000. Noted Apr. 4.

N. C., Raleigh—See "Buildings."

N. C., Worthville—Leward Cotton Mills, addition to textile mill, to J. L. Crouse, Greensboro, $68,000. Noted Mar. 22.

S. C., Greenwood—Grendel Mills, 4 story textile mill, 75,000 sq.ft. floor space, mill construction, to Mauldin & Chapman, Greenwood, $130,000. Noted Mar. 22.

S. C., Greenville—Duncan Mills, 1 story weave shed, 55,000 sq.ft. floor space, mill construction, to Gallivan Bldg. Co., West Washington St., $150,000.

O., Ashtabula—Standard Oil Co. of Ohio, c/o E. B. Wagoner, supt. construction, East Ohio Gas Bldg., Cleveland, 2 story, brick, steel and concrete warehouse and garage, here, to A. C. Felver, Ashtabula. Archts. est. $40,000. Noted Apr. 26.

O., Cleveland—Belvoir Stone & Brick Co., 401 Engineers Bldg., 1 story, brick and steel plant, 50 ton capacity, South Euclid St., to F. W. Klein, 701 East 96th St. Archts. est. $150,000.

O., Cleveland — Prospect Auto Top & Painting Co., 2112 East 19th St., 1 story, 70 x 182 ft., brick and timber factory, to L. Dautel Co., 5710 Hough Ave. Archts. est. $40,000.

O., Elyria—Superior Metal Products Co., Bond and Adams Sts., 1 story, 60 x 160 ft., brick and steel factory, to Hunkin-Conkey Constr. Co., Century Bldg., Cleveland. Archts. est. $40,000.

O., Mansfield—Standard Oil Co. of Ohio, East Ohio Gas Bldg., Cleveland, 2 story, brick, steel and concrete warehouse and garage, here, to E. E. Elford, 307 East Gay St., Columbus. Archts. est. $40,000. Noted Apr. 5.

Mich., Iron Mountain—Ford Motor Co., Highland Park (Detroit P. O.), design and construction of 10,000 hp. hydro electric plant, Menominee River, to Stone & Webster, Inc., 147 Milk St., Boston, Mass., 375 ft. dam and power station sub-structure will be designed by Mead & Seastone, State Journal Blk., Madison, Wis.

Ill., Chicago—Midway Corp., c/o A. S. Alschuler, archt., 28 East Jackson Blvd., 1 and 2 story, 125 x 148 ft. auto sales and service station, fireproof construction, 60th St. and Cottage Grove Ave., to Johnson-Anderson Co., 7120 Evans Ave. Archts. est. $175,000.

Kan., Wichita—Wichita Steam Laundry, 117-19 West 1st St., 1 story, 80 x 160 ft., brick laundry, plain foundation, Murdock and Wichita Sts., to Vandenberg & Son, 119½ South Lawrence St., $80,000.

Wis., Manitowoc—Globe Steam Laundry, 14th and Washington Sts., 2 story, 46 x 120 ft. laundry, rein.-con. and brick, plain foundation, to J. Rezach, Two Rivers. Noted Apr. 26.

Wis., Milwaukee—A. L. Richards, 90 Mason St., 1 story, 122 x 242 ft. garage, brick and steel, plain foundation, Knapp St., to Coddington Eng. Co., 290 3rd St. Engrs. est. $160,000.

Wis., Milwaukee—Misericordia Hospital, 22nd and Chestnut Sts., 2 story, 50 x 100 ft., power house and laundry, brick and concrete, Chestnut St., to E. Steigerwald & Sons, 2303 Galena St. Archts. est. $40,000.

Wis., Milwaukee — Nash Motors Co., Clement Ave., 1 story, 132 x 248 ft., warehouse, brick and steel, Clement Ave., to T. Stark & Co., 130 Muskegon Ave. Archts. est. $75,000.

Wis., Port Wing—Northern Wisconsin Hydro Electric Co., 60 x 95 ft., hydro-electric power plant, rein.-con., brick and steel, to Jacobson Eng. Co., 533 Metropolitan Bldg., Minneapolis, Minn. Engrs. est. $75,000. Noted Apr. 12.

Wis., Sturgeon Bay—Lake Shore Motor Co., 2 story, 50 x 62 ft. concrete and brick garage, plain foundation, to H. Anschutz, Sturgeon Bay. Archts. est. $40,000. Noted Feb. 8.

Wis., Waukesha—Quality Aluminum Casting Co., 505 Lake Ave., 1 story, 87 x 200 ft. foundry, concrete and steel, Lincoln Ave., general contract, to P. F. Gierke, 816 Lincoln Ave.; structural steel, to Wisconsin Bridge & Iron Co., North Milwaukee. Engrs. est. $50,000.

Ia., Waterloo—Rath Packing Co., Sycamore and Elm Sts., general contract 5 story and basement, 90 x 100 ft., cold storage and refrigerator plant, rein.-con. and brick, to G. W. Scales, 903 L. & S. Bldg., $76,118. Noted Apr. 5.

Industrial Works (Continued)

Minn., Minneapolis—Hohn & Tuscany, Co., 735 Temple Court, having plans prepared by P. E. Crosier, 915 New York Life Bldg., 1 story and basement, 66 x 200 ft. garage, brick and steel, 2820 Hennepin Ave. $40,000. Work will be done by day labor.

Minn., St. Paul—Ford Motor Co., Highland Park, Detroit, Mich., 18,000 h.p. power plant, here, to Stone & Webster, 147 Milk St., Boston. Noted Jan. 25.

Mo., St. Louis—A. Leschen & Sons Rope Co., 5909 Kennerly Ave., 1 story, 77 x 308 ft., rein.-con., brick and steel factory, plain foundation, to J. Stewart & Co., Boatsmens Bank Bldg. Archts. est. $75,000.

Mo., St. Louis — Hesse Envelope Co., Main and Vine Sts., 2 story, 180 x 190 ft., rein.-con. and brick factory, plain foundation, Kingshighway, to McBastel Constr. Co., 4208 Gravois Ave. Archts. est. $85,000.

Tex., Dallas—Dallas Power & Light Co., Dallas-Interstate Bldg., will build 1 story power house, rein.-con., along tracks Missouri, Kansas & Texas R.R., by day labor. $398,167.

Calif., Oakland—J. Breuner Co., 281 Geary St., San Francisco, 3 story, 160 x 240 ft. warehouse, heavy mill construction and rein.-con., Adeline and 22nd Sts., here, to P. J. Walker Co., Sharon Bldg., San Francisco, $175,000. Noted Mar. 29.

Calif., San Francisco—American Concrete Co., Humboldt Bank Bldg., will build 2 story, garage, concrete, McAllister St. near Central Ave., by day labor. $40,000.

Calif., San Francisco—Richard Hellman, Inc., Mills Bldg., 2 story, factory, brick and steel, 16th St. between Harrison and Alabama Sts., general contract to Neils Larsen, Monadnock Bldg., $90,000. Noted Nov. 16.

Calif., San Francisco—F. H. Meyer, 742 Market St., 2 story, factory, rein.-con., 5th and Shipley Sts., to G. Wagner, 251 Kearney St., $40,000. E. Wilson Co., 325 Geary St., lessee.

Calif., San Francisco—W. L. Hogan, 333 Kearny St., 1 story, 275 x 275 ft., garage and store building, rein.-con., Northeast Howard and 5th Sts., to W. S. King, Hearst Bldg., $126,000.

Ont., Toronto—Bradshaw Co. Ltd., 107 Atlantic Ave., 1 and 2 story and basement, 58 x 250 ft. rein.-con. and brick factory, to W. J. Trimble, 54 University Ave., $150,000.

Ont., Toronto—Toronto Electric Comrs., 225 Yonge St., let contracts for 2 story, rein.-con., brick and steel sub-station, Bay St., excav. to Lioni & Co., 1450 Dufferin St., structural steel to Hamilton Bridge Co., General Accident Bldg., plumbing to Mechanical Trade Co. Ltd., 54 University Ave. Total est. $100,000.

Buildings

PROPOSED WORK

Conn., Bristol — Nurses Home — Bristol Hospital Corp. receiving tentative sketches 3 story, brick and stone, plain foundation. $150,000. N. Jennings, 4 Oakland St., chn. building com.

Conn., Meriden — Bank, etc. — Meriden Savings Bank, 63 East Main St., plans brick and stone, plain foundation, East Main and Crown Sts. $150,000. Engineer and architect not selected.

Conn., Meriden — Business — L. Lawton, 580 Farmington Ave., plans 3 story, 65 x 110 ft., brick, plain foundation, East Main and State Sts. $165,000. Engineer and architect not selected.

Conn., Meriden—Dormitory—Connecticut School for Boys plans 3 story, brick, plain foundation. $150,000. E. S. Boyd, supt. W. T. Arnold, Hall and Lewis Blk., archt.

Conn., Hartford—Apartment—J. J. Wall, 401 Farmington Ave., having plans prepared by G. Zunner, 182 High St., two 3 story, 65 x 90 ft., plain foundation, Spanish architecture, Farmington Ave. $300,000.

Conn., Hartford—Church—Church of St. Ann having plans prepared by H. F. Ludorf, 122 Main St., New Britain, 2 towers, 60 x 200 ft., brick and terra cotta, plain foundation, Park and Putnam Sts. $165,000. J. V. E. Belanger, 820 Park St., pastor.

Conn., Hartford—School and Community—Lithuanian Roman Catholic Church of the Most Holy Trinity, plans 3 story, rein.-con. and brick, plain foundation, Capitol Ave. To exceed $150,000. J. J. Ambot, 53 Capitol Ave., pastor. Engineer and architect not selected.

Conn., Vernon—High School—Town having plans prepared by F. I. Cooper, 172 Tremont St., Boston, for George Sykes School, 2 story, rein.-con., and brick, plain foundation. $400,000.

Conn., Waterbury—Church and Parish House—Bunker Hill Congregational Church, c/o M. O. Owen, pastor, 22 Marion St., having plans prepared by F. A. Webster, 51 West Main St., brick, plain foundation, Bunker Hill. $200,000.

N. Y., Adams—School—Election soon to vote on $160,000 bonds new brick and concrete school and repairs and addition to present building.

N. Y., Amsterdam—High School—Bd. Educ. having plans prepared by G. L. Lockhart, 1353 University Ave., St. Paul, Minn., 4 story, 128 x 210 ft., brick, tile and stone. $450,000.

N. Y., Brooklyn—School—Bd. Educ., 500 Park Ave., New York, soon takes bids P. S. 177, 5 story, brick, steel and stone, Dahill Rd. $1,075,000. W. H. Gompert, Flatbush Ave. extension and Concord St., archt. and engr. Noted Aug. 10.

N. Y., Geneva—Hospital—Bd. Managers Geneva City Hospital plans brick, concrete and steel contagious ward building. $150,000. J. B. Anderson, pres.

N. Y., Ithaca—Recreation—Cornell University having revised plans prepared by Delano & Aldrich, archts. and engrs., 126 East 38th St., New York City, brick, steel and stone, plain foundation. $1,000,000. Noted July 6.

N. Y., Saratoga Springs—Hotel—Syndicate headed by B. Weissbrot, 110 Forsyth St., New York City, purchased site and plans 190 room brick, concrete and steel, here. $200,000.

N. Y., Yonkers—Apartment—Philipsburgh Constr. Co., 15 North Bway., having sketches made by A. J. and A. O. Suetendael, 15 North Bway., 5 story. $250,000.

N. J., Montclair—Bank—Montclair Savings Bank, 441 Bloomfield Ave., having plans prepared by T. M. James, archt. and engr., 342 Madison Ave., New York City, brick, steel and stone, plain foundation. $200,000.

N. J., Newark—School—St. Anthonius Roman Catholic Church, c/o Guilbert & Bettelle, archts. and engrs., 2 Lombardy St., having preliminary plans prepared brick and stone, plain foundation, South 8th St. $350,000.

Pa., Erie—Exchange—Mutual Telephone Co., 9th St., plans exchange, probably 5 story and basement, 10th St. $400,000. Engineer and architect not selected.

Pa., Nanty-Glo—Hospital—Citizens Com. conducting campaign to raise $150,000 for 3 story and basement, 90 x 100 ft. brick, tile and stone. $150,000. A. H. McAnulty, chn. F. A. Hersh and F. J. Shollar, 310-312 Commerce Bldg., Altoona, archts.

Pa., Phila.—Apartment—Simon & Simon, archts., 249 South Juniper St., soon takes bids 4 story and basement, 48 x 140 ft. brick, steel and stone, plain foundation, 38th and Chestnut Sts. $350,000. Owner's name withheld.

D. C., Wash. — Apartment-Hotel — M. Cafritz, 913 15th St., plans apartment-hotel, K and 14th Sts. $1,300,000. MacNeil & MacNeil, 14 West 45th St., New York City, archts.

D. C., Wash.—Church and Sunday School—St. Stephen's Episcopal Church, Newton and Center Sts., N. W., plans church and Sunday School. $200,000. Engineer and architect not selected.

D. C., Wash.—Home—Central Union Mission, 622 Louisiana Ave., N.W., having plans prepared by A. P. Clark, 816 14th St., N.W., for home. $200,000.

D. C., Wash.—Home—L. Luquer, archt., 819 15th St., N.W., takes bids latter part of month, for home at 3720 Upton St., N.W., for Washington Home for Incurables, 3200 S St., N.W. $275,000. Noted May 3.

W. Va., Charleston—Hospital—Wyson & Jones, archts., Professional Bldg., soon let contract for 5 story and basement, 50 x 108 ft., brick, steel and tile, Virginia Ave., for Mountain State Hospital Co. $200,000.

W. Va., Weirton — Theatre — S. Manos, Steubenville, O., plans brick, steel and concrete, here. $150,000. Engineer and architect not announced.

N. C., Durham—Hotel and Store—Newly organized company (city interested) plans 10 story and basement, 200 rooms, fireproof, Market St. $1,000,000. Address R. W. Rigsbee, city mgr.

N. C., Durham—Municipal—City plans to remodel old high school and convert same into municipal building, also plans wing to new high school. To exceed $150,000. R. W. Rigsbee, city mgr.

N. C., Hickory — College — Lenoir College plans fine arts building and girls' dormitory. $300,000. O. H. Pennkoke, Hickory, pres.

N. C., Kinston — Schools — City sold $200,000 bonds for remodeling existing buildings, adding additional rooms and installing heating plants for white and negro schools. Noted Jan. 25.

S. C., Gaffney—School—City plans 2 story, brick and concrete. $165,000. J. A. Baldwin, Anderson, archt.

La., Hahnville — School — St. Charles Parish School Bd. having plans prepared by W. R. Burk, Balter Bldg., New Orleans, 2 story, 128 x 143 ft. brick. $175,000.

Ky., Ashland—Hotel—Hotel Buckingham plans 11 story, 250 room hotel. $1,000,000. Engineer and architect not selected.

Ky., Louisville—Apartment and Store—H. G. Talamini, W. G. Apartments, plans 10 story, 100 x 200 ft, 3rd and York Sts. $1,000,000. Engineer and architect not selected.

Ky., Louisville — Bank — Federal Land Bank, 4th St. and Bway., plans bank. To exceed $300,000. Address C. E. Davis, pres. Engineer and architect not selected.

Ky., Louisville—Clinic—T. M. Dorsey, Francis Bldg., plans 3 story (ultimately 6 story), 45 x 134 ft., 2nd and Chestnut Sts., $85,000 (ultimately cost $150,000). Engineer and architect not selected.

Ky., Louisville—Office—F. G. Breslin, 32nd and Market Sts., plans 18 story, 95 x 175 ft., 3rd St. and Bway. $1,500,000. Engineer and architect not selected.

Ky., Louisville—Store—W. Heyburn, 403 West Ormsby St., plans 10 or 12 story, 4th St. near Bway. $1,000,000. Joseph & Joseph, Francis Bldg., archts.

Ky., Lexington—Temple—Oleika Shriners having plans prepared by J. V. Moore, 344 McClelland Bldg., for temple. $250,000.

O., Canton—Mercantile—W. S. Ney & Co., 207 Ry. Exch. Bldg., Kansas City, Mo., plans 5 story, 66½ x 200 ft., Market Ave. and 5th St., here. $200,000 or more. Engineers' and architects' names not available.

O., Cleveland—Apartment—Wullinger & Fishman, 5511 Ensign Ave., having plans prepared by Braverman & Havermann, archts., Ulmer Bldg., 3 story and basement, 50 x 120 ft., brick and steel, 1870 East 75th St. $150,000.

O., Cleveland Heights (Warrensville, P. O.)—Store and Apartment—Syndicate of Investors, c/o J. Laronge, 214 Williamson Bldg., Cleveland, plans 3 story, brick, on 130 x 320 ft. plot, Coventry Rd., here. $250,000. Engineers and architects names withheld.

O., Columbus—Store—Erner & Hopkins Co., 146 North 3rd St., plans 4 story and basement, 75 x 125 ft., brick and concrete, 4th St. $200,000.

O., Lakewood (Cleveland, P. O.)—Commercial and Theatre—S. H. Stecker, Society for Savings Bldg., Cleveland, having plans prepared by N. Petti, Williamson Bldg., Cleveland, 2 story and basement, 95 x 170 ft., brick, steel and concrete, Detroit and Woodward Aves., here. $200,000.

O., Painesville — Hospital — Lake Co. Hospital Comn., c/o L. J. Spaulding, clk. Court House, having preliminary plans prepared by F. C. Warner, 767 Hippodrome Annex Bldg., Cleveland, 2 story, brick, steel and concrete. $200,000. Noted Nov. 23.

Mich., Bad Axe—High School—S. Butterworth, archt., Prudden Bldg., Lansing, opens bids about June 1, 2 story and basement, 134 x 137 ft. rein.-con., brick and steel. $150,000. Noted Mar. 29.

Mich., Detroit — Apartment — H. J. Darling, archt., 901 Empire Bldg., preparing preliminary plans 3 story and basement, brick and steel, plain foundation, Hamilton Ave. $175,000. Owners name withheld.

Mich., Detroit—Apartment—J. Kasurin, archt., 512 Empire Bldg., preparing plans 4 story and basement, 65 x 190 ft. brick and steel, plain foundation, Hancock Ave. $200,000. Owners name withheld.

Mich., Detroit—Apartment—G. Marks, c/o Abraham & Wood, archts., 705 Kresge Bldg., having plans prepared 4 story and basement, 42 x 125 ft. brick and steel, plain foundation, Trumbull Ave. and Ash St. $150,000.

Mich., Detroit — Apartment — Varney & Varney, archts., 1422 Washington Blvd., preparing plans 3 story and basement, 90 x 140 ft. brick and steel, plain foundation, Quincy Ave. $175,000. Owners name withheld.

Mich., Detroit—School—St. Leos Parish, c/o Donaldson & Meier, archts., 1314 Penobscot Bldg., having plans prepared 3 story, 72 x 145 ft. brick, steel and stone, 14th Ave. $150,000.

Buildings (Continued)

Mich., Grand Rapids—School—Bd. Educ. having plans prepared by Osgood & Osgood, Grand Rapids, (street address not available), brick and stone addition to Oakdale School. $150,000.

Mich., Lansing—Hotel—Roosevelt Hotel, having plans prepared by S. Butterworth, Prudden Bldg., 4 story and basement, 70 x 160 ft. rein.-con. and brick, plain foundation. Seymour St. $250,000.

Mich., St. Johns—High School—Bd. Educ., rejected bids for Wilson High School, 2 story and basement, 190 x 275 ft. May revise plans. $175,000. S. Butterworth, Prudden Bldg., Lansing, archt.

Mich., Wayne—School—Bd. Educ. having plans prepared by A. Clubb, 426 Goebel Bldg., Detroit, 3 story, 200 x 205 ft. rein.-con., brick and steel, plain foundation. $300,000.

Ill., Berwyn—Theatre, Stores and Office—E. P. Rupert, archt., 19 South La Salle St., Chicago, preparing plans 2 story, 125 x 182 ft., fireproof. Ridgeland Ave. and 22nd St., here. Owner c/o B. Burnacek, 1940 South 63rd St., Berwyn. $200,000.

Ill., Champaign—Station—Illinois Central R.R., 135 East 11th Pl., Chicago, plans railroad station and additional subway tracks, here. $185,000. F. L. Thompson, ch. engr.

Ill., Chicago — Apartment — Rettig Building Corp., c/o E. E. Hall, archt., 123 West Madison St., plans 10 story, 124 x 269 ft., rein.-con., brick and steel, Stony Island Ave. between 66th and 67th Sts. $2,500,000.

Ill., Chicago—Nurses' Home—Austin Hospital Assn., Austin, plans nurses' home, rein.-con., brick and steel, Central St. near Flournoy St. $150,000. J. E. O. Pridmore, 38 South Dearborn St., archt.

Ill., Chicago—Office—Illinois Central R.R., 135 East 11th Pl., plans 7 story, 80 x 130 ft., rein.-con., brick and steel, 1201 South Michigan Ave. $200,000. D. F. McLaughlin, 135 East 11th Pl., archt.

Ill., Chicago—Store, Apartment and Office—W. D. McJunkin, c/o Marshall & Fox, archts., 721 North Michigan Ave., plans 3 story, 40 x 465 ft., rein.-con., brick and steel, Wilson St. and Bway. $250,000.

Ill., Oak Park — Store and Office — S. Koenigsberg, c/o Koenigsberg & Weisfeld, archts., 5 North La Salle St., Chicago, having plans prepared 4 story, 71 x 97 ft., fireproof. Lake and Marion Sts., here. $200,000.

Wis., Madison — Auditorium — Madison Auditorium Co., 357 Washington Bldg., plans 3 story, rein.-con., brick and steel, Main St. $250,000. C. C. Doring, pres. Engineer and architect not selected.

Wis., Madison—Hotel—Wisconsin Hotel Realty Co., 86 Michigan St., had plans prepared and soon takes bids 12 story and basement, 132 x 144 ft., brick and concrete, plain foundation, West Washington and Fairchild Sts. $1,500,000. M. Tullgren & Sons Co., 425 East Water St., Milwaukee, archts. Noted Mar. 29.

Wis., Reedsburg—Theatre—O. V. Kelley having plans prepared by R. S. Chase, 117 Locust St., Janesville, 2 story and basement, 50 x 130 ft., rein.-con., brick and steel. $150,000.

Ia., Conrad—School—Bd. Educ. plans 2 or 3 story and basement, rein.-con., brick, tile and stone. $150,000. E. L. Guild, secy. Architect not announced.

Ia., Sioux City—High School—Bd. Educ. having plans prepared by Beuttler & Arnold, Grain Exch. Bldg., rein.-con. and brick senior high school. $400,000. Noted Mar. 22.

Minn., Minneapolis—Administration, etc.—William Hood Dunwoody Industrial Institute, 816 Superior Blvd., having plans prepared by Hewitt & Brown, 1200 2nd Ave. S., for administration building, gymnasium, auditorium and library, 2 story and basement, 206 ft. long, with 60 and 100 ft. wings, brick and stone, Superior Ave. near Lyndale Ave. N. $200,000. C. A. Prosser, dir.

Minn., St. Paul—Lodge—Fraternal Order of Eagles, Aerie 33, having plans prepared by G. F. Stewart, 207 Pittsburgh Bldg., 3 story and basement, rein.-con., brick and tile, 12th and Wabasha Sts. $225,000. J. F. Sperry, 207 Pittsburgh Bldg., chn. building com.

Kan., Kansas City—Memorial—City had plans prepared by Rose & Peterson, 434 Brotherhood Bldg., 3 story and basement, rein.-con., terra cotta and stone, 7th and Barrett Sts. $500,000.

Kan., Sabetha — Hospital — St. Anthony Hospital, plans 3 story and basement, 44 x 140 ft., rein.-con. and brick. $150,000-$175,000. Will mature in fall. C. A. Smith, 109½ Santa Fe St., Salina, archt.

Kan., Wichita—Clubhouse—B. P. O. E. having plans prepared by E. Forsblom, 305 Sedgwick Bldg., and soon takes bids 140 x 150 ft. rein.-con., brick and stone. $500,000. H. A. Noble, 411 Reliance Bldg., Kansas City, Mo., engr.

Mo., Kansas City — Business — Jenkins Music Co., 1013 Walnut St., having preliminary plans prepared by C. A. Smith, 612 Finance Bldg., 10 story and basement, rein.-con., steel, stone and terra cotta, 1013-23 Walnut St., $500,000.

Mo., Kansas City—High School—C. A. Smith, archt., 612 Finance Bldg., takes bids about June 1, Westport Jr. High School, 6 story and basement, 125 x 200 ft., rein.-con., brick, steel and stone, 39th St. and Hyde Park, for Bd. Educ. $850,000.

Mo., Kansas City—Hospital—Heart of America Hospital Assn., plans hospital, 31st St. and Tracy Ave. $1,000,000. Engineer and architect not selected.

Mo., Kansas City — School—Bd. Educ., having plans prepared by C. A. Smith, 612 Finance Bldg., 1 story and basement, 150 x 200 ft., rein.-con., steel and stone, 70th and Askew Sts. $250,000.

Mo., Kansas City—School—C. A. Smith, archt., 612 Finance Bldg., receives bids between June 1 and 15, 2 story and basement, 60 x 140 ft., rein.-con., brick, steel and stone addition to Mt. Washington School for Bd. Educ. $200,000.

Mo., Kansas City—School—C. A. Smith, archt., 612 Finance Bldg., takes bids about June 1, 2 story and basement, 60 x 140 ft., rein.-con., brick, steel and stone addition to Bristol School, Maywood St., for Bd. Educ. $180,000.

Mo., St. Louis—School—Kentucky Riding School, 5078 Easton Ave., plans 2 story, rein.-con. and brick, plain foundation, Papin St. $150,000. Engineer and architect not announced.

Mo., Warrensburg—High School—Voted $200,000 bonds rein.-con., brick and stone. Engineer and architect not selected.

Okla., Oklahoma City—Office—Physicians, Surgeons and Nurses Exch., 41 Continental Bldg., plans 9 story and basement, 125 x 140 ft., brick, Robinson and 1st Sts. $1,000,000. Engineer and architect not selected.

Ore., Portland—Schools—Bd. Educ. School Dist. 1, Administration Bldg., having plans prepared by C. L. Goodrich, Falling Bldg., for Beaumont School, $175,000; by F. M. White, Sherlock Bldg., for Oakley Green, Sunnyside and Portsmouth Schools, $275,000 each. Noted Jan. 18.

Calif., Bishop—Hotel—H. Shermund, archt., Hearst Bldg., San Francisco, preparing plans hotel, 98 rooms, main room 50 x 100 ft., timber and stone, near here. $150,000. Owner's name withheld.

Calif., Centerville—High School—Washington Union High School Dist. takes bids in about a month, brick and concrete. $150,000. H. H. Meyers, Kohl Bldg., San Francisco, archt. Noted Feb. 8.

Calif., Eureka — Store and office — E. Ricks plans 3 story and basement, probably rein.-con., 4th and F Sts. $200,000. Engineer and architect not selected.

Calif., Lemoore—School—Lemoore Union High School Dist. having plans prepared three 1 and 2 story school buildings, incl. auditorium, gymnasium and shop, rein.-con. $325,000. W. H. Weeks, 369 Pine St., San Francisco, archt. Noted May 3.

Calif., Long Beach—Apartment—D. B. Carlin, 45 Alboni St., had preliminary plans prepared by W. H. Austin, 1st National Bank Bldg., for fireproof apartment, approximately 8 story, East 1st St. To exceed $750,000.

Calif., Long Beach—Office—J. C. Lindsey and W. Horne Co., agents, 38 American Ave., having plans prepared by Walker & Eisen, Pacific Finance Bldg., Los Angeles, 13 story, 80 x 120 ft., rein.-con., 3rd St. $900,000.

Calif., Los Angeles—Hotel—M. L. Garrigus, 5463 Santa Monica Blvd., having plans prepared by L. L. Jones, Grosse Bldg., 4 story, brick, Santa Monica Blvd. $150,000.

Calif., Los Angeles—Hotel—F. Siegel, 414 Chapman Bldg., plans 14 story, Figueroa St. To exceed $500,000. Engineer and architect not selected.

Calif., Los Angeles—Office—Standard Oil Co., Standard Oil Bldg., San Francisco, having plans prepared by G. W. Kelham, archt., and H. J. Brunnier, engr., Sharon Bldg., San Francisco, 8 story, fireproof, Hope and 10th Sts., here. $1,000,000.

Calif., Los Angeles—Office and Bank—Bank of Italy, Bank of Italy Bldg., plans office and bank, Hollywood Blvd. To exceed $200,000.

Calif., Piedmont.— School — Piedmont School Dist. rejected bids 2 and 3 story, rein.-con. $150,000. Will revise plans. W. H. Weeks, 369 Pine St., San Francisco, archts. Noted May 3.

Calif., Pomona—Lodge and Club—B.P.O.E. having plans prepared by F. K. Benckley, Fullerton, 2 story, 110 x 145 ft., brick, Holt St. $150,000 or more.

Calif., San Bernardino—Courthouse—San Bernardino Co. plans first unit of courthouse. $75,000. Another unit will be built later, to cost $150,000. H. E. Jones, Katz Bldg., archt.

Calif., San Francisco—Apartment—M. A. Little, Green and Baker Sts., plans 12 story, fireproof, Southwest Taylor and O'Farrell Sts. To exceed $250,000. Engineer and architect not selected.

Calif., San Francisco—Hotel—St. Francis Hotel Co., Powell and Geary Sts., having plans prepared by Bliss & Faville, Balboa Bldg., 5 story (ultimately 10 story) and basement, annex, probably rein.-con., Post St. near Powell St. $1,000,000.

Calif., San Francisco—Theatre—C. A. Nathan (Universal Film Exchange), 221 Golden Gate Ave., plans theatre, Market St. opposite 5th St. $500,000. Engineer and architect not selected.

Ont., Guelph—Normal School—Provincial Dept. Educ., Parliament Bldgs., Toronto, plans 3 story and basement, 20 room, brick, at Agricultural College, here. $500,000. F. R. Heakes, c/o owner, archt.

Ont., Hamilton—Office—J. E. Lister, 133 Glenfern Ave., having plans prepared by B. H. Prack, Bay St., Toronto, 8 story and basement, 115 x 135 ft. rein.-con., brick and steel. $300,000.

Ont., Hamilton—Theatre—G. Swanwick, 108 St. James St. N., plans 2 and 3 story and basement, concrete, brick and steel. $200,000. Engineer and architect not appointed.

Ont., Oshawa—High School—Bd. Educ., Dominion Bank Chambers, plans 2 or 3 story and basement, 15 rooms, brick, steel and concrete. $150,000 to $200,000. Engineer and architect not selected.

Ont., Toronto—Collegiate—Bd. Educ., 155 College St., having plans prepared by C. Dyson, 155 College St., 2 story and basement, 8 room addition to Riverdale Collegiate, concrete, brick and tile. $150,000.

BIDS DESIRED

Mass., Springfield—Mercantile—May 25, by Smith & Annable, Inc., archts., 145 State St., 4 story, 77 x 100 ft., brick and steel, plain foundation, Taylor St., for H. J. Perkins, Dwight St. $150,000. U. S. Rubber Co., 211 Worthington St., lessee. Noted Feb. 23.

Conn., Hartford—Apartment—J. E. Marchetti, archt., 721 Main St., taking bids and opens same about May 21, 2 and 3 story, 60 x 70 ft. and 60 x 90 ft., brick, plain foundation, Retreat Ave., for D. Marra, 27 Kilbourne St. $200,000. Noted May 10.

Conn., West Hartford (Hartford P. O.)—Temple—June 1, by C. S. Griswold, chn. building com., Wyllis Lodge 90, Masonic Hall Assn., 2 story and basement, 40 x 70 ft. brick, plain foundation. $150,000. W. T. Arnold, Hall & Lewis Blk., Meriden, archt.

N. Y., Mount Morris—School—June 5, by Bd. Educ. Mount Morris Union Free School Dist., new school and repairing present school. C. A. Foote & Son, Mount Morris, archts.; adv. this issue. Noted Mar. 15.

N. Y., New York—School—May 23, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, annex to P. S. 72, East 104th and East 105th Sts. 55 ft. west from Lexington Ave., here., for Bd. Educ.

N. Y., Roosevelt—School—May 22, by Bd. Educ., brick, steel and stone, plain foundation. $150,000. Tooker & Marsh, 101 Park Ave., New York City, archts. Noted Apr. 26.

N. J., Bloomfield—High School—May 21, by Bd. Educ., 4 story, 25 x 140 ft., brick and stone addition, Broad St. $225,000. J. F. Caspen, 207 Market St., Newark, archt. J. O. C. Gibbons, 207 Market St., Newark, engr.

N. J., Haworth—School—June 1, by Bd. Educ., Terrace St., new school. F. M. Robertson and A. C. Pauli, 247 Park Ave., New York City, archts.; adv. this issue.

Pa., Clearfield — Church and Sunday School—West Side Methodist Episcopal Congregation taking bids 1 story, 50 x 100 ft. and 60 x 84 ft. brick and stone. $150,000. J. C. Fulton & Son, Uniontown, archt.

Pa., Phila.—Hotel—F. E. White, archt., Pennsylvania Bldg., taking bids 26 story, basement and sub-basement, 84 x 119 ft. rein.-con., brick, steel, 15th and Ranstead Sts., for Kugler Hotel Co., Pennsylvania Bldg. $5,000,000.

Pa., Phila.—Office—May 19, by Porter, Thomas & Rice, archts., Union Trust Bldg., Baltimore, Md., 4 story and basement, 53 x 94 ft. rein.-con., brick, steel and stone, 129 South 5th St., for U. S. Fidelity Guarantee Co., 315 Walnut St. $500,000.

Buildings (Continued)

Pa., Williamsport—Church—May 23, by Building Com. First Church of Christ, 1st unit, 2 story and basement, 60 x 60 ft. brick and stone, West 3rd and Walnut Sts. $150,000. W. D. Shollenberger, 1522 Scott St., archt. Noted Apr. 19.

Md., Baltimore—Store—May 19, by S. Russell, archt., 11 East Lexington St., 3 story and basement, 25 x 167 ft., brick, plain foundation, 411 North Howard St., for Excello Illuminating Co., 312 North Eutaw St. $175,000. Noted May 10.

W. Va., Charleston — Hospital — W. P. Ginther, archt., Everett Bldg., Akron, O., receiving bids 4 story and basement, 90 x 108 ft., here, for St. Francis Hospital, 333 Laidley St. $150,000.

N. C., Greensboro—Schools—May 21, by Guilford Co. Bd. Educ., three 8 room schools, brick, at Colfax, Jonesboro and Sumner. $200,000. T. R. Foust, co. supt. Linthcum & Linthcum, 117 West Martin St., Raleigh, archts. Noted May 3.

Ky., Louisville—Temple—Joseph & Joseph, archts., Francis Bldg., receiving bids 7 story, 200 x 260 ft., steel, Bway., for Kosairs. $1,750,000. Noted Apr. 12.

O., Cleveland—Commercial and Apartment—United States Mortgage Co., c/o M. P. McCallum, constr. mgr., Hickox Bldg., taking bids and opens same about May 29, 3 story and basement, 66 x 170 ft., brick, steel and concrete, St. Clair Ave. near Hayden Ave. $150,000. Private plans.

O., Cleveland—School—June 1, by W. C. Jansen, archt., 402 Electric Bldg., Cleveland, 2 story, 16 room, brick, steel and concrete, East 92nd St. and Holton Ave., for St. Ladislaus Slovenian Church, 2813 East 92nd St. $150,000. Noted Aug. 31.

O., Columbus—Office—May 24 (change of date), by F. L. Packard, archt., 16 East Broad St., 8 story and basement, 80 x 96 ft., brick, concrete and terra cotta, 4th and Broad Sts., for M. L. Yuster, Parkview Ave. and Broad St. $400,000. Noted May 3.

Mich., Detroit—Apartment—J. W. Wilson, archt., 17 Campus Martius, taking bids and opens same about May 25, 10 story and basement, 113 x 128 ft., rein.-con., brick and steel, plain foundation, John R St., here, for G. J. Hilsendegen, 185 Lockmoor Blvd., Grosse Pointe.

Ill., Chicago—Apartment—V. M. Huntington & Co., 5617 West Madison St., receiving bids 3 story and basement, 120 x 140 ft. fireproof construction, 238-246 North Parkside Ave. $175,000. Kreig & Hetherington, 105 North Clark St., archts.

Ill., Chicago—Apartment—Leichenko & Esser, archts., 38 South Dearborn St., receiving bids 3 story and basement, 70 x 160 ft., fireproof construction, 2544-60 East 72nd St. for Southern Arms Building Corp., c/o architects. $200,000.

Ill., Chicago—Hotel and Store—S. Dakin, 6134 Vernon Ave., receiving bids 3 story, 106 x 150 ft., rein.-con., brick and steel, 22nd St. near Keystone Ave. $200,000. Loewenberg & Loewenberg, 111 West Monroe St., archts.

Ill., Evanston—Apartment—A. H. Quitsow, archt., 11 South La Salle St., Chicago, receiving bids 3 story and basement, 100 x 155 ft., fireproof construction, here. $175,000. Owner's name withheld.

Wis., Fond du Lac—School—May 25, by Stepnoski & Mehner, archts., Forest Ave., 2 story and basement, 175 x 221 ft., brick, tile and concrete, plain foundation, for St. Patrick's Congregation, 19 East Follett St. $150,000. Noted Feb. 22.

Wis., Milwaukee—Theatre—Business—May 25, by M. Tullgren & Sons Co., associated archts., 425 East Water St., 4 story and basement, 125 x 150 ft., brick and concrete, plain foundation, Mitchell St., for Saxe Amusement Enterprises, 204 11th St. $450,000. C. W. and G. L. Rapp, 190 North State St., Chicago, archts. Noted Mar. 29.

Wis., Viroqua—High School—School Bd. taking bids and opens same about June 4, 2 story, 89 x 180 ft., brick, tile and concrete, plain foundation. $150,000. E. J. Hancock, Laycock Bldg., Eau Claire, archt.

Ia., Sioux City—High School—May 21 by Beuttler & Arnold, archts., Grain Exch. Bldg., 3 story and basement, 82 x 130 ft. rein.-con., junior high school, for Bd. Educ. $150,000. Noted Mar. 22.

Ia., Woodward—Hospital—May 22, by H. F. Liebbe, state archt., Des Moines, 2 story and basement, 220 x 243 ft. rein.-con., brick and stone, here, for State Hospital Comn., Des Moines.

Minn., Ely—High School—June 4, by G. H. Ayers, secy. Bd. Educ., 3 story, 200 x 200 ft., rein.-con. and brick, plain foundation. $475,000. Bray & Smith, 617 Torrey Bldg., Duluth, archts. and engrs. Noted Dec. 21.

Tex., Dallas—Church—Tyler St. Methodist Church, Tyler St., taking bids 1 story, basement and balcony, 83 x 168 ft., concrete, brick and stone, plain foundation. $150,000. J. W. Westbrook, 407½ North Bishop St., engr. and archt. Noted Apr. 5.

Okla., Norman — Church — June 1, by Secretary of Methodist Episcopal Church South, 1 story, stone, Gothic type. $300,000. R. H. Hunt & Co., South West Life Bldg., Dallas, Tex., archts. Noted Mar. 15.

Okla., Tulsa—Hotel—June 1, by L. R. Shumway, archt., 603 Wright Bldg., 10 story and basement, 100 x 140 ft. rein.-con. addition 3rd and Cincinnati Sts., for H. R. Ketchum, 509 South Main St. $500,000.

Calif., Los Angeles—Hotel—H. Cross, archt., Merchants National Bank Bldg., receiving bids 6 story and basement, 120 rooms, brick, Francisco St., for F. G. and E. H. Jansen, c/o architect. $150,000.

BIDS RECEIVED

N. Y., Albany—Schools—Bd. Contr. & Supply, general contract for 13th Ward school, from McCann Building Co., 68 State St., $244,200, heating and ventilating work, from J. Hunter Heating & Contg. Co., 68 Liberty St., $35,663; general contract for 2 wings on School 19, New Scotland Ave., from J. P. Sewell, 471 Hamilton St., $202,000, heating and ventilating, from E. W. Thompkins & Co., 27 Green St., $40,600.

O., Athens—High School—Bd. Educ., 2 story and basement, 83 x 171 ft., brick, concrete and stone, from Murch Bros. Constr. Co., Ry. Exch. Bldg., St. Louis, Mo., $249,000. Noted Apr. 26.

O., Cleveland—Hospital—R. S. Harsh, archt., Ohio-Hartman Bldg., Columbus, May 4, 2 story and basement, 180 x 180 ft., brick and concrete with 100 x 100 ft court in center, at Cleveland State Hospital, here, from Schirmer-O'Hara Co., 2031 Euclid Ave., for Dept. Pub. Welfare, 9th and Oak Sts. $155,000. Noted Jan. 11.

O., Mt. Vernon — Memorial — Memorial Building Comn., 2 story and basement, 100 x 140 ft., brick, concrete and stone, from Willing Bros., Bellevue, $207,408. Noted May 19.

O., Rock Creek—School—Bd. Educ., May 1, 2 story, brick, steel and concrete, from Howell & Noble, Warren, $123,841. Noted Apr. 26.

Wis., Appleton—Temple—Appleton Masonic Temple Assn., and Leenhouts & Guthrie, archts., 424 Jefferson St., Milwaukee, 3 story and basement, concrete and stone, from C. R. Meyer & Sons Co., 50 State St., Oshkosh. Archts. est. $150,000. Noted Apr. 26.

Wis., Milwaukee — Apartment-Hotel — Grand Plaza Apartment Co., c/o Rosman & Wierdsma, archts., 424 Jefferson St., (superstructure) 6 story, 122 x 132 x 186 ft., brick, Grand Ave., from S. M. Siesel, 160 Ogden Ave., $226,600.

Minn., Glen Lake (Hopkins, P. O.)—Sanatorium Group—Hennepin Co., Sanatorium Comn., opened bids May 8, group of buildings, incl. 6 story and basement infirmary, employees building, addition to nurses home, 2 garages, rein.-con., brick and tile, general contract from Carlsted Bros., 542 Builders Exch., Minneapolis, $409,120. Noted Apr. 26.

Calif., Norwalk—High School—Excelsior Union High School Dist., group of buildings, brick and timber, general contract from J. W. Davison, 361 Walnut St., Long Beach. $192,432. Noted Apr. 19.

CONTRACTS AWARDED

Mass., Boston—School—City Schoolhouse Comn., 1007 City Hall, 2 story and basement, 61 x 140 ft., brick, concrete and steel, plain foundation, Dudley St., to T. O'Connor Co., Kendall Sq., Cambridge (Boston P. O.). Archts. est. $200,000. Noted Feb. 1.

Mass., Northampton—Store and Apartment—H. A. Goodwin, 62 Center St., Florence, 3 story, 98 x 120 ft., brick, plain foundation, Main and Maple Sts., here, to La France Constr. Co., 292 Maple St., Holyoke, $150,000.

Mass., West Springfield (Springfield P. O.) — High School — Town, 2 story, brick and steel, plain foundation, Lathrop St., to Beacon Constr. Co., 110 State St., Boston. $250,000. Archts. est. $290,000. Noted Apr. 4.

Conn., New Britain — Business — R. Podesta, 510 Main St., 3 story, 50 x 100 ft., brick, plain foundation, 514 Main St., to C. Cianci, 350 Elm St. Archts. est. $150,000. Noted May 3.

Conn., New Haven—Museum—Day & Klauder, archts., 925 Chestnut St., Phila., 3 story, 175 x 243 ft., brick, stone and steel, plain foundation, Whitney Ave., to Sperry & Treat Co., 39 Church St., New Haven, for Yale University. Archts. est. $1,000,000. Noted Apr. 26.

Conn., Norwalk—Store—S. J. Kantor, 4 story, 65 x 100 ft., brick, plain foundation, Main St., to United Building Constr. Co., Room 212 Warner Bldg., Bridgeport. Archts. est. $150,000.

Conn., Waterbury—Church—St. Stanislaus Roman Catholic Church, 80 x 120 ft., brick and stone, plain foundation, East Farms, to G. S. Chatfield Co., 138 Division St. Archts. est. $150,000. Noted Apr. 12.

N. Y., Brooklyn—Apartment—Kenning & Parker, c/o Cohn Bros., archts. and engrs., 361 Stone Ave., will build 5 story, brick, steel and stone, plain foundation, Buffalo Ave., by day labor. $250,000.

N. Y., Brooklyn—Apartment—A. Klein, c/o Shampan & Shampan, archts. and engrs., 50 Court St., will build 100 x 128 ft., brick, steel and stone, plain foundation, Court St. and Troy Ave., by day labor. $200,000.

N. Y., Brooklyn—School—W. H. Gompert, archt. and engr., Flatbush Ave. extension and Concord St., P. S. 142, 5 story, 60 x 100 ft., brick, steel and stone, plain foundation, Henry and Rapelyea Sts., to Willetts Constr. Co., 280 Madison Ave., New York. $397,057. Noted May 3.

N. Y., Marion—School—Bd. Educ., brick, steel and stone, plain foundation, to L. J. Held, 25 Main St. E., Rochester. Archts. est. $200,000. Noted Mar. 29.

N. Y., New York—Exchange—New York Telephone Co., 15 Dey St., 6 story, brick, steel and stone plain foundation, Manhattan Ave., to D. C. Weeks & Son, Inc., 347 Madison Ave. Archts. est. $400,000. Noted Apr. 12.

N. Y., New York—Gymnasium—Fordham University, Fordham Rd., 2 story, cut stone, brick and steel, on campus, to Burke Bros. Constr. Co., 1480 Bway. Archts. est. $250,000. Noted Apr. 26.

N. Y., New York—Office—Six Seventeen Fifth Ave. Corp., c/o Margon & Glaser, archts. and engrs., 2804 3rd Ave., will build 45 x 100 ft., brick, steel and stone plain foundation 617 5th Ave., by day labor. $500,000.

N. Y., Penn Yan—Hospital—Building Committee of Soldiers & Sailors Memorial Hospital, general contract, to B. F. Rogers, Penn Yan, $110,000. Noted Apr. 12.

N. Y., St. Albans (Jamaica, P. O.)—School—W. H. Gompert, archt. and engr., Flatbush Ave. extension and Concord St., Brooklyn, P. S. 36, Bell St., here, to Willetts Constr. Co., 280 Madison Ave., New York City, $368,000. Noted May 3.

N. Y., White Plains — Hospital — White Plains Hospital, New York Post Rd., 3 story, brick, steel and stone addition, plain foundation, to Warren E. Green Co., 70 East 45th St., New York. Archts. est. $250,000.

Pa., Derry—High School—Bd. Educ., 2 story and basement, 126 x 200 ft. brick and tile, to Carstensen & McLain, 330 Swank Bldg., Johnstown, $135,000. Noted Apr. 26.

Md., Baltimore—School—Mayor and City Council, 3 story and basement, 60 x 22[illegible] ft., rein.-con. and brick, plain foundation, Nevada and 1st Sts., to J. L. Robinson Constr. Co., 1130 West Lafayette Ave. $419,974. Noted May 10.

Va., Charlottesville—Hospital, etc.—University of Virginia, hospital addition, to W. P. Thurston Co., Merchants Natl. Bank Bldg., Richmond, $115,000. Foregoing is 1st unit of proposed expansion program incl. 14 new buildings, $3,000,000.

W. Va., Charleston — Temple — Baptist Temple Congregation, 2 story and basement, 136 x 200 ft., brick, stone, steel and tile, Quarrie and Morris Sts., to Ring Hartman Co. Inc., Jannett Bldg. Archts. est. $350,000. Noted Feb. 1.

N. C., Raleigh — Institutional — State School for Blind, gymnasium, cold storage plant and other buildings, general contract to Jewell, Riddle & Co., Sanford, $150,000. Noted Apr. 19.

La., New Orleans—Office—Western Union Telegraph Co., 301 St. Charles St., 4 story, 85 x 130 ft. steel and stone, Perdido and Carondelet Sts., to Stone & Webster, 147 Milk St., Boston, Mass.

O., Columbus—Office—Jeffrey Mfg. Co., 4 story, brick and concrete, 4th St. and 1st Ave., to Stone & Webster, Inc., 147 Milk St., Boston, Mass.

O., Elyria—Club—Loyal Order of Moose, c/o W. Campbell, 357 East Broad St., 2 story and basement, 60 x 120 ft., brick, steel and concrete, to Hunkin-Conkey Constr. Co., Century Bldg., Cleveland. Archts. est. $150,000. Noted Sept. 21.

Buildings (Continued)

O., Toledo—Bank and Office—Home Savings Bank, Madison and Superior Sts., 9 story and basement, 59 x 119 ft., brick, steel and concrete, Huron and Madison Sts., to Spieker Constr. Co., Elm and Utica Sts. Archts. est. $1,000,000. Noted Mar. 22.

Mich., Ann Arbor—Law—York & Sawyer, archts., 50 East 41st St., New York City, brick, steel and stone, South Michigan Ave. here, to Starret Bros., Inc., 101 Park Ave., New York City, for University of Michigan, Ann Arbor. Archts. est. $2,000,000.

Mich., Detroit—Clubhouse—Womens City Club, 141 Bagley Ave., 6 and 9 story, 90 x 120 ft. rein.-con., brick and steel, plain foundation, Park and Elizabeth Sts., to Walbridge-Aldinger Co., 2356 Penobscot Bldg., $500,000. Noted May 10.

Mich., Grand Rapids—Apartment—B. H. Drollinger, 4807 West Madison Ave., Chicago, 5 story and basement, 116 x 229 ft., here, to Mastenbrook & Grove, Shephard Bldg. Archts. est. $500,000.

Mich., River Rouge—Office—Ford Motor Co., Highland Park (Detroit P. O.), 1 story, 51 x 146 ft. and 2 story, 40 x 113 ft. and 40 x 145 ft. rein.-con. and brick, plain foundation, to A. W. Kutsche, 535 Griswold St., Detroit.

Ill., Chicago—Apartment—M. Begun, 4014 Southport Ave., 2 story and basement, 60 x 145 ft., fireproof construction, 1401-11 Irving Park Blvd., to M. Rizinsky, 1607 South Central Park Ave. Archts. est. $200,000.

Ill., Chicago—Apartment, Store and Office—D. S. M. Edison, 6918 Sheridan Rd., 3 story, 120 x 286 ft., rein.-con., brick and steel, 3733-55 North Halsted St., by day labor, $250,000. Dubin & Eisenberg, 14 West Washington St., archts.

Ill., Chicago — Apartment — Lindstrom & Johnson, 30 North Dearborn St., 3 story, 100 x 293 ft., rein.-con., brick and steel, 4520-28 Drexel Blvd., by day labor, $200,000. P. T. Johnston, 190 North State St., archt.

Ill., Chicago—Apartment—C. Nielsen, archt., 1853 Greenleaf Ave., 3 story, 82 x 172 ft., fireproof construction, 1847-53 Greenleaf Ave., to H. E. Jensen, 4948 North Hamlin Ave. Archts. est. $150,000. Owner's name withheld.

Ill., Chicago—Hospital—Austin Hospital Assn., Austin, 6 story, 120 x 200 ft., rein.-con., brick and steel, Central and Flournoy Sts., to R. Sollitt & Sons Constr. Co., 5 North La Salle St. Archts. est. $400,000.

Ill., Chicago—Hotel—Chelsea Hotel Co., 4750 Sheridan Rd., 10 story, 116 x 130 ft., rein.-con., brick and steel, 920 Wilson Ave., to McLennan Constr. Co., 400 North Michigan Ave. Archts. est. $600,000.

Ill., Chicago—Market—A. J. Minkus, c/o Leichenko & Esser, archts., 38 South Dearborn St., 2 story, 100 x 100 ft., rein.-con., brick and steel, Fulton and Sangamon Sts., to Thogerson & Ericksen, 4804 North Kedzie Ave. Archts. est. $150,000.

Ill., Chicago—Store and Office—J. Horwitz, 6422 Randolph St., 2 story and basement, 132 x 243 ft., rein.-con., brick and steel, 4009-61 Lincoln Ave., to Nestto, Wagstad, Carlson Co., 1743 North Crawford Ave. Archts. est. $150,000.

Ill., Chicago—Store and Apartment—F. A. Johnson, c/o Morgan Door and Sash Co., 2287 Blue Island Ave., 3 story, 175 x 200 ft., rein.-con., brick and steel, 4830-48 West Madison St., to A. T. Herlin, 6117 Evans Ave. Archts. est. $300,000. Noted Apr. 19.

Ill., Chicago—Store—Strauss & Schram, 665 West Madison St., 5 story, 72 x 110 ft., rein.-con., brick and steel, 63rd and Green Sts., to Broline-Nolan & Co., 5 North La Salle St. Archts. est. $175,000. Noted Apr. 19.

Wis., Milwaukee—Bank—Amer. Exchange Bank, Plankinton Arcade, 4 story and basement, 70 x 102 ft., brick, stone and concrete, plain foundation, Grand Ave., to W. W. Oeflein, Inc., 86 Michigan St. Archts. est. $400,000.

Ia., Mason City — Hospital — St. Luke's Lutheran Hospital, 3 story and basement, 40 x 206 ft., concrete and brick, to C. Rye & Son, Mason City, cost plus percentage basis. Archts. est. $150,000. Noted Mar. 22.

Mo., Kansas City—Club—Y. M. H. A., 3123 Troost Ave., 3 story and basement, 121 x 144 ft., rein.-con., brick and terra cotta, Linwood Blvd. and Wayne Ave., to Patti Moore Constr. Co., Okmulgee, Okla. Archts. est. $300,000.

Mo., St. Louis — Market — St. Louis County Producers Market Co., Sarah and Laclede Aves., 2 story and basement, 155 x 180 ft., rein.-con. and brick, plain foundation, West Pine St., to W. A. Bopp Constr. Co., Boatsmen Bank Bldg. Archts. est. $175,000.

Tex., San Antonio—Church—St. Marys Catholic Church, 1 story, 90 x 110 ft., rein.-con., steel brick and stone, concrete pile foundation, St. Marys and College Sts., to Walsh & Burney, Calcasieu Bldg., $250,000. Noted May 10.

Calif., Elsinore—Club, etc.—W. I. Jackman, 329 Consolidated Realty Bldg., Los Angeles, representing Southern California Country and Athletic Club, (owner), 3 story rein.-con. club house, pier, pavilion and out buildings, to Engineering Service Co., Washington Bldg., Los Angeles. Cost to exceed $350,000.

Calif., Los Angeles—Hotel—R. B. Rust, archt., Black Bldg., 5 story, brick, Bixel St. near Ingraham St., to L. T. Mayo, 531 Black Bldg., $165,000. Owners name withheld.

Calif., Los Angeles—Mercantile, etc.—Cooper Dry Goods Co., c/o Curlett & Beelman, archts., Union Bank Bldg., 11 story and basement, 150 x 160 ft. mercantile, and 1 story and basement, (ultimately 11 story), 100 x 100 ft., shipping department in connection with foregoing, both rein.-con., 9th and Los Angeles Sts., to Scofield Eng. Co., Pacific Finance Bldg. Noted Dec. 21.

Calif., Modesto—Schools—Modesto Grammar School Dist., 2 brick schools and altering present building, to Herndon & Finnegan, 1814 - 17th St., Sacramento, $140,000. Noted May 3.

Calif., Pasadena — School — Pasadena School Dist., Washington School, brick, general contract to A. Johnson, Kingsburg Bank Bldg., Kingsburg, $185,442. Noted Mar. 22.

Calif., San Francisco — Office — Medico-Dental Bldg. Corp., c/o G. W. Kelham, archt., Sharon Bldg., 12 or 15 story, fireproof, Post and Mason Sts., to G. Wagner, 251 Kearny St., cost plus percentage basis, about $1,350,000. Noted Mar. 22.

Calif., San Francisco—Store—See "Industrial Works."

Calif., Yuba City—High School—Yuba City Union High School Dist., 1 and 2 story, tile and brick, masonry and carpentry work to J. Holdener Constr. Co., 2310 J St., Sacramento, $132,966; plastering to T. Scollan, 2929 T St., Sacramento, $24,800; complete mechanical equipment to Latourette-Fical Co., 907 Front St., Sacramento, $64,890. Noted May 10.

Federal Government Work

PROPOSED WORK

Mass., Boston—Repairs—Spec. 4848—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans repairs to officers quarters, here.

Pa., Phila—Laboratory—Spec. 4845—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans engine testing laboratory, here.

Md., Baltimore—Dredging—U. S. Engineer, Baltimore, rejected bids dredging in Claiborne Harbor, here. Noted Apr. 5.

Tenn., Memphis—Sub Post Office—Treas. Dept., Wash., D. C., plans sub post office, 2nd and Calhoun Sts., here. J. A. Wetmore, acting superv. archt.

Mich., Detroit—Superstructure—U. S. Engineer, 337 Federal Bldg., rejected bids superstructure on west center pier, St. Marys Falls Canal. Noted Apr. 5.

California—Bridges—U. S. Bureau Pub. Rds., Mills Bldg., San Francisco, soon takes bids 2 rein.-con. bridges in Santa Barbara Co. G. H. Sweetser, dist. engr.

Calif., Presidio (San Francisco P. O.)—Laundry, etc.—Treas. Dept., Wash., D. C., having plans prepared by W. A. Newman, archt., Post Office Bldg., San Francisco, 2 story, brick, laundry, servants' quarters, kitchen, dining room, etc., at Marine Hospital, here. J. A. Wetmore, acting super. archt.

Calif., San Diego—Barracks, etc.—Spec. 4843—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans barracks and wing for mess hall, here.

Calif., San Diego—Roads—Spec. 4844—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans additional roads, here.

Calif., San Diego—Storehouse—Spec. 4849—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans paint and oil storehouse at supply depot, here.

Calif., San Diego—Walks and Grading—Spec. 4846—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans walks and grading, here.

BIDS DESIRED

N. J., Oceanport—Road Repair—May 31, at office Constructing Quartermaster, Camp Alfred Vail, resurfacing roads, here; adv. this issue.

Miss., Vicksburg—Levee Work—May 29, at office 3rd Mississippi River Dist., P. O. Box 404, construction of levee work; adv. this issue.

Ky., Dawson Springs—Recreation Building, etc.—June 15, by U. S. Veterans Bureau, Arlington Bldg., Wash., D. C., recreation building and officers' quarters, here; adv. this issue. Noted Apr. 19.

Ky., Louisville—Lumber—May 21, at office U. S. Engineer, P. O. Box 72, furnishing and delivering 100 pieces 3 and 4 x 10 in. x 30 ft. rough oak; 125 pieces 12 x 12 in. x 12ft. oak; 120 pieces 2 and 6 x 12 in. x 14 ft. oak, 35,000 ft. long leaf yellow pine. Noted May 3.

Minn., St. Cloud—Stack—Spec. 4833—June 13 by Bureau Yards & Docks, Navy Dept., Wash., D. C., for radial brick stack, here.

Calif., Richmond—Dredging, etc.—June 1, at office U. S. Engineer, Custom House, San Francisco, dredging 910,000 cu.yd. and building 2,000 lin.ft. retaining wall in Harbor, here. Noted Mar. 29.

Calif., San Diego—Barracks—Spec. 4765—June 6, by Bureau Yards & Docks, Navy Dept., Wash., D. C., barracks buildings at Naval Base, here; adv. this issue. Noted Dec. 7.

Calif., San Diego—Dredging—June 2, at office U. S. Engineer, Central Bldg., Los Angeles, 480,000 cu.yd. dredging in Harbor, here.

Calif., San Diego—Roads—Spec. 4766—June 6 (change of date) by Bureau Yards & Docks, Navy Dept., Wash., D. C., for roads at Marine Barracks, here. Noted Apr. 26.

BIDS RECEIVED

N. Y., Binghamton — Boilers — Treas. Dept., Wash., D. C., 2 horizontal fire-box boilers, at U. S. Court House and Post Office, here, from C. J. Gleason, 1526 Walton Way, Augusta, Ga., $3,140. Noted Apr. 19.

N. Y., Dunkirk—Superstructure—U. S. Engineer, Federal Bldg., Buffalo, stone superstructure on breakwater, here, from Central Dredging Co., Bangor Bldg., Cleveland, O., $58,860. Noted Mar. 22.

Ala., Mobile — Quarters — Treas. Dept., Wash., D. C., medical officers quarters at U. S. Marine Hospital, here, from Realty Constr. Co., Mobile, $9,781. Noted Apr. 19.

Ky., Louisville—Bear Trap Leaves—U. S. Engineer, P. O. Box 72, bear trap leaves for Dam 44, Ohio River, from Penn Bridge Co., Beaver Falls, Pa., $47,770. Noted Apr. 12.

Minn., St. Cloud—Water System, etc.—Spec. 4830—Bureau Yards & Docks, Navy Dept., Wash., D. C., water, drainage and sewerage systems, at U. S. Veterans Hospital, here, from W. D. Lovell, 1415 8th St., S. E., Minneapolis, $24,693. Noted Apr. 19.

Nevada — Roads — C. H. Sweetser, dist. engr., U. S. Bureau Pub. Rds., Mills Bldg., San Francisco, Calif., grading and surfacing 16.5 mi. Austin-East National Forest Highway, Lander Co., from Easton & Brown, Austin, alternates (1) contractor furnishes explosives (2) Government furnishes explosives 80,058 cu.yd. excav., (1) $0.58 (2) $0.57, 188 cu.yd. Class A and 196 cu.yd. Class C concrete $35, 7,155 cu.yd. crushed rock surfacing $4.75, etc., total (1) $99,308 (2) $98,518 deduct for equipment $2,219. Noted Apr. 12.

CONTRACT AWARDED

Pa., Phila.—Underpinning Chimney—Spec. 4818—Bureau Yards & Docks, Navy Dept., Wash., D. C., underpinning chimney foundation, at Navy Yard aircraft factory, here, (1) work complete, to Triest Contg. Co., 247 Park Ave., New York City, (1) $16,980 (120 days) alternate (2a) $16,480, alternate (2b) $15,480. Noted Apr. 19.

Pa., Tobyhanna — Disposal Plant — Constructing Quartermaster, 39 Whitehall St., New York City, sewage disposal plant and sewerage system at Tobyhanna Artillery Target Range, here, to Arnolt-More, Inc., 45 Clinton St., Newark, N. J., $26,900. Noted Mar. 29.

D. C., Wash.—Repairs—Spec. 4841—Bureau Yards & Docks, Navy Dept., repairs to Marine barracks and officers quarters at Navy Yard, to C. A. Hofferberth Contg. Co., Woodward Bldg., $6,390. Noted Apr. 26.

Va., Norfolk—Removing Fenders—U. S. Engineer, removing fenders and placing new ones on Core Bridge, North Carolina, to A. R. Masters Co., Bank of Hampton Bldg., Hampton, $12,250. Noted Mar. 15.

O., Columbus—Hangars, etc.—Constructing Quartermaster, Columbus General Reserve Depot, demolishing 2 steel hangars, erecting 2 steel hangars, etc., to E. H. Latham & Co., 60 East Broad St., $19,115. Noted Apr. 19.

Federal Government Work (Continued)

Ind., Ft. Benjamin Harrison—Sewers—Constructing Quartermaster, reconstruction and repair of sanitary sewer and disposal plant, to S. M. Timberlake Co., Amer. Central Life Bldg., Indianapolis, $24,000. Noted Apr. 19.

Mich., Detroit—Crib-Dolphins, etc.—U. S. Engineer, 337 Federal Bldg., crib-dolphins and connecting walks, at entrance to Short Cut Canal, Rouge River, to Candler Dock and Dredge Co., 8145 Medina St., $15,570.

California—Road—C. H. Sweetser, dist. engr., U. S. Bureau Pub. Rds., Mills Bldg., San Francisco, Calif., grading approximately 12 mi. road Mineral Sect. Red Bluff—Susanville Lateral in Lassen National Forest, Tehama Co., 134,224 cu.yd. excav., etc., to Redmond, Page & Pond, Balboa Bldg., San Francisco, $143,965. Noted Mar. 22.

H. T., Pearl Harbor—Dredging—Spec. 4842—Bureau Yards & Docks, Navy Dept., Wash., D. C., dredging slip here, to Hawaiian Dredging Co., 854 Kukuhuana St., Honolulu, $11,700 (45 days).

Miscellaneous

PROPOSED WORK

Power Development—Phila, N. Y.—Antwerp Light & Power Co., Antwerp, plans development of 1,000 hp. under 60 ft. head, on Indian River, here, work includes concrete dam, power house, rock excav., tailrace and generating equipment. To exceed $150,000. J. Baumert, Antwerp, pres.

Conduits—Erie Pa.— Plans 3 high and low tension conduit systems in State and Liberty Sts. and Cherry St. Subway. $28,500. F. G. Lynch, city engr.

Ferry House—New Orleans, La.—Bd. Port Comrs., New Court Bldg., having plans prepared ferry house, rein.-con., Canal St. $100,000. A. Owen, Interstate Bank Bldg., archt.

Transmission Line—Kentucky—Kentucky Utilities Co., M.E.T. Bldg., Louisville, plans 33,000 volt. transmission line from Rockport to Echols to electrify coal mines at Echols. $30,000. G. T. Bogard, c/o owner, engr.

Transmission Line—Kentucky—Kentucky Utilities Co., M.E.T. Bldg., Louisville, plans 23 mi. transmission line from Lancaster to Richmond. $150,000. G. T. Bogard, c/o owner, engr.

Terminal—Louisville, Ky—Inland Waterways Co., P. O. Box 22, plans two river terminals, East End and West End, incl. railroad tracks, etc. To exceed $25,000. P. Calhoun, Jr., pres.

Stadium—East Lansing, Mich.—E. A. Bowd, archt., Allegan St. W., Lansing, takes bids about June 15, 80 x 500 ft. rein.-con. stadium, 40,000 capacity, College St., for Michigan Agricultural College.

Transmission Line—Ellis Junction, Wis.—Wisconsin Pub. Service Co., 559 Marshall St., Milwaukee, having plans prepared and soon takes bids 5 mi. transmission line from here to High Falls. Work includes several steel tainter gates and 2 steel penstocks for dam. Mead & Seastone, Journal Bldg., Madison, engrs.

Street Lighting System—Shorewood (Milwaukee, P. O.), Wis.—Soon takes bids street lighting system, incl. 90,000 lin.ft. underground trenching, 100,000 lin.ft. wire, 400 transformers, etc. $85,000. A. J. Sweet, 531 Grand Ave., engr. Noted Feb. 22.

Power Line—Devils Lake, N. D.—Midwest Power Co., plans 45 mi. high power line from here to Carrington. $55,000.

Electric Light Improvements—Bolivar, Mo.—See "Sewers."

Steel Tanks—Kansas City, Mo.—Monarch Gas & Oil Co., 1740 Guinotte Ave., having plans prepared steel tanks. $50,000. A. A. Smith, pres. Private plans.

Pipe Line—Texas—Mountain States Pipe Line Co., Amarillo, making plans and surveys 14 in. gas line from oil field 28 mi. north, to Amarillo. $5,000,000. H. K. Hintzer, Amarillo, engr.

Power Development—Quebec—Northern Canada Power Co., Timmins, Ont., plans power development at Ka-Ka-Ke Rapids on Des Quinze River. Site is capable of developing 100,000 hp. but it is probable that initial development will be about 20,000 hp. Work includes concrete dam, power house, turbines, generators, transformers, oil and water pumps, transmission lines, etc. $3,000,000 to $4,000,000. Viele, Blackwell & Bucke, 49 Wall St., New York City, engrs.

Transmission Line—Ontario—Hydro Electric Power Comn., 190 University Ave., Toronto, plans 75 mi. high-voltage transmission line from Port Arthur to Cameron Falls. F. A. Gaby, ch. engr.

Coal Handling Plant—Toronto, Ont.—Milnes Coal Co., Ltd., 88 King St. E., plans coal handling plant incl. concrete storage bins with unloading pocket and elevating apparatus, at 1520 St. Clair Ave. W. $30,000.

Ferry Docks—Windsor, Ont.—Detroit & Windsor Ferry Co. plans to extend and improve docks here, wood pile, concrete and timber. $200,000. Private plans.

BIDS DESIRED

Paving Blocks—New York, N. Y.—May 18, by Bd. Purch., creosoted wood paving blocks, to Dept. Plant & Structures. G. A. Whalen, chn.

Electric Transmission Line—Seneca, Mo.—May 24, by N. S. Freeman, city clk., electric transmission line from here to Grand Falls. H. G. Olmsted Co., Oklahoman Bldg., Oklahoma City, Okla., engrs.

Transmission Line, etc.—Modesto, Calif.—May 26, by C. S. Abbott, secy. Modesto Irrigation Dist., constructing 7.6 mi. 66,000 volt transmission line and 40 mi. distributing line (11,000 and 4,000 volts). Bids will be received on any or all of following items (1) lump sum for 7.6 mi. of completed 66,000 volt transmission line, contractor to furnish materials and labor (2) contractor to furnish labor and carry out construction, Dist. to furnish materials (3) itemized bids for any or all line materials (4) contractor to furnish all labor and carry out construction of 40 mi. distributing lines, comprising both 11,000 and 4,000 volt circuits, Dist. to furnish materials going into lines (5) contractor to furnish all labor and carry out construction, as specified, of 7.6 mi. of 66,000 volt transmission line and of 40 mi. of distributing lines, Dist. to furnsh all materals. R. J. O'Connell, Modesto, electrical engr.

BIDS RECEIVED

Cement and Road Oil—Hartford, Conn.—City, 400 bbl. cement, from Amer. Cement Co., 920 Windsor St., $3.90 per bbl.; 400,000 gal. road oil 45% asphalt base, and 500,000 gal. 65% base, from Mace Moulton Inc., 6 Beacon St., Boston, $0.0554 per gal. Noted Apr. 19 and 26.

Subway—Rochester, N. Y.—Bd. Contr. & Supply, City Hall, 4 track rapid transit railway, stations, bridge, excavating in old canal bed, Contr. 2, from I. M. Ludingtons Sons, Inc., 124 Powers Bldg., $1,654,765. Engrs. est. $1,897,516. Noted Apr. 26.

Tar, etc.—Trenton, N. J.—State Hy. Comn., May 7, from T. Tobish, Mechanic Bldg., 245,928 gal. Grade U. B. tar $24,593; from Barrett Co., 40 Rector St., New York City, 118,697 gal. Grade B tar $11,276, 10,705 gal. Grade X tar $1,071; from National Slag Co., Allentown, Pa., 3,115 tons slag $3,115; from Duquesne Slag Product Co., 34 West Blackwell St., Dover, 5,530 tons slag $6,010; from Standard Bitulithic Co., Church St., New York City, 940 tons bituminous concrete $21,375; from G. F. Brackett, Heights Rd., Ridgewood, 1,000 tons bituminous concrete $17,900; from Union Paving Co., Passaic (street address not available), 40 tons bituminous concrete $1,005; from Utility Constr. Co., 5 Spring St., New Brunswick, 200 tons bituminous concrete $4,400; from J. J. Barrett, 651 Greenwood Ave., 252 tons bituminous concrete $6,805; from Union Paving Co., 30th and Locust Sts., Phila., 3,885 tons bituminous concrete $95,377,664 tons sheet asphalt $572. Noted Apr. 19.

Iron Castings, etc.—Baltimore, Md.—Bd. Awards, May 9, 200,000 lb. manholes, sewer inlet and iron castings, from Greenmount Iron & Mfg. Co., 833 Greenmount Ave., $0.0275 per lb. Noted May 3.

Asphalt Cement—Milwaukee, Wis.—Furnishing 100 tons asphalt cement, from Standard Oil Co., 105 Wells St., $23.62 per ton.

Road Oil—Milwaukee, Wis.—Furnishing 400,000 gal. medium-light road surfacing oil, from Jewett & Somers Oil Co., 20 West Jackson Blvd., Chicago, $.0648 per gal. Noted Apr. 19.

CONTRACTS AWARDED

Heating and Ventilating Apparatus, etc.—Astoria, N. Y.—W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, heating, ventilating and temperature regulation apparatus, in P. S. 70, 12th Ave., here, to D. J. Rice, 42nd St. and Lexington Ave., New York, $81,893. Noted May 3.

Heating and Ventilating Apparatus, etc.—Brooklyn, N. Y.—W. H. Gompert, archt., Flatbush Ave. extension and Concord St., heating, ventilating and temperature regulation apparatus, in P. S. 161, Crown St., to D. J. Rice, 42nd St. and Lexington Ave., New York, $81,896; P. S. 192, 18th Ave. and P. S. 193, Ave. L, to Almirall & Co., 1 Dominick St., New York, $82,711 and $82,865, respectively. Noted May 3.

Steel—Flushing, N. Y.—Transit Comn., 49 Lafayette Ave., New York, furnishing and erecting steel for part of Rapid Transit R.R., Route 52, Sect. 1, Flushing Route, to McClintic Marshall Co., 50 Church St., New York, $679,839. Noted Apr. 26.

Gas Holder—Herkimer, N. Y.—Utica Gas & Electric Co., Foley Blk., foundation for steel gas holder, 500,000 cu.ft., South Main St., to Newport Constr. Co., 200 North Main St.; structural steel, to Stacey Bros. Co., 5535 Carthage Pike, Elmwood, Cincinnati, O. Total cost $150,000.

Heating and Ventilating Apparatus, etc.—New York, N. Y.—W. H. Gompert, arch., Flatbush Ave. extension and Concord St., Brooklyn, heating, ventilating and temperature regulation apparatus, in P. S. 65, East 41st St., here, to T. F. Hall, Inc., 405 Lexington Ave., $84,710. Noted May 3.

Paving Blocks—New York, N. Y.—Bd. Purch., Municipal Bldg., granite paving blocks to Dept. Plant & Structures, to St. George Granite Co., St. George, $5,040. Noted Apr. 26.

Underground Fire Alarm System—New York, N. Y.—T. J. Drennan, fire comr., Municipal Bldg., portion of underground fire alarm system, Boro of Bronx, to W. F. Kenney Co., 44 East 23rd St., Sect. 1 $6,812; James Sudgen Co., 17 West 42nd St., Section 2 $30,767. Noted May 3.

Stadium—Danville, Ky.—Athletic Bd. of Centre College, concrete stadium, 8,000 seating capacity, to Blanchard Bldg. Co., 928 Lindsay St., Dayton, O. Addition of 4,000 more seats may be made later, making total cost $150,000. Noted Feb. 15.

Crude Oil—Louisville, Ky.—City, furnishing and delivering 125,000 gal. crude oil for streets, to Standard Oil Co. of Kentucky, 424-430 West Bloom St., $8,000.

Foundation, etc.—Pineville, Ky.—Kentucky Utilities Co., M.E.T. Bldg., Louisville, constructing foundation, sub-structure, etc., for 15,000 kw. hydro-electric plant, 5 mi. from here, on Pine Mt. Branch of Louisville & Nashville R.R., to Foundation Co. of America, 28 East Jackson Blvd., Chicago. Engrs. est. $2,000,000.

Stadium — East Cleveland (Cleveland P. O.), **O.**—Bd. Educ., concrete stadium of two stands 50 x 350 ft., to Rice-Jones Co., Union Bldg., Cleveland, $67,500. Noted Apr. 19.

Grade Separation—Detroit, Mich.—Wayne Co. Rd. Comn., 1102 Real Estate Exch. Bldg., substructure for grade separation at Oakwood Blvd. and Detroit, Toledo & Ironton R.R. tracks 2 mi. west of Oakwood, incl. concrete retaining wall, piers and abutments, 14,540 cu.yd. excav., 529 cu.yd. concrete, removel of 2,770 sq.yd. old pavement, to C. R. Lennane, 2631 Woodward Ave., $31,000. Noted Apr. 19.

Road Oil Madison, Wis.—Furnishing 50,000 gal. asphaltic road oil, to Camden Petroleum Co., 208 South La Salle St., Chicago, $0.10 per gal. Noted Apr. 26.

Stadium—Lincoln, Neb.—Nebraska Memorial Assn., c/o University of Nebraska, 552 x 775 ft. rein.-con. and steel stadium, to Parson Constr. Co., 404 Arthur St., Omaha, $619,000. Noted Apr. 12.

Cement, etc.—St. Louis, Mo.—Commissioner Oetting, to Missouri Portland Cement Co., Post Dispatch Bldg., 300 bbl. cement in paper sacks $3.05, 150 tons sand $2.35 f.o.b. and 80 tons gravel $2.35; to Progress Press Brick & Machine Co., Kingshighway and Arsenal St., 200,000 sewer brick $19.50 per M.; to Tower Grove Fdry. Co., 4438 Hunt Ave., 24 manhole caps and covers, 150 steps, 250 inlet covers and 20 inlet irons $1,459; to Blackmer Post, Boatmen's Bank Bldg., 2,000 ft. d. s. 12 in. vitr. sewer pipe $846, 500 ft. d. s. 15 in. pipe $353, 150 pipe bends $254 and 150 y junctions $286, total $1,738.

Lighting Standards—St. Louis, Mo.—Bd. Pub. Serv., City Hall, 500 concrete lighting standards, to Hogan Constr. Co., 2120 Harris Ave., $11,250. Engrs. est. $15,000. Will purchase 40,000 additional posts and glassware for same at later date. Noted Mar. 22.

Tunnel — Seattle, Wash. — Constructing tunnel under Duwamish Waterway, 1st Ave. S., sinking 137.5 ft. shaft, driving 400 ft. tunnel, lining 500 cu.yd. tunnel and 400 cu.yd. shaft, to R. L. Sparger, Colman Bldg., $107,582. Noted May 10.

Pier and Pavilion—Elsinore, Calif.—See "Buildings."

Levee—Stockton, Calif.—Western-Pacific R.R., Mills Bldg., San Francisco, 2 mi. levee south of here, 175,000 cu.yd., to W. A. Betchel, 625 Market St., San Francisco.

Subway—Montreal, Que.—Rein.-con. subway, Ontario St., to Dufferin Constr. Co., Notre Dame de Grace St., $149,119. Noted Feb. 15.

Underground Conduit and Cable Work—Toronto, Ont.—Bell Telephone Co. Ltd., 76 Adelaide St. W., will install new underground conduits and cables, by day labor. $100,000. F. Kennedy, mgr.

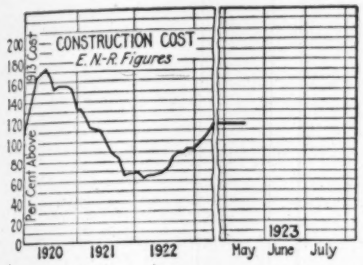
CONSTRUCTION NEWS

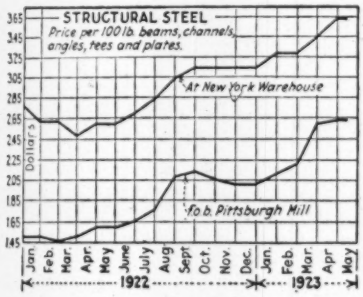
The Construction Barometer

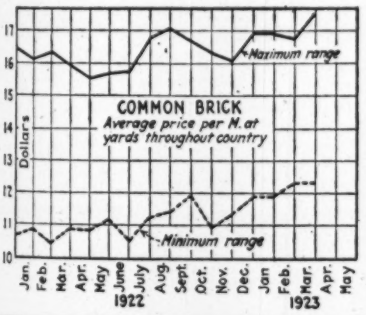
Cost Unchanged — Contracts Hold Up — Price Ranges Given

BASE price of steel has stood at $2.50 per 100 lb. since Apr. 12, but the price on small tonnages has fallen off 10c. in the last two weeks. Brick prices are firm and the situation is satisfactory except for shortages in Chicago and Philadelphia, and the strike in the New York district. Lumber and cement unchanged.

Although the value of contracts let in the first three weeks of May is $14,500,000 less than in the last three weeks of April, public work is $10,000,000 heavier. The last week of April was the heavies ton record. Week of May 17 gained perceptibly over May 10.







VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ending	Public Work	Private Work	Total Contracts
May 3	$30,970,000	$18,629,000	$49,599,000
May 10	14,414,000	24,211,000	38,625,000
May 17	21,510,000	17,893,000	39,403,000
3 weeks	$66,894,000	$60,733,000	$127,627,000

LARGE BUILDING CONTRACTS—NUMBER AND VALUE

Week Ending	No.	Public Work	No.	Private Work
May 3	19	$6,626,000	41	10,566,000
May 10	9	2,059,000	36	20,276,000
May 17	17	6,395,000	36	10,765,000
3 weeks	45	$15,080,000	113	$41,607,000

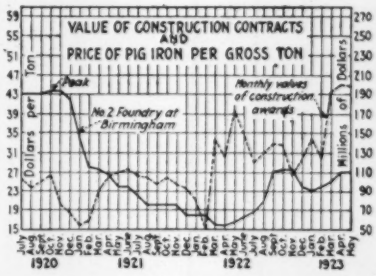
NUMBER OF LARGE JOBS NOW OUT FOR BID

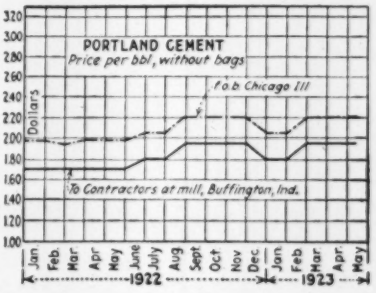
Week Ending	Private	All	Public: Streets and Roads	Public: Water-Works and Sewers	Public: All Buildings
May 3	29	230	75	39	43
May 10	45	205	65	48	46
May 17	43	213	82	49	44

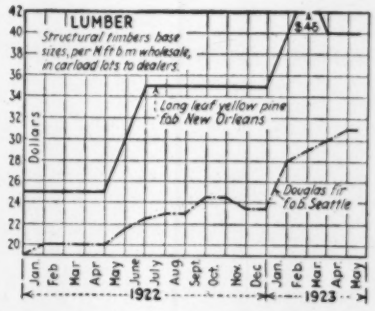
BASE PRICES REMAIN FIRM

	Quoted on May 24, at	Price Was	On
Structurals, Pittsburgh, 100 lb.	$2.50 @$2.60	$2.50 @$2.65	May 17
Cement, Chicago, net bbl.	2.20	2.05	Feb. 1
Pine, N. Y., M.ft.	60.00	58.00	Apr. 5
Fir, San Francisco, M.ft.	41.00	39.00	Apr. 5
Common labor, hr.	0.51	0.50	Apr. 5

PRODUCTION—Steel ingot output at annual rate of about 50,000,000 tons; this rate maintained during last three weeks. Over 256,000,000 ft. of lumber cut during week ending May 12. Nat. Lumber Trade Barometer shows output 2½ per cent above normal; shipments 105 per cent and orders 94 per cent of normal production. Yard strikes threaten to cut off brick supply in New York district.







PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
May 25	New York, N. Y.	May 17
May 25	Brooklyn, N. Y.	May 17
May 25	Long Island City, N. Y.	May 17
May 28	Bismarck, N. D.	May 10
May 29	Horton, Kan.	May 10
May 29	Homestead, Pa.	May 17
May 29	Claremont, N. H.	May 17
	Adv. May 17 and 24.	
May 29	Belmar, N. J.	May 17
May 29	Watertown, S. D.	May 17
May 29	Davidson, N. C.	May 24
May 31	Grand Forks, N. D.	May 17
May 31	Easton, Md.	May 10
	Adv. May 10 to 24.	
May 31	Baltimore, Md.	May 24
June 1	Hammond, Ind.	May 17
June 1	Oskaloosa, Ia.	May 24
June 1	Reeseville, Wis.	May 24
June 4	Talladega, Ala.	May 10
June 4	Wash., D. C.	May 24
	Adv. May 24.	
June 4	Buffalo, N. Y.	May 24
June 5	Stewart, Minn.	May 24

SEWERS

Bids Close		See Eng. News-Record
May 26	Brooklyn Heights (Independence P. O.), O.	May 17
May 28	East Orange, N. J.	May 24
May 29	Maplewood (St. Louis P. O.), Mo.	May 24
May 29	Wash., D. C.	May 10
May 29	Portage, Pa.	May 24
May 29	Chicago, Ill.	May 24
May 31	Akron, O.	May 24
May 31	Cashton, Wis.	May 24
May 31	Easton, Md.	May 10
	Adv. May 10 to 24.	
May 31	New York Mills, N. Y.	May 17
May 31	Akron, O.	May 17
	Adv. May 17 and 24.	
June 1	Hartford, S. D.	May 17
June 2	Columbus, O.	May 24
	Adv. May 24.	
June 4	Whittier, Calif.	May 24
June 4	Kansas City, Mo.	May 17
June 4	Hackensack, N. J.	May 17
	Adv. May 17 and 24.	
June 5	Hightstown, N. J.	May 17
June 5	Long Branch, N. J.	May 24
	Adv. May 24.	
June 5	Hartford, S. D.	May 24
June 6	Waterloo, N. Y.	May 24
June 7	Marion, O.	May 24
	Adv. May 24.	
June 7	Poughkeepsie, N. Y.	May 24
	Adv. May 24.	

Bids Close — See Eng. News-Record

BRIDGES

May 28 Norwich, N. Y. .....May 17
Adv. May 17 and 24.
May 28 California .....May 17
May 28 Ontario .....May 24
May 31 Cincinnati, O. .....May 24
May 31 Madison, Wis. .....May 24
June 5 Grand Haven, Mich. .....May 10
June 5 St. Louis, Mo. .....May 10
Adv. May 17 and 24.
June 5 Fine, N. Y. .....May 24
Adv. May 24.
June 5 Muncy, Pa. .....May 24
June 6 Toronto, Ont. .....May 24
June 8 Birmingham, Ala. .....May 24
July 31 La Center, Wash. .....May 3
Nov. 30 Sydney, Australia .....Apr. 19

RAILWAYS

May 29 New Jersey .....May 24
Adv. May 24.

EXCAVATION, DRAINAGE, IRRIGATION

May 28 Orangeville, Ont. .....May 24
May 31 New Jersey .....May 17
May 31 Ordway, Colo. .....May 24
June 5 Rolling Fork, Miss. .....May 10
June 5 Toms River, N. J. .....May 24
June 5 Sidney, Ia. .....May 24
June 12 Albert Lea, Minn. .....May 24
June 15 Albert Lea, Minn. .....Apr. 12

STREETS AND ROADS

May 25 New Hampshire .....May 24
May 26 La Porte, Ind. .....May 24
May 26 Edwardsville, Ill. .....May 24
May 28 Dallas, Tex. .....May 17
May 28 Rockwood, Pa. .....May 17
May 28 St. Paul, Minn. .....May 17
May 28 Akron, O. .....May 3
May 28 Kansas City, Kan. .....May 10
May 28 Los Angeles, Calif. .....May 17
May 28 East Orange, N. J. .....May 24
May 28 Sandwich, Ont. .....May 24
May 28 Flint, Mich. .....May 24
May 29 Flint, Mich. .....May 24
May 29 Columbus, O. .....May 24
May 29 Massachusetts .....May 24
May 29 Louisiana .....May 10
May 29 Kentucky .....May 10
May 29 St. Louis, Mo. .....May 3
May 29 Maryland .....May 17
Adv. May 17 and 24.
May 29 Florida .....May 17
May 29 Osage, Ia. .....May 24
May 29 Rockwell City, Ia. .....May 24
May 29 Sioux City, Ia. .....May 24
May 29 Wisconsin .....May 24
May 29 Sharon, Pa. .....May 24
May 29 South Milwaukee, Wis. .....May 24
May 29 Paris, Tex. .....May 24
May 29 East Aurora, N. Y. .....May 24
May 29 Oklahoma City, Okla. .....May 24
May 31 Maine .....May 24
May 31 Columbus, O. .....May 24
May 31 Spartanburg, S. C. .....May 24
May 31 Eldora, Ia. .....May 24
May 31 Pittsfield, Mass. .....May 24
Adv. May 24.
May 31 Portland, Ind. .....May 24
May 31 Cleveland, O. .....May 24
May 31 Newark, N. J. .....May 24
May 31 Wisconsin .....May 24
May 31 Ft. Worth, Tex. .....May 24
May 31 Glenrose, Tex. .....May 24
May 31 British Columbia .....May 24
May 31 Sycamore, Ill. .....May 24
May 31 San Antonio, Tex. .....May 24
June 1 Jeffersonville, Ind. .....May 24
June 1 Laurens, S. C. .....May 24
June 1 Paducah, Ky. .....May 17
Adv. May 17 and 24.
June 1 Fessenden, N. D. .....May 24
June 1 Shenandoah, Pa. .....May 24
Adv. May 24.
June 1 Whitesboro, N. Y. .....May 24
June 1 De Kalb, Ill. .....May 24
June 1 Albia, Ia. .....May 24
June 1 Lake City, Ia. .....May 24
June 1 Red Bank, N. J. .....May 17
Adv. May 17 and 24.
June 4 New Jersey .....May 17
Adv. May 17 and 24.
June 4 Ely, Minn. .....May 17
June 4 Newburgh, N. Y. .....May 24
Adv. May 24.
June 4 Waterloo, Ia. .....May 24
Adv. May 24.
June 4 Babylon, N. Y. .....May 24
Adv. May 24.
June 4 Red Bank, N. J. .....May 24
Adv. May 24.
June 4 St. Paul, Minn. .....May 24
June 4 California .....May 24
June 4 Richmond, Va. .....May 24
June 5 Rockville, Ind. .....May 24
June 5 Bellaire, O. .....May 17
June 5 Alabama .....May 24
June 5 Rockport, Ind. .....May 24
June 5 Louisiana .....May 24
June 5 Boonville, Ind. .....May 24
June 5 San Rafael, Calif .....May 24
June 6 Abilene, Tex. .....May 17
June 6 Rhode Island .....May 24
Adv. May 24.
June 6 Delaware .....May 24
Adv. May 24.
June 7 Shelbyville, Ky. .....May 17
June 7 Boonville, Ind. .....May 24
June 7 Evansville, Ind. .....May 24
June 7 Liberty, Ind. .....May 24
June 7 Rushville, Ind. .....May 24
June 7 Pennsylvania .....May 24
Adv. May 24.
June 7 Virginia .....May 24
Adv. May 24.
June 8 Bradentown, Fla. .....May 17
June 8 Pennsylvania .....May 24
Adv. May 24.
June 8 La Crosse, Wis. .....May 24
June 11 Los Angeles, Calif. .....May 24
June 12 West Virginia .....May 24
Adv. May 24.
June 12 Pottsville, Pa. .....May 24
Adv. May 24.
June 12 University (St. Louis P. O.), Mo. .....May 24
June 12 Washington .....May 24
June 15 East Cleveland (Cleveland P. O.), O. .....May 24
Adv. May 24.

INDUSTRIAL WORK

June 12 Lecompte, La. .....May 24

BUILDINGS

May 26 Lakewood, N. Y. .....May 10
May 26 Lorain, O. .....May 24
May 28 Hamburg, N. Y. .....May 10
May 28 Cleveland, O. .....May 3
May 28 Byesville, O. .....May 3
May 28 Keokuk, Ia. .....May 24
May 29 Stockton, Calif. .....May 3
May 29 Greensburg, Pa. .....May 24
May 29 Meriden, Conn. .....May 24
May 29 Brooklyn, N. Y. .....May 24
May 31 Saulte Ste. Marie, Mich. ..May 24
May 31 Wichita, Kan. .....May 24
June 1 West Hartford (Hartford P. O.), Conn. .....May 17
June 1 Morgantown, W. Va. .....Apr. 12
June 1 Tulsa, Okla. .....May 17
June 1 Norman, Okla. .....May 17
June 1 Cleveland, O. .....May 17
June 1 Haworth, N. J. .....May 17
Adv. May 17 and 24.
June 1 Detroit, Mich. .....May 24
June 1 Wierton, W. Va. .....May 24
June 4 Kansas City, Mo. .....May 10
June 4 El Centro, Calif. .....May 10
June 4 New York, N. Y. .....May 24
Adv. May 24.
June 4 Valley Junction, Ia. .....May 24
June 5 Mount Morris, N. Y. .....May 17
Adv. May 17 and 24.
June 7 La Crosse, Wis. .....May 24
June 8 Olympia, Wash. .....May 24
June 8 Bowling Green, Mo. .....May 24
June 12 Denver, Colo. .....May 24
June 15 Clearwater, Fla. .....May 24
June 21 Newark, N. J. .....May 24
July 1 Athens, O. .....May 24

FEDERAL GOVERNMENT WORK

May 28 Post Office—Saco, Me. ....May 10
May 28 Pumps—Wash., D. C. .....May 24
May 29 Levee Work—Vicksburg, Miss. .....May 17
Adv. May 17 and 24.
May 31 Dredging—Milwaukee, Wis.May 3
Adv. May 3 to 24.
May 31 Hospital—Rutland, Mass...May 3
May 31 Dredging — Providence, R. I. .....May 3
Adv. May 3 to 24.
May 31 Road Repair—Oceanport, N. J. .....May 17
Adv. May 17 and 24.
June 1 Dredging—Richmond, Calif.May 17
June 2 Dredging, etc.—San Diego, Calif. .....May 17
June 2 Pipe Valves, etc. — Memphis, Tenn. .....May 24
Adv. May 24.
June 2 Lumber—Nashville, Tenn..May 24
Adv. May 24.
June 4 Post Office—Leesburg, Va.May 10
June 5 Emergency Gates—Montana .....May 10
June 5 Dredging—New Orleans, La. .....May 10
Adv. May 10 to 24.
June 5 Dredging — Wilmington, Del. .....May 10
Adv. May 10 to 24.
June 5 Levee Work—Vicksburg, Miss. .....May 24
Adv. May 24.
June 5 Piping—West Roxbury (Boston P. O.), Mass. ...May 24
June 6 Gates—Denver, Colo. ...May 10
June 6 Barracks—San Diego, Calif. .....May 17
Adv. May 17 and 24.
June 6 Roads—San Diego, Calif..May 17
June 8 Dredging—Phila., Pa. .....May 3
June 11 Dike—New York, N. Y. ...May 10
Adv. May 10 to 24.
June 13 Refrigerating Machinery—Pearl Harbor, H. T. .....Apr. 26
June 13 Stack—St. Cloud, Minn. ...May 17
June 15 Recreation, etc. — Dawson Springs, Ky. .....May 17
Adv. May 17 and 24.
June 15 Nurses Quarters—New York, N. Y. .....May 24
Adv. May 24.
June 19 Dredging—Providence, R. I.May 24
Adv. May 24.
June 19 Dredging — Wilmington, N. C. .....May 24
Adv. May 24.
June 19 Remodeling—Baton Rouge, La. .....May 24
Adv. May 24.
June 20 Dredging, etc. — Buffalo, N. Y. .....May 24
Adv. May 24.
June 20 Dredging—Norfolk, Va. ...May 24
Adv. May 24.
June 20 Remodeling — Huntsville, Ala. .....May 24
Adv. May 24.
June 22 Jetty—Galveston, Tex. ...May 24
Adv. May 24.
June 23 Valves, etc. — Florence, Ala. .....May 24
Adv. May 24.

MISCELLANEOUS

May 28 Heating and Ventilating Apparatus, etc. — Brooklyn, N. Y. .....May 24
May 28 Creosoted Wood Blocks — St. Paul, Minn. .....May 24
May 31 Road Materials — Baltimore, Md. .....May 24
May 31 Freight Shed—New York, N. Y. .....May 24
May 31 Shed—New Orleans, La. ..May 24
June 1 Binder Stone—New York, N. Y. .....May 24
June 1 Pier—Charleston, S. C. ...Apr. 26
Adv. Apr. 26 to May 24.
June 1 Stadium—Madison, Wis. ..May 24
June 1 Miscellaneous Construction, etc.—New York, N. Y. ...May 24
June 1 Trucks—Montreal, Que. ...May 24
Adv. May 24.
June 5 Sand Clay Gravel—Baton Rouge, La. .....May 24
June 12 Dikes, etc.—Missouri ....May 24
June 14 Pier and Wharf—Charleston, S. C. .....May 24
Adv. May 24.
Feb. 28 Headworks — Wellington, New Zealand .....May 24
Adv. May 24.

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Conn., Newington — Center Fire Dist. plans waterworks extensions. $120,000. T. A. Francis, town clk.

N. Y., Endicott — Endicott Water Co. plans 4,000 ft. 6 in. mains.

N. Y., Fredonia—Plans 10 in. pipe line and 25 ft. dam across Canadaway Creek. $55,000. W. H. Shelton, c/o village clerk, engr.

N. Y., Nunda—Plans to purchase new pumping station equipment to replace that which was destroyed by fire. $5,000. Engineer not announced.

Ky., Louisville—Louisville Waterworks Co., 3rd St., plans 48 in. main from Crescent Hill west to 15th St. $65,000. C. W. Smith, pres.

O., Columbus—Making plans 2,700 ft. 4 in. and 2,700 ft. 8 in. mains in 3rd Ave., $36,481; 1,716 ft. 6 in. mains in Ray and Cordell Aves., $3,947. R. H. Simpson, city engr.

O., Cincinnati—Plans laying 10,000 ft. 12 in. c.i. mains. $45,000. J. A. Hiller, City Hall, engr.

O., Port Clinton—See "Sewers."

O., Grandview Heights (Columbus P. O.)—Making plans 16,580 ft. 6 in. c.i. mains in Parkway N., Parkway Dr., Timberman, and Copeland Rds., Goodale and Northwest Blvds., Thomas, Mulford, Dover, Norton, Hooly and 2nd Aves. $50,000. Burgess & Nipel, 223 East Broad St., Columbus, engrs.

O., Painesville—Plans water supply system of tanks or reservoir. $250,000. Hadlow, Hick & Co., Finance Bldg., Cleveland, engrs.

Waterworks (Continued)

Ind., Evansville—Plans addition to filtration plant. $25,000-$30,000. Alvord, Burdick & Howson, 1417-18 Hartford Bldg., Chicago, engrs.

Ill., Chicago—See "Industrial Works."

Mo., Fulton—Voted $50,000 bonds for improvements to water and light plant. Work will be done by day labor under supervision of W. J. McCarroll, supt. Municipal Water, Light & Power Plant. H. K. Graf, Chemical Bldg., St. Louis, archt.

Mo., Kansas City—Sold $2,500,000 bonds (1st issue) to defray cost of surveys, plans, engineering fees, site, etc., for new $11,-000,000 waterworks plant.

Tex., Dallas—Soon takes bids 16 in. main along Greenville Rd. from Junius St. to city limits. $35,000. E. A. Kingsley, city engr.

Tex., Ft. Worth—City Com. takes bids about June 5, 2 electrically driven pumps 2 m. g. daily capacity, one gasoline engine 3 m. g. daily capacity, one 50,000 gal. steel tank, one 333,000 gal. concrete pump, 1 concrete and brick, pump house, 27 x 38 ft., etc., from South Side booster station. $60,000. D. L. Lewis, city engr. J. B. Hawley, Cotton Exch., consult. engr.

Calif., Long Beach—Plans reservoir, increasing storage capacity from 5 m. g. to 40 m. g., will also lay mains and drill wells. To exceed $1,500,000.

Ont., Grimsby—Plans to extend water system to Grimsby Beach. $30,000.

Que., Montreal—Plans to lay 3,300 lin.ft. 30 in. main in Sherbrooke St. from Delormier to Wurtele Sts. H. A. Tetreault, City Hall, dir. pub. wks.

B. C., Vernon—Having plans prepared new pumping station and artesian well in city park. $30,000.

BIDS DESIRED

N. Y., Buffalo—June 4, by A. W. Kreinheder, comr. Pub. Wks., Municipal Bldg., furnishing and delivering forty 30 in., forty 24 in., eighty 20 in., forty 10 in. and two 36 in. flanged gate valves. G. Andrews, Col. Ward Pumping Sta., engr.

Md., Baltimore—May 31, by Bd. Awards, City Hall, two 8 m. g. motor driven centrifugal pumps and electrical equipment for Druid Pumping Station.

D. C., Wash.—June 4, at office Washington Suburban Sanitary Comn., Evans Bldg., New York Ave., for mains and sewers, Contr. 36-W & S. R. B. Morse, Hyattsville, Md., ch. engr. of dist.; adv. this issue.

Va., Richmond—Taking bids addition to pumphouse at station south of Byrd Park, 40 m.g. daily capacity. Designed to permit increase of 20 m.g. when necessary. E. W. Trafford, dir. Public Utilities.

W. Va., Oak Hill—Oak Hill Water Co. taking bids electrically operated pumping machinery, with auxiliary equipment. To exceed $5,000. R. R. Thomas, pres.

N. C., Davidson—May 29, for 100,000 gal. rein.-con. collecting reservoir, one or more 8 in. deep wells, 20,000 lin.ft. 8 in. and 5,200 lin.ft. 10 in. terra cotta sanitary sewers, 11,500 ft. 6 in. and 1,000 ft. 8 in. c.i. water mains, 8,000 ft. galvanized iron water pipes, etc. Mees & Mees, Kinney Bldg., Charlotte, engrs. Noted May 10.

O., Columbus—See "Streets and Roads."

Wis., Reeseville—June 1, by A. C. Buss, village clk., 50,000 gal. steel tank with 116 ft. tower (alternate 60,000 gal. tank, same height), 2 pumping units and motors, drilling 12 in. well and casing, 20,000 gal. concrete reservoir, laying 11,600 ft. 4 and 6 in. c.i. main, 11,400 ft. 6-12 in. sewer, 28 manholes, septic tank, etc. E. B. Parsons, Jefferson, engr. Noted May 17.

Ia., Oskaloosa—June 1, by Waterworks Trustees, for 2 m. g. gal. rapid mechanical filtration plant, also control dam across new channel Skunk River. Brown & Cook, 121 East 2nd St., Ottumwa, engr. Noted Feb. 8.

Minn., Stewart—June 5, by city, 60,000 gal. elevated steel tank. E. Lestico, city clk.

BIDS RECEIVED

N. J., Trenton—For 180 tons 10 in. pipe for Water Dept., from U. S. Cast Iron Pipe & Fdry. Co., Morris Bldg., Phila., $82.25 per ton. This corrects report in May 10 issue.

Pa., Harrisburg—S. Hassler, Water comr., May 15, 30 m. g. covered reservoir, also furnishing and laying pipe, valves, etc. at reservoir, from S. W. Shoemaker & Son, Walnut St., $484,040 and $276,763 respectively. Noted Apr. 19.

Md., Baltimore—Bd. Awards, furnishing and delivering sluice gates for additions to Montebello Filters, Water Dept. Contr. 67, from Coldwell-Wilcox, South End., Newburgh, N. Y., $45,295. Noted May 10.

Tex., Ft. Worth—Mains and connections in 13th St., 36,000 lin.ft. 6-20 in. c.i. pipe, valves, fittings, etc., from H. W. Greenway, 214 Hemphill St., Ft. Worth, $40,235.

Calif., San Francisco—Bd. Pub. Wks. of city and San Francisco Co., constructing Bay Crossing pipe line in Bay Crossing Div. of Hetch Hetchy Aqueduct, Contr. 90, Hetch Hetchy Water Supply, from Western Pipe and Steel Co., 444 Market St., $2,231,-661. Noted Apr. 19.

CONTRACTS AWARDED

N. Y., Liberty—Bd. Water Comrs., c.i. mains and specials, to W. G. Fritz, West Orange (street address not available), $63,552. Noted May 3.

N. C., Marion—City will lay 9¼mi. of 8 in. gravity mains, by day labor, under supervision of H. H. Tate, mayor. Noted Mar. 22.

N. C., Mooresville—Brick and concrete pumping station, filterhouse, auxiliary station, coagulating basin, storage reservoir, laying 5 mi. c.i. pipe lines, 5 mi. 2,200 volt electric transmission lines, to Quion & Withers, Gastonia, $162,000; filter equipment to Tucker & Laxton, Realty Bldg., Charlotte; pipe to Glancorgan Pipe & Fdry. Co., 98 Adams St., Lynchburg, Va.; pumps to Morris Machine Wks., Baldwinsville, N. Y.; wash water tanks to Chicago Bridge & Iron Wks., 608 South Dearborn St., Chicago; valves to Grinnell Co. Inc., Hartman Bldg., Columbus, O.

N. C., North Wilkesboro—Laying 8,000 ft. 4 and 6 in. water pipe and 2,000 ft. 4 in. Universal pipe, to Electrical Constructors Co., 26 West 5th St., Charlotte, $20,000.

O., Columbus—See "Streets and Roads."

Wis., Milton — Deep well, mains, pump house, reservoir, etc., to W. H. Deason Co., 355 Washington Bldg., Madison; centrifugal pumps, to Dayton-Dowd Co., Quincy, Ill. (street address not available); 40,000 gal. tank and 70 ft. tower, to Pittsburg-Des Moines Steel Co., 38 South Dearborn St., Chicago. Noted Apr. 19.

Minn., Winsted—Waterworks system, to Phelps-Drake Co., 719 Metropolitan Life Bldg., Minneapolis, $30,000.

Ark., Ft. Smith—For 3,000,000 gal. concrete reservoir, to J. H. Reddick, 619 North 20th St., $31,368. Noted May 3.

Tex., Rule—For 50,000 gal. steel tank and tower, pump house and machinery, 33 fire hydrants, miscellaneous valves, 34,800 ft. 2-8 in. c.i. pipe, to Pittsburgh Des Moines Steel Co., Sumpter Bldg., Dallas, $50,000. Noted Mar. 1.

Sewers

PROPOSED WORK

Mass., Boston — Plans 400 ft. earthen pipe surface drain, catch basins, etc., Bellevue Ave. between Brook and Beech Sts., West Roxbury, $25,000; 1,000 ft. 12 in. earthen pipe sewer, 25 concrete catch basins, etc., Grove St. between Washington and Center Sts., West Roxbury, $80,000; 500 ft. concrete overflow sewer, Farragut Rd. at East 1st St., South Boston, $47,000. E. F. Murphy, city sewer engr.

N. Y., Glens Falls—June 12, to vote on $75,000 bonds to extend sanitary and storm sewerage system.

N. Y., Ogdensburg—June 7, to vote on $100,000 bonds extending sanitary and storm sewerage system. D. J. Crichton, village clk.

N. J., Morris Plains—A. B. Mills, state archt., State Office Bldg., Trenton, rejected bids sewage disposal plant, incl. 200 ft. concrete tank, 7 ft. deep, etc., at Hospital for Insane, here. May readvertise. Noted May 10.

W. Va., Bluefield — See "Streets and Roads."

Tenn., Milan—Plans complete sewerage system. Voted $100,000 bonds (portion required for system). H. P. Webb, mayor.

O., Canton—Retained McClaskey & Peese, engrs., Renkert Bldg., to prepare plans enlarging sewage disposal plant. $500,000. W. E. Sarver, City Hall, engr.

O., Cincinnati—Plans Mill Creek Intercepting sewer, Contr. 8, Part B, Linden St. to Hartwell disposal plant, 850 ft. 54 in. concrete pipe. $32,200. F. Krug, City Hall, engr.

O., Port Clinton—Ottawa Co. making preliminary surveys for sewers, sewage disposal plant and waterworks system. $300,000. R. E. Garvin, Davis & Farley Bldg., Cleveland, engr.

Mich., Detroit — Having plans prepared 2,601 ft. of 18 in crock to 4 ft. 3 in. cylinder, Puritan Ave. Arm West Sewer, also 2,810 ft. of 15 in crock to 4 ft. 6 in. cylinder in Puritan Ave. Arm East Sewer, brick, monolithic concrete, vitr. segment block and vitr. crock. J. W. Reid, city engr.

Mich., Ferndale—Plans to issue $350,000 bonds to pay share in extending sewer in Campbell Ave. from 8th Mile Rd. to 13th Mile Rd., draining town of Ferndale, Pleasant Ridge Village, city of Royal Oak and Royal Oak Twp., concrete or brick, 4-10 ft. diam., also sewage treatment plant.

Kan., Burr Oak—Making plans sewerage system. $40,000. C. A. Haskins, 517 Finance Bldg., Kansas City, Mo., engr.

Kan., Lyons — Making plans complete sewerage system. $90,000. C. A. Haskins, 517 Finance Bldg., Kansas City, Mo., engr.

Kan., Sterling—Had plans prepared sanitary sewerage system. $40,000. Ruckel Eng. Co., Interurban Bldg., Hutchinson, engrs.

Kan., Topeka—See "Streets and Roads."

Tex., Grand Prairie—Election soon to vote on $30,000 bonds complete sewerage system. Koch & Fowler, 606 Central State Bank Bldg., Dallas, engrs.

Wash., Seattle—Bd. Pub. Wks. rejected bids sewers in Brandon St. et al. $54,965. J. D. Blackwell, city engr. Noted May 17.

Ont., Burlington—Soon takes bids 1,100 ft. 6 x 10 ft. rein.-con. storm sewer. $50,-000. Mackay & Mackay, Bank of Hamilton Bldg., Hamilton, engrs.

Ont., Toronto — Having plans prepared 18,000 ft. storm sewers in various streets, 8 in. and up, $53,550. R. C. Harris, city engr.

BIDS DESIRED

N. Y., East Aurora—See "Streets and Roads."

N. Y., Poughkeepsie—June 7, by Bd. Pub. Wks., Eastman Park Mansion, sewage pumping station. Hazen & Whipple, 25 West 43rd St., New York City, consult. engrs.; adv. this issue.

N. Y., Waterloo — June 6, sanitary and storm sewer in Cox St. To exceed $25,000. A. R. Moore, village clk.

N. J., East Orange—May 28, by Mayor and City Council, 7,500 ft. 24 and 30 in. sewer in William St. $110,000. W. D. Willigerod, City Hall, engr.

N. J., Long Branch—June 5, by Bd. City Comrs., separate sewerage system with sedementation tank in northwesterly section of city. J. W. Seaman, 192 Bway., city engr.; adv. this issue.

Pa., Portage—May 29, by Boro. Council, 2,350 ft. sanitary sewer in Main St., 1,025 ft. 10 in. and 1,225 ft. 12 in. rein.-con. pipe. P. F. Campbell, boro. engr.

D. C., Wash.—See "Waterworks."

O., Akron—May 31, by Bd. Control, Hawkins Rd. Interceptor Sewer, 1 mi., 30 to 80 ft. deep. $250,000. Noted May 3.

O., Columbus—See "Streets and Roads."

O., Columbus — June 2, at office of Franklin Co., joint intercepting sewer in Sewer Dist. Franklin 1, Contr. 3. R. W. Smith, clk.; adv. this issue.

O., Marion—June 7, at office of E. A. Schultz, dir. Pub. Serv., main sanitary sewer, Contr. D. G. B. Gascoigne, 648 Leader-News Bldg., Cleveland, engr.; adv. this issue.

Ill., Chicago — May 29, by Bd. Local Impvts., 207 City Hall, constructing sewers. $260,000. C. D. Hill, ch. engr.

Wis., Cashton—May 31, 20,238 ft. 6-10 in. vitr. sewers, 1,407 ft. 10 in. wood stave pipe, 86 manholes, 2 sewage disposal plants, consisting of tanks, filters, aeration equipment, 671 cu.yd. excav., 272 cu.yd. concrete. $25,000. W. G. Kirchoffer, Dean Bldg., Madison, engr. Noted Feb. 1.

Wis., Reeseville—See "Waterworks."

S. D., Hartford—June 5, sanitary sewerage system and extensions, $35,000, watermain extensions $4,000. Chenoweth, Kennedy & Rettinghouse, Boyce-Greely Bldg., Sioux Falls, engrs. Noted May 17.

Mo., Maplewood (St. Louis P. O.)—May 29, Manchester Sewer 2, 2 mi. 6-36 in. pipe, etc.

Calif., Whittier — June 4, by City Trustees, upper end of outfall sewer incl 10,000 ft. 18, 24 and 27 in. cement pipe. Noted May 17.

BIDS RECEIVED

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro. Queens Subway Bldg., sewers in (1) Chauncey St. (2) Welling St. (3) Evelin St. from Fresh Pond Rd. to Azalea St. (4) Evelin St. from Azalea St. to Mt. Olivet Ave. (5) 102nd Ave., from Green Contg. Co., 734 Vernon Ave., Astoria. (1) $3,260; Kennedy & Smith Inc., 93 Amity St., Flushing. (2) $2,992 (3) $5,031 (4) $10,991; Seaside Contg. Co., 193 Beach 108th St., Rockaway Beach, (5a) $9,625 (5b) $9,511. Noted May 10.

N. J., Atlantic City—Bd. City Comrs., City Hall, extending storm drainage system, from J. J. McHugh, 1617 Race St., Phila., $322,516. Noted Apr. 26.

Sewers (Continued)

Md., Baltimore—Bd. Awards, May 16, 978 lin.ft. 10 in. and 3,858 lin.ft. 8 in. vitr. pipe sewer, 3,552 lin.ft. house connections, 25 manholes, Dist. 7-B, Contr. 193, from D. Catalano, Knickerbocker Bldg., $21,686. Noted May 10.

Mich., Detroit—Dept. Pub. Wks., 10-30 in. vitr. crock lateral sewers in Alleys 3910 and 3912, from W. Blanck & Co., 827 Ford Bldg., $29,776 and $16,775 respectively; Alleys 3913 and 3915, from Oakwood Constr. Co., Oakwood Ave., $14,000 and $17,500 respectively; Alleys 3916 and 3920, from Hammen & Co., 4612 Woodward Ave., $9,472 and $15,978 respectively; Alley 3917, from C. R. Lennane, 2631 Woodward Ave., $12,906; Alley 3918, from Rennie & Bibble Co., Detroit (street address not available), $11,977; Alley 3919, from Detroit Drainage Constr. Co., 5099 LeMay Ave., $17,395.

Calif., Pasadena — From Waterworks Supply Co., Call Bldg., San Francisco, furnishing 8 sewage screens, bucket elevators and machinery, f.o.b. cars Hyperion sewage treatment plant, $39,725, also eight 7 ft. diam. x 7 ft. long Sanitation-Dollerco drum screens, plates perforated with Twin Slots, $36,975; from Dorr Co., 101 Park Ave., New York City, 8 Dorrco Screen units each to handle 10 m.g. per day, each unit consisting of 8 x 8 ft. Dorrco screen with screenings dewatering elevator and direct connected drive for each unit, delivered at Hyperion sewage treatment plant, $54,961. Noted Apr. 5.

CONTRACTS AWARDED

Mass., Boston—Pub. Wks. Dept., sewers in East Cottage and Humphrey Sts., to V. Barletta, c/o Pub. Wks. Dept., $58,033. Noted May 10.

Mass., Fall River—City will lay sewer in Underwood, Maple and Madison Sts., by day labor. $40,000. A. Wolstenholm, city engr.

N. Y., Syracuse—Bd. Contr. & Supply, Sect. E of 17th Ward Sewer. 24 and 30 in. concrete and rein.-con. pipe, to J. Young, Bastable Blk., $119,494.

N. J., Butler—Boro Council, sewers left unfinished by abandonment of a previous contract, to Romano & Tozzi, Montclair (street address not available), $51,053. Noted Apr. 26.

Ala., Scottsboro—Laying 10,000 ft. sanitary sewers in Andrews, Wilson, Laurel and Kyle Sts., to J. C. Wall, Scottsboro, $25,300.

O., Columbus—See "Streets and Roads."

Ind., Indianapolis—Bd. Sanitary Comrs., City Hall., dehydration building, to Hall Constr. Co., South and Illinois Sts., $109,-688. Noted Apr. 5.

Kan., Independence — Sewage disposal plant, to A. G. Sherwood, Independence, $52,388. Noted Apr. 12.

Mo., St. Louis—Paul Jones Realty Co., 13,500 ft. 6-12 in. vitr. sewers in Virginia Park subdivision, to McKelvey Constr. Co., 911 Title Guaranty Bldg. Engrs. est. $22,500.

Tex., Big Springs—For 5 mi. sewer extensions, to Janes Constr. Co., South West Life Bldg., Dallas, $40,500. Engrs. est. $60,000. Noted Apr. 5.

Tex., Ft. Worth—Storm sewers in various streets, 3,810 cu.yd. earth, 982 cu.yd. loose and 981 cu.yd. solid rock excav., 3,394.2 ft. 18-48 in. pipe, above 24 in. rein.-con. below vitr. tile, 2 manholes, 18 inlets, to Tarrant Constr. Co., Box 1025, Ft. Worth, $37,500.

Wash., Seattle—Bd. Pub. Wks., sewers in East Marginal Way, et al., to F. N. Badolato, Box 561, $124,321. Engrs. est. $135,000. Noted May 17.

Calif., Whittier—Constructing lower end of outfall sewer and disposal works, incl. Imhoff tanks and sludge beds (not incl. filter), to H. Hanawalt, La Verne, $48,000. Noted May 17.

Ont., Hamilton—For 3,300 ft. sewers in Marion St. from King to Barclay Sts., King St. from Paradise Rd. to Bond St., South Oval from King to Newton Sts., 410 ft. 30 in. and 2,890 ft. 12, 15, 21 and 24 in. pipe, to Webster Constr. Co., Bank of Toronto Bldg., London. Engrs. est. $30,000.

Bridges

PROPOSED WORK

N. Y., Fort Ann—State Hy. Dept., Albany, and Delaware & Hudson R.R., foot of State St., Albany, submitted plans to Pub. Serv. Comn., for concrete overhead highway crossing of Comstock-Fort Ann highway, to cross 2 tracks of railroad, south of here. $75,000. Later plans may call for bridge to cross 4 tracks. J. MacMartin, ch. engr. of D. & H. R.R.

Pa., Erie—City and Erie & Pittsburgh R.R. Co., (branch of Pennsylvania R.R.) plan viaduct over tracks on West 6th St., here. $82,000. F. G. Lynch, city engr.

Virginia—State Hy. Comn., Richmond, 4 bridges over Little Indian and Maiden Spring Branch, rein.-con. beam spans, Project F 271, Route 11, to Scott & Trinkle, Norton, $29,765; bridge over Dry and Pass Runs, three 30 ft. rein.-con. beam spans and two 20 ft. spans, Project F 294, Route 21, to M. C. Turner, Roanoke, $14,969; 120 ft. steel truss bridge over Grassy Creek, Project F 178, Route 31, to Atlanta Bridge Co., Roanoke, $10,310; bridge over Carys Brook, three 30 rein.-con. beam spans, to Baker Royer Co., Richmond (street address not available), $5,571; bridge over Raccoon Creek, rein.-con. arch and slab spans, Project F 155, Route 32, to Burgess & Atkinson, Scottsville, $9,238. Noted Apr. 26.

Ky., Irvine—Estill Co. plans steel truss bridge across Kentucky River at South Irvine. $50,000. Engineer and architect not selected.

O., Alliance—Plans election to vote on $80,000 bonds (city's share) for bridge on Lincoln Ave. Total cost $100,000.

Wis., Madison—Making plans 33 ft. rein.-con. deck girder single span bridge, 44 ft. roadway and two 10 ft. walks, on Fair Oaks Ave. E. E. Parker, City Hall, engr. Noted Mar. 29.

N. D., Fargo—Great Northern R.R., 523 Metropolitan Life Bldg., St. Paul, Minn., plans 196 ft. steel bridge, with 2 through plate girders, 2 concrete piers. $47,000. A. H. Hogeland, St. Paul, Minn., ch. engr.

Tex., Center—See "Streets and Roads.".

Tex., Waxahachie — See "Streets and Roads."

Ont., Barrie—Simcoe Co. having plans prepared 6 concrete and 2 steel highway bridges, 10-60 ft. spans, mostly 16 ft. wide. $60,000. F. Barber and Associate, Ltd., 45 Jarvis St., Toronto, engrs.

Ont., Goderich—Huron Co. having plans prepared 2 steel truss bridges, Bannockburn Bridge, 79 ft. span, 20 ft. wide, and Lake Rd. Bridge near Bayfield, 50 ft. span, 20 ft. wide. $30,000. R. T. Patterson, County Bldg., engrs.

BIDS DESIRED

N. Y., Fine—June 5, at office of F. H. Kelly, town clk., two concrete-steel arch bridges, 1 over Oswegatchie River, and other over Little River, both near village of Oswegatchie. Concrete-Steel Eng. Co., Park Row Bldg., New York City, engrs.; adv. this issue. Noted May 10.

Pa., Muncy—June 5, by Comrs. Lycoming Co. (Williamsport), 120 ft. 3 span rein.-con. girder bridge over Muncy Creek, here. $30,000. M. H. Krause, Susquehanna Trust Bldg., Williamsport, engrs.

Alabama—See "Streets and Roads."

Ala., Birmingham—June 8, by Bd. Revenue Jefferson Co., 396 ft. steel bridge over Warrior River, eleven 22 ft. steel approach spans, etc. C. J. Rogers, co. engr.

O., Cincinnati—May 31, by W. J. Hiner, purch. agt., Cleveland, Cincinnati, Chicago & St. Louis Ry. Co., 511 West 3rd St., one 76 ft. and four 80 ft. steel girder spans. $45,000. J. B. Hunley, 511 West 3rd St., ch. engr.

O., Cincinnati—May 31, by W. J. Hiner, purch. agt. Peoria & Eastern Ry. Co., 511 West 3rd St., five 85 ft. and five 94 ft. steel girder spans. $67,500. J. B. Hunley, 511 West 3rd St., ch .engr.

Wisconsin—See "Streets and Roads."

Wis., Madison—May 31, by Dane Co. State Road and Bridge Com., constructing Hildebrant, Carlson, Kruchten, O'Malley, Haight, Baldwin, Boyd, Riles, Burns, Hustad and Haight Bridges, concrete, also various roads. J. R. Caldwell, comr.

Tex., Amarillo—City Com. takes bids about June 1, viaduct on 10th and Grant Sts. $39,400. H. Banks, city engr.

Ontario — May 28, by C. H. Fullerton, engr., Parliament Bldgs., Toronto, 90 ft. steel truss highway bridge superstructure, 16 ft., over Katrine Bay, about 3 mi. from Burks Falls Sta., also 100 ft. steel truss highway bridge, 16 ft., over Blanche River Dist. of Temiskaming, for Dept. Lands, Forests & Mines, Northern Development Branch, Parliament Bldg., Toronto, $40,000.

Ont., Orangeville — See "Excavation, Dredging & Irrigation."

Ont., Toronto—June 6, by W. A. McLean, deputy minister of highways, 110 University Ave., high level highway bridge known as Humber Bridge over Humber River, Bloor St., 700 ft. long, 45 ft. wide, Contr. 983 steel superstructure and concrete substructure, or Contr. 1011. Alternate bid on rein.-con. and concrete superstructure and substructure. $500,000. G. Hogarth, ch. engr.

BIDS RECEIVED

Florida—State Rd. Dept., Tallahassee, 896 ft. rein.-con. bridge with 65 ft. steel span over Sebastian River, Project 39, Brevard and St. Lucie Counties, from A. Bentley & Sons, Amer. Natl. Bank Bldg., Jacksonville, $200,343. Noted May 3.

Illinois—Dept. Pub. Wks. and Buildings Div. Highways, Springfield, constructing bridges, s means steel, c s concrete slab, c g concrete girder, sub structure, c c concrete culvert and superstructures; (1) 3 c s, 1-2B White, means (1) 3 concrete slab bridges Bond Route 1, Sect. 2B, White Co. (2) 2 c s and 1 c g, 1-3B, White (3) 2 c g 1-28B, White (4) 1 c g and 1 sub, 1-38B Johnson (5) 1 super, 1-38C, Johnson (6) 1 c g and 1 sub, 1-39B, Massac (7) 1 super 1-39C, Massac (8) 1 sub and 4 c g, 2-21B Fayette (9) 1 c s and 2 c g, 2-22B, Fayette (10) 3 c g, 2-37G, Ogle (11) 2 c s, 2-43B, Christian (12) 1 c g, 2-44B, Christian (13) 1 c g, 2-45B, Christian (14) 1 c g and 1 c s, 2-55B, McLean (15) 2 c g, 2-62B, McLean (16) 1 sub 2-63B, McLean (17) 1 c g, 3-13B Rock Island (18) 1 c g, 3-51B, Greene Co. (19) 2 sub and 6 c g, 3-52B, Greene (20) 2 super, 3-52C, Greene (21) 1 sub, 3-53B, Madison (22) 1 c c, 1 sub and 1 super, 3-74B, Randolph (23) 1 c s, 5-24B, Jo Daviess (24) 1 c s, 6-F, Cook (25) 3 c c, 6-31B, Lee (26) 1 sub and 1 c s, 7-(Federal Aid-7)-R2, Bureau (27) 1 super, 7-(Federal Aid 7)-R3, Bureau (28) 1 c g, 8-34-B, Woodford (29) 2 c g and 1 c s, 8-25-B, Livingston (30) 3 c s, 20 c g and 3 sub, 12-9B, Richland-Clay (31) 2 super, 12-9C, Richland-Clay (32) 2 c g, 12-13B, Marion (33) 1 sub, 16-11B, Shelby (34) 1 super, 16-11C, Shelby (35) 1 c g, 24-4B, Christian (36) 2 c g and 1 c s, 25-10B, Wayne (37) 1 c s and 1 c g, 28-10B, Henry (38) 4 c g, 1 c s and 2 c c, 33-1B, Crawford (39) 14 c g and 1 sub, 33-4B, Jasper (40) 1 super, 33-4C, Jasper (41) 1 c c, 1 c s and 1 c g, 34-1B, Saline (42) 2 super, 34-1C, Saline (43) 2 c s and 3 c g 34-2B, Saline (44) 3 c g, 1 c s and 3 c c, 34-3B, Pope-Hardin (45) 2 c g and 1 c c, 34-4B, Hardin (46) 1 c g, 2 c c and 1 sub, 34-5B, Hardin (47) 1 super, 34-5C, Hardin (48) 1 c s and 1 c g, 4-11B, Livingston (49) 2 c g, 3-23B, Mercer (50) 5 c s and 3 c g, 1-Comb. Q, White (51) 1 sub, 6 c g, and 1 c s, 2-Comb. T, Fayette (52) 2 c s and 2 c g, 2-Comb. U, Christian (53) 7 c g and 2 sub, 3-Comb. W, Greene (54) 1 c s, 2 c g and 1 sub, 16-21B, Montgomery (55) 1 super, 16-21C, Montgomery (56) 1 super, 7-Federal Aid 55-13C, Bureau, from C. B. Mautz, Benton (1) $10,135 (2) $12,392 (50) $46,500. E. F. Kent & Co., Champaign, (street address not available) (48) $31,915 (15) $13,995. Mautz & Oren, Effingham, (8) $22,637. C Taggart, Martinsville (12) $8,292 (52) $36,500. Tripp Bros., Belleville, (22) $28,437. W. C. Johnson, 512 South High St., Belleville, (9) $27,933 (51) $49,800 (32) $30,727 (54) $43,763 (55) $7,711 (40) $13,191. M. Frazier, Louisville, (36) $14,427. General Constr. Co., Syndicate Trust Bldg., St. Louis, Mo. (4) $23,824 (6) $20,190 (43) $26,400 (44) $60,771 (45) $30,792. W. H. Shons, 109 Spring St., Freeport, (3) $22,793 (13) $18,440 (33) $26,034 (41) $33,267. International Steel and Iron Co., 1243 Edgar St., Evansville, Ind. (5) $6,773 (7) $13,254 (42) $18,039. F. E. Marsh & Co., (address not available) (10) $49,744 Oltendorf Constr. Co. (address not available) (24) $13,117. A. Culbertson, Oconee (11) $8,125. I. D. Lain, Bloomington, (14) $20,660. Lundgren-Reis Co. (address not available) (16) $25,407. St. Louis Structural Steel Co., Bank of Commerce Bldg., St. Louis, Mo. (20) $14,908. Illinois Steel Bridge Co., Jacksonville, (34) $36,497 (46) $26,697. Continental Bridge Co., Monadnock Blk., Chicago, (27) $5,786 (56) $5,942. Herrick Constr. Co., Chicago (street address not available) (18) $9,395 (19) $48,731 (21) $19,718 (53) $57,500. C. H. Schadt, Silvis, (17) $4,484. Sheldon Constr. Co., Putnam Bldg., Davenport, Ia. (23) $9,554 (26) $22,699 (49) $40,535 (37) $14,884. Stupp Bros. Bridge & Iron Co., Syndicate Trust Bldg., St. Louis, Mo. (47) $27,354. D. Warner, Polo, (25) $8,248. D. Kief Low Point, (28) $9,423 (29) $18,223. H. R. Caywood, Mount Vernon, (30) $161,577. Vincennes Bridge Co., Vincennes, Ind. (31) $34,801. G. C. Fairclo (address not available (35) $38,172. J. P. Lyons (address not available) (38) $33,096. V. C. Connor, (address not available) (39) $56,798. Noted May 3.

CONTRACTS AWARDED

Ohio—See "Streets and Roads."

O., Cleveland—Zettlemeyer Coal Co., Century Bldg., 204 ft. timber trestle on concrete substructure, over tracks of Pennsylvania R.R., on East 71st St., to Uhl-Jester Co., 1900 Euclid Ave. Engrs. est. $30,000

Bridges (Continued)

Indiana—State Hy Comn., Indianapolis, constructing bridges, s t means steel truss, super. superstructure, sub. substructure, r c a rein.-con. arch, r c s rein.-con slab, r c g rein.-con. girder, F A Federal Aid, S A State Aid; s t super, F A 16, 4-C, Warrick, means steel truss superstructure, Federal Aid 16, State Rd. 4-C, Warrick Co.; to M & P Contract Co., Rockport, s t super., F A 16, 4-C, Warrick, $3,926, engrs. est. $3,984, r c a, F A 37, 18-A, Spencer, $29,867, engrs. est. $33,893, r c s S A 4, 4-L, Orange, $3,984, engrs. est. $4,070; to J. H. Hardin Co., Pendleton, r c a, F A 57 and r c s, S A 9, etc., Warren, $22,260, engrs. est. $26,545, r c a, S A 33, 33-A, Warren, $7,586, engrs. est. $9,032; to National Concrete Co., 825 Lemcke Bldg., Indianapolis, s t sub., F A 36, 10-A, Vanderburgh, $30,578, engrs. est. $40,269; to Schroeter Bros., Hammond, s t, F A 55, 49-C, Lake, $13,675, engrs. est. $14,265; to Hancock & Kieffer, Brownstown, r c g, S A 4, 4-D, Jackson, $6,719, engrs. est. $7,940; to J. F. Hopkins & Son, Loogootee, r c g and r c s, S A 5, 5-C Daviess, $5,017, engrs. est. $5,691; to J. W. Dougherty & Son, Farmersburg, s t, S A 10, 10-H, Sullivan, $3,255, engrs. est. $3,768; to J. E. Sweet & Sons, Woodburn, wood block floor and paint, S A 42, 42-D, Floyd, $8,104, engrs. est. $8,123; to A. G. Schenk, Mt. Vernon, wood block floor and paint, F A 16, 4-C, Warrick, $5,140, engrs. est. $5,189. Noted Apr. 19.

Ind., Monticello—Comrs. White Co., raising 10 steel bridges over Tippecanoe River and tributaries, to R. M. Freeman, 8 West 40th St., New York City, $55,000. Noted May 3.

Mich., Lansing—Rein.-con. arch bridge, (3 span), 262 ft. long, 52 ft. wide, over Grand River on Seymour Ave., to Townsend, Shuttleworth & Balmer Co., Capitol National Bank Bldg., $52,203. Noted May 17.

Ia., Manchester—Delaware Co., Primary Bridge Project 136, to S. F. Holdren, Earlville, 9 box culverts, $3,457; R. Hackbarth, Earlville, 11 box culverts, $4,303; Parsons & Meyer, Dyersville, 1 I-beam span, $3,900; Olson Constr. Co., Waterloo, 2 pony trusses and 14 box culverts, $25,750.

Calif., Sacramento — Sacramento Co. furnishing 511,000 lb. steel and machinery for Steamboat Slough Bridge and 511,000 lb. steel and machinery for Paintersville Slough Bridge, to Moore Shipbuilding & Drydock Co., Balfour Bldg., San Francisco, furnishing steel per lb., $0.0799, machinery per lb., 0.249. Noted May 3.

B. C., Courtenay — Dept. Pub. Wks., Victoria, steel superstructure for 200 ft. main steel truss span and steel truss approaches on concrete abutments, over Courtenay River, total length 400 ft., 16 ft. wide, to Dominion Bridge Co., Mount Royal Hotel, Montreal, Que., $25,000. Provincial Government will build piers by day labor.

B. C., New Westminster — Dominion Government, Ottawa, strengthening ¾ mi. rail and road bridge, 20 ft., over Fraser River, to Dominion Bridge Co., Mount Royal Hotel, Montreal, Que., cost plus basis.

Dams

PROPOSED WORK

N. Y., Fredonia—See "Waterworks."

BIDS DESIRED

Ia., Oskaloosa—See "Waterworks."

CONTRACTS AWARDED

Ark., Pine Bluff — Arkansas Power & Light Co., Remmel dam 900 ft. long at crest 50-60 ft. high, and hydro-electric power station, on Ouachita River between Malvern and Hot Springs, to Ford, Bacon & Davis, 115 Bway., New York City, $1,500,000.

Nev., Yerington—Walker River Irrigation Dist., Yerington, Bridgeport, earth fill dam, to impound 42,000 acre feet, 125,000 cu.yd. earthwork, 1,500 cu.yd. rein.-con. and 20,000 cu.yd. earth and rock excav., to C. R. Hill, 705 Mill St., Reno, $153,400. Noted May 3.

Railways

PROPOSED WORK

Pennsylvania — Lewistown & Reedsville Electric Ry. Co., West Market St., Lewistown, granted franchise to build 1 mi. line from Fountain Sq. to Mount Rock, via Chestnut and Logan Sts. and Logan St. Extension, in Lewistown. J. I. Quigley, pres.

Kansas—Chicago, Rock Island & Pacific Ry., La Salle St., Chicago, plans additional yards, tracks and siding for Herrington and El Reno, Okla., also number of terminals, $200,000; also 29 mi. double track, from Bishop to Paxico and from Herrington to Latimer. L. C. Fitch, vice pres., in charge construction and maintenance.

Ohio — See "Industrial Works" under Mingo Junction, N. Y.

Indiana—Indianapolis & Cincinnati Traction Co., 310 Traction Terminal, Indianapolis, plans extending electric railway line from Connersville to Cincinnati, O. $1,000,000. C. L. Henry, pres.

Michigan—Detroit Dept. Street Railways, St. Jean and Shoemaker Aves., Detroit, having plans prepared 4 mi. double track trolley line on Warren Rd., East Warren and Linwood Aves. $500,000. W. C. Markham, ch. engr.

Illinois—Elgin, Joliet & Eastern Ry., 208 South La Salle St., Chicago, plans 5 mi. second track between Coynes and Des Planes River. $400,000. A. Montzheimer, ch. engr.

BIDS DESIRED

New Jersey—May 29, by City Council, Woodbury, 4,992 lin.ft. straight track, and rein.-con. pavements, etc., on Cooper St., Bids A and B. C. L. Davis, city clk.; adv. this issue.

CONTRACTS AWARDED

Mississippi—Mississippi Central R.R. Co., Hattiesburg, will revise 5 mi. main line near Hattiesburg to eliminate sharp curves and heavy grades. $100,000. S. B. Ringgold, ch. engr.

Illinois—Illinois Central R.R., 135 East 11th Pl., Chicago, 7 mi. second track from Springfield to Barclay, and new double track bridge across Sangamon River, to Frazier Constr. Co., Lincoln, Ind., $410,000.

Wisconsin — Madison Street Rys., 2302 Fair Oaks St., Madison, making plans double tracks on East Johnson St. and University Ave., and extending tracks on Monroe St. $25,000. D. Montgomery, mgr. Private plans.

Ontario—Toronto Transportation Comn., 35 Yonge St., Toronto, will build 4 mi. double civic car tracks on concrete base, wood ties, 100 lb. steel rails, stone block paving, in Toronto, $897,925, also 10 mi. overhead trolley system, $275,000, both by day labor. H. H. Couzens, 35 Yonge St., Toronto, mgr.

Ontario—Toronto Transportation Comn., 35 Yonge St., Toronto, will rebuild and repair Toronto Suburban Ry. tracks in West Toronto, 4 mi. single track to be removed and replaced with new double track on concrete base and stone block paving, on Dundas and Keele Sts. to city limits, by day labor. $2,500,000. H. H. Couzens, mgr.

Ontario—Toronto Transportation Comn., 35 Yonge St., Toronto, will build double track work on Bay St. and intersections at Front St. and Spadina Ave., McCaul and Dundas Sts., King and Queen Sts. and Roncesvalles Ave., by day labor. $436,720. H. H. Couzens, mgr.

Excavation, Drainage Irrigation

PROPOSED WORK

N. Y., New York—Commissioner Docks, Pier "A" North River, rejected bids dredging between West 97th and West 99th Sts., Contr. 1799. Will readvertise. Noted Apr. 26.

Ill., Edwardsville—Levee and Drainage Dist. Assn., Court House, plans drainage work and erection of pump house. $75,000. S. C. Morgan, Edwardsville, engr.

Wis., Jefferson—Farm Drainage Bd. had plans prepared Farm Drain 3, 7,920 acres, $87,000; Farm Drain 5, $25,000. Private plans. J. W. Puerner, secy.

Wis., Milwaukee—Bd. Industrial Educ., 7th and Prairie Sts., soon takes bids excavating for 7 story and basement, 152 x 210 ft., continuation school (3rd unit), brick and concrete, concrete pile caissons and plain foundation.

BIDS DESIRED

N. J., Toms River—June 5, by Bd. Commerce & Navigation, State House, Trenton, (1) finishing incomplete contract dredging canal, 75 ft. bottom width, edge of Manasquan River, (2) removing remainder of material to make canal of 100 ft. bottom width, (3) dredging channel Manasquan River, 100 ft. bottom width, as far as funds will permit. $70,000. V. Gelineua, dir.

Wis., Milwaukee—J. Hunholz, 2310 Vliet St., taking bids on excavation for 6 story and basement, 53 x 106 ft. apartment, brick, tile and concrete, plain foundation, Biddle St. Total cost $250,000. Private plans.

Ia., Sidney—June 5, by Auditor Fremont Co., for work in Mississippi Valley D. D. 1: Plum Creek Diversion Ditch, 390,000 cu. yd. excav.; Possum Creek Diversion Ditch, 378,000 cu.yd.; Main Ditch, 515,000 cu.yd.; Horse Creek Ditch, 60,000 cu.yd.; Cooper Creek Ditch, 213,000 cu.yd.; Knox Ditch, 54,000 cu.yd.; Melitia Hollow Ditch, 38,000 cu.yd.; Cresap lateral 64,000 cu.yd.; Mustard lateral, 115,000 cu.yd.; five laterals combined, 95,000 cu.yd. $195,200. B. B. Hurst, Rockport, Mo., engr.

Minn., Albert Lea—June 12, (change of date) by C. Holway, aud. Freeborn Co., Judicial Ditch 9, Sects. O, T, L, L-1 and L-2. $64,394. Midwest Eng. Co., Albert Lea, engrs. Noted Apr. 12.

Colo., Ordway—May 31, by J. H. Abel, secy. Valley View D. D., Sugar City, constructing system, incl. 225,000 cu.yd. excav., open and tile drains, bridges incl. 3 state highway and 18 farm bridges. $75,000. G. H. Russell Eng. Co., Lamar, engrs.

Ont., Orangeville—May 28, by Wheelock & Christie, engrs., Orangeville, Drain 16, Branches A and B, Drains 7, 25 and 45, incl. 42,350 cu.yd. excav., and one 50 ft. rein.-con. bridge for Amaranth Twp. $40,000.

BIDS RECEIVED

N. Y., Brooklyn—J. H. Delaney, comr. Docks, Pier "A" foot of Battery Pl., North River, New York City, May 21, dikes and dredging a channel between Mill Basin and Paerdegat Basin, Jamaica Bay, here, Contr. 1797, from Arundel Corp., foot of Fulton St., $172,220. Noted May 10.

Wis., Manitowoc—Dredging Manitowoc River, from Fitzsimmons & Connell Dredge Co., 10 South Falls St., Chicago, 23,000 cu.yd. hard pan $2.70, 70,000 cu.yd. softer material $0.44. Noted Apr. 19.

N. D., Grand Forks—Auditor Grand Forks Co., drainage ditch, incl. 261,000 cu.yd. excav., to Strom, Degerness & Hanson, Gary, Minn., $26,883. Noted May 3.

CONTRACTS AWARDED

Miss., Greenville—See "Miscellaneous."

Calif., Meridian—Recl. Dist. 70, 141,313 ft. ditch and lateral excav., 18,000 ft. main canal excav., etc., to H. T. Reupke, Box 421, Los Banos, $33,222. Noted May 17.

Calif., Oakland—Alaska Packers Assn. Wells Fargo Bldg., San Francisco., dredging in Oakland Estuary, 1,000,000 to 1,500,000 cu.yd. excav., to Amer. Dredging Co. 255 California St., San Francisco.

Streets and Roads

PROPOSED WORK

Conn., Bristol—Plans 4,000 lin.ft. concrete curbing, 5,000 lin.ft. concrete gutter and 4,000 lin.ft. concrete sidewalks on Lawndale Ave. and Wooding St. $30,000.

Conn., Meriden—Plans paving 30,000 sq. yd. Miller, Butler, Grove, Brooks, Stone and Bradle Sts., sheet asphalt and brick. $160,000. J. A. Toner, city engr.

Conn., Stafford Springs—Plans paving 4 mi. Monson Rd., 18 ft. $80,000. W. R. Preble, Borough Hall, chn. Bd. Selectmen.

New York—F. S. Greene, comr. State Hy. Dept., Albany, received no bids May 16, reconstructing 2.95 mi. Repair Contr. 1366, Pierrepont Manor-Redwood, Jefferson Co. and 1.44 mi. Repair Contr. 1362, Remsen-Boonville town line, Oneida Co. Noted May 3.

N. Y., Hornell — Plans brick paving Taylor and Park Sts., bitulithic macadamizing Armory Pl., Preston Ave., Ontario, Wells, State, East Elm and West Genesee Sts. $150,000. Noted Jan. 11.

N. Y., Niagara Falls—Plans paving Ashland Ave. and 13th St., granite, wood block, asphalt, sheet asphalt or brick. $61,700, based on granite or wood block. W. Bennett, city engr.

N. Y., Yorkville—Making plans and soon takes bids concrete paving various streets. To exceed $25,000. W. G. Stone & Son, Mann Bldg., Utica, engrs.

N. J., Lambertville—Interstate Bridge Comn., Broad St. Bank, Trenton, plan concrete surfacing bridge over Delaware River, between here and New Hope, Pa. $54,000. L. Focht, State House, Trenton, engr.

Pa., Catasaqua—Plans concrete pavements on Howerton Ave., Race and 2nd Sts. $60,000. Engineer not announced.

Pa., Dunmore (Scranton P. O.)—Plans paving 4 streets. $40,000. F. Flanelly, boro. engr.

Pa., Ebensburg—Comrs. Cambria Co. opens bids about June 13, 4 mi. Allegheny Twp. Rd. connecting Loretto and Ashville, asphalt bound macadam on Telford base (penetration method). $150,000. H. T. Jones, controller.

Pa., Meyersdale—Opens bids about June 15, paving 4,000 ft. Large St., Willite, 22 ft., also sanitary sewers. $40,000. L. H. Rowe, boro. engr.

Streets and Roads (Continued)

W. Va., Bluefield—June 19, to vote on $950,000 bonds for improvements to streets, sewers, etc. E. C. Barton, city engr.

W. Va., Parkersburg—City Council plans vitr. brick paving Market, Andrew and Latrope Sts., et al. $150,000.. J. V. Dunbar Parkersburg, engr.

W. Va., Williamson — Warfield Dist. Mingo Co., election June 2, to vote on $100,-000 bonds constructing Tug River Highway. H. Cook, co. engr.

Fla., Bradentown—Manatee Co. returned bids unopened paving with shell 15 mi. in Terra Ceia Special Road & Bridge Dist., 15 ft. $55,000. Will readvertise. H. B. Glover, Bradentown, engr. Noted Apr. 26.

Tenn., Nashville—Voted $200,000 bonds for widening 7 blocks Church St. from 13th to 20th Aves. W. W. Southgate, City Hall, engr. Noted Apr. 19.

Tenn., Springfield—Robertson Co. plans 12 mi. road from here to Davidson Co. line, 16 ft. $130,000. County to appropriate $67,500.

Ky., Henderson — Rejected bids 25,000 sq.yd. sheet asphalt paving on various streets. $50,000. Will readvertise. J. A. Cunningham, comr. Pub. Wks. and Property. Noted May 3.

Ky., Irvine—Estill Co. Fiscal Court voted $100,000 bonds constructing Kentenva Highway from Irvine to Beattyville.

Ky., Louisville—Jefferson Co. plans 8 mi. waterbound macadam and 4 mi. gravel roads. C. McWain. co. engr.

Ky., Middlesboro—Plans paving various streets. $25,000. J. C. Richardson, city engr.

Ohio—Dept. Highways and Pub. Wks., Columbus, rejected bids May 8, grading, bridging and paving 10.04 mi. roads in Putnam and Holmes Counties. Noted May 17.

O., Bowling Green—Wood Co. soon takes bids grading and paving 2.37 mi. Jamison Rd., 12 ft., waterbound macadam $34,000, surface treated $37,800; 1.01 mi. Pearl-Owen Rd., 12 ft., waterbound macadam $26,600; 0.66 mi. Oak, Walnut and Elm Sts., in Rossford, 20 ft., bituminous macadam $33,500, concrete $34,700.

O., Cleveland—Cuyahoga Co. takes bids in summer grading, curbing and paving Kinsman Rd. 6, Richmond Rd. 6, South Miles Rd. and York-Bennett Rd., vitr. brick, bituminous concrete or waterbound macadam. $250,000. F. Lander, Court House, engr.

O., Columbus—Franklin Co. received no bids May 17, paving 0.98 mi. Alkire Rd. 2 and Norton Rd. 2, Pleasant Twp. Noted May 10.

O., East Liverpool — Plans improving Avondale St. between Bank and North Sts., brick and Willite. $27,500.

O., Napoleon—Henry Co. plans grading, building bridge and paving 5.95 mi. Toledo-Napoleon Rd., 16 ft., 3,400 lin.ft. concrete, balance bituminous macadam. $133,000. J. W. Harper, co. engr.

Ind., Brazil—Clay Co. plans to grade and gravel 14,780 ft. Douglass Rd., 18 ft. $26,036. F. E. James, Brazil, engr.

Ind., Ft. Wayne—Allen Co. plans improving 15,592 ft. Garman Rd., 24 ft., gravel and stone wearing surface. $33,000. O. M. Darling, Ft. Wayne, engr.

Ind., Rensselaer—Jasper Co. plans to grade and gravel 17,680 lin.ft. Trachel Rd., 2 x 18 ft. $26,742. E. D. Nesbitt, Rensselaer, engr.

Ind., Vernon—Jennings Co. plans to grade and gravel 13,210 ft. Richards Rd., 24 ft. $25,369. C. W. Miles, North Vernon, engr.

Ind., Winchester—Randolph Co. plans to grade and surface 15,570 ft. Kemp Rd., 30 ft., stone wearing surface on gravel, $80,-640; pave. 15,740 ft. Howell Rd., 18 ft., stone, $26,600, 12,257 ft. Barkalow Rd., 20 ft., stone, $25,257. A. B. Purdy, Winchester, engr.

Kan., Kansas City—Wyandotte Co. soon takes bids paving 4.4 mi. Argentine-Holliday Rd., 16 ft., concrete or bituminous macadam. O. K. Williamson, Court House, co. engr.

Kan., Topeka—Soon takes bids paving, etc. various streets, 35,000 yd. asphaltic concrete, 12,000 yd. brick, 8,000 ft. clay sewer pipe various sizes, manholes, etc. $225,000. W. E. Baldry, city engr.

Mo., Clayton—St. Louis Co. received no bids May 9, grading and telford macadamizing 3,681 sq.yd. Old Florissant, Chambers and McKelvey Rds. Will readvertise. Noted May 3.

Mo., Clayton — St. Louis Co., rejected bids May 9, grading and telford macadamizing 670 ft. Hancock Ave., 14 ft. Noted May 3.

Mo., Maplewood (St. Louis, P. O.)—Soon takes bids concrete paving $1,100 ft. Bellevue Ave., 36 ft., 8 in. concrete, $15,000; 2700 ft. Commonwealth Ave., Picadilly St. and Richmond Pl., 24 ft., 6½ in. concrete, $37,000. A. H. Beard, 616 Title Guaranty Bldg., St. Louis, engr.

Tex., Angleton — Brazoria Co. making plans grading, shell surfacing, etc. 8.1 mi. Stratton Ridge Rd., (State Highway 19), 16 ft. $97,800. E. N. Gustafson, Bay City, engr.

Tex., Bonham—State Hy. Comn., Austin, granted $170,000 aid to Fannin Co. concrete paving State Highway 5, Dodd-Windom Dist. Total $260,000. S. E. Nielson, co. judge.

Tex., Center—Shelby Co. making plans grading, gravel surfacing and bridging 12.2 mi. State Highway 35, 16 ft. $185,000. P. A. McCarthy, Lufkin, engr.

Tex., Coleman — Coleman Co. making plans grading and gravel surfacing 6.65 mi. Ballinger Rd., Rd. Dist. 3, 16 ft. $60,000. W. E. Dickerson, co. engr.

Tex., Denton — Denton Co., Krum Rd. Dist., making plans and takes bids in summer grading and gravel surfacing 18 mi. road. $34,000. H. T. Brewster, co. engr.

Tex., Jourdanton—Atascosa Co. election soon to vote on $600,000 bonds improving roads. E. D. Scott, co. judge.

Tex., La Grange—Fayette Co. plans to grade and gravel surface highway in Road Dist. 6. $25,000. J. P. Ehlinger, co. judge. Engineer not selected.

Tex., Navasota—Making plans paving 24,000 sq.yd. streets, various types. $90,-000. A. W. Naylor, Navasota, engr.

Tex., Paris—Lamar Co. making plans concrete paving 2.7 mi. State Highway 19, 16 ft., $76,000; rein.-con. paving 1.6 mi. Paris-Blossom, Rd., 16 ft., $48,000; grading, macadam surfacing and 8 in. bituminous topping 16 mi. Bankhead Highway, (State Highway 1) 18 ft., $380,900. W. M. Fooshee, co. engr.

Tex., Waxahachie — Ellis Co. making plans grading, gravel surfacing, bridging, etc., 2.2 mi. State Highway 14, 18 ft. $35,-460. W. A. Spalding, Waxahachie, engr.

Okla., Garber—Had plans prepared and soon takes bids paving Dist. 1, various types. $80,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Okla., Oklahoma City—Clerk Oklahoma Co. takes bids about July 1, grading and paving 3 mi. New Castle Rd., 32,000 sq.yd. concrete. $80,000. R. S. James, Courthouse, engr.

Okla., Sayre—Plans grading and paving 5 blocks Bway., Main and 4th Sts., 13,200 sq.yd. concrete, 3,500 lin.ft. curbing, etc. $56,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Okla., Vinita—Craig Co. having plans prepared grading and gravel surfacing 20 mi. roads, 90,000 cu.yd. earth excav., 210,-000 sq.yd gravel. $100,000. E. Ashby, co. engr.

Calif., Los Angeles—Los Angeles Co. had plans prepared grading and paving Los Angeles St., shaping 12,444 sq.yd. roadway, 3,958 sq.yd. 4 in. asphaltic concrete, 2 in. surface, 8,486 sq.yd. 4½ in. asphaltic concrete, 2½ in. surface, etc.

Calif., Los Angeles—Rejected bids grading and paving Badger Ave. and Dock St. approach to drawbridge. Noted May 17.

Calif., Oroville—Butte Co. having revised plans prepared and soon takes bids surfacing Gridley-Colusa Rd., oil macadam. Former bids rejected. H. H. Hume, co. road engr. Noted May 10.

Ont., Burlington—Soon takes bids 35,000 sq.yd. concrete pavement, 14,000 sq.yd. bituminous macadam and 1,600 ft. concrete curb, on Brant, Ontario, Locust and Caroline Sts. $175,000. Mackay & Mackay, Bank of Hamilton Bldg., Hamilton, engrs.

Ont., Dunnville—Having plans prepared 20,000 sq.yd. concrete or asphalt pavement on concrete with concrete curbs and gutters, $85,000. F. Barber & Associated Ltd., 45 Jarvis St., Toronto, engrs.

Ont., Espanola—Spanish River Pulp & Paper Co. plans paving Spruce and Meade Sts., 17,000 sq.yd. asphalt on 8 in. stone. $65,000. Private plans.

Ont., Port Hope — Had plans prepared 20,000 sq.yd. pavement on Main St., asphalt, concrete or bituminous concrete, 8,500 lin.-ft. concrete curb and gutter. $175,000. James, Proctor & Redfern, 36 Toronto St., Toronto, engrs.

BIDS DESIRED

Maine—May 31, by State Hy Comn., Augusta, paving 2.245 mi. road in Old Town, concrete; 0.587 mi. in Bridgton, bituminous macadam; 8.75 mi. bituminous macadam or gravel in Naples, and 13.62 mi. gravel surfacing in Mercer, Monson, Smyrna, Easton and Edmunds. P. D. Sargent, ch. engr.

New Hampshire—May 25, by State Hy. Comn., Concord, surfacing 1.14 mi. road in Randolph, gravel, and 1.69 mi. in Northumberland, crushed gravel. F. E. Everett, state highway comr.

Massachusetts—May 29, by W. F. Williams, state highway engr., Boston, concrete paving 7,390 ft. road, 18-24 ft., through Adams. To exceed $40,000.

Mass., Pittsfield—May 31, by Clerk Bd. Pub. Wks., City Hall, paving North, Center and Fenn Sts. A. B. Farnham, engr.; adv. this issue.

Rhode Island—June 6, by State Bd. Pub. Roads, State House, Providence, paving highway, Federal Aid Project 17, Div. A in North Providence and Lincoln, Contr. 2304; adv. this issue.

N. Y., Babylon—June 4, by Bd. Village Trustees, approximately 29,000 sq.yd. concrete pavement. J. B. Cooper, clk.; adv. this issue.

N. Y., East Aurora—May 29, grading, curbing and paving Fillmore Ave., brick, asphalt or asphaltic block, and laying storm sewer in Whaley Ave. G. C. Diehl, 576 Ellicott Sq., Buffalo, engr. Noted Apr. 5.

N. Y., Newburgh—June 4, by W. J. McKay, city mgr., paving Renwick and South Sts., vitr. hillside brick or rein.-con.; adv. this issue.

N. Y., Whitesboro — June 1, improving streets, 2,200 cu.yd. excav., 3,800 lin.ft. curb and gutter, 3,800 cu.yd. concrete pavement, 3,800 lin.ft. 3 in. vitr. tile. To exceed $25,-000. W. G. Stone & Son, Mann Bldg., Utica, engrs.

N. J., East Orange—May 28, by Mayor and Boro Council, curbing and paving 18,-500 sq.yd. North 19th and Oak Sts., Greenwood and Tremont Aves., sheet asphalt, national or warrenite bitulithic, $81,000; furnishing and applying 60,000 gal. or any part thereof bituminous road binder to streets. W. D. Willigerod, City Hall, engr. Noted May 3 and 10.

N. J., Newark—May 31, by T. L. Raymond, dir. Dept. Streets & Pub. Impvts., asphalt resurfacing 88,543 sq.yd. Richlieu and Fessenden Places, Lafayette, Clinton, North 7th, Nursery, Park, Pennington, Somerset, 4th and South 15th Sts., Belmont, Gould, Madison, Summer, Cedar, Isabella, Speedway, Ridgewood and 2nd Aves., Peck Ave. from 2nd to 3rd Aves., Peck Ave. from 2nd to 1st Aves. $285,406.

N. J., Red Bank—June 4, by Boro Council, concrete and sheet asphalt paving Peters Pl., concrete paving Drummond Pl. and Oakland St. G. K. Allen, Jr., 60 Broad St., engr.; adv. this issue.

N. J., Woodbury—See "Railways" under New Jersey.

Pennsylvania—June 7, by State Hy. Dept., Harrisburg, reconstructing 27 mi. and resurfacing 30 mi. roadway. P. D. Wright, state comr.; adv. this issue.

Pennsylvania—June 8, by State Hy. Dept., Harrisburg, reconstructing 21 mi. and resurfacing 36 mi. roadway. P. D. Wright, state comr.; adv. this issue.

Pa., Pottsville—June 12, paving and improving portions of several streets. J. H. Strauch, city engr.; adv. this issue.

Pa., Sharon—May 29, brick or sheet asphalt pavement on concrete, 1,470 sq.yd. Ohio St., 7,200 sq.yd. Elm Ave., 1,630 sq.yd. Woodrow Court, 1,530 sq.yd. Case Ave., 5,930 sq.yd. Highland St., 4,640 sq.yd. Cedar Ave., 2,440 sq.yd. Prindel St. and 12,960 sq.yd. Stambaugh Ave.; resurfacing with sheet asphalt 3,000 sq.yd. South Oakland Ave., 300 sq.yd. South Water Ave.; application of hot asphalt on 5,800 sq.yd. West State St. F. S. Williams, city clk.

Pa., Shenandoah—June 1, paving various streets; adv. this issue.

Delaware—June 6, by State Hy. Dept., at its office, Dover, improving 3.557 mi. highway, on Contr. CK-5, 5.59 mi. Contr. CK-7; 0.738 mi. Contr. CK-12, 6.3 mi. Contr. CK-15, etc.; adv. this issue.

Virginia—June 7, by State Hy. Dept., Richmond, paving, bridging, etc., 4.4 mi. Project F 247, Hanover Co.; 6.6 mi. Project F 166 D, Hanover Co.; 11.07 mi. Project F 157 B, Charles City Co.; 6 mi. Project S 285, Prince Edward Co.; 3.95 mi. Project S 65, Rockbridge Co.; 2 bridges over Craigs Creek, Project S 196, Craig Co.; bridge over Spoon Creek, Project F 227, Patrick Co. H. G. Shirley, chn.; adv. this issue.

West Virginia—June 12, by State Rd. Comn., Charleston, grading, paving and bridges in various counties. E. B. Carskadon, secy.; adv. this issue.

Streets and Roads (Continued)

S. C., Laurens—June 1, by Laurens Co. grading and topsoiling 6 mi. State Route 10, Federal Aid Project 170, 35,606 cu.yd. exca. and 19,332 cu. yd. topsoil.

S. C., Spartanburg—May 31, by Spartanburg Co. Highway Comn., grading and surfacing 1.818 mi. State Route 10, 17,578 sq. yd. asphaltic concrete or sheet asphalt surfacing, 19,165 sq.yd. combination concrete header, curbing and base course or 19,165 sq.yd. concrete, etc., also rein.-con. bridge having three 27 ft. spans, etc., on above road.

Georgia — June 6, by State Hy. Dept., East Point, improving Cornelia-Lula Rd., Hall Co.; 11,691 cu.yd. top soil, 40,637 cu. yd. earth excav., etc.; concrete paving 4 mi. La Grange-West Point Highway, Troup Co. W. R. Neel, c/o State Hy. Dept., Atlanta, engr.

Alabama—June 5, by W. S. Keller, state highway engr., Montgomery, grading and surfacing 1.32 mi. road from Dublin to Orion, Montgomery Co., 79,652 cu.yd. common excav., 28,828 sta.yd. overhaul, alternate bids on surfacing (1) 26,200 cu.yd. gravel, 502,200 cu.yd. ½ mi. units overhaul, (2) 59,770 sq.yd. one course concrete, 16,760 cu.yd. sand-clay shoulders (3) 40,000 cu.yd. sand-clay surfacing; alternate bids on bridges on above road (1) using treated timber, 230,080 ft. treated timber structures, 8,000 lin.ft. treated timber piles, 3,308 sq.yd. 1½ in. bituminous surfacing, cold mix (2) using concrete, 1,669 cu.yd. concrete, 235,581 lb. reinforcing, 3,848 lin.ft. concrete piles, 1,714 sq.yd. 1 in. concrete surfacing, 1:2:3½ mix.

Louisiana—June 5, by State Hy. Dept., Reymond Bldg., Baton Rouge, grading, gravel surfacing, and bridge on 11.35 mi. Project 89, Sect. A, Point Coupee Parish. J. M. Fourmy, ch. engr.

O., Cleveland—May 31, grading, curbing and paving West Blvd., Union Ave. S. E., East 82nd and East 84th Sts. To exceed $25,000. R. Hoffman, 618 City Hall, engr.

O., Columbus—May 29, grading, laying necessary water services and sewer connections and paving 4,663 ft. Sydney St., alley west of Chicago Ave., alley north of Vermont Ave., alley north of 4th Ave., alley west of Henry St., second alley north of King Ave., alley north of 3rd Ave. and alley west of Galloway Ave., brick, concrete or asphalt. R. H. Simpson, city engr.

O., Columbus—May 31, by Franklin Co., grading and waterbound macadamizing 2.95 mi. Hard Rd., 16 ft., Perry and Sharon Twps., $61,344; 0.85 mi. Harrison Rd., 18 ft., Franklin Twp., $14,930. C. C. Lattimer, Court House, co. surv.

O., East Cleveland (Cleveland P. O.)—June 15, by C. A. Carran, city mgr., improving various streets; adv. this issue.

Ind., Boonville—June 5, by Comrs. Warrick Co., grading and gravel surfacing highway in Anderson Twp. $44,661. H. G. Whittinghill, aud.

Ind., Boonville—June 7, by Auditor Warrick Co., paving 42,681 sq.yd. Leslie Rd., waterbound macadam, $93,900; grading and gravel surfacing 2.6 mi. Wieble Rd., 18 ft. $25,050. S. Bohanan, Boonville, engr.

Ind., Evansville—June 7, by Auditor Vanderburgh Co., concrete paving 80,626 sq.yd. Henderson Rd. $209,628. R. W. Meissinger, Evansville, engr.

Ind., Jeffersonville—June 1, by Comrs. Clark Co., resurfacing 5.7 mi. William Schleicher Rd., Wood Twp. $71,465. K. P. Barnes, co. surv. Noted May 10.

Ind., Laporte—May 26, by Auditor Laporte Co., concrete paving 45,317 sq.yd. Emery Rd., $117,825; 150,382 sq.yd. Johnson Rd., $390,992. P. Summy, Laporte, engr.

Ind., Liberty—June 6, by Auditor Union Co., grading and gravel surfacing 19,272 ft. Kauffman Rd., 18 ft. $30,740. E. J. Douthit, Liberty, engr.

Ind., Portland—May 31, by Auditor Jay Co., stone paving 15.38 mi. Ed. Snyder, Frost, Learned, Stow and Bishop Rds., 18 ft. $137,630. H. Teeters, Portland, engr.

Ind., Rockport—June 5, by Auditor Spencer Co., grading and gravel surfacing 21,221 ft. Haines Rd., 18 ft. $38,657. Z. X. Bennett, Rockport, engr.

Ind., Rockville—June 5, by Comrs. Parke Co., gravel surfacing 14,245 ft. B. A. Wimmer Rd., Adams Twp. $26,395. L. Bramblett, aud.

Ind., Rushville—June 7, by Rush Co., paving 26,850 sq.yd. Jesse Havens Rd., waterbound macadam. $52,565. F. Catt, Rushville, engr.

Mich., Flint—May 28, by Genesee Co. Rd. Comn., grading and surfacing 0.857 mi. Morris St. in Mt. Morris, and 1.128 mi. Center St. in Otisville, both 18 ft. concrete. J. H. Dennis, co. engr.

Mich., Flint—May 29, by Genesee Co. Rd. Comn., grading and surfacing 0.998 mi. State St. in Montrose and 1.018 mi. Bridge and Broad Sts. in Linden, both 18 ft. concrete. J. H. Dennis, co. engr.

Ill., De Kalb — June 1, by Bd. Local Impvts., concrete paving 20,340 sq.yd. Franklin, Grove, 7th and 11th Sts. $75,000. W. M. Hay, Sycamore, engr.

Ill., Edwardsville—May 26 by Bd. Supvrs. Madison Co., concrete paving road from St. Jacobs to Marine, 42,240 sq.yd. concrete, 14,080 cu.yd. excav. $135,000.

Ill., Sycamore — May 31, by Bd. Local Impvts., concrete paving 5,700 sq.yd. Charles St. and 1,920 sq.yd. Elmwood St. $30,000. W. M. Hay, city engr.

Wisconsin—May 31, by State Hy. Comn. at div. office 6, First Natl. Bank Bldg., Superior, surfacing, etc. Hayward-Minog Rd., Washburn Co., 18,275 cu.yd. topsoiling; Couderay-Hayward Rd., Sawyer Co., 16,016 cu.yd. topsoiling; Frederick-Luck Rd., Polk Co., 4,257 cu.yd. gravel; Bruce-Radisson Rd., Rusk Co., 1,985 cu.yd. topsoiling, also twin span 45 ft. concrete girder bridge. A. R. Hirst, Madison, highway engr.

Wis., La Crosse—June 8, by Bd. Pub. Wks., paving 12 streets, 3 in. brick, asphaltic concrete using natural lake asphalt with asphalt seal coat; same with cement finish; same using manufactured asphalt and asphalt seal coat; same using manufactured asphalt and cement finish, warrenite bitulithic. E. C. Blake, City Hall, engr.

Wis., Madison — May 29, by State Hy. Comn., at div. office 6, 213 South Barstow St., Eau Claire, grading and surfacing Wilson-Knapp Rd., 1,929 cu.yd. gravel, St. Croix Co.; Baldwin-Knapp Rd., 4,267 cu.yd. gravel, St. Croix Co.; Chelsea-Westboro Rd., 5,610 cu.yd. gravel, Taylor Co.; Niellsville-Humbird Rd.,, 1,043 cu.yd. shale (State aid portion(5,321 cu.yd. granite (Federal aid portion) Clark Co.

Wis., Madison—See "Bridges."

We recently asked some of our friends to tell us how they used Construction News. The response was hearty and helpful. This is to thank them

Wis., South Milwaukee—May 29, by Bd. Pub. Wks., 19,800 sq.yd. bituminous, brick or asphalt paving, 4,500 cu.yd. grading and bridge on Rawson Ave., incl. 530 cu.yd. concrete. G. Staal, city engr.

Ia., Albia—June 1, by Auditor Monroe Co., grading 9 mi. from here northwest, and 1 mi. on Albia Rd. extension to Primary Project, 124,360 cu.yd. excav. $30,000. E. Seidel, co. engr.

Ia., Eldora—May 31, by Auditor Hardin Co., grading and gravel surfacing 11.9 mi. Garden City, Steamboat Rock-Cleve and Hubbard-Lawn Hill Rds., 26 ft., 72,080 cu. yd. excav. and 95,702 cu.yd. gravel. J. H. Maher, co. engr.

Ia., Lake City—June 1 by City Clerk, 25,000 sq.yd. concrete paving, 600 lin.ft. straight and 10,500 lin.ft. combined curb and gutter, 4,300 cu.yd. excav., etc. $80,000. W. E. McClure, Rockwell City, engr.

Ia., Osage—May 29, by Auditor Mitchell Co., gravel surfacing 13.175 mi. primary road west and northwest of here, 26 ft. 20,-550 cu.yd. gravel, etc. C. P. Goplerud, co. engr.

Ia., Rockwell City—May 29, by Auditor Calhoun Co., surfacing 14.5 mi. road, 26 ft., 21,750 cu.yd. gravel, etc. W. E. McClure, co. engr.

Ia., Sioux City—May 29, by Auditor Woodbury Co., grading 16.21 mi. road from Moville east toward Correctionville, 26 ft., 247,000 cu.yd. excav. $65,000. J. C. McLean, co. engr.

Ia., Waterloo—June 4, for new paving, resurfacing, etc. R. B. Slippy, city engr.; adv. this issue.

Minn., St. Paul—June 4, by G. J. Ries, aud. Ramsey Co., and B. Wallner, city clk. of West St. Paul, paving South Wabasha and Dodd Rd., Joint Project 23-51, in Dakota Co., 9,893 sq.yd. one course concrete, 2,375 cu.yd. excav., 1,180 lin.ft. straight and radius curb, etc. $30,000. P. N. Coates, 900 Guardian Life Bldg., St. Paul, co. surv.

N. D., Fessenden—June 1, by Auditor Wells Co., 18.067 mi. earth road, 9 acres clearing and grubbing, 122,965 cu.yd. excav., west of Dover; also 16.8 mi. earth road, 35,264 cu.yd. excav., north and south of Harvey. W. G. Black, c/o State Highway Dept., Bismarck, engr.

Mo., University (St. Louis P. O.)—June 12, paving ½ mi. Delmar Blvd., 36 ft., wood block or asphalt; center of street car tracks to be paved with dressed granite. $35,000. W. A. Heimbuecher, 7250 Shaftesbury St., engr. Noted Mar. 15.

Tex., Ft. Worth—May 31, by Tarrant Co., gravel surfacing 9.51 mi. Forest Hill-Rendon Rd., 14 ft. $35,000. D. A. Davis, co. engr.

Tex., Glen Rose—May 31, by Somervell Co. grading, gravel surfacing, etc., 5.86 mi State Highway 10-A, 16 ft., $38,000; 3.42 mi. State Highway 3, 18 ft. base, 16 ft bituminous top, $69,935. A. C. Pancoast, co.

Tex., Paris — May 29, by W. Dewey, judge Lamar Co., grading and gravel surfacing, etc., 7.58 mi. State Highway 19, 12 ft., $54,205; furnishing, hauling, spreading, etc., 6,500 cu.yd. gravel on State Highway 35, $30,000; grading and concrete paving 4.05 mi. State Highway 19, 18 ft., $110,000; paving with 1 course concrete, 1.59 mi. State Highway 5, 18 ft., $48,000. W. M. Fooshee, co. engr.

Tex., Richmond—June 4, by C. D. Myers, judge Fort Bend Co., grading and constructing 18 bridges, over 20 ft. span, on 15.14 mi. State Highway 3, 30 ft. $158,380. C. H. Kendall, co. engr.

Tex., San Antonio—May 31, by A. McCloskey, judge Bexar Co., grading, gravel surfacing and 1 in. bituminous topping 3.42 mi. State Highway 3, 18 ft. base, 16 ft. top. $69,935. A. C. Pancoast, co. engr.

Okla., Oklahoma City—May 29, by City Clerk, grading and paving 1 mi. Agnew Ave. 22,500 sq.yd. asphalt, 9,000 lin.ft. concrete curbing, etc. $95,000. B. M. Hart, city engr.

Washington—June 12, by State Hy. Comn. Olympia, gravel surfacnig 15 mi. Ocean Beach Highway from Palix to Nasel, Pacific Co.; grading and gravel surfacing 5 mi. Sunset Highway from Falls City to Snoqualmie, King Co. J. Allen, state highway engr.

California—June 4, by State Hy. Comn., Sacramento, grading and concrete paving 1 mi. highway between Fish Canyon Rd. and Azusa, Los Angeles Co. R. M. Morton, state highway engr.

Calif., Fresno — City Council receiving bids grading, concrete curbing, guttering, sidewalks and paving Poplar Ave. between Olive and Elizabeth Sts., 34,054 sq.ft. grading, 31,160 sq.ft. asphalt, etc. W. Stranahan, city engr. Noted Apr. 26.

Calif., Los Angeles—June 11, by Bd. Pub. Wks., grading and paving road between Coast Blvd. and Hyperion Sewage Plant, 34,132 cu.yd. excav., 63,766 sq.ft concrete. Noted May 17.

Calif., San Rafael—June 5, by Supervs. Marin Co., grading Manzanita and Bolinas Co. Rds., 18,780 cu.yd. excav., etc.; Steep Ravine Bolinas Rd., 15,139 cu.yd. excav., etc.

Calif., Taft—City Council receiving bids curbing, sidewalks and surfacing 4th St., 67,000 sq.ft. 1½ in. warrenite on 3½ in. black base, etc. $25,000. E. M. Lynch, Central Bldg., Los Angeles, engr.

Ont., Sandwich—May 28, by W. P. Coyle, clk. Essex Co., 2 mi. pavement in Sandwich West Twp. and ¾ mi. in Mersea Twp., both 18 ft. wide, 29,000 sq.yd. rein.-con. $85,000. J. J. Newman, Davis Blk., Windsor, engr.

British Columbia—May 31, by Minister of Pub. Wks., Victoria, grading 1 mi. road, 18 ft., between Stewart and Hyder on Alaska boundry. $35,000. P. Philip, Dept. Pub. Wks., Victoria, engr.

BIDS RECEIVED

Mass., Holyoke — Bd. Pub. Wks., resurfacing, with asphalt, Main, Cabot, Lyman and Dwight Sts., from Daniel O'Connell Sons, 480 Hampden St., $1.50 per sq.yd. for 2½ in., and $1.55 for 3 in. Engrs. est. $30,000. Noted May 3.

New York—F. S. Greene, comr. State Hy. Dept., Albany, May 16, improving and reconstructing 2.52 mi. Highway 5684 Chatham-Valatie, Part 1, Columbia Co., from Lane Constr. Corp., 37 Colony St., Meriden, Conn., $114,978, engrs. est. $121,315; 3.14 mi. Repair Contr. 3050, Ulster-Delaware, Part 3, Ulster Co., and 3.94 mi. Highway 1666 Glens Falls-East Lake George, Part 1, Warren Co., from E. J. Anderson, Albany, (street address not available) $118,570 and $130,527 respectively, engrs. ests. $119,983 and $135,508 respectively; 3.38 mi. Higkway 1577-A West Corners-Redwood, Jefferson Co., from McCarthy & Rock, Antwerp, $146,009, engrs. est. $124,-775; 2.83 mi. Repair Contr. 1369, Gouverneur-Edwards, Part 1, St. Lawrence Co., from Hogeboom & Campfield, Kingston, (street address not available) $128,035, engrs. est. $131,230; 0.92 mi. Highway 1667 Canajoharie Village; Reed, Walnut, Rock and Wheeler Sts., Montgomery Co., from Conroy-Nixdorf Constr. Co., Oneida (street

Streets and Roads (Continued)

address not available) $42,553, engrs. est. $42,573; 4.82 mi. Repair Contr. 1367, Falls Mills-Callicoon, Sullivan Co., from J. H. Gordon, 91 North Pearl St., Albany, $85,770, engrs. est. $93,470; 3.28 mi. Highway 5664 Weedsport-Jordan, Part 1, Cayuga Co., and 4.9 mi. Highway 1669, Wolcott-Savannah, Parts 1 and 2, Wayne Co., from F. H. Wells, Savannah, $130,470 and $184,357 respectively, engrs. ests. $135,540 and $197,727 respectively; 1.35 mi. Repair Contr. 1368, Watkins-Yates Co. line, Schuyler Co., from L. H. Willis and F. A. Frost, Watkins, $54,-111, engrs. est. $58,195. Noted May 3.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, May 16, grading (1) Bath Ave., sheet asphalt paving (2) Cedar Pl. (3) Clara St. (4) East 10th St. (5) East 37th St. (6) Tapscott St. (7) Union St. (8) 10th Ave. (9) 17th Ave. (10) 19th Ave. (11) 70th St. (12) 78th St., curbing and paving (13) Linden St., from Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., (1) $10,318 (5) $5,111; Borough Asphalt Co., 1301 Metropolitan Ave., (2) $10,617 (7) $7,939; Uvalde Asphalt Paving Co., 1 Bway., New York, (3) $4,959 (6) $6,001 (12) $8,034; Cranford Co., 52 9th St., (4) $9,848 (8) $3,582 (9) $11,534 (10) $3,922 (11) $7,412; Necaro Co., Inc., 97 Court St., (13) $84,317. Noted May 10.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., May 16, curbing, recurbing, flagging, reflagging and asphalt paving (1) Clinton Ave. (2) Perry Ave., asphalt paving (3) Ditmars Ave. (4) 4th Ave., grading, curbing and laying sidewalks on (5) Locust St., from Uvalde Asphalt Paving Co., 1 Bway., New York, (1) $19,764 (2) $24,144 (3) $24,800 (4) $13,687; A. A. Johnson Corp., Queens Blvd., (5) $12,478. Noted May 10.

N. Y., Syracuse—Bd. Contr. & Supply, May 15, paving Renwick, Oakwood and East Raynor Aves., (a) asphalt (b) bituminous concrete, from F. J. Baker, University Blk. (a) $20,973; G. B. Dickinson, Union Bldg., (b) $20,767.

N. J., Newark — Curbing and paving Eaton Pl. and Grand Ave., from Standard Bitulithic Co., 50 Church St., New York City, $14,676 and $10,994 respectively; Freeman Ave., from Franklin Contg. Co., 20 Washington Pl., $10,241. Noted May 10.

Pa., Ebensburg—Comrs. Cambria Co., May 16, rebuilding 17,902 ft. Cresson Pike Rd., brick on concrete, from Bell Bockel Co. Inc., 543 Vine St., Johnstown, $202,982. Noted May 3.

Pa., Erie—Asphalt pavements on 29th St., from J. and M. Doyle Constr. Co., Erie, $11,232; Cherry St., from M. A. McCormick, Erie, $20,554.

Maryland—State Rds. Comn., Baltimore, May 15, concrete surfacing 3 mi. Contr. M-25A, Montgomery Co., from G. B. Mullin Co., 1296 Upshur St., N. W., Wash., D. C., $31,469; 9,200 sq.yd. Contr. AA-32, Anne Arundel Co., from F. W. Steahle & Bro., Annapolis, $36,665; 17,900 sq.yd. Contr. K-22, Kent Co., from Old Line Constr. Co., Chestertown, $50,968; 12,500 sq.yd. Contr. Ho-33, Howard Co., from Thomas, Bennett & Hunter, Westminster, $67,391; 9,800 sq. yd. Contr. M-41, and 9,400 sq.yd. Contr. M-37, Montgomery Co., from M. J. Grove Lime Co., Lime Kilns, $37,976 and $30,715 respectively; 7,100 tons rein.-con. base and 7,000 tons bituminous macadam surface, Contr. W-25, Washington Co., from H. W. Kaylor, Hagerstown, $89,820; 12,300 sq.yd. concrete surfacing Contr. Ce-44, and 19,-300 sq.yd. Contr. Ce-46, Cecil Co., from Broad Creek Constr. Co., Elkton, $40,576 and $52,736 respectively; 18,500 sq.yd. Contr. G-25, Garrett Co., from F. A. Dennison Co., 260 10th St. N. W., Wash., D. C., $69,433. Noted May 3.

Md., Baltimore—Bd. Awards, May 16, 11,725 sq.yd. concrete and 610 sq.yd. vitr. block, Contr. 235 OCNA, from Ryan Constr. Co., Real Estate Trust Bldg., Phila., $36,-742; 42,090 sq.yd. vitr. block, etc., Contr. 236 OCNA, from P. Flanigan & Son, Hartford Rd. and Baltimore & Ohio R.R., $207,-675. Noted May 10.

Ky., Ludlow—Paving 3,000 ft. Elm St., from Henkel & Sullivan, 105 Bell Block, Cincinnati, O., using bitulithic pavement $16,047, rein.-con. $16,322, brick $20,997, granite $32,822; Murdock Constr. Co., 4611 Main St., Norwood O., brick $19,967. Noted Apr. 26.

O., Columbus—Franklin Co., 2.78 mi. Harbord Rd., 18 ft., Sharon and Blendon Twps., from D. W. Botkins & Son, 767 South 22nd St., oil $78,664, tar $80,503; 1.46 mi. Borror Rd., 18 ft., Jackson Twp., from Kinnear & Barricklow, Central National Bank Bldg., waterbound macadam $30,358. Noted May 10.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, May 11, paving roads (1-53-14 Massac) means Bond Route 1, Federal Aid Project 53, Sect. 41, Massac Co. (1) 4.93 mi. 1-53-41 Massac (2) 3.7 mi. 2-0-76 Winnebago (3) 2.68 mi. 4-0-11 Livingston (4) 3.17 mi. 7-55-12 Bureau (5) 3. 65 mi. 7-55-13 Bureau (6) 0.38 mi. 7-7-1-3 La Salle (7) 0.92 mi. 8-0-2C Warren (8) 6.06 mi. 13-57-8 Saline Co. (9) 3.7 mi. 30-64-12 Stark (10) 2.68 mi. 4-Comb. A-1 Livingston (incl. 1 bridge) (11) 6.82 mi. 7-Comb. B Bureau; grading (12) 53,590 cu.yd. 1-0-2A White (13) 37,140 cu.yd. 1-0-3A White (14) 152,230 cu.yd. 1-0-28A White (15) 87,560 cu.yd. 1-0-38A Johnson (16) 198,990 cu.yd. 1-0-39A Massac (17) 89,165 cu.yd. 1-0-40A Massac (18) 56,665 cu.yd. 2-0-21A Fayette (19) 122,595 cu.yd. 2-0-22A Fayette (20) 118,745 cu.yd. 2-0-37A Ogle (21) 4,920 cu.yd. 2-0-43A Christian (22) 7,790 cu.yd. 2-0-44A Christian (23) 18,775 cu.yd. 2-0-45A Christian (24) 8,655 cu.yd. 2-0-46A Christian (25) 10,165 cu.yd. 2-0-47A Macomb (26) 51,865 cu.yd. 2-0-48A Macomb (27) 34,355 cu.yd. 2-0-55A McLean (28) 47,585 cu.yd. 2-0-62A McLean (29) 41,980 cu.yd. 2-0-63A McLean-Woodford (30) 49,805 cu.yd. 3-0-19A Rock Island (31) 49,264 cu.yd. 3-0-52A Greene (32) 133,090 cu.yd. 3-0-59A Jersey-Madison (33) 41,790 cu.yd. 3-0-60A Madison (34) 19,815 cu.yd. 3-0-67A Monroe (35) 66,510 cu.yd. 3-0-74A Randolph (36) 89,560 cu.yd. 3-0-75A Randolph (37) 44,590 cu.yd. 5-0-24A Jo Daviess (38) 87,025 cu.yd. 5-0-25A Jo Daviess (39) 26,215 cu.yd. 5-0-26A Jo Daviess (40) 275,-600 cu.yd. 7 and 29-7R Bureau (41) 27,920 cu.yd. 7-55-R1 Bureau (42) 16,645 cu.yd. 7-55-14A Bureau (43) 202,470 cu.yd. 12-0-9A Richmond-Clay (44) 68,845 cu.yd. 12-0-13A Marion (45) 222,445 cu.yd. 16-0-21A Montgomery (46) 62,865 cu.yd. 24-0-4A Christian (47) 36,650 cu.yd. 25-0-10A Wayne (48) 79,115 cu.yd. 28-0-10A Henry (49) 27,725 cu.yd. 33-0-1A Crawford (50) 107,720 cu.yd. 34-0-1A Saline (51) 69,130 cu.yd. 34-0-2A Saline (52) 140,788 cu.yd. 34-0-3A Pope-Hardin (53) 65,858 cu.yd. 34-0-4A Hardin (54) 279,085 cu.yd. 34-0-5A Hardin (54a) 34,320 cu.yd. 3-0-69A Monroe (54b) 30,726 cu.yd. 3-0-70A Randolph-Monroe (55) 242,960 cu.yd. 1-0-Comb. C White (56) 375,715 cu.yd. 1-0-Comb. D Johnson-Massac (57) 179,260 cu.yd. 2-0-Comb. E. Fayette (58) 102,170 cu.yd. 2-0-Comb. H Christian-Macomb (59) 89,565 cu.yd. 2-0-Comb. I McLean-Woodford (60) 174,880 cu. yd. 3-0-Comb. J Jersey-Madison (61) 156,-070 cu.yd. 3-0-Comb. K Randolph Co. (62) 157,830 cu.yd. 3-0-Comb. L, Jo Daviess (63) 320,165 cu.yd. 7-0-Comb. M Bureau (64) 344,943 cu.yd. 34-0-Comb. O. Hardin (65) 662,581 cu.yd. 34-0-Comb. P Saline-Pope-Hardin, from M. Hayes & Son, Janesville, Wis., (1) $125,003 (11) $178,800. G. Welch, Beloit, Wis. (2) $69,120. Trompeter & Sons, Peru, (6) $12,722. Monmouth Gate and Mfg. Co., Monmouth, (7) $26,441. C. E. Hamilton, Carbondale, (8) $135,850. C. S. Upham, Pontiac, (3) $60,556 (10) $92,-246. Harrison Eng. & Constr. Co., Wichita, Kan. (street address not available) (4) $83,013 (5) $97,077. McElwee & Rogy, Peoria, (9) $88,908. Cameron, Joyce & Co., Keokuk, Ia. (24) $11,695 (27) $17,566 (55) $130,405 (62) $104,050. F. E. Harvey & Co., Memphis, Tenn. (street address not available) (14) $80,435. C. B. Mautz, Benton, (12) $34,374 (13) $18,875. Buis & Olson, St. Joseph, (17) $48,042 (56) $168,000. H. Schwitzer, Marion, (15) $40,969 (54a) $23,258 (54b) $23,773 (52) $68,552. Cash Valley Dredging Co., Karnak, (16) $72,282. S. J. Groves & Sons Co., Globe Bldg., Minneapolis, Minn., (37) $32,014 (38) $52,794 (40) $166,460 (41) $14,164 (42) $8,361. Jenner Bros. Co., Davenport, Ia. (20) $92,-639. C. T. Lair, New Canton, (23) $9,117 A. D. Haum, Richview, (21) $1,763 (22) $2,484. W. C. Meneely Co., 709 North Clay St., Frankfort, Ind., (58) $59,300 I. T. May, 2255 North Union St., Decatur, (25) $12,-231. W. Ammon & Sons, Decatur, (street address not available) (26) $17,827. E. P. Olson, 2901 Monterey St., St. Joseph, Mo., (28) $29,153 (29) $15,057 (59) $39,153. Lamoreaux Bros., 805 Brandeis Theatre Bldg., Omaha, Neb. (30) $25,843 (63) $200,-000. List & Gifford Constr. Co., 415 Ry. Exch. Bldg., Kansas City, Mo., (33) $22,-686. Armstrong Eng. & Constr. Co., Taylorville, (31) $50,999 (46) $23,951. Tripp Bros., Belleville, (34) $18,745 (35) $30,789 (36) $45,540 (61) $74,767. Gates Bros., (address not available) (32) $87,346. J. Adelhofea, Potosi, Wis. (39) $26,435. W. C. Johnson, 512 South High St., Belleville, (18) $24,276 (19) $47,595 (43) $24,188 (57) $71,-000. L. Rich Constr. Co., Metropolitan Bldg., East St. Louis, (50) $49,911 (51) $42,051 (53) $51,362 (54) $143,565 (65) $325,176 Scott & White, Merchant's-Laclede Bldg., St. Louis, Mo. (60) $113,649 Ill & Wilson, Rushville, (64) $230,642. M. Frazier, Louisville, (47) $14,591. Ransom-Sherwood (address not available) (48) $15,620. R. A. Baum, Paris, (49) $18,364. General Constr. Co., Syndicate Trust Bldg., St. Louis, Mo. (45) $23,823. Noted May 3.

Mo., Clayton—St. Louis Co., May 9, grading and paving 12,575 sq.yd. Ozard Trail, from Coopers Constr. Service Co., Federal Reserve Bldg., St. Louis, $37,239. Noted May 3.

Tex., Hemphill — Sabine Co. grading, gravel surfacing, etc., 9,632 cu.yd. State Highway 21, from R. H. Minturn, Hemphill, $39,145. Engrs. est. $45,000. Noted May 3.

Ariz., Tucson—Grading 6 mi. streets south of 17th St. and west of 6th Ave., from G. B. Singleton, Tucson, 49,000 cu.yd. excav. $0.82, 20,000 sta.yd. overhaul $0.05, 72 survey monuments $12.50.

Calif., Berkeley—Grading, curbing, guttering and paving Alcatraz Ave. between Adeline and east city limits, from Hutchinson Co., 1706 Bway., Oakland, 25,800 sq.ft. grading $0.065, 21,600 sq.ft. 7 in. asphaltic concrete pavement $0.31, 1,560 ft. curb and gutter $1.60, etc.

Calif., Los Angeles—Improving Western Ave. between Slauson and Manchester Aves., from Tyron & Brain, Tajo Bldg., lump sum for grading $25,000, 673,600 sq.ft. 6 in. concrete pavement $0.242, 1,217 ft. heavy curb $0.65, 14,940 sq.ft. sidewalks $0.20, sanitary sewer complete $58,000, 18,444 ft. light curb $0.55, total $259,185.

Calif., Visalia—Tulare Co. improving (1) Project A, Lindsay-Tulare Division (a) 67 cu.yd. excav. (b) 940 cu.yd. concrete (c) 1,787 tons asphaltic concrete surfacing (d) 1,191 tons asphaltic concrete base (e) 589 tons asphaltic concrete surfacing (2) Project B, Goshen South Div., (f) 950 cu.yd. excav. (g) 1,148 cu.yd. concrete (h) 2,200 tons asphaltic concrete surface (i) 1,456 tons asphaltic concrete base (j) 730 tons asphaltic concrete surface (3) Project C, Dinuba West, 4 mi., (k) 1,600 cu.yd. excav. (l) 1,948 cu.yd. concrete (m) 3,607 tons asphaltic concrete surface (n) 2,424 tons asphaltic concrete base (o) 1,212 tons asphaltic concrete surface, from C. R. Gurdy, Porterville, (1a) $1 (1b) $6.55 (2g) $6.55; J. A. Dowling, Call Bldg., San Francisco, (1c) $6.80 (1d) $7 (1e) $6.65 (2h) $6.80 (2i) $7 (2j) $6.65; Clark & Henery Constr. Co., 38 South Sutter St., Stockton, (1a) $1; N. Lovelace, Visalia, (2f) $0.90; Valley Paving & Constr. Co., 113 North Court St., Visalia, (3k) $1.25 (3l) $9.75; T. A. Hanrahan, Call Bldg., San Francisco, (3m) $6 (3n) $6 (3o) $6.

CONTRACTS AWARDED

Mass., Boston—Bitulithic paving about 1 mi. Breck Ave., Holton St., Boulevard and Commonwealth Terraces, in Brighton, to S. J. Tomasello, 11 Cushing Terrace, Dorchester (Boston P. O.), $46,891.

Connecticut—State Hy. Comn., Hartford, paving road, 25,000 sq.yd. concrete, in Greenwich, to W. H. Arthur, Washington Bldg., Stamford, $108,000; 6,000 ft. in Glastonbury, 18 ft., waterbound macadam, to D. Arrigoni & Bro., Middletown, $28,000; 4,000 ft. in Westport, 18 ft., bituminous concrete, to Silliman & Godfrey Co., 133 Admiral St., Bridgeport, $43,000.

N. Y., Belmont—Allegany Co. will pave with bituminous macadam 24 mi. highways in towns of Allen, Granger, Hume, Centerville, Genesee, Wirt, Scio, Cuba, Andover, Alma, Angelica, Birdsall, Caneadea, Clarksville, Grove and Willing by day labor under supervision of H. Craig, co. supt. highways, $170,000.

N. Y., Buffalo—To Rock Asphalt Paving Co., Morgan Bldg., asphalt paving Olive St. $18,385, South Elmwood Ave. $24,961, Niagara St. $130,130; to H. P. Burgard Co., 1968 Fillmore Ave., asphalt paving Lathrop St. $18,030, Sanford St. $8,700, Hazel Pl. $15,000, Amsterdam Ave. $11,285, Fleming St. $29,345.

N. Y., Lynbrook—Bd. Trustees Incorporated Village, rein.-con. pavement on certain streets, Contrs. 1, 2 and 3, to Good Roads Eng. & Contg. Co., Portchester (street address not available), $2.65 per sq.yd. Noted Apr. 19.

N. J., Newark — Purchasing Agent Essex Co., grading and paving 31,500 sq.yd. Chancellor Ave., asphalt on concrete, to J. B. Gilligan Casey Co., 919 Broad St., $100,-945. Engrs. est. $110,213. Noted Apr. 12.

N. J., Trenton—Asphalt paving Greenwood, Bellevue, Prospect, Chestnut, Tyrell and Mulberry Sts., to J. J. Barrett, 601 Greenwood Ave., $127,000; cement paving New York, Mulberry and Olden Aves., to A. Delucia, 52 Bayard St., $86,000. Noted May 10.

Maryland—State Rds. Comn., Baltimore, paving 2.22 mi. road, Baltimore City, sheet asphalt, Contr. B-56, to P. Flanigan & Son, Harford Rd. and Baltimore & Ohio R.R. Baltimore, $48,541.

Streets and Roads (Continued)

Md., Baltimore—City Council, paving 9,300 sq.yd. St. Paul St., asphalt, to P. Flanigan & Son, Harford Rd. and Baltimore & Ohio R.R., $49,367; 16,270 sq.yd. Contr. 223 NA, to Baltimore Asphalt Block & Tile Co., 1320 North Monroe St., $73,574. Noted May 10.

Virginia—State Hy. Comn., Richmond, 46,839 cu.yd. excav., Project F 98 A, to W. W. Tuck & Sons, Virgilina, $32,930; 134,086 cu.yd. excav., Project F 281, Route 114, to Clintwood Contg. Co., Clintwood, $135,332; 69,348 cu.yd. excav., Project F 265, Route 11, to R. Martin Co., Salem, $125,342; 2,644 cu.yd. excav., Project F 264, Route 12, to Tunstall Johnston Co., City Bank Bldg., Norfolk, $101,922; 63,617 cu.yd. excav., Project F 266, Route 14, to W. W. Boxley, Roanoke, $75,217; 124,350 cu.yd. excav., Project 287, Route 1141, to Jones & Comb, Abingdon, $120,089; 6,375 cu.yd. excav., Project S 254, Route 12, to T. G. Franklin, Bassett, $39,769; 39,715 cu.yd. excav., Project F 294, Route 21, to W. H. Clarke Co., Charlottesville, $133,394; 48,540 cu.yd. excav., Project F 292, Route 21, to L. W. Johnston, Arlington, $23,332; 18,631 cu.yd. excav., Project 134, Route 14, and 61,232 cu.yd. Project F 227, Route 12, to C. E. Hester, Greensboro, N. C. $22,112 and $49,918 respectively. Noted Apr. 26.

West Virginia—State Rd. Comn., Charleston, grading and rock asphalt surfacing 3 mi. Walton-Kanawha Co. Line Rd., Project 3240, Roane Co., to W. McCormick, 361 Kendall Ave., Youngstown, O., $95,991. 8.7 mi. Mile Branch Rd., Projects 3044, 3179 and 3135, Kanawha Co., to A. Keathley, Prof Bldg., Charleston, $331,515; grading 2.5 mi. Ravenswood-Sandyville Rd., Project 3132 A, Jackson Co., to Cooper, Piper & Co., Charleston (street address not available), $52,683. 6 mi. Alderson-Pence Springs Rd., Projects 3270 and 3056, Summers Co., to Langhorne & Langhorne, 1028 4th Ave., Huntington, $87,217. 5.8 mi. Crum-Bull Creek Rd., Project 3189, Wayne Co., to C. E. Price, 2750 Division St., Huntington, $141,355. 7 mi. New Hall-Virginia Rd., Project 3230, McDowell Co., to J. M. Lipscomb & Bro., Camden-on-Gauley, $110,071. 8.4 mi. Pigeon Creek-Horsepen Rd., Projects 3171 and 3120, Logan and Mingo Counties, to S. T. Waller & Co., Williamson, $218,828. 10 mi. Elk River Rd., Project 3206, Kanawha Co., to Brown & Floyd, Lowenstein Bldg., Charleston, $203,270. 10 mi. Clendenin-King Schools Rd., Project 3231, Kanawha Co., to White & Wood, Roanoke, Va., $219,611. 5 mi. Clintonville-Alta Rd., Project 127 B, Greenbrier Co., to Dougher-Boone Constr. Co., Charleston (street address not available), $90,180. 8 mi. Ravenseye-Rainelle Rd., Project 3185, Fayette Co., to Waugh Bros., St. Albans, $111,720; grading and bituminous macadam paving 5 mi. Hinton-Jumping Branch Rd., Project 1067 A and B, Summers Co., to Dayton Constr. Co., Elkins, $202,413. 6.8 mi. Ansted-Hico Rd., Project 3178, Fayette Co., to H. Renick, Williamsport, O., $246,139. Noted Apr. 12.

W. Va., Huntington—Paving 5th Ave. from 13th to 16th Sts., asphalt filler on 6 in. concrete, to Hatfield Constr. Co., 418½ 10th St., $26,056.

W. Va., Kingwood—Preston Co. paving 1½ mi. Kingwood-Reedsville Rd., bituminous macadam on broken stone, to Rich Constr. Co., Weston, $35,935.

N. C., Albermarle—Paving various streets, 50,000 sq.yd. sheet asphalt, to Asheville Paving Co., Asheville, $165,000.

N. C., Greensboro—Guilford Co. surfacing 4½ mi. Battle Ground Rd., warrenite on 5 in. concrete, to R. G. Lassiter Co., Oxford, $115,000.

S. C., Sumter—Sumter Co. paving 21 mi. Oswego, Wakefield and Pocallo Rds., sheet asphalt on 5 in. concrete, to Pritchard-Raines-Hazelhust Co., Savings Bank & Trust Bldg., Savannah, Ga., Slattery & Henry, Mills Bldg., Greenville, and Powell Paving & Contg. Co., Palmetto Bank Bldg., Columbia. Engrs. est. $600,000.

B. C., Victoria—Paving 1½ mi. Johnson St. from Alston St. to bridge, 8 in. rein.-con., to M. P. Cotton Co. Ltd., Cambie Bridge, Vancouver, $52,688.

Fla., Brooksville—Hernando Co., sand clay surfacing (local material) 20 mi. road in Jeny Kilpatrick Special Road and Bridge Dist., to Mickler & McLeod, Stovall Bldg., Tampa, $70,000. Noted Apr. 26.

Fla., St. Petersburg—Brick paving ½ mi. and concrete sidewalks on 5 mi. roads in Allendale Terrace, Forest Hill Dr., 34th Ave. N., and Euclid Ave. E., to Georgia Eng. Co., St. Petersburg, cost plus percentage basis. Est. cost $30,000.

Tenn., Dyersburg—Paving Main, Connell, McGaughey, Mill and Harton Sts., asphalt, to Rhodes & Eller Paving Co., Capitol Blvd., Nashville, $70,000.

Kentucky—State Hy. Dept., Frankfort, grading 8.867 mi. Pikeville-Floyd Co. Line Rd., State Project 6, Sect. B, Pike Co., to Sutton Constr. Co., Ashland, $159,734. 4.42 mi. East Point-Prestonburg Rd., State Project 6, Sect. A, Floyd Co., to Hunt Forbes Constr. Co., Ashland, $96,677. 19.618 mi. Louisa-Lowmansville Rd., Federal Aid Project 28, State Project 6, Sect. B, Lawrence Co., to Hatfield Constr. Co., 418½ 10th St., Huntington, W. Va., $356,172. 11.297 mi. Paintsville-Lawrence Co. Line Rd., State Project 6, Sect. A, Johnson Co., to M. A. Wheeler, 405 East Scott St., Knoxville, Tenn., $212,189; surface treating 9.416 mi. Whitley City-Tennessee State Line Rd., State Project 22, Sects. B and C, McCreary Co., to Southern Oil & Tar Co., Clay and Fulton Sts., Louisville, $12,387; waterbound macadam paving 9.416 mi. Whitley City-Tennessee State Line Rd., State Project 22, Sects. B and C, McCreary Co., to Connolly Constr. Co., Somerset, $239,894. Noted May 17.

Ohio—Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving roads in following counties: **Adams Co., Sect. "C" W. Union-Hillsboro Rd.**, 5.698 mi., waterbound macadam, to Miller & Miller, Martinsville, $92,053; **Ashland Co., Sect. "D" Ashland-Medina Rd.**, 2.962 mi., brick, to D. A. Phillips & Son, Ashland, $140,729; **Clark Co., Sect. "B" Dayton-Lakeview Rd.**, 1.545 mi., bituminous macadam, asphalt, to H. E. Pratt Constr. Co., Mt. Blanchard, $39,569; **Clark Co., Sect. "1-2" Springfield-Washington C. H. Rd.**, 2.06 mi., concrete, to C. Bird, Springfield (street address not available), $47,855; **Darke Co., Sect. "G" Celina-Greenville Rd.**, 1.999 mi., rein.-con., to Hinton & Smalley, Celina, $58,281; **Erie Co., Sect. "R" Milan-Elyria Rd.**, 1.57 mi., rein.-con., to Homeberger-Wagar Co., Sandusky, $58,300; **Fairfield Co., Sect. "D" Cincinnati-Zanesville Rd.**, 2.766 mi., rein.-con., to Radabaugh-Graham Co., 209 South Cassidy Ave., Bexley, Columbus, $105,326; **Gallia Co., Sect. "H-1" Gallipolis-Jackson Rd.**, 3.8066 mi., bituminous macadam, tar, to Miller Bros., Gallipolis, $112,170; **Hardin Co., Sect. "I" Findlay-Kenton Rd.**, 1.628 mi., Kentucky rock asphalt, to P. B. Putnman, Van Wert, $45,627; **Hardin Co., Sect. "J" Findlay-Kenton Rd.**, 1.81 mi. and **Hardin Co., Sect. "K" Findlay-Kenton Rd.**, 2.996 mi., both Kentucky rock asphalt, to Laubis Stone Co., Kenton, $40,007 and $82,240, respectively; **Huron Co., Sect. "P" Columbus-Sandusky Rd.**, 3.541 mi., to R. M. Myers, Attica, brick, $139,368; **Mercer Co., Sect. "A" Celina-Van Wert Rd.**, 3.776 mi. and **Mercer Co., Sect. "A" Celina-Van Wert Rd.**, .252 mi., both concrete, to Hinton & Smalley, Celina, $87,234 and $5,867, respectively; **Ottawa Co., Sect. "G" Oak Harbor-Genoa Rd.**, 1.357 mi., rein.-con., to H. E. Witte & Son, Elmore, $37,207; **Richland Co., Sect. "C" Mansfield-Wooster Rd.**, 2.624 mi., brick, to Dorsey Constr. Co., Findlay, $153,008; **Tuscarawas Co., Sect. "A" Canton-Canal Dover Rd.**, 3 mi. and **Tuscarawas Co., Sect. "B" Canton-Canal Dover Rd.**, 2.299 mi., both rein.-con., to C. G. Fuller, Canal Dover, $93,877 and $68,650, respectively; **Tuscarawas Co., Sect. "E" Canton-Canal Dover Rd.**, 2.093 mi., rein.-con., to P. Christiansen Sons, 1355 Yale Ave., N. W., Canton, $64,628; **Vinton Co., Sect. "G-3" McArthur-Athens Rd.**, .464 mi., rein.-con., to Mariner & Sands, Athens, $16,233; **Warren Co., Sect. "Mason" Cincinnati-Columbus Rd.**, .87 mi., bituminous macadam, asphalt, to Brunson & Van Horne, Cincinnati (street address not available), $29,864; **Mahoning Co., Sect. "L" Youngstown-Salem Rd.**, 1.001 mi., bituminous macadam, asphalt, to Trumbull Constr. Co., Warren, $10,742; **Columbiana Co., Sect. "Salineville" Wellsville-Salineville Rd.**, .565 mi., grading, to Kane Bros., Lisbon, $17,151; **Vinton Co., Sect. "M" McArthur-Gallipolis Rd.**, grading, etc., to Anderson & Brown, Chillicothe, $25,593; **Portage Co., Sect. "F-2" Ravenna-Louisville Rd.**, 2.59 mi., grading, to W. G. Reimund, Holgate, $8,957; **Ashland Co., Sect. "D"** bridges, to D. A. Phillips & Son, Ashland, $14,070. Noted May 17.

O., Cedarville—Paving 10,000 sq.yd. Main St., brick on concrete, to Lloyd Contg. Co., Xenia, $35,000. Engrs. est. $40,000. Noted Apr. 19.

O., Cleveland—Grading, curbing and paving East 55th St. and Way Ave., 2,650 lin.ft. stone curb and 4 in. tile drain gutter, 1,880 cu.yd. earth excav., 1,190 sq.yd. vitr. brick, 3,330 sq.yr. granite block, 4,520 sq. yd. concrete base, to Rieley Bros., The Arcade, $38,063; Shaw Ave., asphalt, to Highway Constr. Co., 903 Lorain Co. Bank Bldg., Elyria, $14,412; West 9th St. and Henritze Ave., both brick, to Roehl Bros. Paving & Constr. Co., West 25th St., and Clark Ave., $781 and $6,738 respectively; Schrade Ave., brick, to H. G. Herring, Pavers Exch., Society for Savings Bldg., $4,913; East 76th St., brick, to Bentley Bros., Union Bldg., $14,500.

O., Columbus—W. H. Duffy, dir. Pub. Serv., to B. F. Patterson, 1214 Neil Ave., grading, curbing, laying necessary water services and sewer connections and paving with asphalt 1,992 ft. Dunedin Rd. $32,251. 1,030 ft. Irving Way $15,407. 958 ft. Medbrook way $11,486; to R. J. Dienst, 480 South 5th St., concrete paving 577 ft. alley north of Stewart Ave. $6,080. 394 ft. Capitol St. $2,513. 360 ft. Rush alley $3,250. 740 ft. alley west of Glen Echo Dr. $4,080; to Yale Constr. Co., 146 Yale Ave., concrete paving 483 ft. 2nd alley north of Oak St. $2,390. Noted May 10.

Indiana—State Hy. Dept., Indianapolis, concrete paving 48.308 sq.yd. Federal Aid Rd. 49, Sect. B., Steuben Co., to J. C. O'Connor & Son, Ft. Wayne (street address not available), $99,611; 41,609 sq.yd. Federal Aid Rd. 52, Sect. B, Vigo Co., to Kerr & Murphy, Bloomington, $77,273. Noted May 17.

Ind., Evansville—Vanderburgh Co., concrete paving 23,525 sq.yd. Evansville—Princeton Rd., to O. Edmond, Evansville, $63,789. Engrs. est. $65,451. Noted Apr. 5.

Ind., Greencastle—Putnam Co., paving 28,440 sq.yd. C. H. Crosby Rd., waterbound macadam, to W. Dorsett, Greencastle, $50,768, engrs. est. $54,956; 30,660 sq.yd. S. W. Hunter Rd., waterbound macadam, to Hoffstetter, Martin & Higham, Greencastle, $63,724, engrs. est. $68,980. Noted May 17.

Ind., Hammond—Lake Co., grading and graveling 2.95 mi. Fred Schlueter Rd., 18 ft., to Acme Constr. Co., Valparaiso, $25,469. Engrs. est. $28,500. Noted Apr. 5.

Ind., Indianapolis—Asphalt paving 17,736 sq.yd. Illinois St., to Amer. Constr. Co., 420 East 17th St., $32,107. Engrs. est. $36,420.

Ind., Indianapolis—Paving with asphalt on concrete, 42,272 sq.yd. 29th St., to Mansfield Eng. Co., 1011 Fletcher Savings & Trust Co., $96,017, engrs. est. $103,000; 21,686 sq.yd. Columbia Ave., to Indiana Asphalt Paving Co., 2810 Columbia Ave., $43,384, engrs. est. $47,000; 15,530 sq.yd. Bancroft St., to Union Asphalt Constr. Co., Lemcke Bldg., $30,315, engrs. est. $34,220; 9,888 sq.yd. Delaware St., to Indiana Asphalt Paving Co., Columbia Ave., $25,453, engrs. est. $28,420.

Ind., Indianapolis—Marion Co., paving 2.9 mi. Schilling Rd., 30 ft., gravel and stone, to W. P. Rigdon, Fountaintown, $30,412. Engrs. est. $32,636. Noted May 17.

Ind., Rochester—Fulton Co., grading and gravel surfacing 3.9 mi. County Line Rd., 18 ft., to W. O'Connor, Culver, $25,888. Engrs. est. 28,210.

Ind., Terre Haute—Concrete paving 10,431 sq.yd. Cherry St., to Foulkes Co., 705 Ohio St., $27,120. Engrs. est. $34,000.

Ind., Winchester—Randolph Co., concrete paving 36,911 sq.yd. Bailey Rd., to Dull Bros., Arcanum, O., $68,895. Engrs. est. $72,107.

Wis., Elkhorn—Walworth Co. Road and Bridge Com., gravel surfacing Delavan-Millard Rd., to H. Johnson, Stoughton, $15,307; East Troy-Beulah Rd., (Janesville Plank), to F. C. Wiswell, Elkhorn, $11,902.

Wis., Milwaukee—Dept. Pub. Wks. paving various streets, etc., to Milwaukee General Constr. Co., 427 Mitchell St. 1,455 ft. concrete curb and gutter, on Clarence St. $1,662; to Dean Constr. Co., 382 East North Ave., 1,788 ft. concrete curb and gutter on Pryor Ave. $2,119; to Kroening Constr. Co., 39th Ave. and Mitchell St., 9,050 sq.yd. concrete on Austin St. $26,865. 1,206 sq.yd. concrete on Montana St. $4,379. 8,234 sq.yd. vibrolithic concrete on Bishop Ave. $24,829; to A. Retzloff, 948-4th St., 3,722 sq.yd. concrete on Ische Pl. $16,694; to Badger Constr. Co., 97 Wisconsin St., 35,872 sq.yd. asphaltic concrete, 152,594 sq.ft. cement walks on 44th, 45th, 47th, 48th and 50th Sts. $131,592. 428 sq.yd. asphalt on Meinecke Ave. $2,006. 3,437 sq.yd. asphalt on 10th St. $15,118. 3,687 sq.yd. asphalt on Wright St. $16,324.

Wis., Milwaukee—Milwaukee Co. Road and Bridgee Com., concrete surfacing, etc., Wauwatosa Ave. No. 3, to J. Bluhm & Sons, 1298 Achilles Pl., $76,870; Lovers Lane Rd. No. A, to Milwaukee General Constr. Co., 427 Mitchell St., $83,326; Rawson Ave. No. 1, to R. H. Gumz, 831 13th Ave. $48,436. Noted May 10.

Ia., Clear Lake—For 28,035 sq.yd. concrete paving, 2,224 lin.ft. curb and 3,588 cu. yd. excav., to Anderson & Emple Constr.

Streets and Roads (Continued)

Co., Tremont Blk., Marshalltown, $69,159. Noted Apr. 19

Ia., Harlan—Sheet asphalt paving 25 blocks, to Western Asphalt Paving Corp., 1st and Nebraska Sts., Sioux City, $2.78 per sq.yd. Engrs. est. $75,000. Noted Jan. 11.

Minn., Minneapolis—Bd. Park Comrs., laying 101,000 lin.ft. colored concrete curb, to Nelson-Endbloom Constr. Co., 917 Plymouth Bldg., $0.45 per ft. Noted May 10.

Kan., Hiawatha — Brown Co. grading Federal Aid Project 151, to Roberts & Reynolds, Sabetha, $39,403. Noted Apr. 12.

Mont., Glendive — Grading and paving 0.97 mi. Merrill Ave., Federal Aid Project 199, 10,000 sq.yd. paving and 4,000 cu.yd. excav., to McGuire & Blakeslee, Great Falls, $44,994. Noted Mar. 29.

Mont., Helena—Bitulithic resurfacing 15 blocks Main, 6th and State Sts., Neill Ave. and Bway., to Birch & Sons, Ford Bldg., Great Falls, $45,118. Noted May 3.

Mo., St. Charles—St. Charles Co. will grade and construct bridges on Marthasville Rd. from Femme Osage Creek to Matson $21,234, grade, bridges and gravel surface Marthasville Rd. from junction between Howell and Hamburg to Femme Osage Creek $27,809, gravel surface Black Walnut Rd. from line of St. Charles and Portage des Sioux Twps. to Portage des Sioux $64,445, grade Marthasville Rd. from Augusta to Warren Co. line $6,355, bridges on Marthasville Rd. from Callaway Creek to Augusta city limits, $20,587, by force account under direction of F. R. Jacoby, co. engr.

Mo., St. Louis—Bd. Pub. Serv., City Hall, May 15, to Eyerman Constr. Co., 1216 South Grand Ave., concrete paving 715 sq.yd. alley C. B. 2953 $1,943, 1,575 sq.yd. C. B. 4067 $4,128, 950 sq.yd. C. B. 4711 $2,612, 865 sq.yd. C. B. 5643 $2,349, 1,850 sq.yd. C. B. 5665 $5,033, 2,020 sq.yd. C. B. 5666 $5,469; to F. A. Stiers, 4500 Enright Ave., 520 sq.yd. C. B. 3710B $1,630; to Hoffner Coal & Constr. Co., 715 South Vandeventer St., 660 sq.yd. C. V. 4427 $3,037, 1,430 sq.yd. C. B. 4501-N $3,925, 1,775 sq.yd. C. B. 5013-E $4,870, 1,730 sq.yd. C. B. 5143 $4,474, 580 sq.yd. C. B. 5257 $1,513; to Blackburn & Creamer, Syndicate Trust Bldg., 1,305 sq.yd. C. B. 5545 $3,743, 1,305 sq.yd. C.B. 5578 $3,982, 935 sq.yd. C. B. 5659 $2,405. Noted Apr. 26.

Tex., Uvalde—Uvalde Co., grading, gravel surfacing, etc., 14.11 mi. San Antonio-Del Rio Highway, 18 ft., to Evans & Greathouse, West 6th St., Austin, $37,368; rein.-con. drainage structures for above, to M. H. Ryland, Uvalde, $9,712; 41,729 cu.yd. gravel to be furnished by county. Engrs. est. $60,000. Noted Apr. 12.

Oklahoma — State Hy. Dept., Oklahoma City, grading and gravel surfacing 4.5 mi. Federal Aid Project 58, Wagoner Co., 22,000 cu.yd. excav., 55,000 sq.yd. gravel, and 6.5 mi. Federal Aid Project 57, Mayes Co., 31,000 cu.yd. excav., 70,000 sq.yd. gravel, to Froebe, Grovelle, Hamblin Co., Muskogee, $56,091 and $75,514 respectively.

Nevada—State Hy. Dept., Carson City, grading, gravel surfacing, etc., Winnemucca-Toll House Rd., Humboldt 8-A, Federal Aid Project 76, Humboldt Co., Contr. 76, to K. Hodgman, Klamath Falls, Oregon, $88,919; Toll House-Paradise Hill Rd., Humboldt 8-B, Federal Aid Project 71, Humboldt Co., Contr. 77, to J. Ross, Yerington, $71,055. Noted May 17.

Ore., Portland—For 2 in. asphaltic concrete pavement on 4 in. concrete, to A. D. Kern, Railway Exch. Bldg., East 55th St. $2,493, East 58th St. $7,560 and East 59th St., $9,747; to Municipal Asphalt Paving Co., City Hall, East 24th St. $8,267, East 21st St. $8,007, East 22nd St. $5,506, Killingsworth Ave. $1,225 and 32nd Ave. $2,795. Noted Apr. 19.

Calif., Anaheim—Improving Miles Park Tract, to Griffith Co., Los Angeles Ry. Bldg., Los Angeles, 240,000 sq.ft. 1½ in. asphaltic concrete surface on 3½ in. asphaltic concrete at $0.22 per sq.ft., 49,000 sq.ft. walks $0.18, 12,309 ft. curb $0.50, etc., total $76,710.

Calif., Bakersfield — Grading, curbing, guttering and paving with 1½ in. warrenite bitulithic on 3½ in. asphaltic concrete portions 20th, 21st and R Sts., to J. A. Dowling, Call Bldg., San Francisco, $76,664. Noted May 10.

Calif., Los Angeles—To Griffith Co., Los Angeles Ry. Bldg., grading and paving Highland Ave., 161,520 sq.ft. grading, 160,059 sq.ft. asphalt pavement, etc., $77,552, Gaffney St., 91,649 sq.ft. asphalt and 1,877 sq.ft. concrete pavement, etc., $34,172. Noted May 17.

Calif., Los Angeles—Supervs. Los Angeles Co., grading, curbing, laying sidewalks and paving Ocean Ave., $180,526 sq.ft. 5 in. concrete, etc., to H. H. Peterson, Loma Portal, $60,700. Noted Apr. 26.

Calif., San Diego—Common Council, paving Goldfinch, Bush and Ibis Sts., 152,432 sq.ft. 1½ in. asphaltic concrete on 2½ in. bituminous, etc., to Griffith Co., 25 14th St., $24,347. Noted May 17.

Ont., Elora—H. Clark, city clk., 13,900 sq.yd. concrete pavement, to W. C. Brennan Co., Melrose Ave., Hamilton, $30,000. Noted May 3.

Ont., Oshawa—Asphalt surfacing 4,500 ft. Gleddon Ave., Huron, Taylor and Clark Sts., mostly 24 ft. wide, to Standard Paving Co., Central Chambers, Ottawa. Engrs. est. $30,000. Noted Nov. 9.

Ont., Toronto—To asphaltic Concrete Co. Ltd., Excelsior Life Bldg., concrete curbs on 8th, Glenlake, Haig and Hanson Sts., Meagher, Mount Royal and Primrose Aves., Oakdene Crescent and Indian Rd., $0.75 per lin.ft.; to Murphy Contg. Co., 8 Wychwood Ave., concrete sidewalks on Chesterhill Rd., Glebeholme Blvd., Atlas, Coxwell, Slade and Woodington Aves., prices range from $1.15 to $2.03 per ft.; to Grant Contg. Co., 50 Front St. E., concrete sidewalks on Evelyn Ave. and Glendonwynne Rd., $2.05 per ft.; to Dept. Pub. Wks. City Hall, curbs and sidewalks on 30 various streets by day labor. Total est. $100,000.

Ont., Toronto—To Kilmer & Barber, 24 Adelaide St., west Toronto, asphalt pavements on concrete base on Meagher Ave. $2,601, Oakdene Crescent $7,291, to Constr. & Paving Co. Ltd., Confederation Life Bldg., Campbell Ave. $4,108, Indian Rd. $8,677, Primrose Ave. $18,778, Symmington Ave. $5,279, Wade Ave. $6,845, to Works Dept., City Hall, Carrick Ave. $3,149, Copeland Ave. $4,721, 8th Ave. $13,437, Haig Ave. $7,985, Hanson St. $8,234, Kenwood Ave. $2,733, Keystone Ave. $5,539, Linsmore Crescent $4,651, Rosemount Ave. $6,072; asphaltic concrete pavement, concrete curbs and gutters, to Works Dept., City Hall Drofnas St. $4,486, Glenlake Ave. $14,569; bitulithic pavements, to Warren Bituminous Paving Co. 54 University Ave., Bingham Ave. $9,384, Hammersmith Ave. $3,354, Oakcrest Ave. $8,724, to Works Dept., City Hall, Aldridge Ave. $8,893, Bingham Ave. $15,412, Bracken Ave. $10,220, Cambridge Ave. $6,014, Chesterhill Rd. $19,646, Durie St. $7,736, Fairmount Crescent $12,825, Hammersmith Ave. $9,131, Harris Ave. $16,272, Mount Royal Ave. $13,402, Pryor Ave. $5,227, Rosethorn Ave. $8,632, Strathmore Blvd. $18,686, Swanick Ave. $7,426.

Industrial Work

PROPOSED WORK

Mass., Gardner—Hedstrom—Union Co., Main St., plans 4 story, 65 x 200 ft. factory, brick and timber, Main St. $150,000. Private plans.

R. I., Providence—S. Priest, c/o Imperial Printing & Furnishing Co., Bellefont (Providence, P. O.), plans 1 story, 150 x 285 ft. garage and service station, Elmwood Ave. $150,000. Engineer and architect not selected.

R. I., Providence—E. Radding, 144 Westminister St., plans 2 story garage and service station, brick, North Main, Frost and Nashua Sts. $75,000. B. S. D. Martin, 36 Weybosset St., archt.

R. I., Providence—What Cheer Stables Co., Benefit and Meeting Sts., plans 2 story garage addition, brick, $75,000. Engineer and architect not announced.

Conn., Bridgeport—A. L. Clark Co., 1490 Main St., plans garage, showroom and service station, Fairfield Ave. $150,000. Engineer and architect not selected.

Conn., New Haven—National Folding Box Co., James St., having revised plans prepared by Wescott & Mapes, Inc., archts. and engrs., 207 Orange St., 5 story, rein.-con. and brick addition to factory. $175,000. Noted Aug. 18.

Conn., Waterbury—Waterbury American Republican Inc., Printers Court, having plans prepared by Lockwood, Greene & Co., archts. and engrs., 101 Park Ave., New York City, 4 story, 50 x 60 ft. plant, concrete and steel, plain foundation, Printers Court. $165,000. Noted Feb. 1.

N. Y., New York—De Rose & Cavalieri, archts. and engrs., 37 East 149th St., preparing plans 2 story, brick, steel and concrete garage, plain foundation. 133rd St., near Southern Blvd. $50,000. Owners name withheld.

N. Y., New York—O. W. Wurtz, c/o Schwartz & Gross, archts. and engrs., 347 5th Ave., soon takes bids 4 story, brick, steel and concrete factory, plain foundation, 1502 3rd Ave. $75,000.

N. Y., Saratoga Springs—Baker Mfg. Corp. plans additions to foundry and machine shop. $100,000-$125,000. J. T. Lorce, genl. mgr.

Pa., Bedford—Bedford Rustic Furniture Co. plans 2 story and basement, brick plant, Main St. $70,000.

Pa., Bedford—Gulf Refining Co. plans 1 story and basement, 60 x 240 ft. oil and gasoline station, rein.-con., West Pitt St. $60,000.

Pa., Slatington—American Slate Co. plans to rebuild plant recently destroyed by fire. $100,000.

Pa., Williamsport—F. A. Rommel, 736 West 4th St., plans 2 story and basement, 40 x 208 ft. brick and steel storage house, West 4th and Walnut Sts. $150,000.

Va., Pulaski—Coleman-Vaughn Furniture Co. making plans mill. $100,000. Engineer and architect not announced.

Va., Richmond — Boughman Stationery Co., 1244 West Broad St., had plans prepared by Carneal & Johnston, Chamber of Commerce Bldg., 2 story, 30 x 150 x 260 ft. concrete and brick. $200,000.

N. C., High Point—Lucas Lumber Co. plans machine shop, power house and mill. $250,000. Engineer not selected.

N. C., Walnut Cove—City plans electric light and power plant. $100,000. Engineer not selected.

N. C., Washington—J. N. Swindell Co. plans packing plant and power house. $100,000-$125,000. Engineer not selected.

Ala., Russellville—City Comrs. plan electric light and power plant. $45,000. A. N. Falls, pres.

Tenn., Milan—City Council plans extensions and additions to light and power plant. $40,000.

Ky., Lancaster—Kentucky Utilities Co., M. E. Taylor Bldg., Louisville, plans to construct ice plant and double capacity power plant, here. $50,000. G. T. Bogard, ch engr

Ky., Louisville—United State Shoe Co., Cincinnati, O. plans additions and improvements to factory, Rowan St., here. $50,000. Address L. A. Holters, 1122 Rowan St., Louisville, local mgr.

Ky., Paducah—Paducah Electric Co. plans improvements and extensions to power plant. $300,000.

O., Akron—See "Miscellaneous."

O., Cleveland—Cleveland Ry. Co., Hanna Bldg., had plans prepared by L. P. Bale, c/o owner, 1 story, 28 ft. high, 54 x 62 ft., automatic sub-stations, brick, steel and concrete. $1,000,000.

O., Cleveland — B. G. Russell, 10539 Euclid Ave., had plans prepared by G. A. Grieble Co., Sloan Bldg., 1 story, 90 x 115 ft., brick and steel garage, East 22nd St. and Marion Ave. $40,000.

O., Columbus — Columbus White Motor Truck Co., Central National Bank Bldg., plans 1 story, 100 x 115 ft., sales and service station, brick and steel, West Broad St. $45,000. C. J. Bassett, mgr.

O., Mingo Junction—Pennsylvania R.R., Pennsylvania Sta., Pittsburgh, plans extensions and additions to shops and yards, also 1 story machine work shop, etc., here. $500,000. W. D. Wiggins, ch. engr.

Ind., Huntingburg — Patoka Furniture Mfg. Co. plans addition to factory, brick. $100,000. Engineer and architect not selected.

Mich., Detroit—Pittmans & Dean Co., 1255 Griswold St., plans 2 story, 71 x 285 ft. brick and steel plant, Broad St. $50,000.

Ill., Chicago—Chicago, Rock Island & Pacific Ry., La Salle St., plans additions to fuel, water and filtration stations, and improvement to shops, on system. $400,000. L. C. Fritch, vice pres., in charge of construction and maintainence.

Ill., Granite City—Commonwealth Steel Co., Granite City, had plans prepared by company architects, 1 and 2 story steel plant, incl. pattern shop, extension to power plant, new coke oven building, metal pattern shop, additions to foundry and core room, also new furnace, 75 ton steel daily capacity. $1,000,000.

Ill., Kewanee—Making plans addition to electric light plant, incl. power unit generators for street lighting system. $125,000. Burns & McDonnell, Interstate Bldg., Kansas City, Mo., engrs.

Wis., Antigo—Antigo Canning Co. plans 1 story addition to cannery, brick and timber. $40,000. Private plans. $40,000.

Wis., Cudahy—Milwaukee Vinegar Co., 79 Buffalo St., Milwaukee, having plans prepared by E. R. Liebert, 432 Bway., Milwaukee, 2 story, 50 x 150 ft., brick, steel and concrete dry house, plain foundation, here. $60,000.

Industrial Works (Continued)

Wis., Green Bay — Foeller, Schober & Stephenson, archts., Nicollet Bldg., rejected bids 2 story, 60 x 132 ft., newspaper plant, brick and concrete, plain foundation, for Green Bay Newspaper Co. 315 Cherry St. $150,000. Will readvertise. Noted May 10.

Wis., Manitowoc—City having plans prepared by F. Alter, engr., City Hall, 1 story, 60 x 90 ft. addition to water and light plant, brick, rein.-con. and steel, plain foundation. $40,000.

Wis., Milwaukee—Pittsburgh Plate Glass Co., 205 Lake St., soon takes bids 5 story and basement, 92 x 140 ft., brick and concrete addition, plain foundation, Lake St. Kirchoff & Rose, 221 Grand Ave., archts.

Wis., Oconto—I. Telford making plans 1 story, 47 x 125 ft. garage and repair shop, brick, rein.-con. and steel, plain foundation. $40,000. Private plans. Noted Apr. 26.

Wis., Sheboygan—D. and D. Hanger & Panel Co., 722 Jefferson Ave., having plans prepared by W. C. Weeks, 720 Ontario Ave., 4 story, 80 x 80 ft., brick, rein.-con. and steel factory, plain foundation, 15th and Georgia Sts. $40,000.

Ia., Iowa Falls—Cerro Gordo Brick and Tile Co., c/o C. Q. Snyder, Iowa Falls, plans brick and concrete factory. $40,000. Private plans.

N. D., Fargo—Great Northern R.R., 534 Metropolitan Life Bldg., St. Paul, Minn., plans 10 stall round house, 200 ton coal chute, 70 ft. cinder pit, 80 ft. turntable and 4,500 ft. trackage. $187,000. A. H. Hogeland, St. Paul, Minn., ch. engr.

Mo., Fulton—See "Waterworks."

Mo., St. Louis—Trade Realty & Investment Co., La Salle Bldg., plans 3 story, 100 x 125 ft. sales building and garage, rein.-con. and brick, plain foundation, Washington Ave. $125,000. Engineer and architect not announced. Owen-Baskett Co., 3339 Locust St., lessee.

Tex., Dallas—V. J. Brannon, 4319 Elm St., soon takes bids 3 story, 74 x 143 ft. factory, concrete, brick, stone and steel, plain foundation, Peak and Bryan Sts. $60,000. H. A. Overbeck & Co., 306 Melba Theater Bldg., engrs. and archts.

Tex., Dallas—J. J. Lyons, c/o J. A. Fitzinger, archt., 808 Southwestern Life Bldg., soon takes bids 6 story, concrete, brick and steel, plain foundation, Carter and Hord Sts. $90,000. R. O. Jameson, 1618 Amer. Exch. National Bank Bldg., engr.

Tex., Ft. Worth—South West Portland Cement Co., Two Republics Bldg., El Paso, making plans and takes bids about Aug. 4 constructing plant, rein.-con., along tracks Houston & Texas Central R.R., here. $1,500,000. O. J. Binford, c/o owner, engr. Noted April 19.

Tex., Ft. Worth—White Eagle Oil & Refining Co., F. & M. Bldg., plans additions to refinery, rein.-con., concrete pile foundation, 40th and North Main Sts. $150,000. C. C. Durkee, c/o owner, engr.

Tex., Ft. Worth—Transcontinental Oil Co., W. T. Waggoner Bldg., had plans prepared additions to refinery, rein-con. and brick, plain foundation, Mt. Olivet Rd. $200,000. W. D. Batchelder, c/o owner, engr.

Tex., Ft. Worth—National Lumber & Creosoting Co., Texarkana, making plans large creosoting lumber plant, here. $300,000. Private plans.

Tex., Ladonia—C. H. Woods & Co. had plans prepared and takes bids in summer cotton gin. $40,000. Engineer and architect not announced.

Ont., Wroxeter—Bainton Bros. plan to rebuild plant recently destroyed by fire. $50,000.

Calif., Berkeley—Pacific Gas & Electric Co., 445 Sutter St., San Francisco, has plans prepared 1 story sub-station, concrete and steel, here. $50,000. Private plans.

Calif., Huntington Beach—California-Pacific Textile, Inc., plans cotton mill. To exceed $1,000,000. T. Talbert, c/o Courthouse, Santa Ana, interested.

Calif., Los Angeles—Chanslor-Lyon Co., 1200 South Grand Ave., having plans prepared by W. L. Schmolle, archt., 40 Montgomery St., San Francisco, and Noice & Merrill, engrs., Washington Bldg., Los Angeles, 3 story and basement, 60 x 170 ft. warehouse, rein.-con. 15th St. and Grand Ave. To exceed $75,000.

Calif., Los Angeles—R. H. Arnold, 830 McGarry St., having plans prepared by J. M. Cooper, Marsh-Strong Bldg., 5 story warehouse, rein.-con., McGarry St. To exceed $250,000.

Calif., Los Angeles—Chanslor & Lyon, 1200 Grand Ave., having plans prepared by A. S. Heinemann, San Fernando Bldg., 3 story, 110 x 165 ft. auto supply building, rein.-con., 15th St. and Grand Ave.

Calif., Oakland.—See "Miscellaneous."

Calif., San Francisco—Northwest Lead Co., 1742 4th St., Seattle, Wash., plans fabricating plant, here or near here. To exceed $300,000. F. W. Bradley, Crocker Bldg., pres.

BIDS DESIRED

Mass., Lowell—Lockwood, Greene & Co., engrs., 24 Federal St., Boston, taking bids 40 x 100 ft. forge shop, here, for Saco-Lowell Shops, Dutton St.

Pa., Latrobe—Railway Steel Spring Co., 30 Church St., New York City, taking bids 1 story, 178 x 1,000 ft. machine shop, brick, cement tile and steel. $300,000. Private plans.

La., Lecompte—June 12, by W. H. Jones, mayor, and Bd. Aldermen, extending electric light and power plant, incl. installation 2 crude oil engines, air compressor, service pumps, 8 in. well, etc. $45,000. Swanson-McGraw Inc., United Fruit Bldg., New Orleans, engrs.

Wis., Madison—P. Dean, archt., Dean Bldg., taking bids 2 story, 66 x 224 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation, for Gill Bros., c/o A. Gill, 452 West Wilson St. $80,000. Noted May 10.

Calif., Los Angeles — Norton & Wallis, archts., Pacific Finance Bldg., receiving bids 2 story (ultimately 3 story), 125 x 375 ft. warehouse, brick, 5th St. and Santa Clara Ave., for Eastern Outfitting Co., 620 South Main St.

Calif., Los Angeles—A. C. Martin, archt., Higgins Bldg., receiving bids 4 story and basement, rein.-con. warehouse, Grand Ave. and 35th St., for May Corp., c/o architect. To exceed $250,000. Noted Apr. 26.

Calif., San Francisco—Bekins Fireproof Storage Co., 13th and Mission Sts., receiving bids 7 story warehouse, rein.-con., Geary St. and Emerson Ave. $100,000. E. T. Flaherty, I. W. Hellman Bldg., Los Angeles, archt. Noted Apr. 5.

BIDS RECEIVED

Mich., Detroit—Pub. Lighting Comn., Atwater St., four 20,000 kw. turbo units for new power plant, from Allis-Chalmers Mfg. Co., West Allis, Milwaukee, Wis., $1,247,000.

CONTRACTS AWARDED

R. I., Providence—S. Bomes, 60 Dorrance St., will build 1 story, 100 x 100 ft. garage, brick and steel, plain foundation, Warrenton St. and Elmwood Ave., by day labor. $40,000. G. H. Wolf, 308 Caesar Misch Bldg., archt. Noted Mar. 22.

Conn., Bridgeport—H. J. Platt, 388 Fairfield Ave., 1 story, 107 x 176 ft. garage, brick and steel, plain foundation, Fairfield Ave., to Marsh Bros. Co., 51 Buckingham St. Archts. est. $50,000. Noted Mar. 29.

Conn., Buckland—E. E. Hilliard Co., Inc., Buckland Court, 1 story, 55 x 136 ft. dyehouse, brick and timber, plain foundation, to Manchester Constr. Co., Main St., South Manchester. Archts. est. $40,000.

Conn., Hartford—I. A. Allen, Jr., Inc., archts., 100 Farmington Ave., 80 x 100 ft. garage, rein.-con. and brick, plain foundation, to Southern New England Contg. Co., Warrenton Ave., for Brown-Thompson Co., Main St. Archts. est. $40,000. Noted May 3.

Conn., Hartford—H. Bland, 521 Park St., 1 story, 50 x 120 ft. garage, brick and steel, plain foundation, to H. Palten, 128 Earl St. Archts. est. $40,000. Noted May 3.

Conn., Hartford—Standard Oil Co. of New York, Wawarme Ave., 1 story, 40 x 120 ft. garage, brick and steel, to R. W. Smith Constr. Co., 375 7th Ave., New York City. Archts. est. $45,000.

Conn., Middletown — R. W. Magnano, Spring St., 1 story and basement, 50 x 70 ft. garage, brick and steel, plain foundation, Spring St., to S. Mazzotta, 78 Spring St. Archts. est. $40,000.

Conn., Southington—Peck, Stowe & Wilcox, 70 x 100 ft. factory, rein.-con., plain foundation, to H. Wales Lines Co., 134 State St., Meriden. Archts. est. $125,000.

N. Y., Brooklyn—J. Dinowitz, c/o E. M. Adelsohn, archt. and engr., 1778 Pitkin Ave., will build 1 story, brick, steel and concrete garage, plain foundation, St. Marks Ave., by day labor. $50,000.

N. Y., Buffalo—National Biscuit Co., 217 Ellicott St., 7 story, 134 x 205 ft., rein.-con., brick and steel bakery, Urban St., to Turner Constr. Co., 11 Goodell St., $800,000.

Pa., Butler—Eagle Printing Co., 3 story and basement, 60 x 110 ft. brick plant, Main St., to H. Wimer, Butler County National Bank. Archts. est. $150,000.

Pa., Pittsburgh—C. G. Hussey & Co., 2850 2nd Ave., 3 story and basement (ultimately 7 story), 80 x 220 ft. factory, 2nd Ave., to Ferro Concrete Constr. Co., 3rd and Elm Sts., Cincinnati, O. Archts. est. $250,000. Noted Apr. 19.

Pa., Sharon—Air Reduction Sales Co., 120 Bway., New York City, 1 and 2 story and basement, 83 x 122 ft. plant, Washington St., to Hughes-Foulkrod Co., Oliver Bldg., Pittsburgh. Archts. est. $150,000. Noted Apr. 26.

Pa., Wilkinsburg (Pittsburgh, P. O.)—H. R. Heller, 231 South Euclid Ave., Pittsburgh, 1 story, 60 x 80 x 100 ft. brick and steel garage, Johnston Ave., to Walker & Curley, 106 Bridge St., Sharpsburg. Engrs. est. $40,000.

Tenn., Memphis—H. H. Roth Co., 1035 Union St., 5 story, 74 x 146 ft., rein.-con. and brick garage, 3rd and Union Sts., to Blair Constr. Co., Randolph Bldg., $125,000.

Ky., Central City—Barnes Auto Co., Inc., 1 story and basement, 70 x 165 ft. garage, brick, to Raymond Contg. Co., Bowling Green, $40,000. Noted Apr. 5.

Ky., Louisville—United States Foil Co., 2934 Grand Ave., 3 story, 100 x 200 ft. factory addition, 30th St. and Grand Ave., to C. A. Koerner & Co., 318 East Burnett St. Engrs. est. $100,000.

Ky., Louisville—Bourbon Stockyards Co., 1048 East Main St., 2 story, 100 x 300 ft. stock yards building, concrete, 60,000 sq.ft. floor space, Market St., to C. A. Koerner & Co., 318 East Burnett St. Archts. est. $150,000.

O., Cleveland—L. D. Round, Stop 3, A. B. C. Line, 1 story, 54 x 88 x 134 ft., brick and steel garage, plain foundation, Bway. and Round Ave., to J. Pion, 11401 Quincy Ave. Archts. est. $50,000.

Mich., Zilwaukee (Saginaw P. O.)—Consumers Power Co., Jackson, hydro electric power plant, to O. W. Jenkins, 223 South Washington St., Saginaw.

Ill., Chicago—Gutmann & Co., 1511 Webster St., 2 story, 77x190 ft. factory, fireproof, Dominick St. near Garfield St., to J. Kalchbrenner, 133 West Washington St. Archts. est. $150,000.

Ill., Chicago—Wisconsin Steel Co., 106th St. and Torrence Ave., 1 story, 44 x 125 ft. factory, fireproof, to Worden-Allen Co., 208 South La Salle St. Archts. est. $125,000.

Ill., Chicago — Illinois Publishing and Printing Co., Hearst Bldg., 4 story, 124 x 240 ft., plant, fireproof construction, 27th and La Salle Sts., to M. Rauen Co., 111 West Washington St. Archts. est. $250,000.

Ill., Chicago — Independent Supply Co., 1341 West 47th St., 3 story, 96 x 120 ft. storage building, fireproof construction, 1335-1341 West 47th St., to Rowley Bros., 332 South La Salle St. Archts. est. $150,000.

Ill., Chicago—Walker Vehicle Co., 8700 South State St., 1 story, 67 x 352 ft. factory, fireproof construction, 1-57 West 87th St., to Dahl-Stedman, 11 South La Salle St. Archts. est. $100,000.

Wis., Antigo—Antigo Canning Co. will build 3 story, 50 x 90 ft. canning plant, brick, rein.-con. and steel, by day labor. $40,000. Private plans.

Wis., Madison—J. Petersen, 102 South Orchard St., 2 story, 99 x 127 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation, to Wisconsin Constr. Co., 102 South Orchard St. Archts. est. $40,000. Noted May 3.

Wis., Plymouth—Badger State Service Co., 1 story, 40 x 80 ft. garage and repair shop, brick, rein.-con. and steel, plain foundation, to H. Van Wagner, Plymouth. Archts. est. $40,000.

Wis., Rhinelander—Rhinelander Electric Power Co. will build 1 story, 32 x 50 ft. power house, rein.-con., steel and brick, plain foundation, by day labor. $40,000. Mead & Seastone, Journal Bldg., Madison, engrs. Noted Mar. 29.

Mo., St. Louis—Columbia Can Co., 128 Madison St., 2 and 3 story, 265 x 345 ft., rein.-con. and brick factory, plain foundation, Natural Bridge Rd., to Widmer Eng. Co., Laclede Gas Bldg. Archts. est. $500,000.

Mo., St. Louis—Ho-Ro-Co Mfg. Co., 110 Locust St., 3 story, 60 x 100 ft., brick factory, plain foundation, Dodier St., to H. J. Cross, 3531 Newstead Ave. Archts. est. $50,000.

Tex., Hemphill—Temple Lumber Co., rebuilding lumber mill recently destroyed by

Industrial Works (Continued)

fire, to Thrall & Shea, Lake Charles, La., $65,000.

Calif., Emeryville—Pioneer Laundry Co., 1341 63rd St., Piedmont, 1 story and mezzanine, laundry, concrete, 63rd and Doyle Sts., here, to H. J. Christensen, 505 17th St., Oakland, $40,000.

Calif., Eureka—C. Green, 7th and D Sts., 1 story garage, frame and stucco, 4th and H Sts., to Wing & Langdon, Eureka, $40,000.

Calif., San Francisco—R. McLeran Co., Hearst Bldg., will build 5 story, rein.-con. warehouse and loft, 2nd and Harrison Sts., by day labor. $140,000.

Calif., Stockton — National Ice & Cold Storage Co., Taylor and Center Sts., reconstructing ice and cold storage plant, recently destroyed by fire, to Davis-Heller-Pearce Co., Delta Bldg., $50,000.

Ont., New Toronto—R. N. Boxer Co. Ltd., Fay Bldg., Toronto, 3 story and basement, rein.-con., brick and steel addition to factory, plain foundation, general contract to Austin Constr. Co., 16112 Euclid Ave., Cleveland, O. Total est. $250,000.

Ont., Rockland — Champlain Tire & Rubber Co., rein.-con. factory, plain foundation, to N. Poirier & Son, 193 Cathart St., Ottawa, $50,000.

B. C., Elko—East Kootenay Power Co. Ltd., Cranbrook, first unit of hydro electric plant, two 7,500 hp. turbines, to Dominion Eng. Co., Montreal, Que.; two 6,000 kw. generators to Canadian General Electric Co., 1065 Pender St. W., Vancouver; tunnel 2,000 ft. long, to Winston Bros. Co., 801 Globe Bldg., Minneapolis, Minn.

B. C., Vancouver—Canadian Pacific Ry., Seymour St., 1 story, 90 x 240 ft. concrete and brick shops, foot of Drake St., to Western Constr. Co., 207 Hastings St. W. $60,000.

Buildings

PROPOSED WORK

Mass., Boston — Police Headquarters — Dept. Pub. Wks. plans police headquarters, Pemberton Sq. $1,000,000. J. A. Rourke, comr. Engineer and architect not selected.

Mass., Somerville (Boston P. O.)—Church—Park Ave. Methodist Church, 68 College Ave., had plans prepared by Woodbury & Stuart, 581 Boylston St., Boston, 3 story and basement, 80 x 200 ft., rein.-con., stone and brick, plain foundation, College Ave. $400,000. H. O. Lacourt, chn. building com.

Conn., New Haven—School—School Bd. having plans prepared by Brown & Von Beren, 185 Church St., 2 story, brick, Towsend Ave. $150,000.

Conn., Winsted—School—Town plans 2 story, 70 x 190 ft., brick, plain foundation, Elm St. $200,000. W. C. Kemp, chn. Bd. Selectmen. Engineer and architect not selected.

N. Y., Jamestown—Hotel—Hotel Jamestown, Inc., Cherry St., soon takes bids 8 or 10 story, 3rd and Cherry Sts. $1,225,000. W. L. Stoddart, 9 East 40th St., New York City, archt. and engr. Noted Feb. 1.

N. Y., New York—School—Bd. Educ., 500 Park Ave., soon takes bids, 5 story addition to P. S. 30, brick, steel and stone, plain foundation, Brook Ave. W. H. Gompert, Flatbush Ave. extension and Concord St., Brooklyn, archt. and engr.

N. Y., Northport—School—Bd. Educ. rejected bids brick, steel and stone, Lawrell Ave. $280,000. Will readvertise at later date. Coffin & Coffin, 522 5th Ave., New York City, archts. and engrs.

N. Y., Nyack—Hospital—Nyack Hospital soon takes bids brick, steel and stone addition, plain foundation. $200,000. Lord & Hewlett, 2 West 45th St., New York City, archts. and engrs.

N. J., Newark—Exposition—Permanent Industrial Exposition c/o F. Grad, archt., 245 Springfield Ave., having plans prepared 200 x 400 ft., brick, steel and stone, plain foundation. $2,000,000.

N. J., Newark—Theatre—J. Stern, c/o Reilly & Hall, archts. and engrs., 405 Lexington Ave., New York City, soon takes bids 100 x 154 ft., brick, steel and stone, plain foundation, Bloomfield Ave., here. $200,000.

N. J., Westfield—Temple—Westfield Lodge F. & A. M., c/o J. F. Jackson, archt. and engr., 137 East 45th St., New York City, having plans prepared brick, steel and stone, plain foundation, Prospect St., here. $150,000.

Pa., Phila.—Apartment—Fox Bros., 4814 North Broad St., soon take bids 3 story and basement, 80 x 125 ft. brick, steel and stone, plain foundation. Broad St. and 66th Ave. $300,000. E. A. Roth, Drexel Bldg., archt.

Pa., Pittsburgh — Church and Office — Smithfield Methodist Episcopal Church, 7th Ave. and Smithfield St., having plans prepared by E. Stotz, Monongahela Bank Bldg., 20 story and basement, 60 x 110 ft. $1,000,000.

Pa., Pittsburgh — Office and Arcade — Jenkins Arcade Co., Penn and Stanwix Sts., having plans prepared 7 story, 90 x 115 ft. top addition, Penn and Stanwix Sts. $300,000. Private plans.

Md., Baltimore—College—Mayor and City Council receiving sketches college, brick, 33rd St. near Stadium. $2,000,000.

Md., Baltimore — Schools — Mayor and City Council plan following schools: Irving, Frederick Rd. and London Ave.; Walbrook, Alto Ave.; Roland Park, south end of Gilman Country School Grounds; Hamilton, Christopher Ave., Hamilton; Ten Hills, Old Frederick Rd. and Edmondson Ave.; School No. 63, Walbrook; School 13, Patterson Park; all brick and steel, $400,000-$500,000 each. Engineer and architect not selected.

D. C., Wash.—Apartment—F. Lake, 1448 G St., N. W., had plans prepared by G. T. Santmyer, 1340 I St., N. W., for apartment. $150,000.

D. C., Wash.—Office—A. B. Mullett & Co., archts., Union Trust Bldg., preparing plans for office building. $250,000. Owners name withheld.

D. C., Wash.—School—Dist. Comrs., 509 Dist., Bldg., having plans prepared for addition to Thompson School, 12th and L Sts., N. W. $150,000.

D. C., Wash.—Theatre—M. Notes, 1400 Massachusetts Ave., having plans prepared by J. J. Zink, 126 Overland Ave., Baltimore, Md., for theatre, Georgia Ave. and Gallatin St. $250,000.

W. Va., Charleston—Hospital—Mountain State Hospital, having revised plans prepared by Wysong & Jones, Professional Bldg., and takes bids about June 1, 5 story and basement, 50 x 108 ft., Virginia Ave. $200,000. Former bids rejected. Noted May 17.

N. C., Charlotte—Theatre and Office—J. H. Cutter, Commercial Bank Bldg., soon takes bids 3 story. W. L. Stoddart, 9 East 40th St., New York City, archt. and engr. Noted Mar. 22.

Tenn., Chattanooga—Lodge and Office—Masonic Temple Assn. plans 14 story, 80 x 100 ft., Cherry and East 7th Sts. $750,000. J. S. Fouche, pres. Bd. Dirs.

Tenn., Madisonville—School—Monroe Co. Bd. Educ. voted $260,000 bond issue for schools. Engineer and architect not selected.

Ky., Louisville—Hospital—Norton Memorial Hospital, 3rd St., plans 8-12 story, 3rd and Oak Sts. $1,500,000. Address D. A. Keller, chn. hospital com. Engineer and architect not selected.

Ky., Louisville—Memorial—City (Louisville Memorial Com.), plans memorial. $1,250,000. W. E. Morrow, secy. Engineer and architect not selected.

Ky., Louisville — Seminary — Southern Baptist Theological Seminary, Norton Hall, 416 West Bway., plans seminary, on 51 acre site, Cherokee Dr. $1,700,000. Address C. S. Gilbert, registrar. Engineer and architect not selected.

Ky., Louisville — Theatre and Office — —United Theatres Co., 5th St., plans 12-15 story, 150 x 220 ft. $3,000,000. Engineer and architect not selected.

Ky., Nazareth — Convent — Convent of Nazareth having plans prepared by J. F. Sheblessy, 12th and Republic Sts., Cincinnati, O., 3 story and basement. $150,000.

O., Cleveland — Apartment — St. James Apartments, c/o M. Marmorstein, 607 Ulmer Bldg., having plans prepared by S. H. White, 1030 Schofield Bldg., 10 story, brick, steel and concrete, on 118 x 175 ft. lot, East 89th St. and Euclid Ave. $750,000.

O., Cleveland—Bank and Office—Brotherhood of Locomotive Engineers, Engineers Bldg., having plans prepared by Knox & Elliot, 906 Engineers Bldg., 20 story and basement, 132 x 168 ft., brick, steel and concrete, Ontario St. and St. Clair Ave. $5,000,000. C. M. Clark, Engineers Bldg., engr. Noted Oct. 5.

O., Cleveland—Commercial and Apartment—Atlas Properties Co., c/o H. Himmel, pres., 1006 Schofield Bldg., plans 11 story, brick, steel and concrete, 938 East 105th St. $700,000.

O., Cleveland—Store—National Stores Co., c/o V. Sincere of Bailey Co., Ontario St. and Prospect Ave., pres., having sketches made by A. Garfield, City Hall, 10 story and basement (ultimately 20 story), brick, steel and concrete, East 9th St. and Euclid Ave. $2,500,000. Noted Apr. 19.

O., Piqua—Church and Sunday School—Green St. Methodist Episcopal Congregation, opens bids about June 20, 2 story and basement, 70 x 130 ft., brick and steel, Caldwell and Green Sts. $160,000. J. C. Fulton & Son, Thompson Ruby Bldg., Uniontown, Pa., archts.

O., Toledo—Church—First Baptist Church had preliminary plans prepared by Mills, Rhines, Bellman & Nordhoff, 1234 Ohio Bldg., 4 story, about 70 x 1[illegible] ft., stone exterior, plain foundation, Collingwood Ave. $250,000.

O., Xenia — Temple — Masonic Temple Assn. plans brick, stone and rein.-con., plain foundation, probably 3 story, Detroit St. $175,000. F. G. Mueller, Hamilton, archt.

Mich., Detroit—Auditorium—St. Anthony's Parish, 5247 Sheridan Ave., having plans prepared by J. G. Kastler, 523 Detroit Savings Bank Bldg., 2 story and basement, 65 x 140 ft. rein.-con., brick and steel, plain foundation, Sheridan Ave. $150,000.

Mich., Grand Rapids—High Schools—Bd. Educ. having preliminary plans prepared by H. H. Turner, 923 Michigan Trust Bldg., 3 or 4 story, high school, $72[illegible],000, also by Robinson-Campau, 715 Michigan Trust Bldg., 2 story and basement, 300 x 400 ft. high and grade school, Harrison St. $530,000.

Ill., Elgin—Church—First Methodist Episcopal Church, 821 Douglas Ave., plans 2 story and basement, fireproof, 222 Milwaukee Ave. $250,000. Talmadge & Watson, 189 West Madison St., Chicago, archts.

Wis., Milwaukee—Apartment—Harris & Jillson, archts., 190 North State St., Chicago, soon takes bids (2 units) each 3 story and basement, 90 x 200 ft., brick and concrete, plain foundation, Prospect Ave., here, for E. B. Woolf & Co., 79 West Monroe St., Chicago. $350,000.

Wis., Milwaukee—High School—School Bd., 10th and Prairie Sts., having preliminary plans prepared by Van Ryn & De Gelleke, 114 Grand Ave., 3 story and basement, brick, tile and concrete, plain foundation, Germania and 9th Sts. $500,000.

Wis., Milwaukee—School—Bd. Industrial Educ., 7th and Prairie Sts., having plans prepared by Van Ryn & De Gelleke, 114 Grand Ave., 7 story and basement, 152 x 210 ft., brick and concrete.

Wis., Milwaukee—School—St. Benedict the Moor Mission, 305 9th St., having preliminary plans prepared by E. Brielmaier & Sons Co., 432 Bway., 2 story and basement, brick and concrete, plain foundation, State St. $200,000.

Wis., Rhinelander—Normal School—Bd. of Normal Regents, Capitol Bldg., Madison, plans 3 story, brick, rein.-con. and steel, plain foundation. $300,000 appropriated. W. J. Kittle, secy. Engineer and architect not selected.

Minn., Minneapolis—Apartment Hotel—J. H. Davidson, 723 Plymouth Bldg., having plans prepared by A. Rose, 1000 Builders Exch., 12 story and basement, 165 x 16[illegible] ft., rein.-con., brick and tile, 11th St. and Marquette Ave. $2,500,000.

Minn., Minneapolis — Workhouse — Bd. Pub. Welfare, City Hall, plans workhouse on Gilfillan Farm, outside city limits. $250,000. Engineer and architect not announced.

Kan., Emporia—Bank and Office—Citizens National Bank takes bids about June 15, 5 story and basement, 43 x 13[illegible] ft., brick, concrete and stone. $300,000. Richards, McCarty & Bulford, 584 East Broad St., Columbus, O., archts. $300,000.

Kan., Great Bend — Hotel — Great Bend Hotel Assn. had plans prepared 3 story, 100 x 140 ft., brick, plain foundation. $150,000. E. Charles & Co., 404 Orpheum Bldg., Wichita, archts.

Kan., Leavenworth — High School — Bd. Educ. had plans prepared takes bids about June 1, 2 story and basement, 120 x 170 ft., rein.-con., brick and stone. $225,000. C. A. Smith, 602 Finance Bldg., Kansas City, Mo., archt.

Neb., Falls City—Hotel—J. H. Craddock & Co., archts., 315 South 15th St., Omaha, prepared plans and soon takes bids 4 story and basement, 93 x 147 ft., rein.-con., brick and stone. $150,000. Owners name withheld.

N. D., Fargo—Hospital—St. Johns Hospital having plans prepared by J. H. Wheeler, 508 Exch. Bank Bldg., St. Paul, Minn., 5 story and basement, rein.-con., brick and tile addition. $225,000.

Mo., St. Louis—Hospital—Graham, Anderson, Probst & White, archts., 80 East Jackson St., Chicago, rejected bids 6 story, fireproof construction, Kingshighway, here, for Jewish Hospital Assn., 5414 Delmar Blvd. $1,000,000. Will revise plans and readvertise. Noted Jan. 11.

Mo., St. Louis—Hotel—Coronado Hotel Co., International Life Bldg., had plans prepared by P. J. Bradshaw, International Life Bldg., 10 story, 177 x 206 ft., rein.-con., brick and steel, concrete pile foundation, Spring Ave. $2,000,000.

Mo., St. Louis—Theatre—M. Loew, 1540 Bway., New York City, having revised plans prepared by T. W. Lamb, 644 8th Ave., New York City, and soon takes bids

Buildings (Continued)

3 story and mezzanine, 125 x 150 ft., rein.-con. and brick, concrete pile foundation, Washington Ave., here. $1,000,000.

Tex., Arlington—Home—Building Com. of Order Eastern Star had plans prepared and takes bids in summer 3 story and basement, rein.-con. and brick, plain foundation. Keystone Stop. $160,000. R. H. Cameron, 503 4th St., San Antonio, engr. and archt.

Tex., Dallas — Church — East Dallas Christian Church, Peak and Junius Sts., takes bids in June, 2 story and basement, 83 x 170 ft., brick, concrete and stone, plain foundation. $200,000. C. D. Hill & Co., Central State Bank Bldg., archts.

Tex., Houston—City Hall—June 9, to vote on $1,700,000 bond issue for city hall, Travis St. W. A. Dody, city archt. and engr.

Tex., Houston—Schools—Houston Industrial School Dist. defeated $3,000,000 bond issue for schools. Noted Mar. 1.

Colo., Ft. Collins—Administration—State Agricultural College had plans prepared and takes bids in June, 3 story, 55 x 137 ft., steel, stone, terra cotta and tile. $165,000. E. Groves, Foster Bldg., Denver, archt.

Calif., Los Angeles—Bank and Office—Walker & Eisen, archts., Pacific Finance Bldg., preparing plans 13 story and basement, 8th St. To exceed $750,000. Architects interested in syndicate which plans above work.

Calif., Los Angeles—Store and Office—Taft Realty Co., 5751 Hollywood Blvd., having plans prepared by Walker & Eisen, Pacific Finance Bldg., 12 story, rein.-con., Hollywood Blvd. and Vine St. To exceed $500,000.

Calif., San Francisco—Apartment—Hotel M. A. Little, c/o E. E. Young, archt., 251 Kearny St., had sketches made 12 story and basement, 62 x 112 ft., fireproof. $500,000. Noted May 17.

Calif., Torrance—High School—Torrance High School Dist., having revised plans prepared by Farrell and Miller, Delta Bldg., Los Angeles, for high school. Former bids rejected. Will readvertise. Noted Apr. 12.

Ont., London — City Hall — G. Wenige, mayor, soon takes competitive plans for city hall. $300,000.

Ont., Sudbury—School—Separate School Bd. plans 2 story and basement, 8 room, concrete and brick, plain foundation. $150,000. Engineer and architect not selected.

Ont., Toronto—School—Bd. Educ., 155 College St., having plans prepared by C. Dyson, 155 College St., 2 story and basement, 8 room, brick addition to Landsdowne School, plain foundation, Landsdowne Ave. $150,000.

BIDS DESIRED

Conn., Meriden—Dormitory—May 29, by E. S. Boyd, supt. Connecticut School for Boys, 3 story, brick, plain foundation. $150,000. W. T. Arnold, 34½ West Main St., archt. Noted May 17.

N. Y., Brooklyn—School—May 29, by W. H. Gompert, archt., Flatbush Ave extension and Concord St., P. S. 177, Ave. P. from 1st St. to Dahall Rd., for Bd. Educ., 500 Park Ave., New York City. Noted May 17.

N. Y., Elmira—Store—Pierce & Bickford, archts., 118 Lake St., taking bids 4 story, 75 x 160 ft., brick and steel, Main and Market Sts., for S. F. Iszard Co., Baldwin and Water Sts. $300,000. Noted Dec. 14.

N. Y., New York—Office—June 4, by B. L. Shientag, industrial comr., 124 East 28th St., alterations, repairs, etc. to office buildings, Dept. Labor, 124 East 28th St. S. W. Jones, Albany, state archt.; adv. this issue.

N. J., Newark—Prison—June 21, by Purchasing Agent Essex Co., Court House, 4 story, 44 x 115 ft., prison, $208,000. C. W. Wands, 59 Central Ave., Caldwell, archt. Runyon & Carey, 843 Broad St., engrs. Noted Apr. 26.

Pa., Ferndale (Johnstown P. O.)—High School—Bd. Educ. taking bids 2 story and basement, brick and steel, here. $150,000. J. E. Adams, Nemo Bldg., Johnstown, archt.

Pa., Greensburg—High School—May 29, by Bd. Educ., 2 and 3 story and basement, 180 x 300 ft. brick and stone. $250,000. M. E. Kressley & Co., 13 4th St., Harrisburg, archt.

Pa., Johnstown—Church—First Evangelical Lutheran Church will build 1 and 2 story and basement, 100 x 100 ft., Somerset St. $175,000. Work will be done by separate contract.

W. Va., Huntington—Bank and Office—Meanor & Handloser, archt., Robson-Prichard Bldg., receiving bids 12 story and basement, 60 x 70 ft., brick, stone and steel, 4th Ave. and 10th St., for First Natl. Bank, 4th Ave. and 10th St. $300,000.

W. Va., Wierton—High School—June 1, by Bd. Educ., c/o W. D. Johnson, secy., 2 story and basement, 95 x 157 ft., Orchard St. $200,000. Peterson & Clark, Steubenville, O., archts.

Fla., Clearwater—School—June 15, by Bd. Pub. Instruction, 2 story, 150 x 190 ft., brick. $150,000. M. L. Elliott, Citizens Bank Bldg., Tampa, archt.

O., Athens—High School—July 1, by Bd. Educ., 2 story and basement, 83 x 171 ft., brick, concrete and stone. $200,000. Former bid rejected. W. B. Ittner, 911 Locust St., St. Louis, Mo., archt. Noted May 17.

O., Cleveland — Hospital — Associated Building Co., c/o G. W. Crile, East 93rd St. and Euclid Ave., taking bids and opens same about May 25, 6 story and basement, 50 x 164 ft., brick and rein.-con. $400,000. Ellerbe & Co., Endicott Bldg., St. Paul, Minn., archts.

O., Lorain—Home—May 26, by St. Joseph Hospital, 4 story and basement, 91 x 111 ft., brick, steel and concrete, 21st St. $200,000. P. Rissman, Lorain, archt.

O., Toledo—Store—F. W. Woolworth & Co., Woolworth Bldg., New York City, taking bids 2 story and basement, 120 x 120 ft., brick, steel and terra cotta, plain foundation, Adams and Superior Sts., here. To exceed $150,000. Jardine, Hill & Murdock, 50 East 42nd St., New York City, archts.

Mich., Detroit—School—June 1, by Bd. Educ., 1354 Bway. Ave., 2 story, part basement, 83 x 245 ft. and 80 x 102 ft. rein.-con., brick and steel, plain foundation, Joy Rd. $200,000. Malcomson, Higginbotham & Palmer, 405 Moffat Bldg., archts.

Mich., Saulte Ste. Marie—Hospital—May 31, by Chippewa Co. Memorial Hospital, 3 story and basement, rein.-con., brick., tile and stone, $200,000. J. White, chn. Bd. Trustees, G. Arntzen, 716 Ludington St., Escanaba, also 341 West Lake St., Minneapolis, Minn., archt. Noted Mar. 15.

Ill., Chicago—Apartment—M. A. Bender, 1325 Fargo Ave., receiving bids 3 story, 100 x 100 ft., fireproof, Birchwood St. near Sheridan Rd. $150,000. M. L. Bein, 64 West Randolph St., archt. Noted May 10.

Ill., Chicago—Apartment—R. S. De Golyer, archt., 7 South Dearborn St., receiving bids 9 story and basement addition, fireproof, 808 Junior Terrace, for Terrace Apartment-Hotel Co., 4300 Claredon Ave. $500,000.

Ill., Chicago—Apartment—C. W. Westerlind, archt., 179 West Washington St., receiving bids 3 story, 150 x 245 ft., fireproof construction, Palmer and Richmond Sts., for Iver Bros., c/o architect. $650,000.

Ill., Chicago—Club—Reborl, Wentworth & Dewey, archts., 332 South Michigan Ave., receiving bids 5 story and basement, fireproof, 1357 Dearborn St., for The Racquet Club, 425 South Wells St. $500,000. Noted Nov. 16.

Ill., Evanston—Apartment—R. F. France, archt., 155 North Clark St., Chicago, receiving bids 3 story and basement, 150 x 170 ft., fireproof construction, 551 Hinman Ave., here, for E. A. Hastings, c/o architect. $280,000.

Wis., La Crosse—Schools—June 7, by Bd. Pub. Wks., 1 and 2 story, 140 x 206 ft., vocational school, $150,000, also Lincoln Grade School, 3 story part basement, 114 x 157 ft., $225,000, both brick, tile and concrete, plain foundations. O. A. Merman, Linker Bldg., archt.

Wis., Racine — Bank and Office — E. B. Funston Co., archts., Janes Bldg., taking bids 2 story and basement, 40 x 100 ft., brick, concrete and stone, plain foundation, Washington Ave., for Racine City Bank, 1345 Washington Ave. $150,000.

Ia., Keokuk—High School—May 28, by Bd. Educ., 3 story and basement, rein.-con., brick, tile and stone. $500,000. J. O. Boyd, pres., Temple & Burrows, 208 Main St., Davenport, archts. Noted Dec. 21.

Ia., Valley Junction—School—June 4, by A. B. Rutt, secy. Bd. Educ. Independent School Dist., constructing school. $165,000. Dougher, Rich & Woodburn, 320 Valley National Bank Bldg., Des Moines, archts.

Kan., Wichita—Home—May 31, by G. H. Thomas and S. E. Fullerton, archts., 310 Wheeler-Kelly-Hagny Bldg., 2 story additions, incl. 25 x 63 ft. boys building, 33 x 64 ft. girls building, 33 x 74 ft. mens building and dairy barn, for Masonic Home Assn., 400 South Seneca St. $150,000. Noted Jan. 11.

Mo., Bowling Green—High School—June 8, by W. E. Kleppisch, secy. Bd. Educ., 3 story, rein.-con. and brick, plain foundation. $150,000. M. J. Geise, 800½ Maine St., Quincy, Ill., archt.

Colo., Denver—Hospital—June 12, by Briscoe, Fisher & Fisher, archts., U. S. National Bank Bldg., 3 story and basement, 130 x 232 ft., T shaped, brick and concrete, 8th Ave. and Birch St., for State. $200,000.

Wash., Olympia—Capitol—June 8, by State Capitol Comn., constructing main portion of legislative building of Capitol group. Former bids rejected. Noted Apr. 19.

Calif., Los Angeles—Lodge and Store—Morgan, Walls & Morgan, archts., Van Nuys Bldg., receiving bids 3 story and basement, rein.-con., 11th and Flower Sts., for Odd Fellows Hall Assn., 218 South Main St. $250,000.

Calif., Modesto—Hotel—A. W. Cornelius, archt., Merchants National Bank Bldg., San Francisco, receiving bids 5 story and basement, brick and steel, for G. F. Covell. $150,000.

Calif., San Francisco—Apartment—E. E. Young, archt., 251 Kearny St., receiving bids 8 story and basement, fireproof, Pacific Ave. and Gough St., for G. W. Burnett, 815 O'Farrell St. $250,000. H. J. Brunnier, Sharon Bldg., engr. Noted Jan. 11.

Calif., San Pedro—Apartment and Store—L. L. Jones, archt., Grosse Bldg., Los Angeles, receiving bids 4 story, brick, for L. Di Carlo, 833 Ora Terrace. $150,000.

BIDS RECEIVED

N. Y., Brooklyn—School—W. H. Gompert, archt., Flatbush Ave. extension and Concord St., May 15, addition to P. S. 99, East 9th St. between Aves. K and L, from C. Meads Co., 217 West 14th St., New York City, $291,100, for Bd. Educ. Noted May 10.

N. Y., Buffalo—School—Bd. Educ., 1401 Telephone Bldg., May 7, P. S. 66, brick, stone and terra cotta, Parkside Ave., general contract from Metzger Constr. Co., 676 Genesee St., $359,423; heating, from R. J. Moran, 379 East Utica St., $68,890; plumbing, from Chippewa Plumbing Co., Inc., 329 Delaware Ave. $22,882. Noted Apr. 26.

N. Y., Elmira—Y.M.C.A., 322 East Market St., brick, concrete and steel, from Pulford & Dempsey Constr. Co., 317 Pennsylvania Ave., $244,750. Noted Apr. 26.

Wis., Racine — Auditorium — Memorial Hall Comn., 1 and 2 story, 180 x 200 ft., brick and concrete, plain foundation, from C. B. Johnson, 111 West Washington St., Chicago, $368,754.

Minn., Minneapolis — Electrical — State Bd. Control, Capitol, St. Paul, May 18, 3 story and basement, rein.-con., brick and tile, State U, here, from Carlsted Bros., 542 Builders Exchange, $258,843. Noted May 10.

Calif., Alhambra — School — Alhambra High School Dist., administration building and auditorium, brick, general contract from Larsen-Segrist Co., Claus Spreckels Bldg., San Francisco, $178,822. Noted May 3.

Calif., Los Angeles—Hotel—F. G. and E. H. Jansen, c/o H. Cross, archt., Merchants Natl. Bank Bldg., 6 story, rein.-con., Francisco St., from R. E. Millsap, Marsh-Strong Bldg., $105,990. Noted May 17.

Calif., Pasadena — School — Pasadena School Dist., group of buildings, from C. G. Wopschall, 675 North Raymond Ave., brick construction $147,353, hollow tile $146,760. Noted May 3.

CONTRACT AWARDED

Me., Portland—Parish House—State St. Congregational Church, State St., 2 story and basement, 50 x 170 ft., brick and stone, plain foundation, to Blackstone & Smith, 187 Middle St. Archts. est. $200,000. Noted Nov. 16.

Mass., Boston—Church and Parish House—Second Universalist Church, 13 Regent Circle, 3 story, brick, stone and steel, plain foundation, Boylson and Ipswich Sts., to L. P. Soule & Son Co., 80 Boylston St. Archts. est. $300,000. Noted Dec. 14.

Mass., Fall River — School — St. Anne Church, 4 story, 75 x 200 ft., brick, plain foundation, Forest St., to O. Dussault, 113 Middle St., $650,000. Archts. est. $600,000.

Mass., Lynn—High School—Bd. Educ., constructing Eastern Junior High School, 2 story, 221 x 225 ft., brick, concrete and steel, plain foundation, Porter and Jackson Sts., to C. S. Cunningham & Sons Constr. Co., 80 Boylston St., Boston, $362,875. Archts. est. 400,000. Noted Dec. 21.

R. I., Providence — Orphanage — Jewish Orphanage, c/o W. R. Walker & Son, archt., 49 Weybosset St., 2 story and basement, 90 x 155 ft., rein.-con. and brick, plain foundation, Summitt St., to E. Turgeon, 86 Weybosset St. Archts. est. $150,000. Noted Mar. 22.

Conn., Hartford—Business—Lewis, Wilcox & Stone, 327 Trumbull St., 3 story (ultimately 6 story), 110 x 150 ft., brick and steel, plain foundation, Allyn and

Buildings (Continued)

Trumbull Sts., general contract (except wood work) to Johnson-Webster Co., 50 South Main St., West Hartford. Archts. est. $170,000. This corrects report Mar. 15 issue.

Conn., Hartford — School — Monroe St. School Bd., 32 class rooms, brick and stone, plain foundation, to Wise & Upton, 36 Pearl St. Archts. est. $200,000. Noted Apr. 26.

N. Y., Brooklyn — Apartment — Kromax Realty Corp., c/o Cohn Bros., archts. and engrs., 363 Stone St., will build 4 story, 80 x 100 ft., brick, steel and stone, plain foundation, East 29th St., by day labor. $150,000.

N. Y., Brooklyn—Apartment—Mengel & Larkin, archts., 81 Fulton St., 6 story, 160 x 250 ft., brick, steel and stone, plain foundation, St. Marks and New York Aves., to G. M. Seglin, Inc., 110 East 42nd St., New York City. Archts. est. $2,000,000. Owners name withheld.

N. Y., Buffalo—Bank—Bank of Buffalo, 343 Main St., rein.-con., steel, Indiana limestone and granite, Main St., to J. W. Cowper Co., Fidelity Bldg., $700,000.

N. Y., Fredonia—Church—First Methodist Episcopal Church, brick and stone, Church St., to J. L. Taylor, Dunkirk. Archts. est. $150,000. Noted Oct. 19.

N. Y., Hornell—School—Bd. Educ., general contract Lincoln School, to L. Dennison, 162 North Main St., $152,831. Noted Apr. 26.

N. Y., Syracuse—High School—Bd. Contr. & Supply, general contract 19th Ward Junior High School, 3 story, rein.-con., brick and steel, Midland Ave., to Shane Constr. Co., Herald Bldg., $426,970; heating work, to J. R. Sheehan Co., 16 South Center St., Schenectady, $65,995. Noted Apr. 26.

N. J., Morris Plains—Dining Hall and Kitchen—B. G. Lewis, comr. Institutions and Agencies, State House, Trenton, 2 story, brick, concrete and steel, at State Hospital for Insane, here, part of general contract to Sturgiss Bros., 20 Washington St., Morristown, $88,140; structural steel, to Lehigh Structural Steel Co., Allentown, Pa., $31,-600. Noted Apr. 12.

Pa., Phila.—School—F. F. Durang, archt., 1220 Locust St., 3 story and basement, 77 x 153 ft. brick and steel, plain foundation, Park and Susquehanna Aves., to Stang & Mitchell, Real Estate Trust Bldg., for Lady of Mercy Roman Catholic Church, Broad and Susquehanna Aves. Archts. est. $225,-000. Noted Apr. 5.

Pa., Pittsburgh — Gymnasium—Carnegie Institute of Technology, Schenley Park, 3 story and basement, Woodlawn Ave., to S. M. Siesel, 1st National Bank Bldg. Archt. est. $500,000. Noted Apr. 26.

Md., Baltimore—Church and Rectory—Church of Our Lady of Pompeii, c/o F. J. Baldwin, archt., 328 North Charles St., will build 2 story, 40 x 40 ft. rectory and 40 x 150 ft. church, brick, plain foundation, Claremont and 3rd Sts., by day labor. $160,000.

Md., Frederick—Home—Independent Order of Odd Fellows, Cathedral and Saratoga Sts., Baltimore, three 2 and 3 story buildings, brick, plain foundations, here, to J. Hiltz & Sons, 345 St. Paul Pl., Baltimore. $250,000. Noted May 3.

D. C., Wash.—Apartment—W. S. Phillips, 15th and K Sts., N. W., apartment building, Argonne Pl., to Weller Constr. Co., 816 14th St., N. W. Archts. est. $2,000,000.

D. C., Wash.—Office—Milburn & Heister Co., archts., 710 14th St., office building at 13th and C Sts., to Parson & Hyman, 816 14th St., N. W. Archts. est. $200,000. Owner's name withheld.

W. Va., Morgantown—Theatre and Store—Communtzis Bros., 4 story and basement, 95 x 143 ft., rein.-con., brick, tile and steel, to C. D. Keyser & Co., Bellaire, O. Archts. est. $300,000. Noted Nov. 2.

Tenn., Memphis — Office — Cotton States Life Insurance Co., 70 South Main St., 12 story, 75 x 87 ft., stone, marble and tile, general contract to Minter & Co., Inc., 115 Bway., New York City; electrical work, to Newberry Electric Co., Century Bldg., St. Louis, Mo.; plumbing, to J. W. Hull Plumbing & Heating Co., 289 South Bellvue St. Engrs. est. $700,000. Noted May 3.

Ky., Louisville—High School—Bd. Educ., 3 story, brick, Morton Ave., to C. A. Koerner & Co., 318 East Burnett St., $200,000.

O., Cleveland—Apartment—Stockbridge Apartments, c/o W. Vretman, 3328 Euclid Ave., 4 story and basement, 50 x 100 ft., brick, steel and concrete addition to E. F. Gibbons Constr. Co., Prospect Fourth Bldg. Archts. est. $150,000.

O., Lakewood (Cleveland, P. O.)—Apartments—E. B. Townsend, 12104 Detroit Ave., Cleveland, 2 and 3 story and basement, 55 x 107 ft. and 53 x 75 ft., brick, 12019 Clifton Blvd., here, to Forest City Steel & Iron Co., 1500 West 100th St., Cleveland. Archts. est. $175,000.

Mich., Trenton—High School—Bd. Educ., 2 story and basement, rein.-con., brick and steel, plain foundation, to Gratton Bros., Porter Blk., Lansing, $150,000. Noted Jan. 25.

Ill., Chicago—Apartment—A. J. Alcorn, 2022 North Tripp Ave., 3 story and basement, 100 x 175 ft., fireproof, 1409-15 Farwell Ave., to P. D. Jensen, 4916 West North Ave. Archts. est. $175,000.

Ill., Chicago — Apartment — Goldberg & Fegel, c/o Dubin & Eisenberg, archts., 14 West Washington St., 3 story, fireproof construction, Dorchester Ave. and 47th Pl., to J. Taff, 4833 North Avers Ave. Archts. est. $200,000.

Ill., Chicago — Apartment — R. L. Kane, archt., 64 West Randolph St., 3 story and basement, 75 x 125 ft., fireproof, Randolph and Austin Sts., to Anderson & Cowie, 7 South Dearborn St. Archts. est. $150,000. Owner's name withheld.

Ill., Chicago—Church—Trinity Methodist Episcopal Congregation, 1617 West 99th St., 1 story and basement, fireproof, 99th and Winchester Sts., to W. McCumber & Sons, 140 South Dearborn St. Archts. est. $150,-000. Noted Feb. 23, 1922.

Ill., Chicago—Hotel—S. M. Earling, 140 South Dearborn St., 5 story, 65 x 150 ft., fireproof construction, 5410 Kenmore Ave., to Antrill Constr. Co., 1106 Leland Ave. Archts. est. $250,000.

Ill., Chicago—Office—Chicago & Northwestern R.R., West Jackson Blvd. and Franklin St., 4 story, 60 x 150 ft., fireproof construction, Ravenswood and Lawrence Aves., to A. Brundage, 110 South Dearborn St. Archts. est. $250,000.

Wis., Madison—Church—St. James Congregation, 1126 St. James Court, 2 story, 60 x 150 ft., brick, rein.-con. and steel, plain foundation, to C. B. Fritz Co., 138 North Frances St. Archts. est. $150,000.

Wis., Milwaukee — Business — Sherkow Realty Co., 737 Grand Ave., 4 story and basement, 92 x 120 ft., brick and concrete, plain foundation, North Ave., to T. Stark & Co., 130 Muskego Ave. Archts. est. $150,000.

Ia., Sioux City—Fire and Police Station—General contract for superstructure, 3 story and basement, 133 x 140 ft., rein.-con., brick, tile and stone, 6th and Water Sts., to B. E. Short, 418 Court St., $244,-999. Noted May 3.

Minn., Minneapolis — Lodge—Minnehaha Lodge, A. F. & A. M. No. 165, 1533 East Lake St., general contract 3 story and basement, 100 x 105 ft., brick and tile, Lake St. and Bloomington Ave., to J. and W. A. Elliott Co., 906 Lumber Exchange. Cost complete $150,000. Noted May 3.

Kan., Kansas City—High School—General contract 4 story and basement, rein.-con., brick, steel and stone, 350 Troup Ave., to Duncan Lynch Constr. Co., 407 Mutual Bldg., Kansas City, Mo., $209,718.

Mo., St. Louis—School—Washington University, Skinker and Lindell Aves., 3 story school of commerce, rein.-con. and brick, plain foundation, to Selden-Breck Constr. Co., Fullerton Bldg. Archts. est. $250,000. Noted May 3.

Tex., Austin—Hotel—Baker Hotel Corp., San Antonio, (street address not available), 11 story, rein.-con., brick and stone, to J. P. Haynes, Moore Bldg., San Antonio, $469,000; elevators, to Otis Elevator Co., 7th St., Ft. Worth, $41,000; mechanical, to J. L. Martin, 412 Congress Ave., Austin, $180,000. Noted May 3.

Tex., Electra—High School—City Com., general contract 3 story and basement, brick and concrete, to Whitehill Constr. Co., Wichita Falls, $124,000. Archts. and engrs. est. $160,000. Noted May 3.

Tex., Texarkana — Theatre — Saenger Amusement Co. 3 story, 120 x 150 ft., rein.-con. and brick, plain foundation, West 3rd St., to Harris & Echols, Texarkana, $200,000. Archts. and engrs. est. $150,000. Noted Apr. 26.

Calif., Hanford—Office and Store—F. N. Isaacs, 2 story and basement, brick and concrete, 4th and Irwin Sts., to Trewhitt-Shields Co., Rowell Bldg., Fresno. Archts. est. $175,000.

Calif., Oakland—Store and Loft—Smith Bros., 472 13th St., 3 story and basement, rein.-con., Bway. near 19th St., to C. W. Heyer, Mills Bldg., San Francisco, $150,-000. Noted Mar. 29.

Calif., San Francisco — Apartment — T. Damico, 889 Filbert St., will build 10 story and basement, concrete and steel, Clay and Gough Sts., by day labor under supervision of F. C. Amoroso, 1336 Kearny St. Archts. est. $385,700.

Calif., San Francisco—Office—Western States Life Insurance Co., Market and 6th Sts., 15 story and basement, Stevenson and 6th Sts., concrete work to Barrett & Hilp, 918 Harrison St., $125,000. Noted Nov. 16.

Ont., Toronto — Apartments — Roberts Bros., 241 Dovercourt Rd., will build two 3 story and basement, concrete, brick and steel apartment houses, Bloor St. and Quebec Ave., by day labor. $200,000. Private plans.

Federal Government Work

PROPOSED WORK

Pa., Middletown—Hangars—Constructing Quartermaster plans 2 steel hangars at Air Intermediate Depot, here.

D. C., Wash.—Hangars, etc.—Constructing Quartermaster plans one 110 x 200 ft. hangar and extension to present one, at Bolling Field, here.

Va., Norfolk—Heating Mains—Spec. 4840—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans heating mains, here.

La., New Orleans—Jetty—U. S. Engineer Office, 329 Custom House, withdrew advertisement for jetty construction, to be opened June 1; adv. this issue. Noted May 10.

Ark., Hot Springs—Buildings—Constructing Quartermaster plans building for Physiotherapy and X-ray, also guard house, here.

Tex., Ft. Bliss — Ward Building — Constructing Quartermaster plans addition to ward building at William Beaumont General Hospital, here.

BIDS DESIRED

Mass., West Roxbury (Boston P. O.)—Piping—June 5, by Treas. Dept., Wash., D. C., piping for U. S. Veterans' Hospital.

R. I., Providence—Dredging—June 19, at office U. S. Engineer, Providence, dredging in harbor; adv. this issue.

N. Y., Buffalo—Dredging, etc.—June 20 at office U. S. Engineer, dredging and rock removal in Black Rock Channel; adv. this issue.

N. Y., New York — Nurses Quarters — June 15 by U. S. Veterans Bureau, Arlington Bldg., Wash., D. C., construction complete of nurses quarters at U. S. Veterans Hospital 81, Bronx. F. T. Hines, dir.; adv. this issue.

D. C., Wash.—Pumps—May 28, by Chief of Air Service, U. S. Army, Wash., 100 engine driven gear fuel pumps.

Va., Norfolk—Dredging—June 20, at office U. S. Engineer, dredging channel in harbor, here; adv. this issue. Noted Apr. 5.

N. C., Wilmington—Dredging—June 19 at office U. S. Engineer, dredging in Scuppernong River; adv. this issue.

Ala., Florence—Valves, etc.—June 23, at office U. S. Engineer, Florence, furnishing and delivering 13 sets sluice valves, operating mechanism, etc., for sluice section Wilson Dam; adv. this issue.

Ala., Huntsville—Remodeling—June 20, by Treas. Dept., Wash., D. C., extending and remodeling U. S. Custom House and Post Office, here. J. A. Wetmore, acting superv. archt.; adv. this issue.

Miss., Vicksburg—Levee Work—June 5 at office 3rd Mississippi River Dist., P. O. Box 404, for about 400,000 cu.yd. levee work; adv. this issue.

La., Baton Rouge—Remodeling—June 19, by Treas. Dept., Washington, D. C., remodeling and enlarging U. S. Post Office, here. J. A. Wetmore, acting superv. archt.; adv. this issue.

Tenn., Memphis—Pipe Valves, etc.—June 2 at office Mississippi River Comn., 1st and 2nd Dists., 1006 McCall Bldg., furnishing and delivering pipe valves and fittings for all steam, exhaust, suction and discharge lines of grader; adv. this issue.

Tenn., Nashville—Lumber—June 2, at office U. S. Engineer, 525,000 ft. b. m. yellow pine or Douglas fir lumber; adv. this issue.

Ky., Louisville—Steel, etc.—U. S. Engineer, P. O. Box 72, receiving bids 24,000 lb. reinforced deformed bars, ½-1¾ in. square, and 1,200 lb. Z bars.

Tex., Galveston—Jetty—June 22, at office U. S. Engineer, repairing, building up and extending West Jetty at Sabine Pass; adv. this issue.

BIDS RECEIVED

Pa., Phila.—Engine Testing Building—Spec. 4835—Bureau Yards & Docks, Navy Dept., Wash., D. C., engine testing building at aircraft factory, here, (1) work complete, from McCormick-Lenham Co., 2716

Federal Government Work (Continued)

South Hutchison St., (1) $21,300 (100 days) (2) $36,836 (125 days); Triest Contg. Corp., 247 Park Ave., New York City, (1) $22,582 (90 days) (2) $15,890 (120 days); Donnell-Zane Co., 233 Bway., New York City, (1) $24,395 (130 days) (2) add $14,-748. Noted Apr. 26.

Del., Wilmington—Dredging—U. S. Engineer, dredging Tuckerton Creek, N. J., from Delaware Dredging Co., 316 Insurance Exch. Bldg., $0.54 per cu.yd. Noted Apr. 19.

Washington—Roads—C. H. Purcell, dist. engr., U. S. Bureau Pub. Rds., New Post Office Bldg., Portland, Ore., grading, surfacing and building bridges, etc., on 9.9 mi. National Forest Rd., Project 102-B, Ferry Co., from Siems & Carlson, Realty Bldg., Spokane, 46,400 cu.yd. rock excav. $1.35, 80,000 cu.yd. common excav. $0.50, 19,800 cu.yd. surfacing material $2.60, totals concrete box culverts (U. S. Government furnishing explosives) $169,341; (contractor furnishing explosives) $178,101; concrete pipe (U. S. Government furnishing explosives) $167,571.

Oregon—Roads—U. S. Bureau Pub. Rds., Dept. Agriculture, Post Office Bldg., Portland, grading 24 mi. Eugene-Florence Highway, Lane Co., from G. F. Atkinson, Chamber of Commerce Bldg., Portland, concrete pipe $376,870, corrugated galvanized iron pipe $372,775, log culverts, $359,635; 7.9 mi. McKinzie River Highway, Belknap, Lane Co., from Motor Investment Co., Portland, Ore. (street address not available), surfacing $2.83, subgrade $1, total $37,310; grubbing 35 acres and clearing 45 acres, Olympia Highway, U. S. Forest Reserve, Bogachiel-Hoh, Clallam Co., from Tielenda Slimkoski & Easley, Wilkinson, Wash., $55,275. Noted May 3.

CONTRACTS AWARDED

W. Va., Huntington—Cement—U. S. Engineer, Huntington, furnishing 3 carloads cement, to Universal Portland Cement Co., Frick Bldg., Pittsburgh, Pa., $2.89 per bbl.

Fla., Jacksonville—Dredging Pump—U. S. Engineer, dredging pump, for Dredge Barnard, to Ellicott Machine Corp., Bush and Severn Sts., Baltimore, Md., $8,210. Noted Mar. 22.

Ky., Louisville—Bear Trap Leaves—U. S. Engineer, P. O. Box 72, bear trap leaves for Dam 44, Ohio River, to Penn Bridge Co., Beaver Falls, Pa., $47,770. Noted May 18.

Ky., Louisville—Metal Work—U. S. Engineer, P. O. Box 72, metal work for weirs for Dam 44, Ohio River, Lot A to J. and J. B. Milholland Co., 714 5th Ave., Pittsburgh, Pa., $5,025; Lots B and C to Variety Iron & Steel Co., Hamilton Ave. and East 40th St., Cleveland, O., $7,100 and 22,400 respectively. Noted Apr. 26.

Miscellaneous

PROPOSED WORK

Tower—Hartford, Conn.—Fuller Brush Co., 647 Main St., plans 4 story tower, brick veneer and steel. $25,000. P. J. Kennedy, Jr., Holyoke, engr.

Grandstand, etc. — South Manchester, Conn.—Cheney Bros. plans grandstand, bleachers, fencing, etc. $30,000. Private plans.

Swimming Pool—New Orleans, La.—New Orleans Country Club, Metairie Ridge, plans swimming pool. $45,000. C. E. Ellis, chn. of special com.

Transmission Line—Kentucky—Kentucky Utilities Co., M. E. Taylor Bldg., plans 33,000 volt transmission line from Elizabethtown to Hardinsville via Sonora. G. T. Bogard, ch. engr.

Power Lines, etc.—Akron, O.—Northern Ohio Traction & Light Co., North Main St., plans extending power lines $1,000,000, substations $250,000.

Wharves, etc. — Beaumont, Tex. — City soon takes bids timber wharves and docks, $300,000. Terrell Bartlett, Calcasieu Bldg., San Antonio, engrs.

Ornamental Lights, etc.—Ft. Worth, Tex.—City Com. soon takes bids ornamental lighting system. $25,000. D. L. Lewis, city engr.

Retaining Wall—Ft. Worth, Tex.—Ft. Worth Power & Light Co., 1001 Commerce St., making plans retaining wall around power plant, 1,000 cu.yd. concrete, etc. $25,000. W. C. Lilly, c/o owner, engr.

Wharves, Docks, etc.—Oakland, Calif.—Alaska Packers Assn., Wells Fargo Bldg., San Francisco, plans wharves, docks, warehouse, etc., on Oakland Estuary, here. To exceed $500,000. Engineer and architect not selected. Plans may be prepared by company engineers.

Granite Blocks—Montreal, Que.—Chairman Executive Com. taking bids 100,000 granite blocks. H. A. Tetreault, dir. pub. wks.

Power Improvements — Ontario — Provincial Government, Ottawa, voted $12,-687,000 to Hydro Electric Power Comn. of Ontario, 190 University Ave., Toronto, to cover work for year as follows: Niagara System, installing additional machinery at Queenston, completing Queenston plant and new transmission lines, $9,850,000; Muskoka System additions to plants and new equipment, $360,000; Rideau System maintenance and repairs, $20,000; Thunder Bay System, new units at Cameron Falls, Nipigon River, transmission lines etc., $1,016,000; Central Ontario System largely to cover new plant at Dam 8 on Trent River, $1,375,000; Nipissing System storage works and auxiliary, $17,000; Essex System transmission lines $50,000; investigation of second Queenston-Chippewa development, $50,000. F. A. Gaby, 190 University Ave., Toronto, ch. engr.

BIDS DESIRED

Binder Stone—New York, N. Y.—June 1, by J. Miller, pres. Manhattan Boro, Municipal Bldg., 8,000 cu.yd. binder stone.

Freight Shed, etc.—New York, N. Y.—May 31, by J. H. Delaney, comr. Docks, Pier "A" foot of Battery Pl., new freight shed on pier at foot of Roosevelt St., East River, Brooklyn Bridge improvement, Manhattan Boro, Contr. 1809.

Heating and Ventilating Apparatus, etc. —Brooklyn, N. Y.—May 28, by Bd. Educ., 500 Park Ave., New York City, heating, ventilating and temperature regulation apparatus in P. S. 16, Bedford Ave., here. W. H. Gompert, Flatbush Ave. extension and Concord St., archt. and engr.

Miscellaneous Construction, etc. — New York, N. Y.—June 1, by Transit Comn., 49 Lafayette St., miscellaneous construction and station finish for Rapid Transit Railroads, in Boros of Manhattan, Bronx, Brooklyn and Queens, Agreement "BV." Noted July 20.

Road Materials—Baltimore, Md.—May 31, by Bd. Awards, paving blocks, f.o.b. cars Baltimore, furnishing and delivering crushed stone, gravel and sand; also furnishing materials and flushing surfaces of roads and streets within city. C. F. Goob, City Hall, highways engr.

Pier and Wharf—Charleston, S. C.—June 14, by Port Utilities Comn., pier at Market St. and wharf at Columbus St. H. M. Gallagher, genl. mgr.; adv. this issue.

Sand Clay Gravel—Baton Rouge, La.—June 5, by State Hy. Comn., Reymond Bldg., furnishing 20,080 cu.yd. sand clay gravel not less than 60% stone or alternate bid on 10,400 cu.yd. washed gravel and 10,040 cu.yd. sand clay gravel not less than 40% stone, for Federal Aid Project 114B, Monroe-Ruston Highway.

Shed—New Orleans, La.—May 31, by Bd. Port Comrs., New Court Bldg., reconstructing Celeste St. shed. A. Walsh, genl. mgr.

Stadium — Madison, Wis. — June 1, by University of Wisconsin, rein.-con. and steel addition to athletic stadium, 400 ft. long, 62 ft. wide, 28.6 ft. at rear. $50,000. A. Peabody, Capitol Bldg., engr. Noted Apr. 26.

Creosoted Wood Blocks—St. Paul, Minn.—May 28, by H. W. Austin, city purch. agt., 1,000 sq.yd. 3½ in. creosoted wood blocks, for Dept. Pub. Wks. G. M. Shepard, city engr.

Dikes, etc.—Missouri—June 12, by Bd. Pub. Wks., City Hall, St. Louis, eight 3-hurdle dikes Missouri River, at St. Charles side, one 3-row hurdle dike between Catfish Island and Meiers Bar, six 3-row hurdle dikes St. Louis Co. side Missouri River, for new St. Louis waterworks, also frame office at Howards Bend. $445,000. E. E. Wall, comr.

Trucks—Montreal, Que.—June 1, by Executive Com., City Hall, furnishing ten 5 ton trucks. R. Bauset, city clk.; adv. this issue.

Headworks—New Zealand, Wellington—Feb. 28, by Secretary Pub. Wks. Tenders Bd., for Arapuni Electric Power Scheme, Sect. 1, headworks; adv. this issue.

BIDS RECEIVED

Paving Blocks—New York, N. Y.—Bd. Purch., creosoting wood paving blocks to Dept. Plants & Structures, from Amer. Creosoting Co., 17 Battery Pl., $1,886. Noted May 17.

Shaft, etc.—New York—Bd. Estimate & Apportionment, City Hall, New York City, May 18, South St. Shaft at St. George, Richmond Boro, for freight and passenger railroad tunnel in Brooklyn and Richmond Boros and under New York Bay, New York City, from Patrick McGovern & Sons, Inc., 50 East 42nd St., New York City, $842,000. Noted Apr. 26.

O., Cleveland—J. F. Malone, dir. Pub. Serv., City Hall, May 16, 400 ton garbage disposal plant, from C. O. Bartlett & Snow Co., French and Winter Aves., $930,558. Noted May 10.

Road Oil—St. Paul, Minn.—Ramsey Co., May 14, 200,000 gal. road oil, from Barber Asphalt Co., 7 South Dearborn St., Chicago, $0.138 per gal. for "A," and $0.128 for "B." Barber brand liquid asphalt; Minnesota Road Equipment Co., 4536 Dupont Ave. S., Minneapolis, $0.065 for medium heavy grade O. U., and $0.066 for heavy grade O. H. Noted May 3.

Road Oil — Fresno, Calif. — Fresno Co. furnishing 100,000 bbl. road oil, from Standard Oil Co., Standard Oil Bldg., San Francisco, $1.12 per bbl. delivered Seguro; A. F. Gilmore Co., Van Nuys Bldg., Los Angeles, $1.155 delivered Taft; Union Oil Co., Mills Bldg., San Francisco, $1.16 delivered Winoil. Noted Apr. 19.

CONTRACTS AWARDED

Cement and Road Oil—Hartford, Conn.—Bd. Contract and Supply, 400 bbl. cement, to Amer. Cement Co., 920 Windsor St.; 400,000 gal. road oil, 45% and 50,000 gal. 65% asphaltic base, to Mace Moulton Jr., Inc., 6 Beacon St., Boston, $25,000. Noted May 17.

Golf Course — Arlington, Mass. — Bay State-Arlmont Country Club, grading and laying out new golf course, Cedar Ave., Arlington Heights, to Canedy Constr. Co., New Bedford (street address not available). Engrs. est. $60,000.

Pier—New York, N. Y.—Dept. Docks, Pier "A" foot of Battery Pl., North River, May 7, temporary pier north of West 135th St., Contr. 1793, to Riverside Contg. Co., 164 Montague St., Brooklyn, $41,506. Noted May 3.

Structural Steel—New York, N. Y.—Bd. Purch., Municipal Bldg., furnishing and delivering steel to Dept. Plant & Structures, to P. J. Constant, Inc., 280 Bway., $7,860. Noted May 10.

Retaining Walls—Freehold, N. J.—Monmouth Co., rein.-con. retaining walls at Bridge W-43 between Avon and Belmar, to T. Proctor, 212 North 5th Ave., Long Branch, $19,085. Noted May 10.

Iron Castings, etc.—Baltimore, Md.—Bd. Awards, 200,000 lb. manholes, sewer inlet and similar iron castings, to Greenmount Iron Mfg. Co., 833 Greenmount Ave., $5,000. Noted May 17.

Levee — Greenville, Miss. — Mississippi Levee Com., 600,000 cu.yd. excav.; 3 sections at Catfish Point new levee, to Clark & Aderholt, Greenville, $0.2389; 2 sections on Greenville front, to W. E. Callahan, Great Southwestern Life Bldg., Dallas, $0.52; average haul 1 mi. Engrs. est. $210,000.

Electrolier System—Los Angeles, Calif.—Lighting system in Santa Monica Blvd., etc., to Southern California Electric Co., 625 South Main St., $106,222. Noted Apr. 5.

Ontario—Dept. Pub. Highways, 110 University Ave., Toronto, concrete culverts as follows: Contr. 886 to J. Palm, Mildmay, $15,000; Contr. 887, to G. A. Gibson, Wroxeter, $20,000; Contr. 888 to Hyland Constr. Co., 72 St. Mary St., Toronto, $15,000; Contr. 890 to W. P. Holdcraft, Kingston, $15,000; Contr. 891 to W. Clark & Sons, Owen Sound, $15,000; Contrs. 892 and 893 to V. T. Bartram, Bank of Toronto Bldg., Toronto, $30,000; Contrs. 940 and 956 to J. A. Vance, 197 Light St., Woodstock, $30,000; Contr. 855 to F. C. Shipp, Box 131, Toronto, $15,000; Contr. 937 to N. Dillane, 291 Yonge St., Toronto, $15,000; Contrs. 852 and 857 to Waltham & Kelly, Kenwood, $30,000; Contr. 853 to A. J. Kirkpatrick, Petrolea, $15,000; Contr. 854 to J. McGill, Harrow, $15,000; Contr. 856 to D. B. Dann, Clarkhill, $15,000; Contrs. 889 and 859 to J. Avery, Mitchell, $20,000 and $15,000 respectively.

Transmission Line and Sub-station—Sutton, Ont.—Village will build 10 mi. transmission line and sub-station, by day labor under supervision of Hydro Electric Comn. of Ontario, University Ave., Toronto. $30,000.

Foundation for Grain Elevator—Vancouver, B. C.—Vancouver Harbor Comrs., 712 Pender St. W., foundations for rein.-con. addition to grain elevator, 2,450 cu.yd. excav., 1,960 cu.yd. concrete, to Pacific Constr. Co., 510 Hastings St., $50,000.

Grain Elevators — Bulgaria — Bank of Agriculture of Bulgaria, system of grain elevators incl. central power stations, drying plants, wharves, etc., to MacDonald Eng. Co., 53 West Jackson Blvd., Chicago, Ill., $10,000,000.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ADVERTISEMENTS ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE.

OFFICIAL PROPOSALS

Bids: June 4.

Concrete Pavement

Red Bank, N. J.

Notice is hereby given that alternate sealed bids will be received by the Council of Borough of Red Bank for the Construction of a Concrete Pavement and a Sheet Asphalt Pavement on a concrete base on Peters Place and for the Construction of a Concrete Pavement on Drummond Place and Oakland Street, in the Borough of Red Bank, N. J., and opened and read in public at the rooms of said Council, Borough Hall, Red Bank, New Jersey, on June 4, 1923, 8 p.m., daylight saving time.

Drawings and specifications for the proposed work prepared by George K. Allen, Jr., Borough Engineer, have been filed in the office of said Engineer at 60 Broad Street, Red Bank, New Jersey, and may be inspected by prospective bidders during business hours. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

Plans and specifications will be furnished to prospective bidders upon payment of ten dollars ($10), which amount will be refunded upon return of plans and specifications before the time specified for the opening of bids.

Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and name of proposed work on the outside, addressed to the Council of Borough of Red Bank and must be accompanied by a certified check for a sum not less than ten (10) per cent of the amount bid on the work, payable to the order of the Borough Collector and a surety company certificate stating that said surety company will provide the bidder with the required bond, and must be delivered at the place and before the hour above named.

The Council of Borough of Red Bank reserves the right to reject any or all bids if deemed to the best interests of the Borough so to do.

By order of the Council Borough of Red Bank.

A. L. MILLER, Mayor.

Attest:
A. E. OLSEN, Clerk.
Red Bank, N. J., May 9th, 1923.

Bids: May 31.

Sewerage System Extensions

Easton, Md.

Sealed Proposals for the construction of certain extensions to the Sewerage System of Easton, Md., will be received and opened by the Mayor of Easton at the Council Chamber in Easton, Maryland, at 12.30 o'clock p.m., on the thirty-first day of May, 1923.

The work to be done comprises the complete construction of about one mile of 8" to 12" pipe sewer, 1,000 feet of House Connections, small pumping station and 4" force main.

Contract, Proposal Forms and Plans may be seen at the office of the Town Clerk or of the Town Engineer, Easton, Md. Plans will be furnished upon payment of $5.00 for each set.

Each Proposal for the work must be accompanied by a certified check drawn to the order of the Mayor & Council of Easton in the sum of $500.00.

JOHN C. NORTH,
Town Clerk.

E. G. KASTENHUBER, JR.,
Town Engineer.

OFFICIAL PROPOSALS

Bids: May 29.

State Highway Work

Baltimore, Md.

Sealed proposals for building six sections of State Highway, as follows:

Washington Co. Cont. W-27. One section of State Highway from Hagerstown to Sharpsburg, a distance of 11.6 miles. (Macadam Recon.).

Garrett Co. Contract G-23. One section of State Highway along Oak and Third Sts. in Oakland, for a distance of 0.67 mile. (Concrete).

Montgomery Co. Cont. M-44. One section of State Highway between Darnestown and Seneca for a distance of 1.0 mile. (Concrete).

Montgomery Co. Contract 141-A. One section of State Highway along the Brookville Pike between the District Line and Woodside, a distance of 2.0 miles. (Concrete Shoulders).

Baltimore Co. Cont. 46-A. One section of State Highway along Seminary Ave. between the Falls Road and York Road a distance of 3.0 miles. (Concrete Shoulders).

Worcester Co. Cont. Wo-30. One section of State Highway from Snow Hill toward Salisbury, for a distance of 1.5 miles. (Concrete).

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on the 29th day of May 1923, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of $1.00, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of Five Hundred ($500) Dollars, payable to the State Roads Commission.

The successful bidded will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 14th day of May 1923.

L. H. STEUART, Secretary,
JOHN N. MACKALL, Chairman.

Bids: June 4.

Water Main and Sewer Construction

Washington, D. C.

Sealed proposals for Contract 36-W&S will be received at the office of the Washington Suburban Sanitary Commission, Evans Bldg., New York Ave., Washington, D. C., until 3 p.m., Eastern Standard Time, Monday, June 4, 1923, for constructing 7,400 feet of 6-in. to 12-in. cast iron water mains and 16,500 feet of 6-in. and 8-in. sewers and appurtenances. Water and sewer pipe to be furnished by Commission.

Plans obtainable after May 21, from Robert B. Morse, Chief Engineer of District, Hyattsville, Md., on returnable deposit of $5.00.

T. HOWARD DUCKETT,
EMORY H. BOGLEY,
J. BOND SMITH,
Commissioners.

OFFICIAL PROPOSALS

Bids: May 31.

Pavement Construction

Pittsfield, Mass.

Sealed bids or proposals for constructing pavements and appurtenances, addressed to the Clerk of the Board of Public Works, will be received at the office of the Board of Public Works, City Hall, Pittsfield, Massachusetts, until 7:30 o'clock p.m. of the thirty-first day of May, 1923. At the above place and time the bids will be publicly opened and read.

Pavement on North Street; the principal items of work are about 5,000 square yards of cement concrete pavement, about 2,000 cubic yards of excavation and other miscellaneous work. The bid must be accompanied by a certified check for five hundred dollars, drawn upon a national bank or trust company established in Pittsfield, Boston or New York and calls for a bond of ten thousand dollars.

Pavement on Center Street; the principal items or work are about 3,800 square yards of asphaltic macadam, about 1,600 linear feet of cement curbs, re-setting about 350 linear feet of stone curbs and other miscellaneous work. The bid must be accompanied by a certified check for five hundred dollars drawn upon a national bank or trust company established in Pittsfield, Boston or New York and calls for a bond of ten thousand dollars.

Pavement on Fenn Street; the principal items of work are about 4,300 square yards of cement concrete pavement, about 1,400 square yards of brick pavement and other miscellaneous work. The bid must be accompanied by a certified check for five hundred dollars drawn upon a national bank or trust company established in Pittsfield, Boston or New York and calls for a bond of ten thousand dollars.

Pamphlets containing information for bidders, form of proposal, contract specifications and plans will be mailed to contractors who apply to the Engineer of the Board of Public Works, or may be obtained at his office.

Bidders may bid on one or all contracts and the right is reserved to reject any or all bids, or to accept any bid.

CHARLES W. POWER,
Mayor and Chairman Paving Committee.
A. B. FARNHAM,
Engineer Board of Public Works.

Bids: June 4.

Street Improvement

Newburgh, N. Y.

Sealed proposals will be received by the City Manager at his office in the City Hall, Newburgh, N. Y., until 2 p.m. Monday, June 4, 1923, for paving and otherwise improving Renwick Street, between the West Shore R.R. and Liberty Street, and South Street between Water and Grand Streets with either vitrified hillside brick or reinforced concrete pavement.

The approximate quantities of pavement to be laid are as follows:

South Street about 4,050 sq.yds.
Renwick Street about 3,900 sq.yds.

Bids will be received on each street separately and cash or a certified check for $1,500 must accompany the bid on each street.

Plans and specifications are on file in the office of the City Engineer, City Hall, Newburgh, N. Y.

The City reserves the right to reject any or all bids received.

W. J. McKAY,
City Manager.

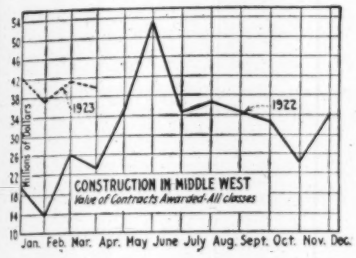
CONSTRUCTION NEWS

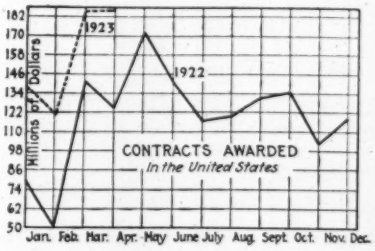
The Construction Barometer

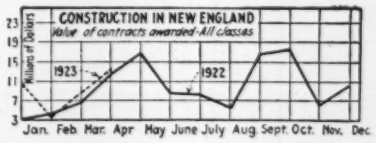
Cost Stationary—Demand Less—Financial Interests Force Buyers' Strike

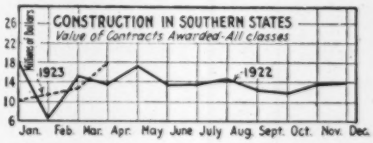
CONTRACT volume for May is about 17 per cent less than in April. Value of large contracts let during the week ending May 24 was $5,000,000 under the preceding week. Thus far, deliberate curtailment of new construction appears to be concentrated around New York, and certainly does not extend beyond the large cities. The publicity being given this idea, however, will probably result in a further falling off in demand. The danger is that the curtailment will come all at once, as has been the rule in depressions.

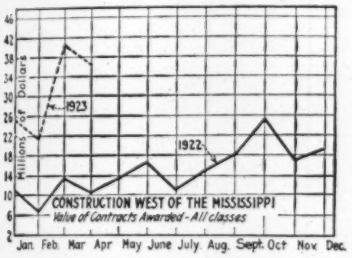
The charts show that up until May 1 contract-letting has been increasing in New England, the South and the Middle Atlantic States, and falling off elsewhere. Also that except for New England and the Middle Atlantic region the lettings have been far heavier than a year ago. Lettings in the U. S. are 49 per cent above year ago.

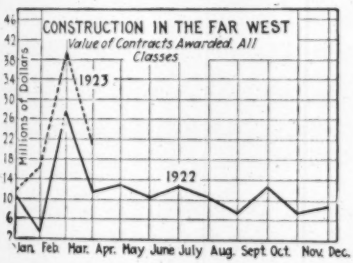


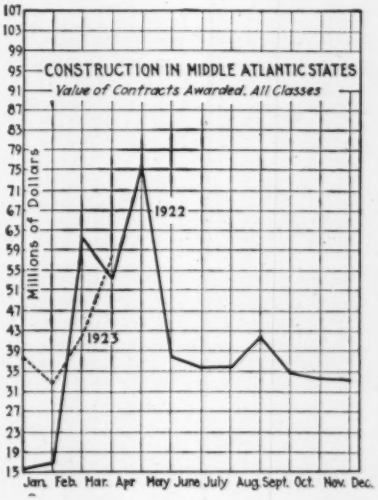












VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ending	Public Works	Private Work	Total Contracts
May 10	$14,414,000	$24,211,000	$38,625,000
May 17	21,510,000	17,893,000	39,403,000
May 24	15,598,000	18,816,000	34,414,000
3 weeks	$51,522,000	$60,920,000	$112,442,000

NUMBER OF LARGE JOBS NOW OUT FOR BID

Week Ending	Private	Public: All	Public: Streets and Roads	Public: Waterworks and Sewers	All Buildings
May 10	45	205	65	48	45
May 17	43	213	82	49	44
May 24	32	230	90	44	48

BASE PRICES REMAIN FIRM

	Quoted on May 31, at	Price Was	On
Structurals, Pittsburgh, 100 lb.	$2.50 @2.60	$2.50 @2.65	May 17
Cement, Chi., net bbl.	2.20	2.05	Feb. 1
Pine, N. Y., M. ft.	60.00	58.00	Apr. 5
Fir, San Fran., M. ft.	41.00	39.00	Apr. 5
Common labor, hr.	0.51	0.50	Apr. 5

PRODUCTION—More steel than iron produced in U. S. during last thirteen years. Present output of steel ingots at annual rate of about 5,000,000 tons in excess of iron. Lumber cut during week of May 19, over 255,000,000 ft. Nat. Lumber Trade Barometer shows output 5 per cent above normal; shipments at 100 per cent and orders, 90 per cent of normal production. Brick shortage continues in New York, Chicago and Philadelphia districts.

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
June 4	Talladega, Ala.	May 10
June 4	Wash., D. C.	May 24
June 4	Buffalo, N. Y.	May 24
June 4	Islington, Ont.	May 31
June 4	Middletown, Conn.	May 31
June 4	North Milwaukee, Wis.	May 31
June 5	Stewart, Minn.	May 24
June 5	Little Chute, Wis.	May 31
June 5	Los Angeles, Calif.	May 31
June 8	Dayton, O.	May 31
June 8	Brooklyn, N. Y.	May 31
June 12	Woodbury, N. J. Adv. May 31	May 31
June 14	Mamon, La.	May 31
June 22	Cleveland, O. Adv. May 31.	May 31
June 27	Davenport, Wash. Adv. May 24 and 31.	May 31

SEWERS

Close Bids		News-Record See Eng.
June 2	Columbus, O.	May 24
June 4	Whittier, Calif.	May 24
June 4	Kansas City, Mo.	May 17
June 4	Hackensack, N. J.	May 17
June 4	Cleveland Heights (Warrensville P. O.), O.	May 31
June 5	Hightstown, N. J.	May 17
June 5	Long Branch, N. J.	May 24
June 5	Hartford, S. D.	May 24
June 5	Holyoke, Mass.	May 31
June 5	Audubon, N. J.	May 31
June 5	Long Island City, N. Y.	May 31
June 6	Waterloo, N. Y.	May 24
June 6	Hamilton, Ont.	May 31
June 6	Brooklyn, N. Y.	May 31
June 7	Marion, O. Adv. May 24 and 31.	May 24
June 7	Poughkeepsie, N. Y. Adv. May 24 and 31.	May 24
June 8	Grove City, Pa.	May 31
June 8	Yankton, S. D.	May 31
June 15	Milwaukee, Wis.	May 31
June 20	Westville, N. J. Adv. May 31.	May 31

WASTE DISPOSAL

Bids Close		See Eng. News-Record
June 20	Duluth, Minn.	May 31
June 21	Sacramento, Calif.	May 31

DAMS

Bids Close		See Eng. News-Record
June 20	Ft. Collins, Colo. Adv. May 31.	May 31

BRIDGES

Bids Close		See Eng. News-Record
June 4	Milwaukee, Wis.	May 31
June 5	Grand Haven, Mich.	May 10
June 5	St. Louis, Mo.	May 10

Bids Close		See Eng. News-Record
June 5	Fine, N. Y.	May 24
	Adv. May 24 and 31.	
June 5	Muncy, Pa.	May 24
June 6	Toronto, Ont.	May 24
June 8	Birmingham, Ala.	May 24
July 31	La Center, Wash.	May 3
Nov. 30	Sydney, Australia	Apr. 19

EXCAVATION, DRAINAGE, IRRIGATION

June 4	Jeffersonville, Ind.	May 31
June 5	Rolling Fork, Miss.	May 10
June 5	Toms River, N. J.	May 24
June 5	Sidney, Ia.	May 24
June 11	Minneapolis, Minn.	May 31
June 12	Albert Lea, Minn.	May 24
June 15	Alexandria, Minn.	May 31
June 15	Albert Lea, Minn.	Apr. 12

STREETS AND ROADS

June 2	Cleveland, O.	May 31
June 4	New Jersey	May 17
June 4	Ely, Minn.	May 17
June 4	Newburgh, N. Y.	May 24
	Adv. May 24 and 31.	
June 4	Waterloo, Ia.	May 24
June 4	Babylon, N. Y.	May 24
June 4	Red Bank, N. J.	May 24
	Adv. May 24 and 31.	
June 4	St. Paul, Minn.	May 24
June 4	California	May 24
June 4	Richmond, Va.	May 24
June 4	Milwaukee, Wis.	May 31
June 4	Breckenridge, Minn.	May 31
June 4	Cleveland Heights (Warrensville, P. O.), O.	May 31
June 5	Rockville, Ind.	May 24
June 5	Bellaire, O.	May 17
June 5	Alabama	May 24
June 5	Rockport, Ind.	May 24
June 5	Louisiana	May 24
June 5	Boonville, Ind.	May 24
June 5	San Rafael, Calif	May 24
June 5	New Hampshire	May 31
June 5	Wisconsin	May 31
June 5	Clarinda, Ia.	May 31
June 5	Florence, Ala.	May 31
June 5	Long Island City, N. Y.	May 31
June 5	Turlock, Calif.	May 31
June 6	Northampton, Mass.	May 31
	Adv. May 31.	
June 6	Wisconsin	May 31
June 6	Abilene, Tex.	May 17
June 6	Rhode Island	May 24
	Adv. May 24 and 31.	
June 6	Delaware	May 24
June 6	Cleveland, O.	May 31
June 6	Brooklyn, N. Y.	May 31
June 6	Hampton, Ia.	May 31
June 7	Shelbyville, Ky.	May 17
June 7	Boonville, Ind.	May 24
June 7	Evansville, Ind.	May 24
June 7	Liberty, Ind.	May 24
June 7	Rushville, Ind.	May 24
June 7	Pennsylvania	May 24
	Adv. May 24 and 31.	
June 7	Virginia	May 24
June 7	Vernon, Ind.	May 31
June 7	Rensselaer, Ind.	May 31
June 7	Ft. Wayne, Ind.	May 31
June 7	Rushville, Ind.	May 31
June 7	Monticello, Ind.	May 31
June 7	Anderson, Ind.	May 31
June 7	Faribault, Minn.	May 31
June 7	Fairmont, Minn.	May 31
June 7	Mishawaka, Ind.	May 31
June 8	Huntingburg, Ind.	May 31
June 8	Paoli, Ind.	May 31
June 8	Cincinnati, O.	May 31
June 8	Fulton, N. Y.	May 31
	Adv. May 31.	
June 8	Bradentown, Fla.	May 17
June 8	Pennsylvania	May 24
	Adv. May 24 and 31.	
June 8	La Crosse, Wis.	May 24
June 8	Elkhart, Ind.	May 31
June 8	Winchester, Ind.	May 31
June 8	Mishawaka, Ind.	May 31
June 8	Williamsport, Ind.	May 31
June 8	Logansport, Ind.	May 31
June 8	Corydon, Ind.	May 31
June 8	Rockport, Ind.	May 31
June 8	Boonville, Ind.	May 31
June 9	Laporte, Ind.	May 31
June 9	Angola, Ind.	May 31
June 9	Barre, Vt.	May 31
June 11	Los Angeles, Calif.	May 24
June 11	Adrian, Mich.	May 31
	Adv. May 31.	
June 11	Minneapolis, Minn.	May 31
June 12	West Virginia	May 24
	Adv. May 24 and 31.	
June 12	Pottsville, Pa.	May 24
	Adv. May 24 and 31.	
June 12	University (St. Louis P. O.), Mo.	May 24
June 12	Washington	May 24
June 12	Maryland	May 31
	Adv. May 31.	
June 12	East Grand Forks, Minn.	May 31
June 12	Stockton, Calif.	May 31
June 12	Sac City, Ia.	May 31
June 12	Le Mars, Ia.	May 31
June 13	Delaware	May 31
	Adv. May 31.	
June 14	Bradentown, Fla.	May 31
June 14	Centerville, Ia.	May 31
June 14	Sandwich, Ill.	May 31
June 15	East Cleveland (Cleveland P. O.), O.	May 24
	Adv. May 24 and 31.	
June 16	Illinois	May 31
June 19	Panama City, Fla.	May 31
June 19	East Liverpool, O.	May 31
June 20	Freehold, N. J.	May 31
	Adv. May 31.	
June 22	Williamson, W. Va.	May 31
June 25	Washington	May 31
June 26	St. Louis, Mo.	May 31

INDUSTRIAL WORK

June 6	St. Louis, Mo.	May 31
June 12	Lecompte, La.	May 24
June 18	Walkerton, Ont.	May 31

BUILDINGS

June 4	Kansas City, Mo.	May 10
June 4	El Centro, Calif.	May 10
June 4	New York, N. Y.	May 24
	Adv. May 24 and 31.	
June 4	Valley Junction, Ia.	May 24
June 4	Syracuse, N. Y.	May 31
June 4	Toronto, Ont.	May 31
June 5	Kinston, N. C.	May 31
June 5	Mount Morris, N. Y.	May 17
June 5	Albion, Mich.	May 31
June 5	Smithfield, N. C.	May 31
June 6	San Francisco, Calif.	May 31
June 6	Murphy, N. C.	May 31
June 7	La Crosse, Wis.	May 24
June 8	Olympia, Wash.	May 24
June 8	Bowling Green, Mo.	May 24
June 10	Madison, Wis.	May 31
June 11	Southmont, Pa.	May 31
June 11	Emporia, Kan.	May 31
June 12	Denver, Colo.	May 24
June 12	Lansing, Mich.	May 31
June 12	Raleigh, N. C.	May 31
June 12	Phelps, N. Y.	May 31
June 14	Nashville, Tenn.	May 31
June 15	Clearwater, Fla.	May 24
June 18	Cleveland, O.	May 31
June 21	Newark, N. J.	May 24
July 1	Athens, O.	May 24

FEDERAL GOVERNMENT WORK

June 2	Lumber—Nashville, Tenn.	May 24
	Adv. May 24 and 31.	
June 4	Post Office—Leesburg, Va.	May 10
June 5	Emergency Gates—Montana	May 10
June 5	Dredging—New Orleans, La.	May 10
June 5	Dredging — Wilmington, Del.	May 10
	Adv. May 10 to 31.	
June 5	Levee Work—Vicksburg, Miss.	May 24
	Adv. May 24 and 31.	
June 5	Piping—West Roxbury (Boston P. O.), Mass.	May 24
June 6	Gates—Denver, Colo.	May 10
June 6	Barracks—San Diego, Calif.	May 17
June 6	Roads—San Diego, Calif.	May 17
June 8	Dredging—Phila., Pa.	May 3
June 11	Dike—New York, N. Y.	May 10
	Adv. May 10 to 31.	
June 11	Breakwater — Marquette, Mich.	May 31
June 13	Stack—St. Cloud, Minn.	May 17
June 13	Hospital—St. Cloud, Minn.	May 31
June 13	Roads and Walks—St. Cloud, Minn.	May 31
June 13	Service Extensions—San Diego, Calif.	May 31
June 15	Piping—Perryville, Md.	May 31
June 15	Recreation, etc. — Dawson Springs, Ky.	May 17
	Adv. May 17 to 31.	
June 15	Nurses Quarters—New York, N. Y.	May 24
	Adv. May 24 and 31.	
June 18	Remodeling — Geneva, N. Y.	May 31
June 19	Dredging—Providence, R. I.	May 24
	Adv. May 24 and 31.	
June 19	Dredging — Wilmington, N. C.	May 24
	Adv. May 24 and 31.	
June 19	Remodeling—Baton Rouge, La.	May 24
June 20	Dredging, etc. — Buffalo, N. Y.	May 24
	Adv. May 24 and 31.	
June 20	Dredging—Norfolk, Va.	May 24
	Adv. May 24 and 31.	
June 20	Remodeling — Huntsville, Ala.	May 24
June 20	Post Office — Pratt, Kan.	May 31
June 21	Mailing Shed—Monroe, La.	May 31
	Adv. May 31.	
June 22	Jetty—Galveston, Tex.	May 24
	Adv. May 24 and 31.	
June 23	Valves, etc. — Florence, Ala.	May 24
	Adv. May 24 and 31.	
June 25	Dredging—Detroit, Mich.	May 31
	Adv. May 31.	
June 25	Dredging, etc.— New York, N. Y.	May 31
	Adv. May 31.	
June 25	Refrigerating Machinery — Pearl Harbor, H. T.	May 31
July 18	Fire Protection System — Pearl Harbor, H. T.	May 31

MISCELLANEOUS

June 5	Sand Clay Gravel—Baton Rouge, La.	May 24
June 7	Modification of Railroad Structure—New York	May 31
June 12	Dikes, etc.—Missouri	May 24
June 12	Stone Crusher Plant—Trenton, N. J.	May 31
	Adv. May 31.	
June 14	Pier and Wharf—Charleston, S. C.	May 24
	Adv. May 24 and 31.	
June 18	Dock and Boat Basin — Sanford, Fla.	May 31
June 18	Ornamental Lighting System—Williamsport, Pa.	May 31
June 26	Subway—Phila., Pa.	May 31
	Adv. May 31.	
June 29	Steam Heating Plant—Wautoma, Wis.	May 31
Feb. 28	Headworks — Wellington, New Zealand	May 24
	Adv. May 24 and 31.	

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Conn., Middletown—Plans to purchase 10,000 ft. 4, 6 and 8 in. c.i. pipe. J. W. Mylcrest, city engr.

N. Y., Fairport—Voted $325,000 bonds and had plans prepared 10 mi. 12 in. and 1 mi. 16 in. mains, 1 m.g. rapid sand filter plant, 2 low adjacent earthen dams with concrete cores and 300,000 gal. standpipe about 35 ft. high. J. P. Wells, Cutler Bldg., Rochester, consult. engr. Noted May 17.

Tenn., Memphis—Voted $1,500,000 bonds extending, improving and enlarging waterworks system. W. B. Fowler, city engr.

Wis., Madison—Making plans and soon takes bids main extensions in various streets. $25,000. E. E. Parker, City Hall, engr.

Wis., Rhinelander — Plans extending mains, rein.-con. pipe. $30,000 appropriated. A. Moe, city clk. Engineer not selected.

Wis., Wisconsin Rapids — Making plans iron removal plant, and surveys to determine underground water supply. $25,000. W. G. Kirchoffer, Dean Bldg., Madison, engr. Noted Mar. 22.

Kan., Winfield—Plans to improve waterworks; $112,000 bonds voted. J. Wilfelt, waterworks mgr. Noted Mar. 15.

Mo., Chamois—Voted $30,000 bonds waterworks.

Mo., Lathrop—Making plans and soon takes bids waterworks. $60,000. A. T. Archer & Co., 609 New England Bank Bldg., Kansas City, engr. Noted Mar. 29.

Mo., Oran—Plans election soon to vote on $25,000 bonds 22,800 ft. 4-8 in. c.i. mains, 29 fire hydrants, fifteen 4-8 in. valves, 60,000 gal. concrete reservoir or 60,000 gal. steel tank on tower. Former bond election defeated. W. A. Fuller, 1917 Ry. Exch. Bldg., St. Louis, engr. Noted May 3.

Mo., Platte City—Defeated $38,000 bonds for waterworks and $9,000 bonds sanitary sewers. A. T. Archer & Co., 609 New England Bank Bldg., Kansas City, engrs.

Tex., Abilene—Making plans rapid sand filter plant. $75,000. H. H. Batjer, city engr.

Tex. Ft. Worth,—City Com. takes bids about Aug. 15, filter plant additions, 10 m.g. capacity. $25,000. J. B. Hawley, Cotton Exch., consult engr. D. L. Lewis, city engr.

Tex., Galveston—Making plans rebuilding Alta Loma pumping plant and extensions. $125,000 bonds voted. C. A. Holt, Jr., city engr. Noted Apr. 19.

Tex., Wolfe City—Making plans complete waterworks system. $50,000 bonds voted. Municipal Eng. Co., Praetorian Bldg., Dallas, engrs. Noted Apr. 19.

Okla., McAlester—Voted $375,000 bonds new pipe line, pumping equipment, water supply system, 6,000,000,000 gal. capacity, and rebuilding dam at Lake McHowe. E. T. Archer & Co., New England Bldg., Kansas City, Mo., engrs. Noted May 3.

Waterworks (Continued)

Okla., Nowata—Voted $112,000 bonds for waterworks system. Benham Eng. Co., 512 Gumbel Bldg., Kansas City, Mo., engrs. Noted Mar. 15.

Ore., Park Rose (Portland, P. O.)—Steiger & Lincoln, engrs., Ry. Exch. Bldg., Portland, take bids about Aug. 15, 400,000 gal. tank, rein.-con. and gunite, or steel, here, for Water Dist. $15,000.

Ore., Portland—Plans new Bull Run gravity pipe line system, 10 mi. 60 in. and 15 mi. 52 in. vertical, lock joint, or electric weld pipe, 3 mi. clearing, one 300 ft. pipe span and one 250 ft. combined highway and pipe span. $3,500,000. F. M. Randlett, City Hall, engr. Noted Oct. 26.

Wash., Camas—City takes bids about June 13 for laying 8 mi. pipe line from here to headwaters of Little Washougal River, diversion dam and intake, small reservoir and improvements to distribution system. $100,000. Stevens & Koon, Spalding Bldg., Portland, Ore., engrs. Noted Sept. 21.

Calif., Napa—Had plans prepared diversion dam, chlorination house, well, etc., in connection with Milliken Canyon water project. To exceed $15,000. A. Kempkey, Hobart Bldg., San Francisco, engr.

Que., Montreal—Plans to lay 1,625 ft. of 8 in. main in Laverdure St., and 3,300 ft. of 30 in. steel main in Sherbrooke St. E. Gauthier, asst. city clk.

Que., St. Louis de Chambord — Plans waterworks system. $40,000. Prices wanted on pipe. J. F. Guinon, Chicoutimi, engr.

Ont., Eastview—Having plans prepared mains, valves, hydrants, etc. $25,000. Pipe will be bought and work let. Patterson & Byrne, 71½ Sparks St., Ottawa, engrs.

Ont., Weston—Having plans prepared and soon takes bids 2 mi. 6 and 8 in. c. i. mains, $26,900, also chlorination plant, $3,000. W. B. Redfern of James, Proctor & Redfern, Ltd., 36 Toronto St., Toronto, engr.

BIDS DESIRED

Conn., Middletown—June 4, by Water Comrs. 255 Main St., 10,000 lin.ft. 4-8 in. c.i. pipe.

N. Y., Brooklyn—June 8, by N. J. Hayes, Comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Carroll, 47th, 56th, 67th, 87th,, East 51st, East 52nd and East 53rd Sts., here.

N. J., Woodbury — June 12, by C. S. Davis, city clk., c.i. mains, special castings, etc. W. H. Boardman, 426 Walnut St., Phila., engr.; adv. this issue.

La., Mamou—June 14, by J. S. Guillory, mayor, Bd. Aldermen, water works plant, incl. oil engines, pumps, steel tower and tanks, hydrants, reservoir, well, etc. $40,000. Kramer Eng. Co., Magnolia, Miss., engrs.

O., Dayton—June 8, by Montgomery Co., 61,048 lin.ft. 4-12 in. Class B c.i. mains in north and south sections of Oakwood Heights Sanitary Sewer Dist. 1, one hundred seventy-eight 4-12 in. valves, 200 sq.yd. repaving, etc. K. B. Allen, Keith Theatre Bldg., co. sanitary engr.

O., Cleveland—June 22, at office of Commissioner Purchases & Supplies, City Hall, furnishing and laying Random Rd. main of Baldwin Fairmount Project. A. V. Ruggles, comr. water; adv. this issue.

O., Cleveland Heights (Warrensville, P. O.)—See "Sewers."

Wis., Little Chute—June 5, by M. Van Hoff, village clk., drilling well first 150 ft. to be 12 or 15 in. diameter with casing, next 550 ft. to be 12 or 15 in. diameter, uncased. A. E. McMahon, c/o City Hall, Menasha, engr. Noted May 17.

Wis., North Milwaukee—June 4, by W. E. Chase, city clk., 6,084 ft. 6-8 in. c.i. mains. $18,000. H. C. Webster, c/o City Hall, engr.

Wis., Oshkosh—Taking bids furnishing and installing pumping machinery for waterworks pumping station. B. T. Gifford, Gay Bldg., Madison, engr.

Wash., Davenport—June 27, by J. E. Fraser, mayor, and City Council, c/o N. C. Ingle, clk., additions to water supply system; adv. this issue.

Calif., Los Angeles—June 5 by Pub. Serv. Dept., Class B c.i. pipe in 12 ft. lengths, 300 pieces 8 in., weight 570 lb. per length, f.o.b. cars San Pedro; 500 pieces 8 in. 570 lb., f.o.b. Aqua Siding, 400 pieces 8 in. 570 lb., f.o.b. Enterprise St. Yard; 500 pieces 10 in., 765 lb., 100 pieces 12 in., 985, 1,000 pieces 12 in., 985 lb., 700 pieces 6 in., 400 lb., and 1,200 pieces 4 in., 260 lb., delivered at Enterprise Street Yards and Aqua Siding.

Ont., Islington—June 4, by S. Barratt, clk. Etobicoke Twp., laying 37,000 ft. 6 and 8 in. c.i. mains between Long Branch Park and Etobicoke Creek. $60,000. James, Proctor & Redfern, 36 Toronto St., Toronto, consult. engrs.

BIDS RECEIVED

N. Y., Long Island City—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in McClellan and Murrison Places, Anable, Ditmars, Potter, 7th, 8th, Anable and Nelson Aves., Bliss, Carolin, Gosman, Barclay, Crescent, Davidson and Hallett Sts., from G. V. Cornell, $15,900; Bway., Hancock and Hick Places, Caldwell, Eliot, Hebbert, Jansen, Mt. Olivet, Paterson, Polk, Rowan and 34th Aves., Forest, Ferguson, Grove, Horton, Mary, McIntosh, Toledo and Tory Sts., from Piano & Grippo, 32 Court St., Brooklyn, $13,800. Noted May 17.

N. Y., Long Island City—N. J. Hayes, com. Water Supply, Gas & Electricity, Municipal Bldg., New York, May 25, mains in Constantia and 98th Places, Alstyne, Corona, Colonial, Lenox, Lewis, Marlowe and Way Aves., Bronson, Granger, Martense, Middagh, Saultell, Waldron, Vandoran, 41st and 45th Sts., here, from J. A. Gregory, 351 East 124th St., New York, $14,000. Noted May 17.

N. Y., New York—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in Unionport, Gun Hill and White Plains Rds., Allerton, Fenton, Morgan, Mayflower, Newbold, Pierce, Plymouth, Rhinelander, Rombouts and Waterbury Aves., Mansion and Mead Sts., from Clementi Contg. Co., 1195 Spoffard St., $54,000. Noted May 17.

N. Y., New York—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in Albany Post Rd., Van Courtlandt Park E., Davidson, Rochambeau, Riverdale, Tyndall, Waldo and Webb Aves., Doughty, East 157th, Exterior, East 147th, East 180th and West 252nd Sts., from C. De Blasio, 339 7th Ave., Mt. Vernon, $36,232. Noted May 17.

N. J., Trenton—Digging trench and back filling for 6,000 ft. 10 in. mains in Stuyvesant Ave., from J. Jiangola, 416 Princeton St., $1.16 per lin.ft.

O., Bedford—See "Sewers."

CONTRACTS AWARDED

N. Y., Endicott—Endicott Water Co. will lay 6 in. mains in north side, by day labor. To exceed $25,000. Noted May 24.

N. Y., Liberty—Bd. Water Comrs. will extend distributing system, by day labor. H. W. Taylor, 149 Bway., New York City, engr. Noted May 3.

Pa., Altoona—Pennsylvania R.R., Broad St. Sta., Phila., 250 m.g. reservoir, 475 ft. long, 68 ft. high, at Tipton Run, 4 mi. north of Tipton, incl. 37,000 cu.yd. excav. and 30,000 yd. concrete and rubble masonry, also 4 mi. standard gauge railroad track, to A. L. Anderson & Bros. Inc., Altoona Trust Bldg. Engrs. est. $1,000,000.

Pa., Harrisburg—Furnishing and laying pipe and building 30 m.g. rein.-con. covered reservoir, to S. W. Shoemaker & Sons, Walnut St., $276,763 and $484,040 respectively. Noted May 24.

Md., Baltimore—Mayor and City Council, sluice gates for additions to Montebello Filters, Water Dept. Contr. 67, to Coldwell-Wilcox Co., South End, Newburgh, N. Y., $45,295. Engrs. est. $50,000. Noted May 24.

Wis., West Allis—For c.i. mains in 26 streets, to Ribbens Bros., Mayville, 6 in. pipe $2.90, 8 in. $3.40, 12 in. $5.50, 16 in. $8.10, 24 in. $22, total $76,000. Noted May 10.

Wis., Woodville—Distribution system, to O'Niel & Preston, 608 Exch. Bank Bldg., St. Paul, Minn., $25,000; steel tower and tank, to Minneapolis Steel & Mchy. Co., 2854 Minnehaha Ave., Minneapolis, Minn., $8,100; pump house, to J. P. Hill, Woodville, $900; well, to M. Boman, Durand, $8.50 per ft., pump, to Chippewa Pump Co., Chippewa Falls, $1,600. Noted Apr. 26.

S. D., Avon—See "Sewers."

Tex., Granbury—For 2 crude oil engines, 2 centrifugal motor driven pumps, c.i. pipe, steel tank, etc., to Municipal Eng. Co., Praetorian Bldg., Dallas, $75,000. Noted May 3.

Ore., Portland—To Gamon Meter Co., 282 South St., Newark, N. J., furnishing four thousand ¾ x ¾ and fifty 1 x 1 water meters, $32,125; Rensselaer Valve Co., Ontario St., Troy, N. Y., four hundred and eighty five 2-16 in. valves, $12,054; Continental Pipe Mfg. Co., Lewis Bldg., 200 fire hydrants, $14,700.

Calif., San Francisco — Spring Valley Water Co., 375 Sutter St., rein.-con. reservoir on Stanford Heights, to H. C. Vensano & Co., 58 Sutter St., $65,000.

Calif., San Francisco—Bd. Pub. Wks. of city and San Francisco Co., constructing Bay Crossing pipe line in Bay Crossing Div. of Hetch Hetchy Aqueduct, Contr. 90, Hetch Hetchy Water Supply, to Western Pipe & Steel Co., 444 Market St., $2,231,661. Noted May 24.

Ont., Huntsville—Taking bids chlorinating plant. $32,000. T. M. Culhn, city engr.

O., Cleveland—Concreting pockets at Crib 3 Lake Erie, 3,900 cu.yd. rubble concrete, to Amer. Constr. Co., Marion Bldg., $88,698. Noted May 17.

Sewers

PROPOSED WORK

Conn., Hartford—Plans to construct small building, to contain 2 centrifugal pumps to pump sewage out of Colt Meadows. $25,000. R. N. Clark, city engr.

Conn., Hartford—Plans 7,000 lin.ft. 18-24 in. vitr. clay and 1,000 lin.ft. 48 in. segmental block sewer in South Marshall, Case, Ward and Palm Sts. $30,000. R. N. Clark, city engr.

Conn., New Britain—Bd. Pub. Wks. plans 8,000 ft. and 12 in. vitr. clay sewer in Wells, Alden and Reo Sts. $30,000. J. D. Williams, city engr.

Tenn., Memphis — See "Streets and Roads."

Tenn., Sweetwater — See "Streets and Roads."

Mich., Detroit—Plans 55,593 ft. 12, 15, 18, 20 and 24 in. vitr. crock and brick sewers in Laterals 3906, 3911, 3921, 3936, 3937 and 3923 to 3933 inclusive. J. W. Reid, city engr.

Ill., East Alton—Plans complete sewerage system. $110,000. Sheppard & Morgan, Edwardsville, engrs.

Ia., Odebolt—Making plans sewerage system and disposal plant. $30,000. W. E. Buell & Co., 205 Davidson Bldg., Sioux City, engrs.

Kan., Emporia—Making plans sewer extension to mains and laterals, 4-10 in. pipe, $25,000. R. E. Paulette, city engr.

Mo., Bolivar—Had preliminary surveys made sanitary sewerage system. $100,000. A. T. Archer & Co., 609 New England Bank Bldg., Kansas City, engrs. Noted May 17.

Mo., Lathrop—Making plans and soon takes bids sanitary sewerage system and disposal plant. $65,000. A. T. Archer & Co., 609 New England Bank Bldg., Kansas City, engrs.

Ark., Ft. Smith — Had plans prepared sewers in Dist. 4. $40,000. W. H. Evans, 2400 Tillis Ave., engr.

Tex., Stamford—June 9, to vote on $30,000 bonds for disposal plant and sanitary sewers. J. B. Hawley, Cotton Exch., Ft. Worth, engr. Noted Feb. 22.

Calif., South San Francisco (San Francisco, P. O.)—Plan to vote on $49,000 bonds combination sanitary and storm sewer in Pecks Dist. and $9,000 bonds vitr. pipe sewers in Grand Ave. extension. G. A. Kneese, Court House, Redwood City, engr.

Ont., Hanover—See "Streets and Roads."

Ont., Owen Sound—Having plans prepared new sewers. $49,000. Prices wanted on materials. R. McKnight, city engr.

BIDS DESIRED

Mass., Holyoke — June 5, by Bd. Pub. Wks., 7,530 ft. 8-32 in. vitr. sewer pipe. $10,000.

N. Y. Brooklyn—June 6, by E. Riegelmann, boro pres., Boro Hall, sewers in 12th Ave., Bay Parkway, 76th, 77th, Bay 28th, East 32nd and 48th Sts.

N. Y., Long Island City—June 5, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sewer in Foster Ave.

N. J., Audubon—June 5, for 7,000 ft. 12, 24, 36 and 48 in. sewers in various streets. $60,000. J. J. Albertson, Court House, Camden, engr.

N. J., Westville—June 20, by Boro Council, sanitary sewerage system. Remington & Vosbury, 601 Market St., Camden, engrs.; adv. this issue.

Pa., Grove City—June 8, by I. L. McKay, city secy., sewage disposal plant incl. 6 concrete tanks, 525 ft. terra cotta pipe. $50,000. F. Graham, city engr.

O., Cleveland Heights (Warrensville P. O.)—June 4, vitr. clay sewer and c.i. main in Taylor Rd. and Washington Blvd. To exceed $25,000. F. A. Pease Eng. Co., Marshall Bldg., Cleveland, engrs.

Wis., Milwaukee — June 15, by J. H. Fowles, secy., Sewerage Comn., 508 Market St., superstructure of 72 x 104 ft., fine screen house, brick and concrete, on Jones Island. T. C. Hatton, c/o owner, engr. Noted Jan. 25.

S. D., Yankton—June 8, by J. W. Summers, Yankton, 8,090 lin.ft. 12 in. and 11,560 lin.ft. 15 in. sewers at State Hospital. $35,000. C. H. Conrick, Yankton, engr.

Sewers (Continued)

Calif., Sacramento — See "Streets and Roads."

Ont., Hamilton—June 6, by S. H. Kent, city clk., furnishing one horizontal centrifugal sewage pump, 130 gal. per minute against 67 ft. head. W. L. McFaul, city engr.

BIDS RECEIVED

N. Y., Brooklyn—E. Riegelmann, boro. pres., Boro Hall, May 23, sewers in Vermont St., from Necaro Co., Inc., 97 Court St., 106.97%, engrs. est. ($314,013); Utica Ave., from Nazzaro & Querriero, 87% ($10,405); Lefferts Ave. from Crooke & Dickinson, 93.8% ($9,164); 81st St. and Fort Hamilton Parkway, from M. Tozzi, 1362 63rd St., 93% ($3,572) and 97% ($1,745) respectively; Troy Ave., from S. Ambrosio, 1016 60th St., 85% ($1,596). Noted May 17.

O., Bedford—For 8,000 ft. 8-16 in. vitr. clay sewer and 7,000 ft. 6 in. c.i. main in Columbus St., from W. B. Smith, 1350 West 89th St., Cleveland, $43,000. Noted May 3 under "Waterworks."

Ore., Astoria—See "Miscellaneous."

CONTRACT AWARDED

Conn., West Hartford (Hartford, P. O.)—Street Sewer and Water Comn., 4,000 ft. 15-20 in. vitr. clay sewer, to A. De Marco, Southington (street address not available). Engrs. est. $30,000. Noted May 10.

N. Y., Binghamton—Bd. Contr. & Supply, sanitary and storm sewers in Charles, Yates, Medford and Robinson Sts., Howard, Mason and Snow Aves., to Stento & Sarafini, 84 Court St. To exceed $25,000. Noted Apr. 26.

N. Y., Endicott—Sewers in Liberty and Exchange Sts., to Parlor City Constr. Co., Binghamton, $32,301.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sewers in Chauncey St., to Green Contg. Co., 734 Vernon Ave., Astoria, $3,260; Wellington St., Evelin St. from Fresh Pond Rd., to Azalea St. and Evelin St. from Azalea St. to Mt. Olivet Ave., to Kennedy & Smith, Inc., 93 Amity St., Flushing, $2,992, $5,031 and $10,991 respectively; 102nd Ave., to Seaside Contg. Co., 193 Beach 108th St., Rockaway Beach, $9,511. Noted May 24.

N. Y., Tonawanda — Town Bd., Village Hall, laying 8-48 in. pipe, to W. J. Irwin & Son, Greenville, O., $379,733; furnishing and delivering 8-20 in. vitr. pipe and connections, to A. Lyth & Sons Co., 48 West Eagle St., Buffalo, $44,372; 24-48 in. concrete pipe and connections, to F. H. Sherrard, 25 Morse Ave., East Orange, N. J.; pumping station, to W. L. Lose, Tonawanda, $48,900.

O., Cleveland—Cuyahoga Co., 8,200 ft. 12-18 in. vitr. clay sewer in Sect. 9-B, Co. Sewerage System, to Langahan Constr. Co., Marshall Bldg., $100,091. Noted May 10.

Mich., Detroit—To J. A. Mercier Co., 616 Hammond Bldg., Blaine Ave. Arm West $31,914, Warren Ave. Arm East, Sect. 2, $67,534; to Jeynes & Affeld, 1208 Ford Bldg., Warren Ave. Arm East, Sect. 1, $53,795; to Anderson & Campbell, Detroit (street address not available) Warren Ave. East, Sect. 3, $48,231; to Liberty Constr. Co., 1026 Detroit Savings Bank Bldg., Warren Ave. Arm East, Sect. 4, $56,687; to Lennane & McIlvenna, 1112 Book Bldg., Clayton Ave. Arm Central Ave. Sewer, $24,565; to W. Blanck & Co., 827 Ford Bldg., Laterals 3910 and 3912, $29,767 and $16,755 respectively; to Oakwood Constr. Co., Oakwood Ave., Laterals 3913 and 3915, $14,000 and $17,500 respectively; to Hammen & Co., 4612 Woodward Ave., Laterals 3916 and 3920, $9,473 and $15,978 respectively; to C. R. Lennane Co., 2631 Woodward Ave., Lateral 3917, $12,906; to Detroit Drainage Constr. Co., 5099 LeMay Ave., Lateral 3919, $17,395; to Rennie & Dibble, Detroit (street address not available) Lateral 3918, $11,977. Laterals to be vitr. crock. Noted May 10 and 24.

Wis., West Allis—Vibr. pipe sanitary sewers in 27 streets, to F. E. Kaminski, c/o Hotel Irvington, Wauwatosa, $69,000. Noted May 10.

S. D., Avon—Constructing 2½ mi. sewers and 1½ mi. watermains, to Gjellefald Chapman Constr. Co., Forest City, Ia., $24,000.

Ont., East view—Will build 12,000 ft. of 8-12 in. vitr. sanitary sewers, by day labor. $32,345. Patterson & Byrne, 71½ Sparks St., Ottawa, engrs.

Ont., Hamilton—For 942 ft. of 54 in. rein.-con. sewer in tunnel in Main and McNab Sts., to J. H. McKnight Constr. Co., 88 St. Davids St., Toronto, $34,839.

Ont., Ottawa—Will repair sewerage system, incl. new concrete pipe, castings, etc., by day labor. $45,000. A. F. Macallum, city engr.

Waste Disposal

BIDS DESIRED

Minn., Duluth—June 20, by O. S. Olsen, city comr., City Hall, garbage incinerator, 62nd Ave. W. $58,000. J. H. Wilson, city engr.

Calif., Sacramento—June 21, by City for garbage incinerator. H. G. Denton, clk.; adv. this issue.

Bridges

PROPOSED WORK

N. Y., Conklin—Lehigh Valley R.R., 143 Liberty St., New York, G. T. Hand, ch. engr., and Delaware, Lackawanna & Western R.R., 90 West St., New York, G. Ray, ch. engr., plan large viaduct, here. $125,000.

Fla., Jacksonville — See "Streets and Roads."

Fla., Orlando—Orange Co. plans bridge over west fork of St. Johns River, 600 ft. wood approach, one 100 ft. steel span, concrete abutments at beginning of approaches and concrete piers for steel span. $30,000. C. A. Browne, Orlando, engr.

Tenn., Memphis—Voted $250,000 bonds to assist in building Arkansas Viaduct connecting western abutment of Harahan Bridge on Arkansas side of Mississippi River with highway at levee on said side. W. B. Fowler, city engr.

Michigan—State Hy. Dept., Lansing, rejected bids for Bridges 531001 and 531002 in Mason Co., and Bridge 820303, Wayne Co. Noted Apr. 19.

Minnesota—State Legislature authorized $2,000,000 bond issue for Hennepin Co., constructing bridge over Minnesota River, also roads. G. H. Mallon, Minneapolis, chn. co. comrs.; adv. this issue. Noted May 3.

Ont., Hamilton—Wentworth Co. plans to expend $50,000 on bridges and repairs. A. Lumsden, County Bldgs., engr.

Ont., Toronto — Provincial Dept. Highways, 110 University Ave., plan high level highway bridge 1,200 ft. long, 40 ft. wide, probably steel trestle on concrete, on Yonge St., just north of here. $800,000 to $1,000,000. G. Hogarth, ch. engr.

BIDS DESIRED

Wis., Milwaukee—June 4, by Dept. Pub. Wks., widening Folson Pl. Bridge from 20 ft. to 41 ft. 6 in. $130,000-$150,000. N. C. Cutler, City Hall, engr. Noted May 17.

Ill., Chicago—Comrs. Cook Co., receiving bids substructure for Burnham Bridge, Miner St. bridge in Des Plaines, Tohey Ave. bridge over Des Plaines River, viaduct near Barrington, Willow St. bridge in Winnetka and culverts near Matteson. $300,000.

Ont., Owen Sound—R. C. McKnight, engr. Grey Co., County Bldgs., taking bids rein.-con. highway bridges, 12 ft. span on Lot 2, Concession 3, Collingwood Twp., 16 ft. span on Lot 38, Concession 7, Artemesia Twp., 14 and 16 ft. spans on Lot 36, Concession 6, Osprey Twp. $30,000.

BIDS RECEIVED

O., Fremont—Sandusky Co., May 18, 320 ft. concrete bridge, 44 ft., (5 spans, each 60 ft.), over Sandusky River on State St., from Grant-Bolton Co., Central Natl. Bank Bldg., Columbus, Plan A $239,498, Plan B $201,125. Noted May 10.

Wyoming—See "Streets and Roads."

Missour—State Hy. Dept., Jefferson City, May 15, two 140 ft. and two 80 ft. steel truss spans, etc. (on 64-11, Hickory, meaning State Project Route 64, Sect. 11, Hickory) from Pioneer Constr. Co., 101 New York Life Bldg., Kansas City, $53,770; three 16 ft. and three 20 ft., rein.-con. slab spans, etc., 24-13, St. Clair, from A. A. Davis & Co., Grain Exch. Bldg., Oklahoma City, $8,880; two 35 ft. girder spans over Indian Creek and one 70 ft. steel truss span, over Hog Creek, 7-84, Texas, from Short & Bremer, Monett, $17,308; one 40 ft., rein.-con. deck girder span and two 10 x 12 ft. box culverts, etc., 1-34, Platte, from J. C. Lyle, Kansas City (street address not available), $10,124; one 70 ft. steel truss span, over Cypress Creek and one 70 ft. steel truss span, etc., over Logan Creek, State Project 206, Ripley Co., from T. T. Wright Lumber Co., Doniphan, $20,546; three 40 I-beam spans, over Drainage Ditch 6, 9-148, Pemiscot, from Pittsburgh-Des Moines Steel Co., Tuttle and Southwest 10th St., Des Moines, Ia., $9,670; three 20 ft. rein.-con. slab spans, etc., over Shockley Branch, 20-31, Saline Co., from H. H. Hanenkratt, Kansas City (street address not available), $7,606. Noted May 10.

CONTRACTS AWARDED

Mass., Westfield—State Hy. Dept., State House, Boston, 40 ft. rein.-con. bridge, 36 ft. wide, Westfield Rd. and relocating highway to eliminate curve, to D. O'Connell Co., 480 Hampden St., Holyoke, $33,000. Engrs. est. $30,000.

N. Y., Rochester—See "Miscellaneous."

West Virginia—State Rd. Comn., Charleston, constructing various bridges, (a. m. sub. means ashlar masonry substructure). Limestone Run Bridge 871, Harrison Co., 75 ft. concrete arch, to Hardmann & Minns, Spencer, $18,196; Upper Tract Bridge 876 across South Branch Potomac River, Pendleton Co., 200 ft. steel through truss to E. R. Mills, Newport, Ky., $26,855, a. m. sub. to Wallace Constr. Co., Kitzmiller, Md., $9,044; Petersburg Gap Bridge 875 across South Branch Potomac River, Hardy Co., 200 ft. steel through truss and one 80 ft. steel pony truss, to Vincennes Bridge Co., Vincennes, Ind., $30,519, a. m. sub. to Shaid Contg. Co., Elkins, $15,991; Salt Lick Bridge 685, Braxton Co., 70 ft. steel pony truss, to Champion Bridge Co., Wilmington, O., $5,043, a. m. sub. to Shaid Contg. Co., Elkins, $10,877; Bridge 869, across Reedy Creek, Wirt Co., 120 ft. steel through truss, to Oregonia Bridge Co., Lebanon, O., $10,700, rein.-con. sub. to Hardmann & Minns, Spencer, $15,344; Moorehead Bridge 867, across Right Reedy Creek, Wirt Co., 120 ft. steel through truss, to Oregonia Bridge Co., Lebanon, O., $10,843, concrete sub to Waters & Freemes, Columbus, O. (street address not available), $11,504; Lee Bridge 868 across Reedy Creek, Wirt Co., 150 ft. steel through truss to Capitol Constr. Co., Columbus, O. (street address not available), $15,333, rein.-con. sub to Waters & Freemas, Columbus, O. (street address not available), $20,696; Bridge 797, across Ten-Mile Creek, Lincoln Co., 160 ft. steel superstructure to Oregonia Bridge Co., Lebanon, O., $15,563; Bridge 872 across Jennies Creek, Wayne Co., 120 ft. steel superstructure to Vincennes Bridge Co., Vincennes, Ind., $10,884, (sub rejected). Noted Apr. 12.

Kan., Paola — Miami Co., Osawatomie Bridge, two 70 ft. and one 130 ft. steel truss spans, to Yancey Constr. Co., Abilene, $26,391. Noted Apr. 19.

Wyoming—State Hy. Comn., Cheyenne, 133 ft. timber trestle and 80 ft. steel span on Federal Aid Project 139, Lusk-Newcastle Rd., Niobrara Co., to J. F. Turpin, Wheatland, $22,732. Noted May 18.

Ont., Chatham—L. A. Pardo, supt. Kent Co., 7 rein.-con. highway bridges, 8-16 ft. spans, 20 ft. roadway, to G. W. Cutter, Chatham, one concrete and steel bridge, to J. J. Bradley, R. R. 2, Tillbury. Total est. $30,000. Noted Apr. 26.

Ont., Toronto—York Twp., 200 ft. 3 span cantilever arch bridge, rein.-con. over Rosedale Ravine, on Astley Ave., to Goldie Constr. Co., 32 Church St., $100,000. Noted Apr. 26.

Dams

PROPOSED WORK

N. Y., Fairport—See "Waterworks."

Tex., Ft. Worth—Southwestern Portland Cement Co., Two Republics Bldg., making plans and surveys dam across Sycamore Creek, 600,000 gal. daily capacity, concrete spillway, etc. $250,000. J. B. Hawley, Cotton Exch. engr.

Okla., McAlester—See "Waterworks."

Calif., Napa—See "Waterworks."

Mexico, Sonora—Richardson Constr. Co., Van Nuys Bldg., Los Angeles, Cal., or more properly Compania Constructora Richardson, S. A., plans 3,300 ft. Indian weir type dam, 12 ft. high, 300 ft. wide between upstream and downstream toe, rockfill and paved with concrete, in addition to extensive canal construction. About $3,000,000. Quinton-Code & Hill, Hollingsworth Bldg., Los Angeles, Cal., engrs. This corrects report in May 3 issue.

BIDS DESIRED

Colo., Ft. Collins—June 20, at office North Poudre Irrigation Co.; enlarging Halligan dam. A. J. Whistleman, secy.; adv. this issue.

CONTRACTS AWARDED

Mo., Kansas City—Rein.-con. dam, 250 ft. long at crest, 350 ft. overall, in Little Blue River off 12th St., to Arkansas Bridge Co., 1503 Waldheim Bldg., $88,000. Noted May 3.

Railways

PROPOSED WORK

Texas-Dallas—Ry. Co., Interurban Bldg., Dallas, plans rebuilding trackage on Forest Ave., from Meadow to 2nd Aves. $33,860. Live Oak St. $69,640. B. R. Brown, ch. engr.

Minnesota—See "Industrial Works" under Hibbing.

Railways (Continued)

Ontario—Oshawa Ry. Co., Oshawa, plans to extend street railway from Alexandria Park to Ross Corners and build spur line in Lake View Park, Oshawa, about ¾ mi., 60 or 80 lb. rails. $30,000 to $40,000. H. W. Cooper, mgr.

CONTRACTS AWARDED

New York — See "Miscellaneous under Rochester."

Michigan—See "Industrial Works" under Detroit.

Excavation, Drainage Irrigation

PROPOSED WORK

Fla., Ft. Pierce—St. Lucie Co. plans to issue $100,000 bonds to dredge channel to 14 ft. depth. E. H. Collins, Jr., Ft. Pierce, engr.

Fla., Miami—Dade D. D. plans to issue $2,000,000 bonds for drainage canals and outlet to ocean. E. R. Graham, Miami, engr.

Wis., Appleton—Outagamie Co. Drainage Bd., 816 Summer St., plans drainage 5,400 acres, some tile draining, approximately 9½ mi. open ditch, 329,000 yd. excav. $40,-000. H. W. Wickert, secy. Engineer not selected.

Wis., Hancock—Adams Co. Drainage Bd. making plans draining 6,000 acres, incl. 18 mi. open ditch work, 350,000 cu.yd. excav. $52,400. E. Philles, Wisconsin Rapids, engr.

Minn., Owatonna—Steele Co. plans Co. Ditch 14, $80,000; Co. Ditch 13, $20,000. G. Griffin, co. aud.

S. D., Yankton—Yankton and Clay Counties plan 17 mi. open ditch, 616,000 cu.yd. excav. $225,000.

Wash., Washougal—Washougal Diking Dist. making plans and takes bids June 1, Washougal Diking Project, $120,000, and also on reclamation work. W. Schwarz, Vancouver, engr. Noted Dec. 21.

BIDS DESIRED

Minn., Alexandria — June 15, by V. Thomas, aud. Douglas Co., Co. Ditch 23, 62,100 lin.ft. 6-30 in. tile, 12,000 cu.yd. excav. 8,300 lin.ft. open ditch. $47,234. E. W. Edwards, Benson, engr.

Minn., Minneapolis—June 11, by A. P. Erickson, aud. Hennepin Co. dredging Lake Minnetonka, Project 2319. About $25,000. J. W. Shaffer, co. surv.

CONTRACT AWARDED

N. Y., Rochester—See "Miscellaneous."

O., Sandusky—Pennsylvania R.R., Broad St., Phila., removing 9,000 yd. rock and 150,000 yd. earth in deepening slip at coal loading dock here, to Duluth-Superior Dredging Co., foot of 45th Ave., Duluth, Minn., $275,000.

Ia., Storm Lake—Buena Vista and Pocahontas Counties, D.D. 146, 26,757 lin.ft. 6-30 in. tile, to Humboldt Gravel & Tile Co., Humboldt, $19,412; labor, to T. Larsen, Storm Lake, $10,362.

Tex., Beaumont — Atlantic Refining Co. dredging Neches River, to W. Moore & Co., 438 Peristein Bldg., $50,000.

Streets and Roads

PROPOSED WORK

Conn., East Hartford (Hartford P. O.) —Plans widening Main St. from Pitkin St. to Boulevard Corner, 2,500 ft. $150,000. C. H. Olmsted, 1175 Main St., engr.

Conn., Meriden—Plans relaying walks and curbs, concrete, 4,000 ft. long, 5-13 ft. wide. $35,000. J. A. Toner, supt. pub. wks.

N. Y., Jamestown—Plans paving Cowden Pl., Harris, Royal and Glasgow Aves., Barrows, 11th, Beechview and East 8th Sts., brick on concrete. $105,000. L. Begman, city engr.

Pa., New Castle—Plans to pave Lutton St. and Cunningham Ave., and repave Croton St., vitr. brick. $25,000. C. E. Brown, clk.

West Virginia—State Rd. Comn., Charleston, rejected bids grading and rock asphalt paving 1.1 mi. Main St. in Grantsville, Project 3165, Calhoun Co.; grading and bituminous macadam paving 6.313 mi. Crab Orchard-Slab Fork Dist. Rd., Project 3239, Raleigh Co., 5.3 mi. Falls Dist.—Ansted Rd., Project 3038, Fayette Co.; grading and gravel surfacing 1.2 mi. St. Marks-Ellenboro Rd., Project 3252 A, Pleasants Co. Noted Apr. 12.

Fla., Cocoa—City rejected bids (unopened) treating 53,740 sq.yd. with asphalt material, 11,660 sq.yd. with asphalt material and paving 11,660 sq.yd. with Ojus rock. $50,-000 bonds defeated. A. F. Harlee, Titusville, engr. Noted Apr. 26.

Fla., Jacksonville—Duval Co. voted $3,-000,000 bonds for road and bridge work. F. Brown, clk. Noted May 10.

Fla., Kissimmee — Osceola Co. election June 12, to vote on $80,000 bonds constructing various roads. J. L. Overstreet, clk.

Fla., Sarasota — Sarasota Co. election June 12, to vote on $75,000 bonds constructing various roads. O. E. Roesch, clk.

Tennessee — State Hy. Dept., Nashville, soon takes bids grading, surfacing and bridging 8 mi. road, 18 ft., from Camden to Carroll Co. Line, Benton Co., chert or gravel. J. G. Creveling, comr. Dept. Highways and Pub. Wks.

Tenn., Memphis—Voted $750,000 bonds improving streets, alleys and highways, widening streets, alleys or highways, opening new streets and connecting existing streets and alleys; also constructing sewers. W. B. Fowler, city engr.

Tenn., Sweetwater—Voted $50,000 bonds street and sewer improvements.

Ky., Calhoun—McLean Co. election soon to vote on $350,000 bonds for road improvements, probably gravel or limestone.

O., Columbus — Making plans grading, curbing, laying necessary water services and sewer connections and paving 4,319 ft. Buttles Ave., Rich St., 2nd alley north of Main St., alley west of Stoddard Ave. and alley north of Main St., asphalt, brick or concrete; 1,540 ft. 8 in. vitr. sewer in alley north of Greenlawn Ave., $2,184; 2,000 ft. 8 in. main in Leonard Ave., $4,000. R. H. Simpson, city engr.

O., New Philadelphia—Tuscarawas Co. making plans concrete paving Dennison-Deersville Rd. $45,000. H. Fielder, Court House, engr.

Ind., Anderson—Madison Co. plans concrete paving 26,740 sq.yd. Faust Rd., $70,-861; 9,811 sq.yd. Haugh Rd., $27,502; grading and gravel surfacing 2.67 mi. Van Winkle Rd., 24 ft., $25,370. A. H. Doyle, Anderson, engr.

Ind., Terre Haute—Vigo Co. plans concrete paving 48,084 sq.yd. Marcus Dyer Rd., Sect. A, $107,297, 22,482 sq.yd. Sect. B, $93,-257; 43,272 sq.yd. Dix Rd., Sect. A, $138,444 and 41,622 sq.yd. Sect. B, $131,698. G. Grimes, Terre Haute, engr.

Michigan—State Hy Dept., Lansing, rejected bids grading and surfacing 3.489 mi. road St. Clair Co., 4.009 mi. Muskegon Co., 5.973 mi. road Oceana Co., 4.853 mi. road Macomb Co., and 4.145 mi. road Charlevoix Co. F. F. Rogers, state comr. Noted Apr. 12, 19 and May 17.

Mich., Detroit—Plans prepared grading and paving with 3½ in. sheet asphalt on 8 in. concrete 12,000 sq.yd. Lonyo St. $70,240, 1,700 sq.yd. Greenlawn Ave. $10,450, 4,000 sq.yd. Washburn Ave. $23,750, 5,500 sq.yd. Lakewood Ave. $33,180, 3,300 sq.yd. Parkhurst Pl. $21,230, 2,500 sq.yd. Green Ave. $14,880, 28,000 sq.yd. Puritan Ave. $165,-970; paving 5 alleys, 6,950 sq.yd. 1 course 6 in. concrete, $17,440. J. W. Reid, city engr.

Ill., McLeansboro—Making plans 6,000 ft. rein.-con. paving, 24-30 ft. $55,000. Caldwell Eng. Co., Ayres Bank Bldg., Chicago, engrs.

Ia., Ireton—Rejected bids 16,000 sq.yd. paving and 6,000 lin. ft. curb. Plans will be revised and new bids taken on reduced yardage. T. J. Johnson, 319 Iowa Bldg., Sioux City, engr. Noted Apr. 26.

Minnesota—See "Bridges."

Kan., Chanute—Having preliminary plans prepared improving 8 blocks, asphaltic concrete. F. W. Austin, city engr.

Missouri—State Hy. Dept., Jefferson City, plans grading 9.937 mi. roads, 30 ft., in De Kalb Co. B. H. Piepmeier, state highway engr.

Tex., Athens—Henderson Co. election in July, after 28th (change of date), to vote on $1,750,000 bonds improving various roads. J. A. Johnson, co. judge. Noted Apr. 26.

Tex., Barstow—Ward Co. making plans grading, surfacing with 5 in. sledged stone base and 4 in. gravel top 17 mi. State Highway 1, 18 ft. $133,500. R. E. Booker, Monahans, co .engr.

Tex., Bonham—Fannin Co. making plans grading, concrete surfacing and bridging 7.35 mi. Honey Grove-Bonham Rd., 18 ft. $277,900. P. B. Price, Honey Grove, engr.

Tex., Galveston—Plans paving various streets. $100,000 bonds voted. C. A. Holt, Jr., city engr.

Tex., Houston—Harris Co. making plans grading and crushed stone surfacing 1.5 mi. State Highway 19, 16 ft., 1 in. inverted penetration bituminous topping on shell. $34,000. Howe & Wise, 214 First National Bank Bldg., engrs.

Tex., Jasper—Jasper Co. making plans grading and gravel surfacing 6 mi. State Highway 7, 16 ft. $60,000. C. P. Hunter, co. engr.

Tex., Richmond—Ft. Bend Co. making plans surfacing with 1 in. hot mixed asphalt topping 10.41 mi. State Highway 19, 16 ft. $30,600. C. H. Kendall, Sugarland, co. engr.

Okla., Davis—Having preliminary plans prepared paving streets, various types. To exceed $25,000. A. T. Archer & Co., 609 New England Bank Bldg., Kansas City, Mo., engrs.

Okla., Perry—Noble Co. election soon to vote on $500,000 bonds hard surfacing 42 mi. roads.

Colo., Boulder—Takes bids in June or July paving with warrenite bitulithic 13,715 sq.yd. in South Bway. Paving Dist., $36,661, 5,075 sq.yd. in 13th St. Paving Dist., $21,-219; resurfacing with warrenite bitulithic 8,175 sq.yd. Grant Place Paving Dist., $16,-396. J. Randolph, city engr.

Calif., Oakland—Alameda Co. plans paving highway between Livermore and Pleasanton and between Dublin and San Ramon at county line. $250,000. G. A. Posey, co. surv.

Calif., San Diego—Plans curbing, sidewalks and paving 30th Sts., 31,326 sq.yd. 1½ in. asphalt on 4 in. concrete, etc.; 25th and Crosby Sts., 30,221 sq.yd. 4 in. aspnalt, etc. F. A. Rhodes, city engr.

Que., Montreal—Plans 29,577 ft. asphalt pavements on various streets $369,445; 19,-418 ft. concrete sidewalks on various streets, $78,785, also 12 in. tile and 2 x 3 brick sewers in 6 streets, $14,794. E. Gauthier, asst. city clk.

Ontario—Provincial Government, Northern Development Branch, Toronto, having surveys made 40-45 mi. tarvia macadam road from Timmins through South Porcupine and Porquis Junction to Iroquois Falls. $250,000; grading and graveling 10 mi. road from Cobalt to Lorrain mining camps, $50,000-$100,000. C. H. Fullerton, Parliament Bldgs., Toronto, engr.

Ont., Hanover—Plans 16,000 cu.yd. asphalt, bitulithic or concrete pavement and storm sewers in Main St. $100,000. James, Proctor & Redfern, 36 Toronto St., Toronto, engrs.

Ont., Hamilton—Takes bids about June 1, asphalt pavements on Cumberland Ave. $30,000. Prices wanted on materials. W. L. McFaul, city engr.

Ont., Hamilton — Wentworth Co. plans gravel, concrete and macadam roads. $127,-780. Part of work will be let by contract and balance by day labor. J. Vance, County Bldg., clk.

Ont., Lindsay—E. L. Miles, engr. Victoria Co., soon takes bids 5,000 sq.yd. macadam base course, 10,300 sq.yd. bituminous bound macadam on macadam base with 6,300 lin.ft. concrete edging and 600 lin.ft. curb and gutter in village of Babcageon, 3,200 sq.yd. bituminous macadam with 3,200 lin.ft. concrete edging in village of Fenelon Falls. $50,000.

Ont., Oshawa—Plans to resurface 50,000 sq.yd. King and Simcoe Sts., asphalt. $80,-000. W. C. Smith, city engr.

Ont., Ottawa—Plans paving 8,500 sq.yd. Catherine St. and Bethan Rd., asphalt on concrete. $41,000. A. F. Macallum, city engr.

Ont., Owen Sound—Plans paving 2nd Ave. probably cement. $40,000. R. McKnight, city engr.

Ont., Owen Sound—Plans 12,000 sq.yd. asphalt pavement on concrete, and 2,800 ft. storm sewers in 2nd Ave. $80,000. D. H. Fleming, Owen Sound, engr.

Ont., Scarboro—Scarboro Twp. plans 12 mi. concrete sidewalks, 4-6 ft. $80,000. C. E. Frase, Stop 19 Kingston Rd., Toronto, engr.

Ont., Teeswater—Having plans prepared cement pavement on Main St. $32,000. W. H. Logan, city engr.

Ont., Toronto — Having plans prepared and soon takes bids paving Bay, Connolly and Front Sts., Glenmount Park and Park Rds., asphalt on concrete; Kenilworth Ave., asphaltic concrete; Glenmount Park Rd., brick block, $245,187. R. C. Harris, city engr.

BIDS DESIRED

New Hampshire—June 5, by State Hy. Dept., Concord, paving 0.72 mi. highway in Epping, bituminous macadam; 0.76 mi. in Alton and 1.15 mi. in Dublin, gravel; 1.33 mi. in Haverhill and 1.61 mi. in Tilton, asphalt. F. E. Everett, state highway comr.

Vt., Barre—June 9, by City Engineer and Council, 6,550 sq.yd. rein.-con., 940 lin.ft. gutter, etc., on Washington and Church Sts. $27,000. S. Ruggles, 72 Franklin St., city engr.

Mass., Northampton—June 6, by O. E. Brainerd, city engr., rein.-con. paving Crafts Ave., Spring and West Sts.; adv. this issue.

N. Y., Brooklyn—June 6, by E. Riegelmann, boro pres., Boro Hall, curbing and asphalt paving Delamere Pl., Highlawn Ave.,

Streets and Roads (Continued)

Bay 22nd, East 8th and East 10th Sts., asphalt paving Farragut Rd., Ave. L, Ovington, 17th, 7th and 16th Aves., Stoddard and Ludlam Places, Louisa, 56th, 58th, 78th, East 9th, East 15th, 54th and 75th Sts.; recurbing and asphalt paving 83rd, Bay 35th and 61st Sts.; grading, curbing and flagging Bergen Pl., 17th Ave. and 54th St.; curbing and paving Ave. L, preliminary bituminous macadam; grading, curbing and laying sidewalks on 73rd St.

N. Y., Fulton—June 8, by Common Council, at office of M. C. Baker, city clk., improving and asphaltic concrete paving several streets. G. W. Hackett, city engr.; adv. this issue.

N. Y., Long Island City—June 5, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sheet asphalt paving, etc., Havemeyer St.; grading, curbing and laying sidewalks and sheet asphalt paving 107th, Beach 117th and Beach 122nd Sts.

N. J., Freehold—June 20, by Monmouth Co. rein.-con. paving 1.25 mi, Englishtown-Jamesburg Rd. 19. G. F. Randolph, 60 Broad St., Red Bank, civil engr.; adv. this issue.

Delaware—June 13, by State Hy. Dept., Dover, improving 5.17 mi. Contr. C S 21; 8.9 mi. Contr. CK 10; 0.833 mi. Contr. CK 13; 3.09 mi. Contr. CS 22; 2.24 mi. Contr. CS 24; adv. this issue.

Maryland—June 12, by State Rds. Comn., Baltimore, paving Contrs. F-54, Ce-45 and D-30, in Frederick, Cecil and Dorchester Counties, concrete; Contrs. 125-A and A-3A, Montgomery and Alleghany Counties, concrete shoulders. J. N. Mackall, chn.; adv. this issue.

W. Va., Williamson—June 22, by Mingo Co., improving 4.28 mi. Glen Alum-Ben Creek Rd., 22,600 ft. clearing and grubbing, 65,800 cu.yd. excav., etc.; 3.91 mi. Tamcliff-Spice Creek Rd., 20,670 ft. clearing and grubbing, 63,250 cu.yd. excav., etc. H. Cook, road engr.

Fla., Bradentown—June 14, by Manatee Co., shell surfacing 15 mi. road on Terra Ceia Island, 15 ft. $55,000. H. B. Glover, Bradentown, engr. Noted May 24.

Fla., Panama City—June 19, by Comrs. and Bond Trustees, 6,000 lin.ft. concrete curb and gutter, 8,000 lin.ft. 2 in. concrete gutter, 30,000 sq.yd. vitr. brick, vertical fibre brick, granite block, wood block, asphalt or concrete paving. $100,000. O. H. Lang, Moultrie, Ga., consult. engr.

Alabama—J. H. Mayer, div. engr., State Hy. Comn., Montgomery, receiving bids grading and asphalt surfacing 32 mi. Birmingham-Gadsden Highway, 20 ft., St. Clair Co., $400,000.

Ala., Florence—June 5 (change of date), 75,000 sq.yd. paving, various types. $100,000. W. S. Eastip, mayor. Noted May 10.

O., Cincinnati—June 8, by Hamilton Co., grading and paving 40,300 sq.yd. Boomer, Zig Zag and Elm Rds., bituminous macadam, $78,140; 60,000 sq.yd. Cleves and Warsaw Rds., concrete $374,624 or bitoslag $498,833. E. A. Gast, Court House, co. surv.

O., Cleveland—June 2, by Cuyahoga Co., Court House, grading, curbing and paving Snow Rd. $117,897. F. Lander, Court House, engr.

O., Cleveland—June 6, repaving Woodland Ave. from Eagle Ave. to East 55th St., asphalt. To exceed $100,000. R. Hoffman, City Hall, engr.

O., Cleveland Heights (Warrensville P. O.)—June 4, grading, curbing and paving Woodridge, Williams, Oxford, Montford, Summit, Park and Lee Rds., bituminous macadam, asphaltic concrete or sheet asphalt. $100,000. F. A. Pease Eng. Co., Marshall Bldg., Cleveland, engrs.

O., East Liverpool—June 19, resurfacing about 1 mi. River Rd., 18 ft., concrete. $80,000.

Ind., Anderson—June 7, by Auditor Madison Co., hard surfacing 4,905 ft. Haugh Rd., 18 ft. $27,502, 13,371 ft. Faust Rd., 18 ft., $70,860; grading and graveling 2.67 mi. Van Winkle Rd., 24 ft., $25,370. A. H. Doyle, Anderson, engr.

Ind., Angola—June 9, by Auditor Steuben Co., grading and gravel surfacing 29,086 ft. Burl Hughes Rd., 18 ft. $28,152. F. Hubbell, Angola, engr.

Ind., Booneville—June 8, by Auditor Warrick Co., clay and gravel surfacing 17,740 ft. Youngblood Rd., 24 ft., $25,083; hardsurfacing 5,848 ft. Holtz Rd., 30 ft., $25,907, 18,478 ft. Hasse Rd., 16 ft., $26,700, 10,190 ft. Wiebe Rd., 18 ft., $25,050, 34,681 ft. Leslie Rd., 18 ft., $93,900. S. Bohanan, Booneville, engr.

Ind., Brazil—June 7, by Auditor Clay Co., grading and gravel surfacing 14,780 ft. Douglass Rd., 18 ft. $26,036. F. E. James, Brazil, engr. Noted May 24.

Ind., Corydon—June 8, by Auditor Harrison Co., grading and gravel surfacing 14,543 ft. Bird Rd., 24 ft. $25,460. G. C. Doolittle, Corydon, engr.

Ind., Elkhart—June 8, by Bd. Pub. Wks., concrete paving 12,453 sq.yd. East Boulevard. $33,000.

Ind., Ft. Wayne—June 7, by Auditor Allen Co., grading, gravel and stone wearing surface on 15,592 ft. Garman Rd., 24 ft. $33,000. O. M. Darling, Ft. Wayne, engr. Noted May 24.

Ind., Huntingburg—June 8, by Auditor Dubois Co., paving crushed stone 19,270 ft. Bretz Rd., 24 ft. $25,881. E. Pickhardt, Huntingburg, engr.

Ind., Jeffersonville — June 4, by Comrs. Clark Co., gravel surfacing 8.8 mi. Wm. D. Taylor Rd. in Owen and Washington Twps. $85,187. K. P. Barnes, co. surv. Noted May 17.

Ind., Laporte—June 9, by Auditor Laporte Co., grading and gravel surfacing 5.1 mi. Johnson Rd., 18 ft., $27,600; 4.7 mi. Wright Rd., 18 ft. $25,926. P. Summy, Laporte, engr. Noted May 24.

Ind., Logansport—June 8 by Auditor Cass Co., grading and gravel surfacing 19,731 ft. Berkshire Rd., 24 ft. $25,098. J. Bennett, Logansport, engr.

Ind., Mishawaka—June 7, by Bd. Wks., concrete paving 20,943 sq.yd. West 4th St. $55,500. J. L. Stevens, city engr. Noted May 10.

Ind., Mishawaka—June 8, by Bd. Wks., concrete paving 14,807 sq.yd. Battell Rd. $39,240. J. L. Stevens, city engr. Noted May 10.

Ind., Monticello — June 7, by Auditor White Co., grading and graveling 15,835 ft. Cover Rd., 24 ft. $27,700. G. A. Thomas, Monticello, engr.

Ind., Paoli—June 8, by Auditor Paoli Co., crushed stone paving 57,070 ft. Orleans Rd., 18 ft., $49,991. A. Boyd, Paoli, engr.

Ind., Rensselaer—June 7, by Auditor Jasper Co., grading and gravel surfacing 17,680 ft. Trachel Rd., 18 ft. $26,742. E. D. Nesbitt, Rensselaer, engr. Noted May 24.

Ind., Rockport—June 8, by Auditor Spencer Co., grading and gravel surfacing 19,345 ft. Smith Rd., 24 ft. $25,475. Z. X. Bennett, Rockport, engr.

Ind., Rushville—June 7, by Auditor Rush Co., stone surfacing 21,127 ft. Leisure Rd., 24 ft. $28,906. F. Catt, Rushville, engr.

Ind., Vernon—June 7, by Auditor Jennings Co., grading and gravel surfacing 13,210 ft. Richards Rd., 24 ft. $25,369. C. W. Miles, North Vernon, engr. Noted May 24.

Ind., Williamsport—June 8, by Auditor Warren Co., grading and gravel surfacing 14,714 ft. Balbach Rd., 30 ft. $29,841. J. R. Gregory, Williamsport, engr.

Ind., Winchester — June 8, by Auditor Randolph Co., grading and surfacing with gravel and stone, 15,740 ft. Howell Rd., 30 ft. $25,600. A. B. Purdy, Winchester, engr. Noted May 24.

Ind., Winchester—June 8, by Auditor Randolph Co., stone paving 12,257 ft. Barkalow Rd., 20 ft., $25,257; grading and paving 15,570 ft. Kemp Rd., 30 ft., stone wearing surface on gravel, $80,640. A. B. Purdy Winchester, engr.

Mich., Adrian—June 11, by City Comn., improving 6 streets. G. P. Love, city clk.; adv. this issue.

Illinois—June 16, by Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, portland cement concrete paving 0.56 mi. Route 14, Sect. 9-1, Hamilton Co., 18 ft., C. H. Older, ch. engr., also at same time by City of McLeansboro, widening Sect. 9-1, Caldwell Eng. Co., Jacksonville, engrs.

Ill., Chicago—Comrs. Cook Co., receiving bids paving 2.5 mi. extension to 95th St., W., 1.75 mi. 95th St. near city limits, 1 mi. in Bartlett Twp. and 1 mi. in Glenwood Twp. $200,000.

Ill., McLeansboro—See "Illinois."

Ill., Sandwich — June 14, by Bd. Local Impvts., City Hall, rein.-con. paving Church St., (except center 18 ft.), $43,000. Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, will also take bids same day for center 18 ft., $19,000. A. L. Webster, Wheaton, engr.

Wis., Milwaukee—June 4, at office Dept. Pub. Wks., one course concrete pavement, one course concrete pavement integral curb, vibrolithic concrete pavement integral curb, asphaltic concrete pavement cement curb and gutter, cement sidewalks. R. E. Stoelting comr.

Wisconsin—June 5, by State Hy. Comn. at div. office 4, Citizens Natl. Bank Bldg., Wisconsin Rapids, grading and surfacing Friendship-Kilbourn Rd., Adams Co., Sect. A, 8,776 cu.yd. featheredge gravel, Sect. B, 12,295 cu.yd. featheredge gravel, Sect. C, 15,039 cu.yd. featheredge gravel; New Lisbon-Mauston-Kilbourn Rd., Juneau Co. 8,933 sq.yd. concrete, 2,470 cu.yd. gravel, etc. A. R. Hirst, Madison, state highway engr.

Wisconsin—June 6, by State Hy. Comn. at div. office 3, Nicolet Bldg., Green Bay, concrete surfacing, etc., 23,325 sq.yd. Pere-Greenleaf Rd., Broad Co., 23,308 sq.yd. Askeaton-Greenleaf Rd., Brown Co. A. R. Hirst, Madison, highway engr.

Wis. Milwaukee—June 4, by W. J. Carr, clk Milwaukee Co., concrete surfacing, etc., 14,000 sq.yd. Howard Ave. Lake Twp.; 5,300 sq.yd. Silver Spring Rd. and Whitcomb Ave. in village Whitefish Bay. Wisconsin Hy. Comn. Madison, engrs.

Ia., Centerville—June 14, by Auditor Appanoose Co., grading 6.753 mi. road from Moulton north, and from here southwest and northwest, 182,021 cu.yd. excav., 6,029 lin.ft. 6-18 in. tile, etc. $50,000. F. L. Davis, co. engr.

Ia., Clarinda—June 5, by Auditor Page Co., grading 12.31 mi. road from here northeast to County line and 16.3 mi. from here south to State line, 26 ft., 629,824 cu.yd. excav. $150,000. I. H. Taggart, co. engr.

Ia., Hampton—June 6, by Auditor Franklin Co., gravel surfacing 22.25 mi. county roads, 26 ft., 29,400 cu.yd. gravel, etc. To exceed $50,000. M. E. Hicketheir, co. engr.

Ia., Le Mars—June 12, by Auditor Plymouth Co., grading 17.883 mi. Federal Aid Project 192, from Woodbury Co. line north, 26 ft., 319,500 cu.yd. excav., etc. To exceed $75,000. G. S. Huxtable, co. engr. Noted May 18.

Ia., Sac City—June 12, by Auditor Sac Co. gravel surfacing 4.463 mi. road from Schaller west, and 5.052 mi. in towns of Schaller, Early, Lake View, Wall Lake, Lytton and Auburn, 26 ft., 13,220 cu.yd. gravel. W. D. Maxwell, co. engr.

Minn., Breckenridge—June 4, by city, paving 19,500 sq.yd. various streets rein.-con., bituminous concrete, bituminous macadam, bitulithic or wood block. $45,000-$75,000. R. R. Waite, city clk.

Minn., East Grand Forks—June 12, paving, etc., various streets, 8,600 cu.yd. excav., 40,400 sq.yd. paving, 9,140 lin.ft. concrete curb. Bids on one course concrete, bitulithic or asphaltic concrete. $100,000. A. N. Briggs, city clk.

Minn., Fairmont—June 7, by W. M. Canfield, aud. Martin Co., gravel surfacing 4 mi. State Aid Rd. 6, Job 2309, 13.6 mi. State Aid Rd. 8, Jobs 2305, 2306 and 2310, 4 mi. State Aid Rd. 9, Job 2307, and 4.7 mi. State Aid Rd. 10, Job 2308, 30,084 cu.yd. gravel surfacing. $75,000. C. N. Krosch, Fairmont, engr.

Minn., Faribault — June 7, by F. M. Kaisersatt, aud. Rice Co., gravel surfacing 4.6 mi. State Rd. 19, Job 2305, 10.5 mi. State Rd. 20, Job 2306, 4.7 mi. State Rd. 26, Job 2307, and 7.7 mi. State Rds. 32 and 33, Jobs 2314 and 2315. J. C. McElherne, Faribault, engr.

Minn., Minneapolis—June 11, by A. P. Erickson, and Hennepin Co., grading and concrete culverts on Project 2317, Road 6, 60,000 cu.yd. excav., 297 cu.yd. concrete for culverts, $40,000. J. W. Shaffer, co. surv.

Mo., St. Louis—June 26, by Bd. Pub. Serv., 208 City Hall, curbing and paving 65,775 sq.yd. Soulard, Forest Park, Tennessee, Wiesehan, Elenore, Hebert, Utah, Schollmeyer, Tyrolean and Elmer Sts., 12th St. from Soulard to Chouteau Sts., 12th St. Russell to Soulard Sts., Osceola St. from Ohio St. to Bway., Osceola St., from Ohio St. east, asphalt, warrenite, asphaltic concrete and rein.-con. $298,280. W. W. Horner, city engr.

Washington—June 25, by State Hy Comn., Olympia, grading and surfacing with crushed rock 6 mi. Navy Yard Highway from Union City to Holyoke Creek, Mason Co. J. Allen, state highway engr.

Calif., Stockton—June 12, by A. L. Banks, city clk., paving, etc., Harrison St., 32,042 sq.ft. pavement, 2½ in. cementing gravel base and 3 in. asphalt concrete base with 2 in. asphalt concrete surface; Castle St., 1,950 sq.ft. 5 in. pavement, 10,987 sq.ft. 7 in. pavement, and 11,691 ft. cement walks. W. B. Hogan, city engr.

Calif., Turlock—June 5, by City Council, grading and paving Orange St. between West Main St. and South Ave., 83,000 sq. ft. 3 in. asphaltic concrete base with 1½ in. warrenite surface, 90,000 sq.ft. grading, etc. H. Hall, city engr. Noted May 3.

BIDS RECEIVED

Mass., Boston—Bd. Pub. Wks., May 22, paving 1,000 ft. Gloucester and Hereford Sts., 30-40 ft., sheet asphalt, from Warren Bros. Co., Parkman Bldg., $29,921.

N. Y., New York—Park Bd., Municipal Bldg., May 24, roads and paths, etc., Eastern Blvd. to City Island, from C. D. Beckwith, Inc., 2875 Bway., $93,986. Noted May 17.

N. Y., St. George—J. A. Lynch, pres. Richmond Boro., Boro. Hall, May 23, grading and granite block paving, etc., Marginal

Streets and Roads (Continued)

St., from J. Johnson Sons, 455 Bway., West New Brighton, $21,731. Noted May 17.

Delaware—State Hy. Dept., Dover, grading and concrete paving, etc., 4.35 mi. Townsend-Coldwell Rd., Contr. CN-11, from Wm. Eisenberg, Woodbine, N. J., $152,830; 2.746 mi. Bear-State Rd., Contr. CN-10, from D. E. O'Connell & Sons, Ridley Park, Pa., $97,488; 3.16 mi. Marsh Rd., Contr. CN-7, from Baton Constr. Co., Presser Bldg., Phila., $137,494; Camden drainage sewer, Contr. CK-8A, from George & Lynch, Dover (street address not available), vitr. clay pipe $2,690, concrete pipe, $2,724; fill at Appoquinimink, Contr. 48-C, from Jester & Cook, Lincoln, $2,340. Noted May 3.

Maryland—State Rds. Comn., Baltimore, concrete surfacing 9,400 sq.yd. Contr. M-39, Montgomery Co., from Gosnell, Russell Co., Frederick, $31,700; 13,100 sq.yd. Contr. B-54, Baltimore Co., from P. F. Reddington, 2 East Lexington St., Baltimore, $38,767; 13,000 sq.yd. Contr. D-33, Dorchester Co., from Holt Constr. Co., Federalsburg, $57,-223; 6,800 sq.yd. Contr. Wo-28, Worcester Co., from J. K. Wetter, Salisbury, $17,093; gravel surfacing 30,000 sq.yd. Contr. Ch-25, Charles Co., and 39,000 sq.yd. Contr. SM-23, St. Marys Co., from St. Marys Constr. Co., Mechanicsville, $28,616 and $38,875 respectively; 17,800 sq.yd. bituminous surfacing, Contr. Bc-43, Baltimore City, from Baltimore Asphalt Block & Tile Co., 1320 North Monroe St., Baltimore, $97,277; Contr. W-26, Washington Co., 4,500 tons rein.-con. base and 4,450 tons bituminous macadam surface, from Bester-Long Co., Hagerstown, $59,943; Contr. 45-A, Montgomery Co., 3,520 sq.yd. concrete shoulders, from J. H. Blankford, Brandywine, $11,264. Noted May 10.

D. C., Wash.—Dist. Comrs., 509 Dist. Bldg., surfacing roadways, from Cranford Paving Co., 2620 E St., N. W., oil $1.82, lake asphalt $1.89, about $60,000.

West Virginia—State Rd. Comn., Charleston, grading and paving with concrete and gravel 0.35 mi. Barkwill and 3rd Sts., in St. Marys, Projects 3254 and 3268, Pleasants Co., from Pipes & Johnson, Middlebourne, $26,003. Noted Apr. 12.

Ind., Albion—Noble Co. ,concrete paving 75,696 sq.yd. Stacy Steel Rd., from W. L. Johnson Constr. Co., 1205 North Bellview Pl., Indianapolis, $136,645. Engrs. est. $138,394.

Ind., Indianapolis—Marion Co., concrete paving 78,643 sq.yd. Northwestern Ave., from McCoun Constr. Co., Noblesville, $196,-643. Engrs. est. $204,672.

O., Cleveland—From Rieley Bros., The Arcade, grading, curbing and paving driveways at city hospital, asphalt, $24,907, East 106th, asphalt, $3,977, Mt. Overlook Ave., brick, $8,924. Work involves 2,730 cu.yd. earth excav., 1,270 sq.yd. vitr. brick, 4,260 sq.yd. asphalt and 6,530 sq.yd. concrete base.

Missouri—State Hy. Dept., Jefferson City, May 15, constructing roads (1-23, Andrew means Route 1, Sect. 23, Andrew Co.) 1.802 mi. **1-23, Andrew,** from F. M. Clark, Savannah, $18,935; 3.296 mi. **1-40, Clay,** from J. W. Lyle, Kansas City (street address not available), $14,008; 1.618 mi. **64-11, Hickory,** from Vincennes Bridge Co., Vincennes, Ind., $16,117; 4.886 mi. **7-27, Randolph,** from P. J. Murphy, Moberly, $14,100; 4.202 mi. **3-34, Carroll,** from C. T. Pemberton, Wakenda, $8,564; 0.54 mi. **3-33, Carroll,** from Cameron Joyce & Co., Keokuk, Ia., $21,040; 4.059 mi. **20-32, Saline,** from A. W. Mosley, 529 Kansas City Ave., Excelsior Springs, $17,184; 2.784 mi. **12-53, Franklin,** from Vedder & Kasmann, Union, $32,279; 1.212 mi. **7-21, Macon,** from Coopers Constr. Serv. Co., Federal Reserve Bank Bldg., St. Louis, concrete, $34,885, gravel $31,764; 4.304 mi. **24-13, St. Clair,** from A. A. Davis & Co., Grain Exch. Bldg., Oklahoma City, Okla., $49,259; 2.036 mi. **47-11, Warren,** and 1.6 mi. **25-4, St. Genevieve,** from H. A. Warman, Pittsfield, Ill., $26,010 and $28,305 respectively; 4.2 mi. **7-84, Texas,** and **4.701 mi. State Project 206, Ripley Co.,** from Missouri Bridge & Iron Co., Fullerton Bldg., St. Louis, $27,096 and $17,298; 4.625 mi. **1-39, Platte,** and 4.897 mi. **20-31, Saline,** from H. H. Hanenkratt, Kansas City (street address not available), $29,970 and $31,264 respectively. Noted May 10.

Tex., Georgetown—Williamson Co. surfacing 15.57 mi. State Highway 2-C, 141,714 sq. yd., (a) 1 in. Uvalde rock asphalt, (b) 1½ in. inverted penetration, from W. E. Dozier, 230 Austin Natl. Bank Bldg., Austin, (a) $91,496; Haden & Austin, Hill and Market Sts., Houston, (a) $100,859 (b) $92,-711. Engrs. est. $85,000-$100,000. Noted May 3.

Tex., Palo Pinto—Palo Pinto Co. grading and surfacing 9.81 mi. North Branch of Highway 1, 2,096 cu.yd 1:2:4 concrete, 31,-612 cu.yd. roadway, 63,263 cu.yd. borrow, 14,677 cu.yd. loose and 8,753 cu.yd. solid rock excav., 55,717 cu.yd. stone quarry, from Smith Bros., Amer. Natl. Bank Bldg., Dallas, $154,400; 268,211 lb. reinforcing furnished by county. Engrs. est. $177,500. Noted May 3.

Wash., Seattle—Paving 3rd Ave. W. et al., from J. L. Smith, Pioneer Bldg., 28,420 sq.yd. 6 in. concrete $1.70, 23,640 sq.yd. 7 in. $1.90, etc., total $97,412, 6 in. clay or concrete, $102,140 7 in. clay or concrete; engrs. est. $97,872 clay, $107,782 concrete; improving 15th Ave. S. et al., 130,000 lin.ft. wood curbing, 21,000 lin.ft. box drain, 116,-000 temp wood sidewalk, 33,500 cu.yd earth excav., from G. A. Banderet, Bryn Mawr, $48,574, engrs. est. $44,636.

Calif., Sacramento — Curbing, guttering, sewers and paving 11th Ave. between 44th St. and Stockton Blvd., from A. Teichert & Son, Ochsner Bldg., 6,886 ft. curb and gutter $1.76, 1,304 ft. 4 in. vitr. sewer $1.02, 1,166 ft. 8 in. vitr. sewer $1.23, 47,714 ft. 4 in. asphaltic concrete $0.17, 26,966 ft. 5½ in. asphaltic concrete $0.2135.

CONTRACTS AWARDED

Maine—State Hy. Comn., Augusta, to I. J. Murphy, Somerville, Mass., paving 4.3 mi. in Somerset Co., 2,450 sq.yd. bituminous macadam $2.50, 14,000 cu.yd. excav. $1.35, etc., total $113,625. 4.535 mi. in Cumberland Co., 2,231 sq.yd. bituminous macadam $2.50, 14,989 cu.yd. excav. $1.50, etc., total $102,430; to H. H. Day, Bangor (street address not available), 2.32 mi. in Penobscot Co., 4,800 sq.yd. gravel $2.40, 7,000 cu.yd. excav., etc., $1.10, total $32,433. Noted Apr. 26.

Conn., Rockville—Pub. Wks. Comn., 6,000 lin.ft. concrete curb and gutter, and 3,000 lin.ft. concrete sidewalks, to R. Farrell, 33 Grove St. Engrs. est. $25,000. Noted Apr. 19.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, asphalt paving Barrett St., to Borough Asphalt Co., 1301 Metropolitan Ave., $13,104; 49th St., to Cranford Co., 52 9th St., $10,577; 78th St., to Uvalde Asphalt Paving Co., 1 Bway., New York, $9,378; curbing and asphalt paving Ave. K, to Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., $18,135; grading, curbing and flagging Kingsland Ave., to Greico Bros., 172 Russell St., $13,354; Ave. T and 56th St., to G. M. Mandatto, 132 29th St., $11,278 and $3,159 respectively. Noted May 10.

N. Y., Buffalo—Paving Weaver Ave., to Rock Asphalt & Constr. Corp., Morgan Bldg., $36,317; Playter St., to Erie Contg. Co., Morgan Bldg., $25,285; Bryant St., to H. P. Burgard Co., 1968 Fillmore Ave., $34,-190, all asphalt on concrete.

N. Y., East Aurora — Concrete paving South St., to Hessel & Son, East Aurora, $25,000.

N. Y., Peekskill—Bd. Village Trustees, repaving various streets, brick to H. G. Strong, Dobbs Ferry; concrete to Christopher Bros., Peekskill. Noted May 3.

N. J., Roselle Park (Elizabeth P. O.)—Mayor and Boro Council, improving Walnut St., Clay and Sheridan Aves., to C. H. Winans Co., 207 Broad St., Elizabeth, $66,-775. Noted May 10.

Pa., Erie—Asphalt pavement on 29th St., to J. and M. Doyle Constr. Co., Erie, $11,-232; Cherry St., to M. A. McCormick, Erie, $20,554. Noted May 24.

Maryland—State Rds. Comn., Baltimore, concrete surfacing 3 mi. Contr. M-25A, Montgomery Co., to G. B. Mullin Co., 1296 Upshur St. N. W., Wash., D. C., $31,469; 9,200 sq.yd. Contr. AA-32, Anne Arundel Co., to F. W. Steahle & Bro., Annapolis, $36,665; 17,900 sq.yd. Contr. K-22, Kent Co., to Old Line Constr. Co., Chestertown, $50,-968; 12,500 sq.yd. Contr. Ho-33, Howard Co. ,to Thomas, Bennett & Hunter, Westminister, $67,391; 18,500 sq.yd. Contr. G-25, Garrett Co., to F. A. Dennison Co., 260 10th St. N. W., Wash., D. C., $69,433; 9,800 sq.yd. Contr. M-41, and 9,400 sq.yd. Contr. M-36, Montgomery Co., to M. J. Grove Lime Co., Lime Kiln, $37,976, and $30,715 respectively; 12,300 sq.yd. Contr. Ce-44 and 19,300 sq.yd. Contr. Ce-46, Cecil Co., to Broad Creek Constr. Co., Elkton, $40,576 and $52,736 respectively; 7,100 tons rein.-con. base and 7,000 tons bituminous macadam surfacing, Contr. W-25, Washington Co., to H. W. Kaylor, Hagerstown, $89,820. Noted May 24.

Va., Richmond—Vitr. brick paving 4 mi. various streets, to C. M. Weinbrunn, 1015 North 6th St., $178,330; paving 6 mi. various streets to McGuire & Rolfe, Virginia Ry. & Power Bldg., Contr. 1, granite spall $3,419, Contr. 2, asphalt $146,281, Contr. 5, asphalt concrete $25,548.

West Virginia—State Rd. Comn., Charleston, surface treating 22.2 mi. Projects 42, 1037, 2021 and 2022, Raleight Co. and 16.4 mi. Projects 54, 2024, 2009, 1086, 2023, 2025 and 1111, Greenbrier Co., to Ada Constr. Co., Ada, O., $16,353 and $19,317 respectively, 3.5 mi. Projects 79 A and 1068, Pocahontas Co., to Dougher-Boone Constr. Co., Charleston (street address not available), $5,789, 6 mi. Project 1027, Fayette Co., to Fidelity Constr. Co., Mt. Hope, $3,004, 4.8 mi. Projects 34, 60 and 1065, Monroe Co., to O. C. Young, Beckley, $8,773; grading and concrete paving Project 124, Harrison Co., and Project 125, Taylor Co., to Keeley Constr. Co., Clarksburg, $157,956 and $300,-458 respectively; grading and waterbound macadam paving 4.1 mi. Project 3218, Jefferson Co. ,and 1.5 mi. Project 3197 B, Tyler Co., to Edwards-Dunn Co., Greensburg, Pa., $83,537 and $34,204 respectively; grading 5 mi. Project 3142, Pendleton Co., to J. J. Battershill & Son, Virginia, Va., $105,480; grading and bituminous macadam paving Project 3225 B, Harrison Co., to Rogers & Shumway, Worthington, $225,-459; constructing 4 concrete slab culverts on Project 3077, Brooke Co., to B. A. Cresap, Wellsburg, $4,053. Noted Apr. 12

Fla., St. Petersburg — Granite curbing, brick paving and 5 mi. of 6 ft. concrete sidewalk on 34th Ave. and Foster Hill Dr. in Allendale Terrace Sub., paving to Georgia Eng. Co., St. Petersburg, $18,000; sidewalks to Farmer Concrete Wks., St. Petersburg, $10,000.

Fla., Sanford—To Hutton Eng. & Constr. Co., Sanford, concrete curbing, guttering and asphalt surfacing on 6 in. rock 3rd St. from Sanford to Magnolia Sts. and from Oak to Avacado Sts., 10,371 sq.yd. paving; Central St. from Sanford to French Sts. and Oak St. from 10th to 13th Sts. and Palmetto St., 11,746 sq.yd. paving; 13th and Laurel Sts., 11,139 sq.yd. paving; 2nd St. from Oak to French Sts. and Avocado Ave. from 5th to 9th Sts., 9,764 sq.yd. paving, unit prices; curbing and guttering $0.75 per lin.ft., rock base $0.75 per sq.yd., asphalt $0.97 per sq.yd. Noted Apr. 4.

Ala., Birmingham — Jefferson Co. Bd. Revenue grading and paving 8 mi. North Bessemer Rd. from Fairfield to Bessemer, asphalt on concrete and 7 mi. road from Baines-Bridge to Bessemer via Parkwood, chert macadam, to Newell Contg. Co., 3828 Ave. A, $296,879 and $108,265 respectively; 4 mi. Crestview and Shades Mt. Rd., and 2 mi. Waddel-Edgewood-Rosedale Rd., both bitulithic on macadam, to J. F. Morgan & Co., Woodward Bldg., $122,177 and $47,700 respectively; 5 mi. Robbins Cross Roads to Corner School House, chert, to J. M. Acton, Short Creek, $46,962; 4 mi. Liz Ford-Heard Shoals Rd., chert, to J. O. Wiley, Bessemer, $33,050; 3 mi. Robbins Crossroads to Warrior River, chert, to Vines & Meyer, Wylam, $18,084.

Tenn., Newport—Asphalt paving various streets, to Murray Constr. Co., Holston Natl. Bank Bldg., Knoxville, $115,000.

O., Bay Village—Grading and laying 128,-000 sq.ft. stone sidewalks on West Lake Rd., to Cleveland Stone Co., Union Bldg., Cleveland, $45,523. Noted May 10.

O., Cleveland—Curbing and repaving 21,-620 sq.yd. Prospect Ave., asphalt, to Cleveland Trinidad Paving Co., The Arcade, $82,-462. Noted May 10.

Ind., Greencastle—Putnam Co., constructing various roads, to Hundrix Bros., Putnamville, $68,980.

Ind., Indianapolis—Paving 11,571 sq.yd. Bway. and 12,751 sq.yd. New Jersey Rd., asphalt on concrete, to Amer. Constr. Co., 420 West 17th St., $25,100 and $25,995 respectively. Engrs. est. $27,250 and $27,-602 respectively.

Ind., Noblesville—Hamilton Co., grading and gravel surfacing 5.1 mi. Jones Rd., 24 ft., to J. Cowles, Noblesville, $52,446. Engrs. est. $59,420.

Mich., Bad Axe—Huron Co. Rd. Comn., grading and gravel surfacing 7 mi. Assessment Dist. Rd. 206, to R. Rankin, Bad Axe, $61,845.

Mich., Cassopolis—Cass Co. Rd. Comn., grading and gravel surfacing 7 mi. Assessment Dist. Rd. 8, to Hoehle Constr. Co., 104 Everard St., Jackson, $43,122. Noted May 10.

Mich., Detroit — Paving various streets with 3½ in. sheet asphalt on 8 in. concrete, to Detroit Asphalt Paving Co., 20 McGraw Bldg., Casper Ave. $24,552, Dodge Ave. $22,288, Eastlawn Ave. $12,822, Genesee Ave. $24,479, Livernois Ave. $134,253, Linsdale Ave. $6,181, Navy Ave. $74,445, Six Mile Rd. $92,332, Wager Ave. $17,311; to G. R. Cooke, 1260 Penobscot Bldg., Brentwood Ave. $31,888; to Cleveland Trinidad Paving Co., 402 Hammond Bldg., Glendale Ave. $45,196. Noted May 10.

Mich., Saginaw—Saginaw Co. Rd. Comn., grading and gravel surfacing 3.023 mi. Assessment Dist. Rd. 48, to F. McNally, 1115 South Thompson St., $29,862. Noted Apr. 26.

Streets and Roads (Continued)

Wis., Milwaukee—Concrete paving, etc., 9 alleys, to Clayton Constr. Co., 397 Farwell St., $50,411; 1 alley, to Bodeman Constr. Co., 691 48th St., $2,475; 4 alleys, to Ryback & Cadowski, 1092 2nd Ave., $26,652; 5 alleys, to Czerwinski Constr. Co., 376 16th Ave., $21,642; 1 alley, to J. B. McCarthy, 3332 State St., $3,349; 2 alleys, to J. Bluhm & Son, 1298 Achilles Pl., $7,942.

Wis., North Fond du Lac—Paving, curbing and guttering various streets, vibrolithic concrete, to L. A. Larson & Co., 104 Main St., Oshkosh, $55,796. Engrs. est. $50,000.

Ia., Clarion—Wright Co., grading 6.942 mi. road from Eagle Grove south, to J. W. Reed & Son, Ft. Dodge, 94,388 cu.yd. excav. $0.245; Knutsen & Christensen, Marble Rock, 19,292 ft. 6 in. tile $0.104, 2,500 ft. 10 in. $0.23, and 12 tile intakes $18. Noted Mar. 15.

Ia., Manchester—Delaware Co., grading, etc., 8.5 mi. primary road from Thorpe north to county line, 117,432 cu.yd. rock and 10,310 cu.yd. rock excav., etc., to S. J. Groves & Sons, Globe Bldg., Minneapolis, Minn., $56,440.

Ia., Onawa—Monona Co., grading 15.34 mi. roads northwest and southeast of here, 147,034 cu.yd. excav., to J. O'Connor, 231 Park Ave., Council Bluffs, $0.18, total $26,691. Noted Apr. 19.

Minn., Breckenridge—Wilkin Co., Job 2301 State Rd., 6, 60,203 cu.yd. excav., 150,755 cu.yd. overhaul clay surfacing, to F. Spaufelner, Barnesville, $27,020; 1,174 lin.ft. 18-36 in. portable culverts, to Klauer Mfg. Co., 9th and Washington Sts., Dubuque, $2,039; 5 monolithic culverts to Wistine Bros., Herman, $2,845; two 20 ft. concrete slab bridges to Bajumpa & Lappi, Ottertail, $4,730. Noted Apr. 26.

Kan., Iola—Allen Co. grading, bridging and paving 5.187 mi. Federal Aid Project 125, Sect. B, to Harrison Eng. & Constr. Corp. of New York, 418 Sedgwick Bldg., Wichita, $160,244. Noted Apr. 19.

S. D., Elkpoint—Paving 6 blocks with concrete, to Booth & Oelson, 120 Virginia St., Sioux City, Ia., $2.13. Engrs. est. $50,000. Noted Apr. 19.

Tex., Leonard—For 11,403 sq.yd. vertical fibre brick on concrete, to J. C. Field & Co., Denison, $42,862.

Tex., Marshall — For 8,430 sq.yd. 3 in. vertical fibre brick on 4 in. concrete, to Cocke & Turner, Marshall, $41,229. Noted Apr. 19.

Tex., Rockwall—Rockwall Co. 50,000 sq. yd. concrete road, to McCollum Constr. Co., F. & M. Bldg., Ft. Worth, $132,273. Noted May 10.

Tex., San Augustine—San Augustine Co. grading, gravel surfacing, etc., 4.41 mi. Kings Highway, to R. H. Minton, Hemphill, $39,144.

Wyoming—State Hy. Comn., Cheyenne, grading and surfacing 5.5 mi. Lingle-Lusk Rd., Federal Aid Project 150-A, Goshen Co., to Connelly & Randolph, Lingle, $25,113, also 1 bridge to M. F. Levy, 630 Symes Bldg., Denver, Colo., $7,236; grading and building 3 treated timber bridges on Worland-Tensleep Rd., Federal Aid Project 108, Sect. D, Washakie Co., to Taggart & Tebbs Co., Cowley, $31,666; widening and placing bituminous concrete wearing course on 5 mi. Casper-Salt Creek Rd., Federal Aid Project 19, Natrona Co., to Warren Constr. Co., Kansas City, Mo. (street address not available) $97,964; crushed rock surfacing 12 mi. Sundance-Beulah Rd., Federal Aid Project 25, Crook Co., to M. J. Kenny Constr. Co., 832 Lafayette St., Denver, Colo., $39,800; grading and surfacing 5.5 mi. Lincoln Highway, Laramie-North Rd., Federal Aid Project 152, Albany Co., to Bowman & Gustafson, Laramie, $30,002; grading, surfacing and bridge construction on 8 mi. Yellowstone Highway, Federal Aid Project 144, from Cheyenne, north, Laramie Co., to Tyler & Baker Constr. Co., Rock River, $44,981, also bridge to M. J. Levy, 630 Symes Bldg., Denver, Colo., $12,953. Noted May 18.

Ore., Portland—Paving 59th Ave., East 86th, East 88th and Hallock Sts., 24 and 30 ft., 3 blocks with oiled waterbound macadam and 1 block with 6 in. concrete, to P. W. Yett, 262 6th St., macadam $1.25, concrete $1.20, total $42,644. Noted Apr. 19.

Calif., Daly City—Paving Winchester and Acton Sts., etc., with 1½ in. asphaltic concrete on 4 in. concrete, to Eaton & Smith, 715 Ocean Ave., San Francisco, $31,500. Noted May 3.

Calif., Los Angeles—Grading, concrete paving, sidewalks and curbing Western Ave. between Slauson and Manchester Sts., 673,600 sq.ft. 6 in. concrete, etc., to Tyron & Brain, Tajo Bldg., $259,186. Noted May 24.

Calif., San Jose—To R. S. Crummey, Keyes and 5th Sts., grading and paving 7th St. between William and Reed Sts., 34,318 sq.ft. 1½ in. warrenite bitulithic on 3 in. asphaltic concrete, incl. grading, $0.25, etc.; 6th St. between Keyes and Humbodlt Sts., 26,189 sq.ft. 1½ in. warrenite bitulithic on 3 in. asphaltic concrete, incl. grading, $0.25, 1,378 sq.ft. concrete gutter $0.24. Noted May 17.

Calif., San Jose—Grading, curbing, guttering, sidewalks and paving portion 10th, 5th and 16th Sts., to A. J. Raisch, 46 Kearny St., San Francisco, 103,779 sq.ft. 3 in. Durite asphaltic concrete base with 1½ in. surface, incl. grading, $0.25, etc., total to exceed $25,000.

Ontario—Dept. Pub. Highways, 110 University Ave., Toronto, grading 2½ mi. from Welcome Corners to Dale, Contr. 1006, to J. R. Wilkinson, Port Hope, $15,000; grading 6 mi. Beachburg easterly, Contr. 1005, to J. R. McQuigge, Arnprior, $20,000; macadam base course from Dunnville easterly, to Bate, McMahon Co., Central Chambers, Ottawa, $75,000.

Ontario—Dept. Pub. Highways, 110 University Ave., Toronto, paving 3.9 mi. in Goderich, **Contr. 845**, 6 mi. from Seaforth to Mitchell, **Contr. 846**, 4 mi. from Clinton to Seaforth, **Contr. 911**, 3.2 mi. in Clinton westerly, **Contr. 950**, and 4 mi. from Caledonia to Hagersville **Contr. 875**, to Webster Constr. Co., Bank of Toronto Bldg., London; 3 mi. Brampton west, **Contr. 925**, 4.8 mi. Harriston westerly, **Contr. 868** and 7 mi. in Durham South, **Contr. 945**, to Britnell Contg. Co., Baxter St., Toronto; 1.9 mi. Brampton South, **Contr. 870**, 0.3 mi. Chatsworth S., **Contr. 880**, and 3.6 mi. Chatsworth N., **Contr. 881**, to Canadian Eng. & Contg. Co., 72 James St., Hamilton; 4 mi. from Acton to Georgetown, **Contr. 810**, and 10.4 mi. Brampton N., **Contr. 924**, to R. McDonald Constr. Co., Crown Office Bldg., Toronto; 7.1 mi. Walkerton westerly, **Contr. 867**, to Warren Bituminous Paving Co., 54 University Ave., Toronto; 1 mi. from St. Davids to Queenston, **Contr. 869**, to Law Constr. Co., 107 Hillsdale Ave. E., Toronto; 2.3 mi. from Becketts Bridge to Forks Rd., **Contr. 871**, to W. J. McAuliffe, 85 Colbeck St., Toronto; in Delhi Village **Contr. 872**, to G. A. Smith, Delhi; 9.4 mi. from St. Thomas to Aylmer, **Contr. 873**, to M. L. McLean, Simcoe; 4 mi. Sarnia Gravel Rd. from Arkona side road westerly, **Contr. 844**, by day labor; 4 mi. Marden North, **Contr. 808**, to T. B. Farrell, Arthur; 4 mi. Plantagenet East, **Contr. 835**, to A. Bissonette, Alfred; 8 mi. Haleys Deviation, **Contr. 838**, to Grant Bros., Natl. Bank Bldg., Ottawa; 5 mi. from Whitby to Lindsay, **Contr. 842**, to Lumsden Eng. & Transport Co., 6 Adelaide St. E., Toronto; 5 mi. from Whitby to Lindsay Rd., **Contr. 843**, to G. A. Chenery, Whitby; Slego Hill, **Contr. 877**, and North Creek, **Contr. 878**, to Cameron Bros. & Hutt, Berwick; 5.1 Mi. from Hagersville to Jarvis, **Contr. 914**, to R. Honsberger, Vineland; 4.7 mi. Washago South, **Contr. 961**, to A. B. McLeod, London; 5.2 mi. Beachburg, westerly, **Contr. 922**, to J. R. McQuigge, Arnprior; 2.9 mi. from Oldcastle to Dougal Rd., **Contr. 926**, to G. Campbell, R. R. 4, Essex; 4.2 mi. from Greenock to Kinloss Twps., **Contr. 930**, to T. G. McLean, Wingham; 5.3 mi. near Arthur, **Contr. 931**, to J. Gaffney, West Moncton; 3 mi. from Aylmer easterly, **Contr. 932**, to L. E. Dancy, Woodstock; 1.8 mi. Hawkesbury, west, **Contr. 902**, to V. Belanger, Hawkesbury; 4.1 mi. from Richardson side road to town line, **Contr. 903**, to Laplante & Lerouse, Box 941, Cornwall; 4 mi. near Elgin, **Contr. 905**, to M. G. Hennings & Co., Smiths Falls; 4 mi. Kenilworth north, **Contr. 906**, to C. Cook & Co., Orillia; 4.8 mi. from Arkona south to Sarnia gravel road, **Contr. 910**, to H. Tweedle, Ailsa Craig; 2½ mi. Clifford westerly, **Contr. 912**, to J. Milligan, Iroquois; 4.9 mi. Tillsonburg easterly, **Contr. 913**, to Stewart Constr. Co., Paris; 2 mi. from Stittville to Stanleys Corners, **Contr. 943**, to McNamara Bros. & Thornton, 23 Scott St., Toronto; 4 mi. Elgin north, **Contr. 944**, to M. G. Hennings & Co., Smiths Falls; 4 mi. near Oxford, **Contr. 946**, and 5 mi. at Ekfred, **Contr. 947**, to W. C. Crummer & Strain, Cedar Springs; 1.4 mi. near Parkhill, **Contr. 949**, by day labor; Forks Rd. in Welland Co., **Contr. 952**, to W. T. McAuliffe, 85 Colbeck St., Toronto; 1.4 mi. Proof Line 9th and 11th Concessions, **Contr. 953**, by day labor. G. Hogarth, ch. engr. Noted March 8.

Ontario—Dept. Pub. Highways, 110 University Ave., Toronto, concrete pavements 20-30 ft. wide, 0.54 mi. Manotick, **Contr. 829**, to Lumsden Eng. & Transport Co., 7 Adelaide St. E., Toronto, $25,000, 0.5 mi. North Gower **Contr. 839**, and 1 mi. Keptville **Contr. 840**, to King & Holmes, Oakville, $75,000, 3.11 mi. Kitchener **Contr. 916**, to C. Damman, 21 Albert St. E., Kitchener, $120,000, 1.4 mi. Welland westerly **Contr. 862**, to Brennan Contg. Co., Melrose Ave., Hamilton, $60,000, 3.7 mi. westerly from end of pavement at Chatham **Contr. 827**, to McNamara Bros. & Thornton, 23 Scott St., Toronto, $150,000, 2 mi. from Clappisons Corners to Bridge 3 **Contr. 828**, to Transcanada Paving Co., Hamilton, (street address not available), $75,000, 2.75 mi. Crumlin easterly **Contr. 894**, to Ross & Brazier Constr. Co., London, $90,000, 4 mi. from Essex to Maidstone **Contr. 895**, to Campbell & Lallimore, Canadian Pacific Ry. Bldg., Toronto, $130,000, 2 mi. St. Thomas easterly **Contr. 938**, to E. G. Martin, Elmira, $75,000 asphaltic concrete pavements, 20-40 ft. wide, macadam base, 7.5 mi. from Stittville to Belle Corner, **Contr. 939**, to Grant Bros., Bank Natl. Bldg., Ottawa, $400,000, 5.1 mi. from Pickering to Whitby **Contr. 897**, to D. O. Johnson, 43 Market St., Brantford, $400,000, 4.4 mi. Kingston Rd. from Grand Trunk Ry. tracks easterly **Contr. 918**, to Provincial Paving Co., 24 Adelaide St. W., Toronto, $350,000, 4 mi Hamilton southerly **Contr. 898**, to Hamilton Contg. Co., 72 James St., Hamilton, $320,000; macadam base course mostly 20 ft. wide 5.7 mi. Caledonia North, **Contr. 834** and 2.3 mi. from Beckitts Bridge to Chambers Corners **Contr. 901**, to Law Contg. Co., 107 Hillsdale Ave. E., Toronto, $90,000, 5.5 mi. Clarence and North Plantagenet Twps. **Contr. 866**, to Berthiaume & Co., Hawkesbury, $60,000, 3 mi. Farrans Point easterly **Contr. 876**, to F. Milligan & Co., Orillia, $35,000, 5 mi. Perth north easterly **Contr. 960**, to McNamara Bros. & Thornton, 23 Scott St., Toronto, $60,000, 1.9 mi. near Summerstown **Contr. 942**, and 3.9 mi. Yonge Twp., **Contr. 900**, to Chisholm Wellage Co., Cedar St., Brookville, $25,000 and $45,000 respectively 3.8 mi. near Cornwall **Contr. 920**, to W. T. Woodland, Cardinal, $45,000, 3.7 mi. from Farrans Point westerly **Contr. 865**, to McLean & Stidwell, Cornwall, $45,000, 4.3 mi. from Cayuga to Nelles Corners **Contr. 941**, to J. Pearson, Stevensville, $60,000, waterbound macadam pavement 20-30 ft. wide, 0.3 mi. Morrisburg **Contr. 832**, to McLean & Stidwell, Cornwall, $9,000, 4 mi. Rideau north east **Contr. 833** and 3.1 mi. Odessa easterly **Contr. 899**, to McGinnis & O'Connor, Kingston, $80,000 and $60,000 respectively; surface treatment of macadam roads with tar, 12.3 mi. from Cornwall to Lancaster, **Contr. 849**, and 5 mi. from Orillia to Washago, **Contr. 851**, to J. B. Dunkley, Northcliffe Blvd., Toronto, $40,000, 4.7 mi. Barriefield **Contr. 850**, to W. Huber, 97 Keele St., Toronto, $15,000, 16.4 mi. from Dunnville to Cayuga and 9.5 mi. from Peterboro southerly, **Contr. 883**, to Law Constr. Co., 107 Hillsdale Ave. E., Toronto, $50,000. Noted March 8.

Ont., Cobourg—Paving 14,000 sq.yd. bitulithic pavement on concrete with concrete curbs and gutters to Warren Bituminous Paving Co., 54 University Ave., Toronto, $64,188 for 2 in. surface and $67,930 for 3 in. surface. Engrs. est. $75,000.

Que., St. Lambert—To Warren Bituminous Co., 54 University Ave., Toronto, Ont., 93,000 ft. 4 ft. 6 in. sidewalk and 18 in. gutter, $218,000.

Ont., Stratford—For 35,000 sq.yd. asphalt pavement to Merlo, Merlo & Ray, Sandwich St., Ford, $55,000; 35,000 sq.yd. 6 in. concrete base and 32,000 lin.ft. concrete curb and gutter to L. Malcolm, 167 Collingwood St., Kingston, $81,000.

British Columbia—Grading and gravel surfacing 4.24 mi. Edgewood-Vernon Rd., to Rawlings & Labrash, Nakusp, $50,000; grading and laying 8 in. one course concrete on 2.38 mi. road, to Cotton Co. Ltd., Cambie Bridge, Vancouver, $78,000; 2 mi. Warrenite bitulithic surface on old macadam base on Chilliwach-Rosedale Rd., to Columbia Bitulithic Co., 402 Pender St. W., Vancouver, $50,000.

Industrial Works

PROPOSED WORK

Mass., Boston—Chamberlain Garage Inc., c/o L. Joselyn, archt., 339 Newbury St., having plans prepared 4 story, 88 x 185 ft. garage, rein.-con., plain foundation, Stoneholm St. $300,000.

Mass., Boston—Hunt-Spiller Mfg. Corp., 385 Dorchester Ave., takes bids about June 4, 1 story, 135 x 240 ft. foundry, rein.-con. and steel, wood pile foundation. Total cost incl. machinery $500,000. Andrews, Rantoul & Jones, 50 Congress St., archts.

Conn., Bristol—Blakesley Novelty Co., 83 Laurel St., had plans prepared 1 story, 40 x 50 ft. factory, brick and steel, plain foundation, Laurel St. $40,000. Private plans.

Conn., Hartford—Standard Mattress Co., 71 North St., rejected bids 4 story, 40 x 52 ft. factory, rein.-con. and brick, plain foundation, North St., $40,000. Will revise

Industrial Works (Continued)

plans. Gallen-Storrs & Co., 118 Asylum St., archts. and engrs. Noted Mar. 22.

Conn., New Britain — Amer. Hardware Corp., Franklin St., had plans prepared 2 story, 15 x 80 ft. power house, brick, plain foundation. Park St. $50,000. Private plans.

Conn., Putnam—J. E. and E. Stoumbelis having plans prepared by L. E. Conway, Goldsmith Blk., New London, 2 story, 60 x 90 ft. garage, brick and steel, plain foundation, Bundy St. $40,000.

Conn., Southington—E. Rogers plans 3 story cold storage plant, brick and concrete, plain foundation. $45,000. Engineer and architect not selected.

Conn., Stamford—J. and S. Gruber having plans prepared by Emmens & Abbott, Washington Bldg., 2 story, 80 x 90 ft. garage, brick and steel, plain foundation, Beckley Ave. $55,000.

N. Y., Watervliet—Foreman & Clark Mfg. Co., 2409 2nd Ave., plans factory, 25th St. $165,000. F. Hogan, supt.

Pa., Danville—Danville Galvanizing Co. plans plant. $50,000. Engineer and architect not announced.

Pa., Lykens—Amer. Briquette Co. plans to rebuild factory recently destroyed by fire. $50,000 to $60,000. Engineer and architect not announced.

Pa., Salemville -- Keystone Coal & Coke Co. plans to rebuild major portion of washery recently destroyed by fire. $100,000. Engineer and architect not announced.

Pa., Snydertown — Plymouth Anthracite Coal Co. plans to rebuild coal washery plant recently destroyed by fire. $100,000. Engineer and architect not announced.

D. C., Wash.—Labor Co-operative Educational and Publishing Society, Inc., having plans prepared by Pierson & Wilson, Washington Loan & Trust Bldg., for publishing plant, 30th and B Sts., S. W.

N. C., Kinston—See "Buildings."

Ga., Hogansville—Lockwood, Greene & Co., archts., 24 Federal St., Boston, soon takes bids concrete mill, containing 250,000 ft. floor space, here, for International Cotton Mills.

Fla., Orlando—I. K. Berman and J. N. Wigfall having plans prepared 1 story, 100 x 120 ft. laundry, brick, Concord Ave. $100,000.

Ala., Birmingham — Standard Sanitary Mfg. Co., Bessemer Bldg., Pittsburgh, Pa., plans 150 x 190 ft. warehouse, first unit of factory, here. $100,000. Engineer and architect not selected.

La., New Orleans — Longsfield Bros., Baronne and Lafayette Sts., soon takes bids 127 x 160 ft. brick factory, Tchoupitoulas and Calliope Sts. M. Goldstein, Hibernia Bank Bldg., archt.

Ky., Louisville—Louisville Petroleum Refining Co. plans oil refinery, 11,000 bbl. $250,000. Engineer and architect not selected.

O., Cincinnati—Rauh & Mack Shirt Co., 209 East 6th St., having plans prepared by G. Drach, 1701 Union Trust Bldg., 8 story, 50 x 145 ft., rein.-con. factory addition, plain foundation. $400,000.

O., Cleveland—Standard Oil Co., c/o J. A. Watterson, East Ohio Gas Bldg., plans 2 or 3 story candle factory, brick, steel and concrete, East 65th St. $100,000. Private plans.

Ind., Jeffersonville — Jeffersonville Canning Co., Court and Walnut Sts., plans canning plant, concrete blocks. $40,000. Engineer and architect not selected.

Wis., Cambridge — Bd. Educ. plans 1 story central heating plant, brick, rein.-con. and steel, plain foundation. $50,000. L. C. Banker, supt. Engineer and architect not selected.

Wis., Fond du Lac—St. Agnes Hospital, 390 East Division St., having preliminary plans prepared by R. E. Schmidt, Garden & Martin, engrs., 104 South Michigan Ave., Chicago, power house and equipment. $45,000.

Wis., Madison—Chicago & Northwestern Ry., East Madison St., making plans 1 story, 60 x 200 ft., power house and machine shop, brick, rein.-con. and steel, plain foundation. $150,000. A. W. Bowers, 201 South Blair St., divisional agt.

Wis., Madison—See "Buildings," under "Store."

Wis., Mayville—Feilback Mfg. Co. plans 2 story, 60 x 90 ft., brick, rein.-con. and steel factory, plain foundation. A. O. Feilback, mgr. Engineer and architect not selected.

Wis., Milwaukee—Milwaukee Journal Co., 182 4th St., had plans prepared 5 story and basement, 50 x 202 ft., brick and concrete plant, plain foundation, 4th St. F. D. Chase, Inc., 645 North Michigan Ave., Chicago, engrs and archts.

Wis., Stevens Point—Journal Printing Co., 114 North 3rd St., having plans prepared by Oppenhamer & Obel, Spencer Bldg., Wausau, 1 story and basement, 47 x 120 ft., brick and concrete plant, plain foundation. $60,000.

Minn., Fergus Falls—E. J. Windmiller, prop. of Star Laundry, plans 1 story, 45 x 150 ft. laundry, brick.

Minn., Hibbing—Oliver Iron Mining Co., Wolvin Bldg., Duluth, plans ore crushing plant for Hibbing Dist. mines, will include spurs and yard changes. $2,000,000.

Kan., Arkansas City—Ranney Davis Mercantile Co., (owner), and W. L. McAtel, archt., Johnson Bldg., takes bids about June 15, 2 story and basement, 100 x 132 ft., rein.-con. brick and stone warehouse, 1st St. $100,000.

Mo., Kansas City—Opie Brush Co., 700 East 19th St., plans 3 story and basement, rein.-con., brick and stone factory, 612 Southwest Blvd. $125,000. Engineer and architect not selected.

Mo., Springfield—Lipscomb Grain & Seed Co., 540 Wall St., had plans prepared 2 story, 53 x 100 ft. warehouse, with 6 tanks 73 ft. high, 28 x 32 ft. elevator, 136 ft. high, rein.-con., brick and steel. $150,000. Southwest Eng. Co., Woodruff Bldg., engrs.

Tex., Breckenridge—Magnolia Petroleum Co. plans large carbon black plant. $200,000. Engineer and architect not announced.

Tex., Tyler—Byrne Publishing Co. soon takes bids rebuilding 2 story, brick plant, plain foundation, recently destroyed by fire. $75,000. Engineer and architect not announced.

Okla., Tulsa—Oklahoma Steel Castings Co., 411 Central Natl. Bank Bldg., having plans prepared 2 story plant addition. $50,000. Private plans.

Wash., Seattle—Frederick & Nelson, 5th and Pine Sts., plan 120 x 120 ft. warehouse and garage, in Westlake Ave. Dist.

Wash., Seattle—F. S. Harmon Co., Inc., 1524 5th St., plans 6 or 8 story, steel and concrete warehouse, Westlake Ave. Dist.

Ore., Portland—Grand Rapids Showcase Co., 100 Coldbrook St., Grand Rapids, Mich., or c/o Chamber of Commerce, Portland, takes bids about June 23, 4 story, 100 x 400 ft. sheds, rein.-con., on 6 acre tract near here. $600,000. S. D. Young, pres. Engineer or architect not selected.

Calif., Glendale (Los Angeles, P. O.)—H. C. Powell (Rogers Una-Drive Motor Truck Co.), 105 East Colorado St., plans 1st unit of motor truck plant. To exceed $50,000. Engineer and architect not selected.

Calif., Los Angeles—Armour & Co., 119 Central Ave., having plans prepared 3 story and basement, rein.-con. warehouse, Central Ave. $115,000. Private plans.

Calif., San Francisco—J. Allec, 2140 Folsom St., having plans prepared by A. S. Bugbee, 26 Montgomery St., 1 story and mezzanine, 200 x 213 ft. rein.-con. factory, Folsom and 17th Sts. $80,000. E. R. Bacon Co., 51 Minna St., lessee.

Calif., San Jose—Santa Clara Co. had plans prepared by Binder & Curtis, 255½ South 1st St., rein.-con. power house, on county hospital grounds. $90,000.

Calif., Wilmington—White Star Oil Syndicate, Lowes State Bldg., Los Angeles, plans refinery, 2,500 gal. daily capacity. To exceed $100,000.

Ont., Ottawa—City plans central heating plant. A. F. Macallum, city engr.

Ont., Saulte Ste. Marie—Great Northern Gas Co., Ltd., plans gas plant and new gas mains. $100,000. R. G. Finnegan, c/o owner, engr.

Ont., Toronto—Kilgour Bros., 21 Wellington St. W., having plans prepared by D. C. Cotton, 54 Adelaide St. W., 2 or 3 story and basement, 90 x 120 ft., brick and steel factory, plain foundation, Wellington St. $150,000.

Que., Montreal—Central Garage, 249 Laval Ave., plans rein.-con. garage. $60,000. Gascon & Parent, 502 St. Catherine St. E., archts.

Que., Montreal—Drummond McCall & Co. Ltd., 28 Victoria Sq., plans 4 story rein.-con. warehouse, Wellington St. $200,000.

BIDS DESIRED

O., Cleveland—J. Miller, 2701 East 55th St., taking bids and opens same about June 10, 1 story, 85 x 140 ft., brick and steel garage, East 55th St. and Bragg Rd. $40,000. Private plans.

Mich., Menominee—Lloyd Mfg. Co., State St., taking bids 3 story 72 x 400 ft. rein.-con. factory, State St. $75,000. Hubert & Nelson, Menominee, archts.

Wis., Medford—Frendle Bros. Co., c/o H. Grann taking bids 1 story, 50 x 100 ft. garage and repair shop, brick, rein.-con. and steel, plain foundation. J. G. Schneider, Arcadia, archt. $40,000. Noted Apr. 26.

Wis., Port Washington — Schmit Bros. taking bids 1 story and basement, 52 x 100 ft. garage addition, brick and concrete, plain foundation. $40,000. F. Graf, 307 Grand Ave., Milwaukee, engr. Noted May 17.

Wis., Sheboygan—W. C. Weeks, archt., 720 Ontario Ave., taking bids 1 story 50 x 90 ft. factory and dry kiln building, brick and rein.-con., plain foundation, for Lincoln Plywood Co., South Water St. and New York Ave. $50,000. Noted May 3.

Mo., St. Louis—Great Western Smelting & Refining Co., 3100 North Bway., taking informal sub-bids 1 and 2 story and basement, 100 x 400 ft., brick, concrete and steel foundry, Bway. $150,000. Work will be done by separate contracts under supervision of J. M. Hirshstein, archt., 5777 Delivers ville Ave.

Mo., St. Louis—June 6, by J. G. Jonah, ch. engr., St. Louis & San Francisco Ry., 900 Olive St., 20 stall roundhouse, power plant, car repair and machine shops, mill shop, 2 wash and repair rooms, etc., Fyler Ave. and Frisco right-of-way, Lindenwood, here. $500,000. Noted Mar. 8.

Tex., Wichita—Texhoma Oil & Refining Co. taking bids 4 unit cracking plant, 5,000 bbl. daily capacity with 2,000 bbl. fuel oil. $500,000. W. B. Hamilton, pres. Private plans.

Calif., Los Angeles—W. J. Saunders, archt., 227 Laughlin Bldg., receiving bids 1 story, brick addition to plant, and new 3 story, rein.-con. laundry, Crocker St., for Home Service Co., 779 Towne St. To exceed $60,000. Noted Apr. 12.

Calif., Sacramento—Eng. Dept. of Western Pacific R.R. Co., Mills Bldg., San Francisco, receiving bids 1 story, rein.-con. and steel additions to Jeffery shops. To exceed $50,000. Private plans.

Ont., Walkerton — June 18, by F. B. James, archt., County Bldg., concrete and brick central heating plant for county buildings. Bruce Co., owner. $50,000.

CONTRACTS AWARDED

Mass., Everett (Boston P. O.)—Boston Elevated Ry. Massachusetts Ave., Boston, 2 story, 118 x 175 ft. repair shops, brick, and steel, plain foundation, here, to Simpson Corp., 77 Summer St., Boston, $300,000. Archts. est. $275,000.

Mass., Fall River—M. and G. Colovas and G. Vlhes, 2 story, 100 x 175 ft. garage, rein.-con., 4th and 5th Sts., to Greany & Sherry, 175 Main St., $100,000. Archts. est. $125,000.

Mass., Waltham — J. L. Thomson Mfg. Co., Roberts Sta., 3 story, 50 x 220 ft. factory, brick and steel, plain foundation, South St., to W. H. Whitcomb Constr. Co., 6 Beacon St., Boston. Archts. est. $100,000.

R. I., Providence—What Cheer Stables Co., Benefit and Meeting Sts., 2 story addition to garage and service station, brick and steel, plain foundation, to C. I. Bigney Constr. Co., 357 Westminster St. Archts. est. $75,000. Noted May 24.

Conn., New Haven—Dutee Wilcos Flint, Inc., 51 Bway., 1 story, 50 x 170 ft. plant addition, brick and steel, plain foundation, James and River Sts., to Sullivan & McKeown, 937 Dixwell Ave. Archts. est. $40,000.

Conn., New Haven — New Haven Gas Light Co., 80 Crown St., 1 story, 66 x 135 ft. boiler house, brick and steel, East Chapel St., to Standard Constr. Co., 53 Court St. Archts. est. $50,000.

Conn., Norwalk—Daynor Realty Co., Day St., South Norwalk, 3 story, 115 x 200 ft. warehouse, brick, plain foundation, here, to Mattiello & Lasprogato, 62 Meadow St., South Norwalk. Archts. est. $70,000.

N. Y., Binghamton—Truitt Bros. Co., 32 Commercial Ave., will build 2 story, 80 x 120 ft., brick and steel factory addition, by day labor under supervision of H. S. Gardner, archt., Ack. Bldg. $40,000.

N. Y., Green Island (Troy P. O.)—Manning Abrasive Co. will build 3 story, 50 x 135 ft., brick and concrete factory, plain foundation, 26th St., by day labor. $175,000. H. Eldred, Green Island, archt. and engr.

Industrial Works (Continued)

N. Y., New York—Atlantic Warehouses, Inc., 4 story, 78 x 117 ft. and 1 story, 50 x 80 ft. rein.-con. bakery, in Bronx, to Turner Constr. Co., 244 Madison Ave. Great Atlantic & Pacific Tea Co., lessee.

Pa., Grove City—Bessemer Gas Engine Co. will build 2 concrete and steel additions to factory, 80 x 180 ft. foundry and paint shop, and 76 x 180 ft. storage house, by day labor.

Pa., Kingston—(Wilkes Barre P. O.)—Glen Alden Coal Co., constructing boiler plant, 85 x 90 ft. 68 ft. high, with 32 x 69 ft. wing, 41 ft. high, at Pettebone Collery, to Turner Constr. Co., 11 Goodell St., Buffalo, N. Y.

Pa., Pittsburgh—Standard Sanitary Mfg. Co., Bessemer Bldg., 1 story, 38 x 148 ft. brick and steel plant, 527 Preble Ave., to B. A. Groah Constr. Co., 847 West North Ave.

Pa., Uniontown—Richmond Radiator Co., 1480 Bway., New York City, 1 story, 80 x 92 ft. and 50 x 75 ft. brick, corrugated iron and steel plant, Pittsburgh Rd., to Truscon Steel Co., 3354 Delaware Ave. Engrs. est. $50,000.

W. Va., Warwood—United States Fibre Box Co., Martindale St. and Roosevelt Ave., Indianapolis, Ind., 2 story, 80 x 200 ft. factory, here, to J. A. Shumacher, 818 East St. Clair St., Indianapolis, Ind.

O., Cleveland—Greenwald, Stecher & Wallach, Society for Savings Bldg., 1 story, 125 x 135 ft., brick and steel garage, Central Ave. near East 14th St., to Mikelson & Lindhorst, Discount Bldg. Archts. est. $50,000.

O., Cleveland—Schonberg Printing Co., 102 St. Clair Ave., N. W., 1 story, 50 x 129 ft. and 20 x 25 ft., brick, steel and concrete, factory, boiler house and garage, East 25th St. and Payne Ave., to A. A. Lane Constr. Co., 1869 East 55th St. Archts. est. $50,000.

Mich., Detroit—Hupp Motor Car Co., 3501 East Milwaukee Ave., 120 x 504 ft. rein.-con. brick and steel plant, Mt. Elliott Ave., with depressed tracks, loading docks, tunnel, etc., to Everett Winters Co., 751-754 Book Bldg., $500,000.

Wis., Burlington — Patefield Bros. Co. will build 2 story, 50 x 70 ft. garage and repair shop, brick, rein.-con. and steel, plain foundation, by day labor. Private plans. Noted May 17.

Wis., Green Bay — Joannes Bros., 118 South Washington St., 5 story, brick and concrete warehouse, and 1 story addition to spice mill, brick and timber, plain foundations, to H. J. Selmer Co., McCartney Natl. Bank Bldg. Archts. est. $50,000.

Wis., Kiel—Kiel Machine Co., 1 story, 62 x 84 ft., brick and concrete machine shop, plain foundation, to Neumann Bldg. Co., Kiel. Archts. est. $40,000. Noted May 10.

Wis., La Crosse—Weisse Mfg. Co., Caledonia and Gilett Sts., will build 1 story, 70 x 200 ft., factory, boiler house and shaving vault, brick, rein.-con. and steel, plain foundation, by day labor. $75,000. O. J. and R. E. Sorensen, 216 Main St., archts. Noted Mar. 29.

Wis., Madison—Wiedenbeck-Doblein Co., 601 West Mifflin St., 99 x 137 ft. garage and repair shop, brick, rein.-con. and steel, plain foundation, Bedford St., to Wisconsin Constr. Co., 102 South Orchard St. Archts. est. $40,000.

Wis., Milwaukee—Rohn Automobile Renewal Co., 711 Chestnut St., 1 story, 60 x 160 ft., brick and steel factory, plain foundation, Sycamore St., to Coddington Eng. Co., 290 3rd St. Archts. est. $50,000.

Wis., Milwaukee — Manufacturers Box Co., 32 Keefe Ave., 1 story, 100 x 110 ft. factory addition, brick and timber, to P. Riesens Sons, 1018 Humboldt Ave. Archts. est. $40,000.

Wis., Milwaukee—Western Leather Co., 878 Marshall St., 1 story, 40 x 140 ft. boiler house, brick and concrete, plain foundation, to A. W. Riesen, 409 Bway. Archts. est. $65,000.

Wis., Racine—Belle City Malleable Iron Co., Kewaunee St., 1 story, 145 x 230 ft., core and mill building, brick, rein.-con. and steel, plain foundation Forrest St., to Nelson & Co., Inc., Janes Bldg. Archts. est. $125,000. Noted Oct. 26.

Ia., Cedar Rapids—Iowa Ry. and Light Co., Bowes Bldg., power plant to T. Stark & Co., 118 South 11th St., W. Engrs. est. $250,000.

Mo., Kansas City—Sheet Metal Products Co., 1819 Central St., general contract 1 story, 125 x 305 ft., rein.-con., brick, steel and stone factory, to Bickel Co., 700 Interstate Bldg., $60,000.

Tex., Dallas—Dallas Textile Mills, c/o J. P. Burrus, Pres., Interurban Bldg., 2 story, brick, concrete and steel plant, plain foundation, in Love Field Industrial Dist., to Inge Constr. Co., Swiss and Hawkins Sts., $1,000,000. Noted May 17.

Tex., Dallas—Higginbotham Bailey Logan Co., Jackson St., general contract 7 story, 75 x 200 ft., loft and warehouse addition, Jackson and Poydres Sts., to Hickey & Montgomery, Scollard Bldg., $400,000. Noted Jan. 4.

Tex., Dallas—V. N. Brannon, 4310 Elm St., 3 story, 74 x 143 ft., warehouse and factory, brick and concrete, plain foundation, to Hughes-O'Rourke Constr. Co., 2408 Lamar St., $60,000. Noted May 24.

Tex., Dallas — Shook Rubber Co., 2111 Commerce St., 3 story, 60 x 75 ft., brick and concrete warehouse, plain foundation, to Christy Dolf Constr. Co., Central Bank Bldg., $40,000.

Calif., Long Beach — S. Kenelly, 427 American Ave., 1 story and basement, auto service building, 6th St. and American Ave., to McGrew & Sons, 1345 West Ocean Ave., $60,000.

Calif., Los Angeles—May Corp., Grand Ave., general contract 4 story and basement, rein.-con. warehouse, Grand Ave. and 35th St., to G. L. Peck, H. W. Hellman Bldg., $200,000. Noted May 24.

Calif., Oakland — L. R. Lurie Co., 315 Montgomery St., San Francisco, 1 story, rein.-con. garage, 32nd and Adeline Sts., here, to A. H. Vogt, 185 Stevenson St., San Francisco, $42,000. Noted Apr. 26.

Calif., Sacramento—Lindley & Co., 220 K St., 1 story and basement, rein.-con. warehouse, 3rd and Q Sts., to Campbell Constr. Co., 601 Nicolaus Bldg., $79,864. Noted May 17.

Calif., San Francisco — Western Sugar Refinery, 2 Pine St., concrete work 1 story, concrete and steel warehouse, Delaware and 23rd Sts., to A. Arras, 185 Stevenson St. Total cost $245,000.

Ont., London—Reid Bros., 391 Clarence St., 1 story and basement, 125 x 150 ft. cement factory, Nightingale Ave., to Hayman & Sons, 432 Wellington Ave. Archts. est. $100,000.

Buildings

PROPOSED WORK

Mass., Boston — School — School House Dept., City Hall, having preliminary plans prepared by McLaughlin & Burr, 88 Tremont St., rein.-con. and brick, wood pile foundation, Sherwin Dist. $200,000.

Mass., Boston—Stores and Office—Huntington Co., c/o R. H. Doane, archt., 162 Newbury St., had plans prepared 2 story, 112 x 400 ft., concrete and steel, Huntington Ave. $300,000.

Mass., New Bedford—Theatre—S. Berserosky, 1502 Acushnet Ave., having preliminary plans prepared by Funk & Wilcov, 26 Pemberton Sq., Boston, rein.-con. and brick, plain foundation, $200,000.

Mass., Pittsfield — School — Miss Halls School, Curtis Inn, Lenox, having plans prepared by York & Sawyer, 50 East 41st St., New York City, 2 story, brick, Holmes Rd., here. $150,000.

Mass., Springfield—Parish House—First Congregational Church Parish Com., 50 Elm St., plans 2 story, 100 x 220 ft., brick, plain foundation, Elm St. $250,000-$300,000. Kirkham & Parlett, 25 Harrison Ave., archts.

Mass., Ware—High School—Town having plans prepared by J. D. Leland & Co., 41 Mt. Vernon St., Boston, 3 story, brick, plain foundation. $150,000.

R. I., Providence—Church—St. Adalberts Church rejected bids 140 x 160 ft., brick and terra cotta, plain foundation, Attwells Ave. $170,000. Will readvertise about September or October. H. Ludorf, Main St., New Britain, archt. Noted Apr. 19.

Connecticut — Infirmary — State Psychiatric Comn. plans infirmary. $200,000. A. W. Creedon, 50 State St., Hartford, member of comn. Engineer and architect not selected.

Conn., Ashford—Town Hall—C. C. Knowlton, Putnam, plans 2 story and basement, 50 x 90 ft., rein.-con. and brick, plain foundation, here. $160,000. Private plans.

Conn., Bristol—Business—J. P. O'Connell, 133 Main St., plans 3 story, brick and steel, plain foundation, Main St. $165,000. Engineer and architect not selected.

Conn., Hartford — Apartment, etc. — L. Aronson, Westland St., having revised plans prepared by Berenson & Moses, 30 Allyn St., 3 story, 40 x 95 ft., brick, plain foundation, Westland St. $150,000. Former bids rejected.

Conn., Hartford—Apartment—C. Camillieri, 181 Village St., having plans prepared by Dunkelberger & Gilman, 72[illegible] Main St., 3 story, 45 x 100 ft., brick, plain foundation, Vine St. $150,000.

Conn., Hartford—Business—A. A. Katz, 983 Main St., plans 4 or 6 story, 100 x 110 ft., John St. $250,000. Engineer and architect not selected.

Conn., Hartford—Club House—Tumble Brook Country Club, 64 Highland St., had plans prepared by Smith & Bassette, 36 Pearl St., 3 story, 50 x 100 ft., stone and hollow tile, plain foundation. $160,000. G. S. Auerback, secy.

Conn., Manchester—Church—St. Marys Parish plans brick and stone, plain foundation. $150,000. J. S. Neill, 59 Park St., pastor. Engineer and architect not selected.

Conn., Meriden—Business—M. J. Dubin, 125 Oakland Terrace, Hartford, having plans prepared by H. H. Beckenstein, 1029 Main St., Hartford, 3 story, 80 x 100 ft., brick and steel, plain foundation, East Main St., here. $150,000. Noted May 3.

Conn., Meriden—Community—All Saints Episcopal Church, 201 West Main St., plans brick, plain foundation. $150,000. F. S. Lippitt, pastor. Engineer and architect not selected.

Conn., New Britain—City Hall, etc.—City plans 2 story, stone, plain foundation, East Main and Main Sts. $400,000. A. M. Paonessa, mayor. Engineer and architect not selected.

Conn., New Haven — Orphanage — New Haven Orphan Asylum, c/o Norton & Townsend, archts., 839 Chapel St., rejected bids several buildings, brick, steel and concrete, Whitney Ave. Will revise plans and readvertise. Noted Apr. 26.

Conn., New London—Business—C. H. Klinck Estate, 219 Bank St., having plans prepared by Bilderbeck & Langdon, Inc., Barrows Bldg., 3 story, 80 x 100 ft., brick and steel, plain foundation, Bank St. $175,000.

Conn., Plainville—High School—School Bd. plans 3 story, brick, plain foundation, Linden St. $300,000. L. S. Mills, 58 East Main St., secy. Engineer and architect not selected.

Conn., Putnam—Business—J. E. and E. Stoumbelis, having plans prepared by L. E. Conway, Goldsmith Blk., New London, 3 story, 70 x 100 ft., brick, plain foundation, Main St. $150,000. Noted May 3.

Conn., Putnam—Business—L. Wolfe, 30 Pleasant St., having plans prepared by L. E. Conway, Goldsmith Blk., New London, 3 story, 60 x 100 ft., brick and steel, plain foundation, Main St. $150,000.

Conn., Stamford—Apartment—H. J. and S. Weissman, Speike Bldg., plans two 3 story, 30 x 50 ft. and 33 x 90 ft., brick, plain foundations, Myrtle Ave. $160,000. Private plans.

Conn., Stamford — Temple — Masonic Builders Assn., 125 Atlantic St., had plans prepared by Emmons & Abbott, Washington Bldg., 3 story, 62 x 140 ft., granite and steel, plain foundation, Bedford St. $200,000.

Conn., Vernon—High School—Town soon receives bids 3 story, brick, plain foundation, in Rockville. $300,000. W. B. Chambers, 111 East 40th St., New York City, archt.

Conn., Wallingford—Town Hall—City plans 3 story, probably brick, plain foundation. $150,000. J. A. Martin, 401 Center St., clk. and chn. of com. Engineer and architect not selected.

Conn., Waterbury—Church—Italian Mission of First Baptist Church, plans stone, plain foundation, Grove and Center Sts. $160,000. A. Ventura, 21 Harker Ave., pastor. Engineer and architect not selected.

Conn., Waterbury—Home, etc.—Amer. Legion, Posts 37 and 1, plan 3 story, brick and stone, plain foundation, Central Ave. $150,000. Address E. P. Armstrong, commander, Corp. Coyle Post, Amer. Legion, 551 Walcott Rd. Engineer and architect not selected.

Conn., Westport—Bank—Westport Bank & Trust Co. having plans prepared by C. E. Cutler, Myrtle Ave., 2 story, 100 x 110 ft., brick and marble, plain foundation, Post Rd. $155,000. C. Harris, Lincoln Ave., secy. and treas.

N. Y., Binghamton—Business—H. Goldsmith, O'Neil Bldg., plans business block. $250,000.

N. Y., Brooklyn—Hospital—Trinity Hospital, Fulton St. and East New York Ave., plans 5 story, brick, steel and stone addition, plain foundation. Private plans.

N. Y., New York—Loft—J. Goldberg, c/o G. and E. Blum, archt. and engr., 505 5th Ave., soon takes bids brick, steel and stone, plain foundation, West 38th St. $200,000.

N. Y., Ripley—School—Plans election to vote on $150,000 bonds for brick school.

Buildings (Continued)

N. Y., Saranac Lake—School—Bd. Educ., brick, stone, steel and concrete, from Shane Constr. Co., Herald Bldg., Syracuse, $624,-808. Bids rejected. Will advertise.

N. Y., Troy—High School—Albany Catholic Diocese having plans prepared by F. Morgan, Savings & Loan Bldg., converting 5 story, 60 x 100 ft., brick hospital into high school, also constructing wing, 8th St., here. $200,000.

N. J., Hopewell—Schools—Hopewell Twp. School Bd. plans school here, 1 at Pennington and one on Pennington-Trenton Rd. $250,000. J. H. Hankinson, chn. Engineer and architect not selected.

N. J., Newark—Apartment—Schanerman & Kaplowit, c/o N. Siegler, archt. and engr., 164 Market St., having plans prepared brick, steel and stone, plain foundation, Milford and Clinton Aves. $310,000.

Pa., New Castle—Temple—Scottish Rite Bodies F. & A. M., having plans prepared by R. G. Schmid, 152 West Randolph St., Chicago, and takes bids about June 11, temple on Heland and Lincoln Aves. $1,000,000.

Pa., Pittston—Hotel—Chamber of Commerce plans modern fireproof hotel. $200,-000. Engineer and architect not announced.

Md., Baltimore—Store and Office—Methodist Church, 325 North Howard St., having plans prepared by J. R. Forsythe, 16 East Lexington St., 5 story, brick, plain foundation, Charles St. near Franklin St. $160,000.

W. Va., Huntington—Lodge—Feramorz Grotto, F. & A. M., 545 6th Ave., having plans prepared by R. M. Bates, Jr., Watts Bldg., 3 story and basement, 100 x 250 ft., 8th St. $200,000.

W. Va., Huntington—School—Bd. Educ. having plans prepared by R. M. Bates, Jr., Watts Bldg., 2 story and basement, 100 x 130 ft., brick, tile and stone, 10th Ave. $150,000.

N. C., Morganton — Dormitories — State having plans prepared by C. C. Hook, Trust Bldg., Charlotte, three 2 story dormitories at State Hospital for Insane, here. $250,000.

Ga., Alto—Sanatorium—State Bd. Health, State Capitol, Atlanta, having plans prepared by Daniell & Bentell, Healy Bldg., Atlanta, sanatorium near here. $500,000.

Ga., Atlanta—High School—Had plans prepared 3 story, 70 x 469 ft. rein.-con. and brick, plain foundation. $450,000. To be let about July 1. Lockwood Green & Co., Forsyth Bldg., engrs. Edwards & Sayward, Chamber Commerce Bldg., archts.

Fla., St. Petersburg — Hotel — G. L. Preacher & Co., archts., Healy Bldg., Atlanta, Ga., preparing plans for Hotel Vannoy, here. $4,000,000. Owner's name withheld.

Tenn., Memphis—Club—Elks Club, Jefferson St., having plans prepared by Mahan & Broadwell, Amer. Bank Bldg., 12 story, 75 x 148 ft., Front and Jefferson Sts. $750,000.

Tenn., Memphis—Schools, etc.—Voted $1,-250,000 bonds for schools and sites; $150,-000 additions and improvements to General Hospital and nurses home; $150,000 improving, enlarging and equipping Cossitt Library and operating public library, art gallery, etc.; $100,000 to purchase land and erect buildings for Fire Dept.; $100,000 (city's share) constructing new buildings and additions to Tuberculosis Hospital, Shelby Co. voted $100,000, (its share) toward foregoing project.

Tenn., Memphis — Schools, etc. — Shelby Co. voted $600,000 bonds for schools and $300,000 for jail.

Tenn., Morristown—School—City plans to vote on $200,000 bond issue for schools. Engineer and architect not announced.

Ky., Ashland—Apartment—J. C. Miller of Amer. Rolling Mills Co. having plans prepared by J. Steinkampf & Bros., 1212 Mercantile Library Bldg., Cincinnati, O., 4 story and basement, brick, 23rd St. and Lexington Ave. $150,000.

Ky., Harlan—Apartment—E. M. Howard having plans prepared by R. F. Graf & Son, Arnstein Bldg., Knoxville, Tenn., 3 story and basement, 100 x 120 ft., brick. $150,000.

Ky., Lexington—Auditorium—State University of Kentucky plans auditorium, brick, Stell Field Campus. $200,000. A. O. Shippke, Supt. building and grounds.

Ky., Louisville—Apartment—T. Bohannan (agent for owner), Realty Bldg., plans 4 story, 66 x 126 ft., 3rd and Oak Sts. $150,-000-$200,000. Engineer and architect not selected.

Ky., Louisville — Apartment — F. E. Reeser, 1122 Rowan St., plans 3 story, 100 x 200 ft., 3rd St. and Park Ave. $150,-000. Engineer and architect not selected.

Ky., Louisville—Infirmary—St. Joseph Infirmary, 4th St., having plans prepared by D. X. Murphy & Bro., 714 Louisville Trust Bldg., 6 story, Eastern Parkway between Preston and Floyd Sts. $1,500,000.

Ky., Winchester—Dormitory and Gymnasium—Kentucky Wesleyan College plans dormitory and gymnasium. $150,000. Engineer and architect not selected.

O., Alliance—Theatre and Office—Koch Bros., having plans prepared by Albrecht, Wilhelm & Kelly, Union Bldg., Cleveland, 2 story, 110 x 156 ft., brick, steel and concrete. $150,000.

O., Cincinnati—School—Bd. Educ. plans school, Harrison Ave. To exceed $150,000. S. Hannaford & Sons, 1024 Dixie Terminal Bldg., archts.

O., Cleveland—Apartment—B. Benjamin, 9917 Parkgate Ave., having plans prepared by M. Weis, 617 Union Bldg., 4 story and basement, brick, plain foundation, 2036 East 100th St. $325,000. Noted Apr. 26.

O., Cleveland—Apartment—M. F. Narosny, 2435 Overlook Rd., had plans prepared by M. Weis, 617 Union Bldg., 3 story and basement, 37 x 124 ft., brick and timber, Cedar Rd. opposite Fairmount Blvd. $150,000.

O., Cleveland—Apartment—M. Rosen, 201 Ulmer Bldg., having plans prepared by Braverman & Havermaet, Ulmer Bldg., 4 story, brick and timber, plain foundation, Superior Rd. near Eddington Ave. $150,000.

O., Cleveland—Apartment—Rosen Bros., 608 St. Clair Ave. N. W., had plans prepared by M. Weis, 617 Union Bldg., 3 story and basement, 37 x 124 ft., brick, plain foundation, 1822 East 82nd St. $150,000.

O., Cleveland—Commercial and Apartment—Stotter-Haber Co., c/o R. H. Stotter, Leader-News Bldg., having preliminary plans prepared by Morris & Weinberg, 3226 Euclid Ave., 10 story, 80 x 110 ft., brick, steel and concrete, 8501 Euclid Ave. $400,000.

O., Cleveland Heights (Warrensville P. O.)—Commercial and Apartments—Greenwald, Stecher & Wallach, Society for Savings Bldg., Cleveland, having plans prepared by N. Petti, Williamson Bldg., Cleveland, 2 story, 135 x 185 ft., brick and timber, plain foundation, Mayfield and Coventry Rds., here. $200,000.

O., Dover—Theatre, Commercial and Lodge—G. A. Ebeling, archt., Newman-Stern Bldg., Cleveland, soon lets contract 4 story and basement, 50 x 150 ft., brick, steel and concrete, here, for Dover Pythian Castle Co. $150,000. Noted Aug. 31.

Mich., Detroit—Schools—Bd. Educ., 1354 Bway. Ave., having plans prepared by Malcomson, Higginbotham & Palmer, 405 Moffat Bldg., addition to Morley School $260,-000, McMillan School $185,000, and Western High School $275,000, all 2 story and basement, rein.-con., brick and steel, plain foundations.

Mich., Grand Rapids—Clinic—Physicians Assn., F. N. Smith, secy., Metz Bldg., takes bids about July 1, 4 story and basement, 65 x 100 ft. rein.-con. $300,000. Ellerbee Co., 692 Endicott Bldg., St. Paul, Minn., archts.

Mich., Niles — Hotel — Nicol, Scholer & Hoffman, archts., Lafayette, Ind., take bids June 15, 5 story and basement, rein.-con. and brick, on 132 x 191 ft. site, Main St., here, for T. W. Ready, c/o Ready Capsule Co., Niles. $250,000.

Ill., Alton—High School—Bd. Educ. plans 2 story and basement, rein.-con. and brick. $250,000 bonds voted. Engineer and architect not selected.

Ill., Chicago—Apartment—A. Proskauer, archt., 127 North Dearborn St., preparing plans 3 story, 100 x 261 ft., fireproof construction, 4727 Ellis Ave. $250,000. Owner's name withheld.

Ill., Chicago—Hall and Store—Independent Order Odd Fellows, c/o Rawson & Eisenburg, archts., 5 North La Salle St., plans 3 story, fireproof construction, Ogden Ave. $150,000.

Ill., Chicago — Store—General Furniture Co., 3039 East 92nd St., plans 3 story, 72 x 123 ft., fireproof, 2608-12 West North Ave. $225,000. I. S. Stern, 35 South Dearborn St., archt.

Wis., Antigo — High School — Bd. Educ. having plans prepared by Claude & Starck, Badger Annex, Madison, 2 story and basement, 68 x 110 ft., brick, rein.-con. and steel, plain foundation. $150,000.

Wis., De Pere—School—Bd. Educ. plans brick, rein.-con. and steel, plain foundation. $150,000. Engineer and architect not selected.

Wis., Janesville—Theatre—H. F. Jones, 107 North Franklin St., having plans prepared by Balch & Lippert, Gay Bldg., Madison, 2 story, 80 x 150 ft., brick, rein.-con. and steel, plain foundation, North Franklin St. $150,000. Noted Mar. 29.

Wis., Kenosha—Temple—Masonic Temple Bldg. Assn., c/o J. I. Chester, pres., 178 Park Row, soon takes bids 2 story and basement, 82 x 120 ft., brick, concrete and stone, plain foundation. $150,000. R. G. Schmidt & Co., 77 West Washington Ave., Chicago, archts.

Wis., Milwaukee — Business — Statzer Granite Co., 723 Grand Ave., having preliminary plans prepared by M. Tullgren & Sons Co., 425 East Water St., 3 story and basement, 60 x 150 ft., brick and concrete, plain foundation, Wells St. $155,000.

Wis., Milwaukee—Club House—Frei Gemeinde Society, 262 4th St., having preliminary plans prepared by C. F. Ringer & Son, 432 Bway., 3 story, 90 x 150 ft., brick and concrete, plain foundation, 27th St. $150,000.

Wis., Milwaukee—School and Chapel—Capuchin Fathers, 2nd and Burliegh Sts., had plans prepared 4 story and basement, 54 x 130 ft. and 50 x 114 ft., brick and concrete, plain foundation, 10th and State Sts. $200,000. Taking bids on excavation. E. Brielmaier & Sons Co., 432 Bway., archts.

Wis., Milwaukee — Temple — Wisconsin Consistory, Van Buren and Oneida Sts., plans temple. $2,000,000. W. Perry, secy. Engineer and architect not selected.

Wis., Wausau—Hotel—Bellis Steel Co., 3rd and Scott Sts., having plans prepared by Oppenhamer & Obel, archts., Wausau. 3 story and basement, 50 x 120 ft., brick, rein.-con. and steel addition, plain foundation, 2nd St. $150,000.

Ia., Conrad—School—Bd. Educ. having plans prepared by E. F. Gier, Conrad, 3 story and basement, rein.-con., brick, tile and stone. $150,000. Noted May 18.

Ia., Des Moines—Schools—Bd. Educ. having plans prepared rein.-con., brick and steel junior high school, 14th and University Sts., $500,000. Proudfoot, Bird & Rawson, 810 Hubbell Bldg., archts.; school at Ovid and Cornell Sts., $200,000. Boyd & Moore, 1022 Grand Ave., archts. Noted Apr. 5.

Ia., Mt. Ayr—Court House—Ringgold Co. election June 4 to vote on $160,000 bonds for court house. Noted Nov. 16.

Minn., Minnetonka Beach—Club House—Lafayette Club, c/o C. M. Harrington, pres. 713 Chamber of Commerce, Minneapolis, having revised plans prepared by Hewitt & Brown, 1200 2nd Ave. S., Minneapolis, and soon takes bids 1, 2 and 3 story, brick, concrete and tile. $300,000. Former bids rejected. Noted Mar. 1.

Minn., Wauseka — High School—School Bd. having plans prepared by W. B. Ittner, 911 Locust St., St. Louis, 2 story and basement, rein.-con. and brick, plain foundation. $500,000.

Mo., St. Louis—Monkey House—Zoological Bd. Control, Forest Park, had plans prepared 1 and 2 story, 110 x 129 ft., brick, concrete and steel, plain foundation, Forest Park. $150,000. Private plans.

Ark., Hot Springs — Hotel — Arlington Hotel Co., Central Ave., soon takes bids 6 and 10 story, 200 x 200 ft. brick, concrete and steel, concrete pile foundation. $2,500,-000. Mann & Stern, A. O. U. W. Bldg., Little Rock, archts.

Tex., Houston—Municipal, etc.—June 9, to vote on $1,750,000 bond issue for 19 story and basement, 170 x 237 ft., city hall, market and office building, brick, stone, terra cotta, rein.-con., granite and steel, Travis St. R. J. Cummins, 214 Gulf Bldg., engr. C. D. Hill & Co. and J. W. Dehmert, 501 Kress Bldg., archts.

Okla., Muskogee—Court House and Jail—Muskogee Co. defeated $350,000 bonds for court house and jail. Noted May 3.

Okla., Oklahoma City—Hotel—W. B. Skirwin, 1st St. and Bway., having plans prepared by Layton, Smith & Forsyth, S. W. Natl. Bldg., 13 story, 100 x 140 ft., brick. $1,000,000.

Wash., Seattle — Bible Institute — First Presbyterian Church, 7th and Spring Sts., plans 9 story, 110 x 130 ft., steel, concrete and terra cotta. $1,000,000. M. A. Matthews, pastor.

Wash., Tacoma—Schools—Voted $2,400,-000 bonds for new schools, incl. 6 intermediate, 1 large grade school, and additions to 7 grade schools. Noted Apr. 12.

Calif., Alameda—High School—Alameda High School Dist. voted $750,000 bonds for high school. Noted Apr. 12.

Calif., Los Angeles — Apartment — A. C. Blumenthal, et al., Loew State Bldg., plans apartment, brick, on 150 x 300 ft. site, Wilshire Blvd. near Bronson Ave. To exceed $250,000. Engineer and architect not selected.

Calif., Los Angeles—Club—Los Angeles Nurses' Club, 1103 West 8th St., having plans prepared by J. J. Frauenfelder, Story Bldg., 5 story, 3rd and Lucas Sts. To exceed $150,000.

Buildings (Continued)

Calif., Los Angeles—Hotel—J. B. Lankershim, Lankershim Bldg., having plans prepared by A. C. Martin, Higgins Bldg., 7 story annex, rein.-con., Flower and 6th Sts. To exceed $200,000.

Calif., Los Angeles—Loft—C. E. Page, Jewelers Exch. Bldg., having plans prepared by Milwauke Building Co., Wright & Callendar Bldg., 12 story and basement, rein.-con., 6th St. and Grand Ave. To exceed $500,000.

Calif., Los Angeles—Loft—Stewart-Dawes Shoe Co., c/o J. M. Cooper, Marsh-Strong Bldg., having plans prepared 5 story and basement, 90 x 100 ft., rein.-con., Santee and 8th Sts. $150,000.

Calif., Los Angeles—Lodge, etc.—Independent Order of B'nai B'rith, 519 West 9th St., had plans prepared by Norton & Wallis, Pacific Finance Bldg., 3 story and basement, lodge, club, store and gymnasium, brick, 9th St. and Union Ave. $150,000.

Calif., Los Angeles—School—Cumnock School of Expression, 200 South Vermont Ave., having plans prepared by A. S. Heineman, San Fernando Bldg., 2 story, brick and concrete, Las Palmas Ave. To exceed $150,000.

Calif., Los Angeles—Store—Citrin Cloak & Suit Co., 516 West 7th St., plans 5 story, 65 x 172 ft., fireproof, Hollywood Blvd. To exceed $250,000.

Calif., Marysville—Club—L. L. Freeman, pres. Marysville Art Club, is head of Building Assn., which plans club, fireproof, 11th and E Sts. $150,000. Engineer and architect not selected.

Calif., Marysville—Lodge, Store and Office—Masonic Lodges of Marysville plan lodge, 6 or more stories. To exceed $150,000. Engineer and architect not selected.

Calif., Monrovia—High School—Monrovia High School Dist. defeated $489,000 bonds for high school. Noted May 3.

Calif., Oakland—Store and Loft—A. F. Edwards, c/o Reed & Corlett, archts., Bank of Savings Bldg., having plans prepared 4 story, rein.-con., Telegraph Ave. and 17th St. $150,000. Healds Business College, 528 16th St., lessee.

Calif., Palo Alto—High School—Palo Alto Union High School Dist. to vote on $150,000 bonds for high school addition.

Calif., Riverside — High School — Riverside High School Dist. having plans prepared by G. S. Wilson, 646 West 9th St., economics building, brick and concrete. To exceed $150,000.

Calif., Sacramento—Theatre—Paramount Corp., c/o L. F. Starks, archt., Ochsner Bldg., having revised plans prepared theatre, fireproof, K and 9th Sts. $350,000.

Calif., San Francisco—Apartment—M. Marcussen, Amer. Natl. Bank Bldg., having plans prepared by H. P. Merritt, 57 Post St., 6 story and basement, rein.-con., California St. near Jones St. $150,000.

Calif., San Francisco — Hospital — St. Francis Hospital, Bush and Hyde Sts., having sketches made by A. I. Coffey, Humboldt Bank Bldg., 4 story and basement annex, brick. To exceed $150,000.

Calif., San Francisco — Lodge — B'nai B'rith, 49 Eddy St., had sketches made by S. Heiman, 57 Post St., 2 story, fireproof. $250,000.

Calif., San Francisco—Loft—Commercial Art Co., 53 3rd St., having plans prepared by Merritt & Gunnison, 57 Post St., 6 or 7 story addition, brick or concrete, 2nd St. near Mission St. To exceed $150,000.

Calif., San Francisco—Temple—Scottish Rite of San Francisco, Sutter St. and Van Ness Ave., having plans prepared by C. Werner, Santa Fe Bldg., 6 story addition, probably rein.-con. $1,000,000.

Calif., San Jose—Office—Binder & Curtis, archts., 255½ South 1st St., take bids about June 17, 10 story, brick and terra cotta, North 1st St., for Commercial Building, Inc., c/o architects. To exceed $300,000. Noted Jan. 18.

Calif., Santa Ana—Hospital—Santa Ana Valley Hospital Assn., Spurgeon Bldg., having plans prepared by H. N. Thornton, Hill Bldg., 4 story, fireproof, Grand Ave. $250,000.

Calif., Stockton — Exhibit — San Joaquin Co. having plans prepared by Wright & Satterlee, Bank of Italy Bldg., 1 story, concrete and steel, county fair grounds. $150,000.

Calif., Wilmington—Hotel and Store—Harbor City Housing Corp., c/o A. G. Bailey, archt., 410 Jr. Orpheum Bldg., Los Angeles, having plans prepared 4 story, brick. $150,000.

Ont., Hamilton—College—Provincial Government Bd. Educ., Parliament Bldgs., Toronto, having plans prepared by F. R. Heakes, Parliament Bldgs., Toronto, 20 room, probably 3 story and basement, rein.-con., brick and steel, plain foundation, Huron St., here. $450,000.

Que., Montreal — School — Notre Dame Congregation, Sherbrooke St., plan 6 story, granite, brick and steel, Sherbrooke St. $800,000.

Ont., Toronto—Business—Dominion Realty Co., Bank of Commerce Bldg., plans 3 story and basement, 88 x 100 ft. concrete and steel, plain foundation, Yonge and St. Clair Sts. $200,000. Engineer and architect not selected.

Ont., Toronto—Church—Ossington Ave. Baptist Church, Ossington Ave. and Bloor St., plans 1 story and basement, brick and steel, plain foundation, Concord Ave. $150,000. Engineer and architect not selected.

Ont., Toronto—Office—Provincial Government, Parliament Bldgs., having plans prepared by F. R. Heakes, provincial archt., Parliament Bldg., 250 x 250 ft., probably 5 story and basement, rein.-con., brick, steel and stone, plain foundation, Queens Park. $1,250,000.

Ont., Toronto—School—Bd. Educ., 155 College St., having plans prepared by C. Dyson, 155 College St., 2 story and basement, 6 or 8 room, addition to Ogden St. School, brick and timber, plain foundation. $150,000.

B. C., Vancouver—Hospital—Vancouver General Hospital, Heather St. and 12th Ave., plans rein.-con. brick and tile. $150,000 to $175,000. Engineer and architect not selected.

B. C., Vancouver—High School—Bd. School Trustees, Hamilton St., plans 3 story, 30 room, rein.-con. and brick, in West End. $275,000. A. A. Barrs, c/o owner, archt.

BIDS DESIRED

N. Y., Batavia—Theater—Batavia Community Theaters Building Com. taking bids birck, stone, concrete and steel, East Main St. $350,000. Address H. D. Crosby, Batavia.

N. Y., Phelps—School—June 12, by J. F. Helmer, clk. Bd. Educ., new school in Dist. 8. $175,000. Foote & Carpenter, 302 Carter Bldg., Rochester, archts. Noted Nov. 2.

N. Y., Syracuse—High School—June 4, by Bd. Contr. & Supply, 17th Ward Junior High School, 2 story and basement, 200 x 300 ft., brick, steel and stone. $450,000. A. L. Brockway, Syracuse Savings Bank Bldg., archt. Noted Feb. 1.

N. Y., White Plains—School—Bd. Educ. taking bids and opens same in about 2 weeks, 3 story and basement, 45 x 139 ft., rein.-con. and brick, plain foundation. $200,000. G. Allen, 24 Mt. Vernon St., Boston, archt.

N. J., Collingswood—Exchange—J. T. Windrim, archt., Commonwealth Bldg., Phila., taking bids 3 story and basement, 75 x 150 ft., rein.-con., brick and steel, plain foundation, here, for Bell Telephone Co., 19th and Arch Sts., Phila. $360,000.

N. J., Princeton — Infirmary — Day & Klauder, archts., Franklin Bank Bldg., Phila., taking bids 3 story, 100 x 150 ft., rein.-con., brick and steel, plain foundation, here, for Princeton University. $500,000.

Pa., Phila.—School—P. F. Gertz, archt., 1634 North 6th St., taking bids 2 story and basement, 160 x 180 ft., rein.-con., brick and steel, plain foundation, Berks and Blair Sts., for St. Hugh Roman Catholic Church, 144 East Allegheny Ave. $300,000.

Pa., Phillipsburgh—Temple—G. S. Idell, archt., 1705 Chestnut St., Phila., taking bids 3 story and basement, 60 x 88 ft., brick, plain foundation, for Masonic Assn. $250,000.

Pa., Southmont—School—June 11, by E. A. Hower, secy. Southmont Boro. School Bd., Otto Bldg., Johnstown, 2 story and basement, 110 x 130 ft. brick and tile, Main St. $150,000.

D. C., Wash.—Apartment—L. G. White, Continental Trust Bldg., receiving bids apartment building Connecticut Ave. and Garfield St. $600,000. Stern & Tomlinson, Continental Trust Bldg., archts.

N. C., Kinston—Hospital, etc.—June 5, by C. B. McNairy, supt. Caswell Training School, erection of hospital, boys' industrial building, girls' industrial building, laundry, cold storage building, mule barn and implement shed. H. A. Underwood, 916 Commercial Bank Bldg., Raleigh, engr.

N. C., Murphy—High School—June 6, by Cherokee Co. Bd. Educ., constructing high school. $150,000. F. P. Simpson, Raleigh, archt.

N. C., Raleigh—Office—June 12, by Raleigh Building & Loan Assn., 107 Fayetteville St., 11 story, steel. H. P. S. Keller, 129 Hillcrest St., archt.

N. C., Smithfield—Schools—[illegible] 5, by Johnson Co. Bd. Educ. (Sm[illegible]eld), 2 brick schools, one at Wilson Mi[illegible] and one at Micro. $200,000. H. B. Mo[illegible], supt. C. H. Cook, Charlotte, archt.

Ga., Atlanta—Market—City [illegible] g bids 1 story, 200 x 269 x 300 ft., rein[illegible] brick, plain foundation. $150,000 [illegible] and Forsyth Bldg., engr. A. T. Brow[illegible] Forsyth Bldg., archt.

Tenn., Nashville—Temple—Ju[illegible] 14, by Masonic Lodge, brick, concrete [illegible] stone, 7th and Broad Sts. $500,000. [illegible]mus & Clark, Stahlman Bldg., archts.

Ky., Bowling Green—Station—[illegible]nsville & Nashville Ry., 10th St. and Bw[illegible] Louis, ville, receiving bids station, here. $360,000. G. R. Smiley, ch. engr. of co[illegible]truction. Noted Apr. 26.

O., Cleveland—School, etc.—Ju[illegible] 18, by Bd. Educ., East 6th St. and Roc[illegible]ell Ave., 2 story and basement, 30 x 172 f[illegible] and 33 x 78 ft., school and boiler house, b[illegible]ck, steel and concrete, East 146th St. and Harvard Ave. $750,000. W. R. McCor[illegible]ck, East 6th St. and Rockwell Ave., archt. Noted Oct. 26.

O., Cleveland—School—June 18, by Bd. Educ., East 6th St. and Rockwell Ave., 2 story and basement, 172 x 306 ft. and 33 x 78 ft., brick, steel and concrete school and boiler house, East 106th St. and Sandusky Ave. $750,000. W. R. McCornack, East 6th St. and Rockwell Ave., archt.

Mich., Albion—College—June 5, by Albion College, 2 story and basement, 45 x 105 ft. with 47 x 60 ft. wing, rein.-con. and brick, called Robinson Hall. $200,000. J. D. Chubb, 109 North Dearborn St., Chicago, archt.

Mich., Lansing—Temple—June 12, by E. A. Bowd, archt., 127 West Allegan St., 7 story, 100 x 165 ft., South Capitol St., for Masonic Temple Assn., Amer. State Savings Bank Bldg. $750,000.

Wis., Madison—Hotel—June 10, by M. Tullgren & Sons Co., archts., 425 East Water St., Milwaukee, 9 story and basement, 132 x 144 ft., brick, terra cotta and concrete, plain foundation, here, for Hotel Wisconsin Realty Co., 86 Michigan St., Milwaukee. $1,000,000. Noted May 17.

Kan., Emporia—Bank and Office—June 11, by Citizens Natl. Bank, 5 story and basement, 43 x 130 ft., brick, stone and concrete, Main St. $300,000. Richards, McCarty & Bulford, 584 East Broad St., Columbus, O., archts. Noted May 24.

Calif., San Francisco—School—June 6, by Bd. Pub. Wks., rein.-con. school, Powell St., for city and San Francisco Co. $250,000. J. Reid, Jr., 1st Natl. Bank Bldg., archt.

Ont., Toronto—School—June 4, by Separate School Bd., 477 Jarvis St., 2 story and basement, 8 room, brick and steel, plain foundation. Shaw St., $150,000. J. P. Hynes, 73 King St. W., archt.

BIDS RECEIVED

N. Y., New York—School—W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, May 23, annex to P. S. 72, East 104th and East 105th Sts. here, from M. F. Kelley Co., 51 East 42nd St., $668,945. Noted May 17.

Pa. Pittsburgh—School—Bd. Educ., Fulton Bldg., May 17, constructing David B. Oliver School, 2 story and basement, 63 x 231 ft. with 3 wings, 72 x 82 ft., 77 x 82 ft. and 63 x 156 ft. Brighton Rd., from P. H. Kelly Constr. Co., 1713 Sansom St., Phila., $677,500. Noted May 10.

Calif., Taft—High School—Taft Union High School Dist., group of buildings, incl. auditorium, gymnasium, science, shop, etc., general contract from Olchester, Potter and Kerr., Selma, $169,300. Noted Apr. 26.

CONTRACTS AWARDED

Mass., Quincy — Armory — Pub. Wks. Dept., State House, Boston, 2 story, 95 x 150 ft., rein.-con., steel and brick, wood pile foundation, here, to J. Bowen Co., 184 Dudley St., Roxbury (Boston P. O.), $200,000.

Conn., Bridgeport—Business—J. Johnson & Sons, 85-89 Church St., New Haven, 4 story, 65 x 85 ft., brick and steel, plain concrete pile foundation, Main, Wall and Middle Sts., here, to T. J. Pardy Constr. Co., 1481 Seaview Ave., Bridgeport. Archts. est. $150,000.

Conn., Bridgeport—Church—J. A. Jackson, archt., 185 Church St., New Haven, 1 story, 78 x 176 ft., brick, stone and steel superstructure, East Main and Ogden Sts., to Casey & Hurley, 120 Pequonnock St., for St. Charles Roman Catholic Church, 299 Ogden St. Noted Apr. 26.

Conn., Bridgeport—High School—Bd. Educ., 3 story, 16 room, brick and steel, plain foundation, South Ave. and Warren

(Buildings—Continued)

St., to W. G. Muirhead, 1024 Main St., $194,-249. Archts. est. $237,955. Noted Dec. 14.

Conn., Bridgeport—Professional and Business—F. N. Benham, c/o 1st Natl. Bank of Bridgeport, 6 story, 40 x 100 ft. professional building on Broad and Gilbert Sts., and 4 story, business building on Broad and State Sts., brick and steel, to T. J. Pardy Constr. Co., 1181 Seaview Ave. Archts. est. $300,000. Noted Mar. 15.

Conn., Hartford—Apartment—A. Parskey, 22 Barker St., had plans prepared by H. H. Beckenstein, 1029 Main St., 3 story, 40 x 90 ft., brick, plain foundation, Vine St. $150,000.

Conn., Hartford—Church—Society of Our Lady of Salette, Park Ave., 80 x 170 ft., granite, plain foundation, New Park Ave., to McIntyre & Ahearn, 1315 Asylum Ave. Archts. est. $250,000.

Conn., Hartford—Store and Apartment—F. A. Tomasino, 43 Belden St., 4 story, 45 x 90 ft., brick, plain foundation, Vine St., to J. A. Ferrante, 94 Adelaide St. Archts. est. $150,000.

Conn., New Haven—High School—Bd. Educ., 3 story, 200 x 200 ft., brick, steel and concrete, plain foundation, Edgewood Ave., Augusta Lewis Troup School, to Larkin-Carey Co., 166 Brewery St., $706,518. Archts. est. $750,000. Noted Mar. 29.

Conn., Norwalk—Business—J. Balazs, 2 Mulroy St., 3 story, 40 x 70 ft., brick, plain foundation, Ely Ave., to F. J. Hodges, 14 1st Ave., East Norwalk. Archts. est. $150,000.

Conn., South Manchester—Apartment—L. H. Geer, archt., 62 Prospect St., 3 story, brick, Chestnut St., to Manchester Constr. Co., 953 Main St. Archts. est. $150,000. Owner's name withheld.

Conn., Torrington—Store and Office—D. L. Talcott, 192 Prospect St., 3 story, 70 x 110 ft., brick and steel, plain foundation, Main St., to F. W. Fuller, 79 Main St. Archts. est. $155,000.

N. Y., Brooklyn—Apartment—A. S. G. Constr. Co., c/o G. F. Pelham, archt. and engr., 200 West 72nd St., New York, will build 5 story, brick, steel and stone, plain foundation, 8504 4th Ave., here, by day labor. $150,000.

N. Y., Brooklyn—School—W. H. Gompert, archt. and engr., Flatbush Ave. extension and Concord St., addition to P. S. 99, East 9th St. between Aves. K and L, to C. Meads Co., 217 West 14th St., New York City. $291,100. Noted May 21.

N. J., Camden—Exchange—Bell Telephone Co., 19th and Arch Sts., Phila., 5 story and basement, 136 x 140 ft., brick, rein.-con. and steel, plain foundation, 7th and Federal Sts., here, to Irwin & Leighton, 126 North 12th St., Phila. Archts. est. $1,000,000.

N. J., Lakewood—School—Bd. Educ., P. S. 1, 2 story, 140 x 180 ft., Clifton Ave., to Gibbs-Mueller, 215 South Broad St., Phila. Noted Apr. 12.

Pa., Mt. Lebanon—Church—Mt. Lebanon Methodist Episcopal Congregation, 2 story and basement, 100 x 100 ft., West Liberty Ave., to H. Busse Co., Main and Wabash Aves., Pittsburgh. Archts. est. $150,000.

D. C., Wash.—Apartment—B. S. Simmons, archt., Dist. Natl. Bank, apartment building, to F. H. Gore, 1410 G St., N.W., $300,000. Owner's name withheld.

D. C., Wash.—Apartment—F. Lake, 1344 G St., N. W., first unit apartment building, to W. L. Turner, 41 Q St., N. W., $150,000. Noted May 24.

D. C., Wash.—Office—Washington Times-Herald, Munsey Bldg., 4 story, 100 x 100 ft., brick, steel and stone addition, to R. P. Whitty Co., 815 15th St., N. W. Archts. est. $200,000. Noted May 23.

N. C., Charlotte—Store—J. B. Ivey & Co., 13 North Tryon St., steel contract for 5 story and basement, 86 x 238 ft., brick, concrete and steel, to Southern Eng. Co., Realty Bldg., $70,000. Will probably ask for bids on general contract about June 10. Noted Feb. 22.

N. C., Raleigh—Office and Fraternal—Odd Fellows Lodge, Home Bldg., 10 story and basement, rein.-con., brick, stone and terra cotta, Hargett and Salisbury Sts., to J. E. Beaman, Commercial Bank Bldg., $336,400. Noted Mar. 1.

Ga., Augusta—Apartment—Walton Way Realty Co., 4 story, 32 apartments, Walton Way, to Gude & Co., Candler Bldg., Atlanta, $250,000.

Tenn., Memphis—Office—R. York of York Lumber and Mfg. Co., 823 South Bellevue St., 5 story, 98 x 140 ft., rein.-con., brick, terra cotta and stone, Madison and Manassas Sts., to Blair Constr. Co., Randolph Bldg. Archts. est. $500,000.

O., Akron—School—Bd. Educ., 2 story, 64 x 200 ft., brick, plain foundation, Crosby St., to Carmichael Constr. Co., 524 Hamilton Bldg., $225,000.

O., Mt. Vernon—Memorial—Mt. Vernon Memorial Building Comn., 2 story, 100 x 140 ft., brick, concrete and stone, to Willing Bros, Bellevue, $207,408. Noted May 17.

O., Newcomerstown — High School—Bd. Educ., 2 story and basement, 120 x 137 ft., rein.-con. and brick, to Taylor-Owen Co., Coshocton, $119,875. Noted May 3.

O., Rock Creek—School—Bd. Educ., 2 story, brick, steel and concrete, to Howell & Noble, Warren. Archts. est. $150,000. Noted May 17.

Mich., Lansing—School—Bd. Educ., City Hall, 3 story and basement, 60 x 200 ft. brick, West Kalamazoo St., to G. H. Christman Co., Porter Apartments, $143,000. Noted Mar. 22.

Wis., Milwaukee—Hotel—Hotel Medford, 3rd and Sycamore Sts., 4 story, 75 x 120 ft., brick and concrete addition, to B. Wilke, 1011 Island Ave. Archts. est. $400,000.

Wis., Milwaukee—Studio—T. Cusack Co., 332 4th St., 1 story and basement, 82 x 165 ft., brick and concrete, plain foundation, to H. Schmitt & Son, 430 Farwell Ave. Archts. est. $150,000.

Wis., Oconomowoc—School and Dormitory—Redemptorist Fathers, two 3 story and basement, 42 x 128 ft. wings, brick, tile and concrete, plain foundations, to Hutter Constr. Co., 128 Western Ave., Fond du Lac. Archts. est. $400,000.

Wis., Sheboygan—Ebenreiter Lumber Co., 1215 Erie Ave., 1 story, 58 x 98 ft., brick, rein.-con. and steel factory plain foundation, to H. Loesing, Jr., 1905 North 11th St. $40,000. Noted May 10.

Minn., Glen Lake (Hopkins P. O.)—Sanatorium Group — Hennepin Co. Sanatorium Comn., c/o E. S. Mariette, secy., general contract 6 story and basement infirmary building, to Pike & Cook, 416 South 5th St., Minneapolis, $221,792; men employes building, to Kitrud & Mudsen, 754 Builders Exchange, Minneapolis, $104,-000, both rein.-con. and brick. Noted May 17.

Minn., Minneapolis—School—Bd. Educ., 305 City Hall, 2 story and basement, 30 x 109 x 201 ft., rein.-con., brick, tile and stone, 4404 East 33rd St., general contract to Victorson Constr. Co., 126 South 9th St., $121,441. Total $179,800.

Mo., St. Louis—Apartment Hotel—F. L. Cornwell, Lasalle Bldg., having plans prepared by W. S. Frank, Century Bldg., 7 story, 44 x 125 ft., rein.-con. and brick, plain foundation, Whittier St. and Lindell Blvd. $300,000. Work will be done by day labor.

Tex., Dallas—Office—M. H. Thomas., Cotton Exch., 8 story and basement, 50 x 174 ft., stone, brick and steel, plain foundation, Wood and Akard Sts., to Henger & Chambers, Slaughter Bldg., $270,000. Archts. est. $300,000. Noted Mar. 15.

Tex., Galveston—Bank—Texas Bank & Trust Co., general contract 9 story and basement, brick, steel, stone and concrete, plain foundation, to West Lake Constr. Co., First Natl. Bank, Ft. Worth, $515,000.

Ore., Portland—Apartment—D. M. Pallay, 1087 East Glison St., 5 story, 100 x 140 ft., rein.-con. and brick, Flanders and 22nd Sts., to Zanello Bros., Worcester Bldg., $365,000.

Calif., Los Angeles—Apartment—Fashion Realty Co., Loew State Bldg., 5 story and basement, brick, 5th St., to Richardson Building & Eng. Co., 141 North Larchmont Ave., $300,000.

Calif., Los Angeles—Church—Highland Park Presbyterian Church, brick and rein.-con., Pasadena Ave., to J. B. Harris, 808 Westchester St., $200,000. Noted Jan. 18.

Calif., Los Angeles—Hotel and Store—H. Rivers, et al., 414 South Irving Blvd., 11 story and basement, rein.-con. and brick, Columbia and 6th Sts., to Arndorff-Klapper-Gow Co., 625 Bank of Italy Bldg., $400,000.

Calif., San Francisco—Apartment—T. McDougal, c/o J. Stewart, archt., Claus Spreckels Bldg., 6 story and basement, rein.-con., Turk St. near Taylor St., to Atlas Concrete Co., 180 Jessie St., $150,000. Noted Feb. 8.

Que., Montreal—Apartment—Drummond Apts. Ltd., 10 story, 117.6 ft. high, 214 x 252 ft. rein.-con., brick, steel and stone, Drummond St., to Anglin-Norcross Ltd., Victoria St., $5,000,000. Noted Mar. 22.

Que., Montreal — Exchange — Bell Telephone Co., Notre Dame St., 9 story, 70 x 145 ft. rein.-con., brick, steel and stone, to E. G. M. Cape & Co., Cathcart St. $550,000, structural steel to Dominion Bridge Co., Lachine.

Que., Montreal — Store — Dupuis Freres Ltd., St. Catherine St., 3 story 111 x 131 ft. rein.-con., brick and steel addition, Demontigny St., to Archambault & Leclaire Ltd., 71 St. James St., $398,500.

Ont., London—Exhibition—Watt & Blackwell, archts., Bank of Toronto Bldg., 2 story and basement, 185 x 305 ft., brick and steel, to R. G. Wilson & Son, 193 College Ave., for Western Fair Bd. Archts. est. $175,000. Noted May 10.

Federal Government Work

PROPOSED WORK

N. Y., Chelsea—Roads and Walk—Spec. 4850—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans roads and walks, here.

N. J., Cape May—Repairs—Spec. 4852—Bureau Yards & Docks, Navy Dept., Wash. D. C., plans repairs to building, here.

Pa., Phila.—Repairs—Spec. 4854—Bureau Yards & Docks, Navy Dept., Wash. D. C., plans repairs to Bldg. 133, at aircraft factory, here.

Tenn., Nashville—River Improvement—Secretary of War, Wash., D. C., approved $693,000 allotment for river improvement and construction for upper and lower Cumberland River, during fiscal year. Major Fiske, Custom House, Nashville, dist. engr.

Ky., Addison—Steel Piling—U. S. Engineer Office, P. O. Box 72, Louisville, plans to purchase 600 lin.ft. steel sheet piling 38 ft. lengths, about 900,000 lbs. or 450 tons, for Dam 45, Ohio River, here.

Ky., Louisville—Lumber—U. S. Engineer, P. O. Box 72, plans to purchase 22,000 ft. long leaf yellow pine, 27,000 ft. select dimension oak, mainly 3 x 8 in. x 36 ft., and 4 x 10 in. x 36 ft., 50 pieces 3 in. flitch 24 ft. long, f.o.b. Louisville.

Ill., Chicago — Sewer Extension — Spec. 4851—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans Great Lakes sewer outfall extension, here.

Washington—Road—C. H. Purcell, dist. engr., U. S. Bureau Pub. Rds., Post Office Bldg., Portland, Ore., rejected bids grading and surfacing 2.5 mi. Ranier National Forest Rd., 18 ft., Randle, Lewis Co. Noted May 10.

Calif., San Diego—Irrigation Facilities—Spec. 4853—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans irrigation facilities, here. Bids to be opened at local yard.

BIDS DESIRED

N. Y., Geneva—Remodeling—June 18, by Treas. Dept., Wash., D. C., remodeling and enlarging U. S. Post Office, here. J. A. Wetmore, acting superv. archt.

N. Y., New York—Dredging, etc.—June 25, at office U. S. Engineer, 39 Whitehall St., dredging and rock removal in East River; adv. this issue.

Md., Perryville — Piping — June 15 by Treas. Dept., Wash., D. C., installing underground steam piping, etc., at U. S. Veterans' Hospital, here. J. A. Wetmore, acting superv., archt.

La., Monroe—Mailing Shed—June 21, by Treas. Dept., Wash., D. C., mailing shed at U. S. Post Office, here. J. A. Wetmore, acting superv. archt.; adv. this issue.

Mich., Detroit—Dredging—June 25, at office U. S. Engineer, Detroit, dredging in Livingstone Channel, mouth of Detroit River; adv. this issue.

Mich., Marquette—Breakwater—June 11, at office U. S. Engineer, Custom House, Duluth, Minn., repairs to breakwater, here.

Minn., St. Cloud—Hospital—Spec. 4828—June 13 by Bureau Yards & Docks, Navy Dept., Wash., D. C., hospital group, for U. S. Veterans' Hospital, here. Noted Sept. 21.

Minn., St. Cloud—Roads and Walks—Spec. 4831—June 13, by Bureau Yards & Docks, Navy Dept., Wash., D. C., roads and walks at U. S. Veterans' Hospital, here.

Kan., Pratt—Post Office—June 20, by Treas. Dept., Wash., D. C., for U. S. Post Office, here.

Calif., San Diego—Service Extensions—Spec. 4764—June 13, by Bureau Yards & Docks, Navy Dept., Wash., D. C., service extensions to Marine barracks, Navy Yard, here. Noted Dec. 7.

H. T., Pearl Harbor—Fire Protection System—Spec. 4827—July 18, by Bureau Yards & Docks, Navy Dept., Wash., D. C., fire protection system at Naval Ammunition Depot, here. Noted May 3.

H. T., Pearl Harbor—Refrigerating Machinery—Spec. 4767—June 25 (change of date) by Bureau Yards & Docks, Navy Dept., Wash., D. C., for refrigerating equipment at Naval Station, here. Noted Apr. 26.

BIDS RECEIVED

N. H., Portsmouth — Remodeling — Spec. 4795—Bureau Yards & Docks, Navy Dept., Wash., D. C., remodeling marine barracks,

Federal Government Work (Continued)

Navy Yard, here, (1) work complete, from W. F. Martins, 112 Cutler Bldg., Rochester, N. Y., (1) $62,822 (240 days) (2) rock $10, earth $3 (3a) $20 (3b) $35 (4) $6,375; A. Pope, 4727 15th St., Wash., D. C., (1) $78,000 (2) $2 (3a) $10 (3b) $15 (4) $5,900; Newport News Contg. Co., Law Bldg., Newport, Va., (1) $87,907 (240 days) (2) add $6 deduct $3 (3a) add $30 deduct $20 (3b) add $50 deduct $30 (4) deduct $5,200. Noted May 10.

Pa., Phoenixville — Post Office — Treas. Dept., Wash., D. C., constructing U. S. Post Office, here, from C. E. Morell Co., Greenville, S. C., 57,900. Noted May 3.

Mich., Houghton — Post Office — Treas. Dept., Wash., D. C., construction complete, incl. mechanical equipment, U. S. Post Office, here, from W. D. Lovell, 1415 8th St., S.E., Minneapolis, Minn., $74,990. Noted Apr. 26.

Mo., St. Louis—Earthwork—Mississippi River Comn., 1311 International Life Bldg., 645,000 cu.yd. earthwork in Iowa River-Flint Creek Dist. 16, Iowa, from La Crosse Dredging Co., Plymouth, Bldg., Minneapolis, Minn., $0.28; 300,000 cu.yd., in Louisa Co. Levee Dist. 15, Iowa, from La Crosse Dredging Co., Plymouth Bldg., Minneapolis, Minn., and Wapello Contg. Co., Wapello, Ia., each $0.1875. Noted May 3 and 10.

New Mexico—Road—U. S. Bureau Pub. Rds., 242 West Washington St., Phoenix, Ariz., grading, etc., 11.48 mi. Canoncito-Pecos Forest Highway, 2.2 ft., Santa Fe National Forest, Santa Fe and San Miguel Counties, here, from J. F. Hamer, Stop 6, Interurban, Ft. Worth, Tex., $135,463 (omitting surfacing). Engrs. est. $130,298. Noted Apr. 5.

Arizona—Bridges—U. S. Bureau, Pub. Rds., 242 West Washington St., Phoenix, structures on 23.436 mi. Flagstaff-Angell Forest Highway, Coconino National Forest, Coconino Co., from L. C. Lashmet, Albuquerque, N. M., $71,980. Engrs. est. $63,637. Noted May 3.

Arizona—Road—U. S. Bureau Pub. Rds., 242 West Washington St., Phoenix, grading 18.038 mi. Prescott-White Spar Highway, Prescott National Forest, Yavapai Co., from Lee Moor Contg. Co., Two Republics Bldg., El Paso, Tex., $467,582. Engrs. est. $448,976. Noted May 3.

Washington—Roads—C. H. Purcell, dist. engr., U. S. Bureau Pub. Rds., Post Office Bldg., Portland, Ore., grading and surfacing 14.7 mi. Mt. Baker Highway, Glacier, Whatcom Co., from Siems & Carlson, Realty Bldg., Spokane, 40,000 cu.yd. common excav. $0.60, 10,000 cu.yd. surfacing $2.90, etc., total $117,184. Noted May 10.

Oregon—Road—C. H. Purcell, dist. engr., U. S. Bur. Pub. Rds., Post Office, Portland, grading, surfacing ,etc., 5.5 mi. Devils Lake Rd., 16 ft., Siletz National Forest, Lincoln Co., from Warren Constr. Co., Park Rose, Portland, 138,000 cu.yd. common excav. $0.56, 12,000 cu.yd. surfacing $3.05, etc., total $207,864. Noted May 10.

Calif., Los Angeles — Dredging — U. S. Engineer, Central Bldg., dredging in Los Angeles Harbor, Area 3, 1,270,000 cu.yd., Area 4, 610,000 cu.yd., Area 5, 820,000 cu. yd., Area 6, 200,000 cu.yd., from San Francisco Bridge Co., Nevada Bank Bldg., San Francisco, Area 3 only $0.321, Area 4 $0.331, Areas 3, 4 and 6 $0.34, Areas 4 and 6 $0.34, Areas 4, 5 and 6 $0.34, Areas 3, 4, 5 and 6 $0.292; United Dredging Co., Central Bldg., Area 3 $0.337, Areas 4 and 6 $0.3198, Areas 4, 5 and 6 $0.3178, Areas 3, 4, 5 and 6 $0.3148. Noted May 3.

Panama — Towers — Spec. 4794—Bureau Yards & Docks, Navy Dept., Wash., D. C., dismantling towers at St. Petersburg, Fla., and erecting same at La Palma, C. Z., here, from W. F. Martins, 112 Cutler Bldg., Rochester, N. Y., $8,349 (160 days). Noted Mar. 8.

H. T., Pearl Harbor—Storehouse—Spec. 4692—Bureau Yards & Docks, Navy Dept., Wash., D. C., complete 2 story, concrete, tile and steel storehouse, at Naval Operating Base, here, (1) work complete, from L. R. Smith, 1576 Pensacola St., Honolulu, H. T., (1) $183,216 (240 days) (2) $215,575 (300 days) telegraphic modification (1) deduct $8,500 (2) deduct $8,500; W. F. Martins, 112 Cutler Bldg., Rochester, N. Y., (1) $190,000 (275 days) (2) $218,000 (305 days); Walker & Olan, 820 Lower Piikii St., Honolulu, (1) $200,000 (270 days) (2) $231,900 (285 days) telegraphic modification (1) deduct $1,500 (30 days) (2) deduct $2,700. Noted Apr. 26.

CONTRACTS AWARDED

Mich., Detroit — Superstructure — U. S. Engineer, 337 Federal Bldg., superstructure on west center pier, St. Marys Falls Canal, to G. O. Comb, Sault Sts. Marie, $31,200. Noted May 17.

Minn., St. Cloud—Water System, etc.—Spec. 4830—Bureau Yards & Docks, Navy Dept., Wash., D. C., water and sewerage system at U. S. Veterans' Hospital, here, to W. D. Lovell, 1415 8th St., S.E., Minneapolis, Minn., $24,693. (120 days). Noted Apr. 19.

Oregon—Road—C. H. Purcell, dist. engr., U. S. Bureau Pub. Rds., Post Office Bldg., Portland, grading and 6 in. crushed rock surfacing on 8.7 mi. Crater National Forest Rd., Crater Lake, Jackson Co., preparing 45,800 ft. subgrade, 20,500 cu.yd. crushed rock, etc., to W. Vonderhelm, Eagle Point, crushed rock $3.16 per cu.yd., total $64,341.

Miscellaneous

PROPOSED WORK

Tunnel — Meriden, Conn. — Connecticut School for Boys plans 2 rein.-con. tunnels, to connect buildings. $50,000. E. S. Boyd, supt. Engineer not selected.

Duct, etc.—New Britain, Conn.—Bd. Pub. Wks. plans to purchase 25,000 ft. 3½ in. single tile duct $6,000; 25,000 ft. 4 in. and 15,000 ft. 3½ in. fibre duct, $6,000; 50 manhole frames, $6,000; 1,600 bbl. cement, $7,000, for underground conduit system on Broad St. J. D. Williams, city engr.

Memorial—New Britain, Conn.—City receiving sketches memorial to War Veterans. $30,000. Address G. H. Dyson, 92 Harrison St., chn. Permanent Memorial Com.

Jetties—Ft. Pierce, Fla.—St. Lucie Co. plans to issue $120,000 bonds to extend jetties. E. H. Collings, Jr., Ft. Pierce, engr.

River Terminal—Natchez, Miss.—Plans river terminal work, incl. buildings and equipment. $100,000. L. A. Whittington, mayor.

Transmission Line—Kentucky—Kentucky Utilities Co., M. E. T. Bldg., Louisville, plan extending 33,000 volt transmission line from Elizabethtown to Camp Knox. To exceed $25,000. G. T. Bogard, c/o owner, engr.

Wall — Lancaster, Ky. — J. Poindexter plans masonry wall, 11 ft. high, ½ mi. long, to protect land from back water, due to new dam on Dix River. $41,000.

Stadium — Bloomington, Ind. — Indiana University having plans prepared by Osborn Eng. Co., 2848 Prospect St., Cleveland, O., stadium, 50,000 seating capacity. Noted Apr. 26.

Train Shed — St. Louis, Mo. — Terminal R.R. Assn., Union Sta., having preliminary plans prepared concrete and steel train shed, either bush or umbrella type. $1,000,000. Private plans.

Wharf — Beaumont, Tex. — Atlantic Refining Co. plans 700 ft. wharf.

Spillway—Ft. Worth, Tex.—See "Dams."

Fill, etc.—Galveston, Tex.—City making plans raising and filling west end Galveston Island. $1,250,000 bonds voted. C. A. Holt, Jr., city engr.

Electric Light, etc.—Wills Point, Tex.—Voted $25,000 bonds for electric light and power improvements. L. Gilmore, city secy.

Rock Crushing Plant—Palisade, Nev.—Southern Pacific R.R., Southern Pacific Bldg., San Francisco, Calif., plans rock crushing plant, here.

Park Improvements — Eureka, Calif. — City plans to vote on $100,000 bonds for park improvements. Noted Mar. 15.

Distributing System — Loomis, Calif. — Pacific Gas & Electric Co., 445 Sutter St., San Francisco, plans distributing system, here. To exceed $25,000. Private plans.

Town Site—San Gabriel, Calif.—W. P. Temple, et al., Title Insurance Bldg., Los Angeles, plans town site for 4,000 to 5,000 people, here, first unit includes four 2 story, brick or concrete buildings to be erected in center of site. To exceed $150,000.

Gas Mains — Montreal, Que. — Montreal Light Heat & Power Co., Craig St. plan to lay 4,210 ft. 16 in. c.i. pipe in Hanatoux St. $31,365, 250 ft. 12 in. in Jarry St. $1,373, 1,650 ft. 6 in. in St. Denis St. $5,445.

BIDS DESIRED

Modification of Railroad Structure—New York—June 7, by Transit Comn., 49 Lafayette St., New York City, modification of railroad structure east of Boulevard to allow raising street grade, Route 61, Boro of Queens, Agreement "CM." G. McAneny, chm.

Stone Crusher Plant—Trenton, N. J.—June 12, by Mercer Co., Court House, stone crusher plant, etc., at Moore Sta. H. E. Breed, 507 5th Ave., New York City, consult. engr.; adv. this issue.

Subway—Phila. Pa.—June 26, at office W. S. Twining, dir. Dept. City Transit, 1211 Chestnut St., subway in Arch St., Contr 207; adv. this issue.

Ornamental Lighting System—Williamsport, Pa.—June 18, by City Council, ornamental lighting system, 300 standards. L. Mussina, city engr.

Dock and Boat Basin—Sanford, Fla.—June 18, by W. B. Williams, city engr., dock and boat basin, 76,000 lbs., reinforcing bars, 1,700 cu.yd. concrete, 24,000 cu.yd. hydraulic fill, 11,000 ft. creosoted timber, 15,300 lin. ft. foundation, 1,930 lin.ft. creosoted and 20,000 lin.ft. Palmetto piling, etc. F. T. Williams, Sanford, engr.

Sand and Gravel Dumps, etc.—New London, Wis.—Taking bids sand and gravel dumps and conveyors. C. J. Thompson, clk. Private plans.

Car Barns—Racine, Wis.—Milwaukee Electric Ry. & Light Co., Pub. Serv. Bldg., Milwaukee, taking bids 1 story, 80 x 160 ft. car barns, brick, steel and concrete, plain foundation, Layard Ave., here. $100,000. R. H. Pinkley, c/o Owner, archt. and engr.

Heating Plant—Wautoma, Wis.—June 29, by Waushara Co., steam heating plant for court house, jail and garage. $25,000. W. H. Berray, Court House, chn. Private plans.

Coaling Station—Dubuque, Ia.—Illinois Central R.R., 135 East 11th Pl., Chicago, receiving bids 300 ton coaling plant, here. $35,000. F. L. Thompson, ch. engr.

BIDE RECEIVED

N. Y., Millersport—Comrs. Niagara Co., (Lockport), Erie Co., (Buffalo), Amherst and Clarence Twps., May 24, twin span bridge, 24 ft., (a) concrete, (b) steel, over Tonawanda Creek, Transit Rd., from Meyer & Meyer, Erie St. and Cemetery Rd., Lancaster, (a) $49,943 (b) $48,199. Noted Oct. 26.

Subway—New York, N. Y.—Transit Comn., 49 Lafayette St., Sect. 2 of Route 45, part of Bway.-4th Ave. Rapid Transit R. R. from Patrick McGovern, Inc., 50 East 42nd St., $5,976,086. Noted May 3.

Brick—St. Petersburg, Fla.—City furnishing 5,000,000 paving bricks, from Southern Clay Co., Vol St. Life Bldg., Chattanooga, Tenn., $30 per m f.o.b. Chattanooga.

Retaining Wall, etc.—Astoria, Ore.—City building retaining walls, etc., (1) standard walls (2) step down walls, from W. O. Bulette, 1257 Naval Ave., Bremerton, Wash., along Bond, 11th, 12th and 14th Sts., Dist. 1, 3,400 lin.ft. concrete retaining wall, 26,000 lin.ft. piling, 1,100 lin.ft. concrete tunnel, 3,000 lin.ft. 6-10 in. sewer, etc., (1) $98,647 (2) $93,110; Commercial, 15th and 16th Sts., Dist. 2, 4,600 lin.ft. concrete retaining wall, 34,000 lin.ft. piling, 1,100 lin. ft. concrete tunnel, 4,800 lin.ft. 6-16 in. sewer, etc., (1) $129,547 (2) $119,490; Duane, 11th and 12th Sts., Dist. 3, 2,000 lin.ft. concrete retaining wall, 15,000 lin.ft. piling, 1,000 lin.ft. concrete tunnel, 2,500 lin.ft. 6-12 in. sewer, etc., (1) $62,589 (2) $59,440.

CONTRACT AWARDED

Monument—Bristol, Conn.—City Soldiers Memorial, granite, 40 ft. shaft, large base, to Harrison Granite Co., 200 5th Ave., New York City. Engrs. est. $30,000. Noted Jan. 4.

Subway—Rochester, N. Y.—Bd. Contr. & Supply, City Hall, 4 track rapid transit railway, stations, bridge, excavation in old canal bed, Contr. 2, to I. M. Ludingtons Sons, 124 Powers Bldg., $1,654,765. Engrs. est. $1,897,516. Noted May 17.

Docks and Tunnel—Detroit, Mich.—See "Industrial Works."

Asphalt—Montreal, Que.—To Imperial Oil Co., 918 St. Patrick St., supplying 2,000 tons refined asphalt in tank cars $16.20 per ton, 200 tons in barrels $22.25, 1,000 tons in tank cars $16.20.

Gas Mains—Montreal, Que.—Montreal Light, Heat & Power Co., Craig St. W., will lay 9,700 ft. 20 in. c.i. pipe from Elm Sta. to Pie IX Blvd., 1,154 ft. 12 in. in Davidson St. from Rouen to St. Catherine Sts. and 546 ft. 8 in. from St. Catherine to Notre Dame Sts., 3,750 ft. 12 in. c.i. pipe in Bennett St. from Hochelaga to St. Catherine Sts. $122,864, 2,250 ft. 6 in. c.i. pipe in McCord St. from Wellington to Notre Dame Sts. $8,590, by day labor. E. S. Stanton, supt.

Gas Main — Montreal, Que. — Montreal Light, Heat & Power Co., 83 Craig St. W., will build 9,263 ft. 4, 6 and 12 in. c. i. mains in 24 streets, by day labor. $28,881.

Transmission Line—Ontario—Hydro Electric Comn., 190 University Ave., Toronto, will build 16 mi. transmission line from substation at Wallaceburg through Whitebread and Port Lambton to Sombra, by day labor. $80,000. F. A. Gaby, ch. engr.

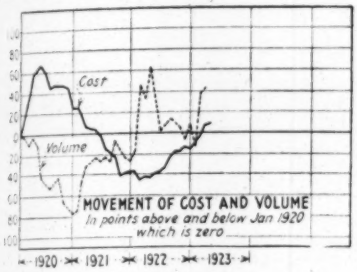
Transmission Line — Stouffville, Ont. — Will build 11 mi. transmission line to Yonge St., by day labor, under supervision Hydro Electric Power Comn. of Ontario. $30,000.

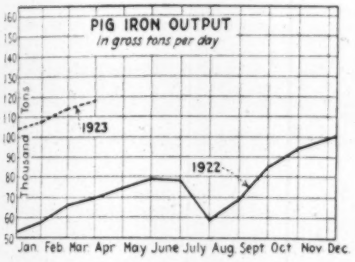
CONSTRUCTION NEWS

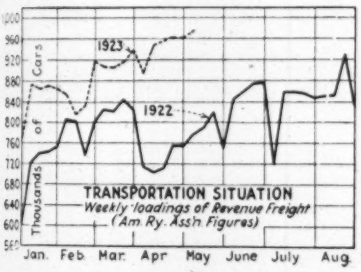
The Construction Barometer

Labor Higher—Contracts Down Except in South and Far West

THE 4-point advance in construction cost since May 1 is chargeable to labor, as explained in the Business Side of Construction. The major materials remain steady, but the common-labor rate for the country now averages 53c. per hr., against 51c. a month ago. Demand, as reflected by contracts, has fallen 14 per cent. In 1922 the May contracts were 20 per cent heavier than the April. The decline is greatest in the Middle Atlantic states and West of the Mississippi. There are gains in the South and in the Far West. The chief drop is in industrial building; streets and roads are heavier than a month ago.







E. N.-R. Statistics

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ending	Public Work	Private Work	Total Contracts
May 17	$21,510,000	$17,893,000	$39,403,000
May 24	15,598,000	18,816,000	34,414,000
May 31	16,126,000	13,565,000	29,691,000
3 weeks	$53,234,000	$50,274,000	$103,508,000

LARGE BUILDING CONTRACTS—NUMBER AND VALUE

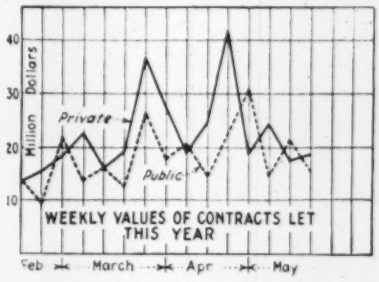
Week Ending	Public No.	Public Work	Private No.	Private Work
May 17	17	$6,395,000	36	10,765,000
May 24	10	2,509,000	35	12,481,000
May 31	11	2,555,000	33	8,528,000
3 weeks	38	$11,459,000	104	$31,774,000

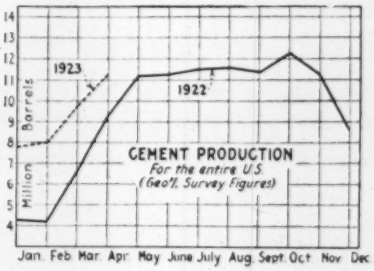
NUMBER OF LARGE JOBS NOW OUT FOR BIDS

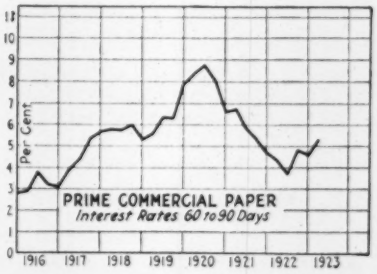
Week Ending	Private	Public All	Public Streets and Roads	Public Waterworks and Sewers	All Buildings
May 17	43	213	82	49	44
May 24	32	230	90	44	48
May 31	25	226	94	38	36

BASE PRICES UNCHANGED IN WEEK—LABOR HIGHER

	Quoted on June 7, at	Price Was	On
Structurals, Pittsburgh, 100 lb.	$2.50 @2.60	$2.50 @2.65	May 17
Cement, Chi., net bbl.	2.20	2.05	Feb. 1
Pine, N. Y., M. ft.	60.00	58.00	Apr. 5
Fir, San Fran., M. ft.	41.00	39.00	Apr. 5
Common labor, hr.	0.53	0.51	May 31







PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
June 8	Brooklyn, N. Y.	May 31
June 11	Montreal, Que.	June 7
June 12	Woodbury, N. J. Adv. May 31 and June 7.	May 31
June 12	Woodward, Okla.	June 7
June 14	Mamon, La.	May 31
June 15	Elbow Lake, Minn.	June 7
June 15	Milwaukee, Wis.	June 7
June 15	Brooklyn, N. Y.	June 7
June 19	Little Chute, Wis.	June 7
June 20	Fairport, N. Y. Adv. May 31 and June 7.	June 7
June 22	Cleveland, O. Adv. May 31 and June 7.	May 31
June 25	Duluth, Minn.	June 7
June 27	Davenport, Wash.	May 31

SEWERS

Bids Close		See Eng. News-Record
June 11	Sterling, Kan.	June 7
June 12	Watertown, Wis.	June 7
June 12	Dayton, O.	June 7
June 12	Chicago, Ill.	June 7
June 15	Erie, Pa. Adv. June 7.	June 7
June 15	Milwaukee, Wis.	May 31
June 15	Milwaukee, Wis.	June 7
June 18	St. Therese, Que.	June 7
June 19	Media, Pa. Adv. June 7.	June 7
June 19	Erie, Pa.	June 7
June 20	Westville, N. J.	May 31
June 21	Linthicum Heights, Md. Adv. June 7.	June 7

WASTE DISPOSAL

Bids Close		See Eng. News-Record
June 20	Duluth, Minn.	May 31
June 21	Sacramento, Calif.	May 31

BRIDGES

Bids Close		See Eng. News-Record
June 9	Schuylerville, N. Y.	June 7
June 11	San Leandro, Calif.	June 7
Juen 11	Chicago, Ill.	June 7
June 11	Saskatchewan	June 7
June 12	Fine, N. Y.	June 7
June 14	Mercer, Pa.	June 7
June 15	Norwich, N. Y.	June 7
June 15	Clarinda, Ia.	June 7
June 19	Alabama	June 7
June 20	Okanogan, Wash.	June 7
June 26	Alabama	June 7
June 29	Reading, Pa.	June 7
July 3	Alabama	June 7
July 31	La Center, Wash.	May 3
Nov. 30	Sydney, Australia Adv. Apr. 19, May 3 and June 7.	Apr. 19

DAMS

Bids Close		See Eng. News-Record
June 20	Ft. Collins, Colo. Adv. May 31 and June 7.	May 31

EXCAVATION, DRAINAGE, IRRIGATION

Bids Close		See Eng. News-Record
June 11	Minneapolis, Minn.	May 31
June 12	Albert Lea, Minn.	May 24
June 15	Alexandria, Minn.	May 31
June 15	Albert Lea, Minn.	Apr. 12
June 26	Savanna, Ill. Adv. June 7.	June 7

RAILWAYS

Bids Close		See Eng. News-Record
June 12	Ontario	June 7

STREETS AND ROADS

Bids Close		See Eng. News-Record
June 8	Perry, N. Y.	June 7
June 11	Wash., D. C.	June 7
June 11	Oakland, Calif.	June 7
June 11	Cloquet, Minn.	June 7
June 11	Los Angeles, Calif.	May 24

Bids Close		See Eng. News-Record
June 11	Adrian, Mich.	May 31
June 11	Minneapolis, Minn.	May 31
June 11	Chicago, Ill.	June 7
June 11	New Ulm, Minn.	June 7
June 11	Utah	June 7
June 12	West Virginia	May 24
June 12	Pottsville, Pa.	May 24
June 12	University (St. Louis P. O.), Mo.	May 24
June 12	Washington	May 24
June 12	Maryland Adv. May 31 and June 7.	May 31
June 12	East Grand Forks, Minn.	May 31
June 12	Stockton, Calif.	May 31
June 12	Sac City, Ia.	May 31
June 12	Le Mars, Ia.	May 31
June 12	Wisconsin	June 7
June 12	St. George, N. Y.	June 7
June 12	Massachusetts	June 7
June 12	Upper Arlington (Columbus P. O.), O.	June 7
June 12	Quebec	June 7
June 12	Eureka, Calif.	June 7
June 12	Gonzales, Tex.	June 7
June 12	Elkhorn, Wis.	June 7
June 12	Colorado	June 7
June 12	South Dakota	June 7
June 13	Brooklyn, N. Y.	June 7
June 13	New York, N. Y.	June 7
June 13	Baltimore, Md.	June 7
June 13	Delaware	May 31
June 13	Saskatchewan	June 7
June 14	Bradentown, Fla.	May 31
June 14	Centerville, Ia.	May 31
June 14	Sandwich, Ill.	May 31
June 14	Sumter, S. C.	June 7
June 14	Bradentown, Fla.	June 7
June 15	East Cleveland (Cleveland P. O.), O.	May 24
June 15	Hudson, N. Y. Adv. June 7.	June 7
June 15	Ebensburg, Pa.	June 7
June 15	New York Adv. June 7.	June 7
June 15	Brenham, Tex.	June 7
June 15	Orangeburg, S. C.	June 7
June 15	Quebec	June 7
June 15	New York, N. Y.	June 7
June 15	Ohio	June 7
June 16	Illinois	May 31
June 18	Port Jervis, N. Y. Adv. June 7.	June 7
June 18	Seattle, Wash.	June 7
June 18	Utah	June 7
June 18	Columbus, O.	June 7
June 19	East Aurora, N. Y. Adv. June 7.	June 7
June 19	Maryland Adv. June 7.	June 7
June 19	Alabama	June 7
June 19	Stark, Fla.	June 7
June 19	Panama City, Fla.	May 31
June 19	East Liverpool, O.	May 31
June 19	Trenton, N. J. Adv. June 7.	June 7
June 19	Louisiana	June 7
June 19	Ohio	June 7
June 20	Freehold, N. J. Adv. May 31 and June 7.	May 31
June 20	Kentucky	June 7
June 21	Newton, N. J. Adv. May 31 and June 7.	June 7
June 22	Williamson, W. Va.	May 31
June 22	Tennessee	June 7
June 25	Washington	May 31
June 26	St. Louis, Mo.	May 31
June 26	Alabama	June 7
June 26	Trenton, N. J.	June 7
June 29	Henderson, Ky.	June 7
July 3	Alabama	June 7

INDUSTRIAL WORK

June 10	Baltimore, Md.	June 7
June 12	St. Paul, Minn.	June 7
June 12	Lecompte, La.	May 24
June 18	Walkerton, Ont.	May 31
June 27	Orient, O.	June 7

BUILDINGS

June 11	Southmont, Pa.	May 31
June 11	Emporia, Kan.	May 31
June 11	Leavenworth, Kan.	June 7
June 12	New York, N. Y.	June 7
June 12	Denver, Colo.	May 24
June 12	Lansing, Mich.	May 31
June 12	Raleigh, N. C.	May 31
June 12	Phelps, N. Y.	May 31
June 12	Confluence, Pa.	June 7
June 12	Baltimore, Md.	June 7
June 12	Duluth, Minn.	June 7
June 12	North Bay, Ont.	June 7
June 13	West Allis, Wis.	June 7
June 14	Asbury Park, N. J.	June 7
June 14	Nashville, Tenn.	May 31
June 15	Clearwater, Fla.	May 24
June 15	Pawhuska, Okla.	June 7
June 15	Verona, Wis.	June 7
June 18	Cleveland, O.	May 31
June 18	Jamestown, N. Y.	June 7
June 18	Viroqua, Wis.	June 7
June 21	Springfield, Mass.	June 7
June 21	Newark, N. J.	May 24
June 21	Dennison, Tex.	June 7
June 21	Paw Paw, Mich.	June 7
June 25	Grand Rapids, Mich.	June 7
June 26	Birmingham, Ala.	June 7
June 27	Gallipolis, O.	June 7
June 28	Grand Rapids, Mich.	June 7
June 30	Louisville, Ky.	June 7
July 1	Athens, O.	May 24
July 3	Norwich, Conn.	June 7
July 6	Virginia, Minn.	June 7
July 15	Astoria, Ore.	June 7

FEDERAL GOVERNMENT WORK

June 11	Dike—New York, N. Y.	May 10
June 11	Breakwater — Marquette, Mich.	May 31
June 11	Hangars—Middletown, Pa.	June 7
June 13	Stack—St. Cloud, Minn.	May 17
June 13	Hospital—St. Cloud, Minn.	May 31
June 13	Roads and Walks—St. Cloud, Minn.	May 31
June 13	Service Extensions—San Diego, Calif.	May 31
June 15	Piping—Perryville, Md.	May 31
June 15	Recreation, etc. — Dawson Springs, Ky.	May 17
June 15	Nurses Quarters—New York, N. Y. Adv. May 24 to June 7.	May 24
June 15	Lumber — Chattanooga, Tenn.	June 7
June 18	Remodeling — Geneva, N. Y.	May 31
June 18	Additions and Alterations — El Paso, Tex. Adv. June 7.	June 7
June 19	Lumber—Wash., D. C.	June 7
June 19	Dredging—Providence, R. I. Adv. May 24 to June 7.	May 24
June 19	Dredging — Wilmington, N. C. Adv. May 24 to June 7.	May 24
June 19	Remodeling—Baton Rouge, La.	May 24
June 20	Dredging, etc. — Buffalo, N. Y. Adv. May 24 to June 7.	May 24
June 20	Dredging—Norfolk, Va.	May 24
June 20	Remodeling — Huntsville, Ala.	May 24
June 20	Post Office — Pratt, Kan.	May 31
June 20	Lumber—Baltimore, Md.	June 7
June 21	Mailing Shed—Monroe, La.	May 31
June 22	Jetty—Galveston, Tex. Adv. May 24 to June 7.	May 24
June 22	Extension—Pensacola, Fla.	June 7
June 23	Valves, etc. — Florence, Ala. Adv. May 24 to June 7.	May 24
June 25	Dredging—Detroit, Mich. Adv. May 31 and June 7.	May 31
June 25	Dredging, etc. — New York, N. Y. Adv. May 31 and June 7.	May 31
June 25	Refrigerating Machinery — Pearl Harbor, H. T.	May 31
June 25	Extension—Niagara Falls, N. Y.	June 7
June 25	Extension — Anniston, Ala. Adv. June 7.	June 7
June 27	Sewer Extension — Chicago, Ill.	June 7
July 18	Fire Protection System — Pearl Harbor, H. T.	May 31
July 18	Storage Facilities — Pearl Harbor, H. T.	June 7

MISCELLANEOUS

June 11	Paving Blocks — New York, N. Y.	June 7
June 11	Materials—St. Paul, Minn.	June 7
June 11	Street Lighting System — Shorewood (Milwaukee P. O.), Wis.	June 7
June 12	Dikes, etc.—Missouri	May 24
June 12	Stone Crusher Plant—Trenton, N. J.	May 31
June 13	Structural Steel—Rapid City, S. D.	June 7
June 14	Pier and Wharf—Charleston, S. C. Adv. May 24 to June 7.	May 24
June 16	Breakwater — Rockport, Tex. Adv. June 7.	June 7
June 16	Tunnel—Orient, O.	June 7
June 18	Dock and Boat Basin — Sanford, Fla.	May 31
June 18	Ornamental Lighting System—Williamsport, Pa.	May 31
June 25	Dock Front, etc.—Conneaut Harbor (Conneaut P. O.), O. Adv. June 7.	June 7
June 26	Subway—Phila., Pa. Adv. May 31 and June 7.	May 31
June 26	Tunnel—New York, N. Y. Adv. May 31 and June 7.	June 7
June 29	Steam Heating Plant—Wautoma, Wis.	May 31
Feb. 28	Headworks — Wellington, New Zealand	May 24
July 2	Sea Wall — Vicksburg, Miss. Adv. May 31.	June 7

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Conn., Hartford—Bd. Water Comrs. plans laying 6 and 8 in. c.i. mains in West Point Terrace, Grandview, Waverly, South, Preston, Magnolia and Doner Sts. $35,000. C. M. Saville, 1029 Main St., engr.

N. Y., Waterloo—Waterloo Preserving Co. plans 3½ mi. mains from here to Seneca Falls. $15,000. Engineer not announced.

Ind., Kendallville — See "Industrial Works."

Wis., Prairie du Chien, Wis.—See "Miscellaneous."

Minn., Faribault—See "Sewers."

N. D., Fargo—Plans mains in Hole's addition. $30,000. A. T. Jacobson, city engr.

Wyo., Casper—June 26, to vote on $200,000 bonds for waterworks incl. 1 m.g. reservoir $75,000, mains, etc., $125,000, also $75,000 for storm sewers. F. S. Knittle, city engr.

Tex., Ballinger—City Com. making plans and soon takes bids new mains, etc. $35,000. J. Pirie, city engr.

Tex., Ft. Worth—Soon takes bids 12 m.g. pump, miscellaneous machinery, for Holly pumping plant. $80,000. D. L. Lewis, city engr.

Mo., Holden—June 12, to vote on $75,000 bonds waterworks improvements, incl. rebuilding present dam, new filtration plant and pumping station, extensions to water mains and laterals. Benham Eng. Co., 512 Gumbel Bldg., Kansas City, engrs. Noted Jan. 25.

Okla., Nowata—Defeated $112,000 bonds for completion of waterworks system. Benham Eng. Co., 512 Gumbel Bldg., Kansas City, Mo., engrs. Noted May 31.

Calif., Alhambra—Plans election to vote on approximately $150,000 bonds or more constructing wells, pipe lines, reservoirs and other improvements to water works system. T. B. Downer, city engr.

Calif., Corte Madera—See "Miscellaneous."

Calif., Modesto—Modesto Irrigation Dist., 823 11th St., plans to vote on $57,000 bonds for 26 pumping plants and pipe, artesian wells, pipe line, Davis-Curtiss drains, open drains, equipment, etc. P. Jones, ch. engr.

Ont., Huntsville — Town plans chlorination plant in connection with water supply. $25,000. T. M. Cullon, clk.

Ont., Oshawa — City will purchase 300 water meters and 25 hydrants in connection with water works extension. W. C. Smith, City Hall, engr.

Ont., Renfrew—Plans to purchase 1,700 ft. 6 in. and 650 ft. 4 in. c.i. pipe, four 6 in. and three 4 in. gate valves, 3 hydrants, 1 ton pig lead, for Water Dept. J. R. Stewart, city engr.

Ont., Toronto—City plans 12,500 ft. 6 in. c.i. mains in Avenue Rd., Burnaby, Orchard View, Willowbank and Strathmore Blvds., Oriole Parkway, Ainslee and Heather Sts., Hosedale Heights Dr., Errington, Glenview, Davisville, Hillsdale and Alberta Aves. $38,139. R. C. Harris, city engr.

BIDS DESIRED

N. Y., Brooklyn—June 15, by N. J. Hayes, comr. Water Supply, Gas and Electricity, Municipal Bldg., New York, mains and appurtenances to cross-connect and set additional valves on existing mains in various streets in East New York Sect., here.

N. Y., Fairport—June 20, rapid sand rein.-con. filter plant, furnishing and hauling, etc., 10 mi. 12 in. and 1 mi. 16 in. pipe, constructing 30 ft. standpipe and 2 earthen dams. J. P. Wells, Cutler Bldg., Rochester, consult. engr.; adv. this issue. Noted May 31.

Ind., Evansville—City Council taking bids and opens same about July 1, extending water filtration plant, rein.-con. and brick buildings, c.i. mains, etc. Alvord, Burdick & Howson, 1417-18 Hartford Bldg., Chicago, engrs. Noted May 24.

Wis., Little Chute—June 19, 11,404 ft. 6-12 in. pipe, 20 hydrants, valves, etc., 7½ tons special castings, one 100,000 gal. rein.-con. reservoir, pumphouse, one 100,000 gal. steel tank on 100 ft. tower, and two 2 stage centrifugal pumps, 500 g.p.m. $50,000. A. E. McMahon, Menasha, engr.

Wis., Milwaukee—June 15, at office Dept. Pub. Wks., erection and completion of gate house and laying distribution system in

Waterworks (Continued)

front of Riverside Pumping Station. R. E. Stoelting, comr.

Minn., Duluth—June 25, by G. P. Phillips, city comr., extending water and gas mains in 90th Ave. W., 88th Ave. W., Swenson and Keene Aves. $30,000. H. G. Fischer, Water and Light Dept., engr.

Minn., Elbow Lake—June 15, 1 centrifugal pump and motor for Water Dept. J. E. Bonner, Sauk Center, engr.

Okla., Woodward—June 12, by S. J. Dohrer, water works system, incl. steel storage tank, 6 wells, 3,000 ft. 8 and 10 in., 1,000 ft. 12 in. and 18,900 ft. 16 in. c.i. pipe, etc. $175,000. Black & Veatch, Mutual Bldg., Kansas City, Mo., engrs.

Que., Montreal—June 11, by Chairman Executive Com., City Hall Annex, for 6 m.g. pumping unit, for Notre Dame de Grace Station.

Que., Verdun—City receiving bids 16 in. mains in 1/3 mi. Relelle Ave. from La Salle Rd. to Verdun Ave. $25,000. W. Hadley, city engr.

BIDS RECEIVED

Me., Portland — Portland Water Dist., May 22, new conduit, Sebago Lake, Sect. 1, (a) using 54 in. pre-cast concrete pipe (b) using 54 in. riveted plate steel pipe, from A. S. Merrill, 20 Garden St., Bath, (a) $29,685 (b) $29,737, Merritt, Chapman & Scott Co., 292 Paquot Ave., New Haven, Conn., (a) $53,330 (b) $49,877, F. A. Rumery Co., 21 Portland St., Portland, (a) $84,784 (b) $80,740; Sect. 3 Forgione & Romano Co., 96 Walnut St., South Portland, (a) $40,438 (b) $39,498, G. M. Bryne, 31 Church St., Winchester, Mass., (a) $62,014 (b) $59,164, F. A. Rumery Co., 21 Portland St., (a) $63,350 (b) $59,550; Sect. 2, from G. M. Bryne, 31 Church St., Winchester, Mass., $199,119, F. A. Rumery Co., 21 Portland St., $137,314, C. R. Gow Co., 80 Boylston St., Boston, Mass., $247,053; pipe, total straight bid, from Riter-Conley Co., 68 Devonshire St., Boston, $50,892, Newark Concrete Pipe Co., 469 Broad St., Newark, N. J., $58,313, Lock Joint Pipe Co. Ampere, N. J., $57,989. Noted Apr. 26.

Md., Baltimore—Mayor and City Council, May 31, two 8 m.g. motor driven centrifugal pumps and electrical equipment for Druid Pumping Station, from DeLaval Steam Turbine Co., North Clinton St. and Pennsylvania R.R., Trenton, N. J., $23,125 (compensation method), and $25,625 (motor method). Noted May 24.

O. Cleveland—Coagulation basins at Baldwin filtration plant, 2,812,000 lb. reinforcing, 40,000 cu.yd. concrete, 21,800 cu.yd. earth excav., 85,000 cu.yd. backfill, from Stange-Walsh Constr. Co., Baldwin Rd., $1,439,000. Noted May 3.

O., Cleveland—Cuyahoga Co., 21,300 ft. 12 in. c.i. mains in Impvt. 28 Co. Sewer Dist., from D. Pfahl & Co., Berea Rd., $120,521. Noted May 17.

CONTRACTS AWARDED

N. Y., Long Island City—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Constantia and 98th Places, Alstyne, Corona, Colonial, Lenox, Lewis, Marlowe and Way Aves., Bronson, Granger Martense, Middagh, Saultell, Waldron, Vandoran, 41st and 45th Sts., here, to J. A. Gregory, 351 East 124th St., New York, $14,400; in McClellan and Murrison Places, Anable, Ditmars, Potter, 7th, 8th, Anable and Nelson Aves., etc., to Paino & Grippo, 32 Court St., Brooklyn, $13,800. Noted May 31.

N. Y., New York—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in Unionport, Gun Hill and White Plains Rds., Allerton, Fenton, Morgan, Mayflower, Newbold, Pierce, Plymouth, Rhinelander , Romboults and Waterbury Aves., Mansion and Mead Sts., to Clementi Contg. Co., 1195 Spoffard St., $54,000. Noted May 31.

N. J., Freehold—Mayor and Boro Council, fuel oil engines, pumps, compressors, fuel oil tanks, and deepening several wells, to Ingersoll-Rand Co., 11 Bway., New York City, $24,300. Noted Apr. 19.

O., Bedford—See "Sewers."

O., Columbus—See "Streets and Roads."

Ill., Canton—Artesian well, to Sewell Well Co., 901 Howard St., St. Louis, Mo., $21,285. Noted May 3.

Wis., LaCrosse — Cast iron mains in various streets, to Mankato Constr. Co., Mankato, Minn., (street address not available), $45,780. Noted May 17.

Wis., Wauwatosa — Rein-con. reservoir only, to Jacobus & Winding, 1 State St., $16,475. Noted May 10.

Ia., Coulter—To Wickes Eng. & Constr. Co., Polk Bldg., Des Moines, waterworks system, incl. 8 in. well 125 ft. deep, 1,580 lin.ft. 6 in. and 3,740 lin.ft. 4 in. c.i. pipe, 40,000 gal. steel tank and tower, pump, etc., $17,000. Engrs. est. $15,000. Noted May 3.

Ia., Traer—To C. W. Roland Co., 215 Good St., Des Moines, 80,000 gal. steel tank and 2.5 mi. 4-10 in. mains, $23,500. Noted May 3.

Tex., Eastland—For 1 m.g. daily capacity filtration plant, to Natl. Water Purifying Co., Kaufman, $18,500. Engrs. est. $20,000.

Tex., Ft. Worth—Mains and connections in 13th St., 36,000 lin.ft. 6-20 in. c.i. pipe, various valves, fittings, etc., to H. W. Greenway, 214 Hemphill St., Ft. Worth, $40,235. Noted May 24.

Wash., Seattle—Furnishing 30,175 ft. 8 in. Class C c.i. pipe for Water Dept., to U. S. Cast Iron Pipe Co., Colman Bldg., and Amer. Cast Iron Pipe Co., Hoge Bldg., $46,126.

Calif., Napa—City Council, constructing portion Milliken Canyon pipe line; furnishing riveted steel pipe to Sacramento Pipe Wks., R St., Sacramento, $42,500; valves to Mark-Lally Co., 2nd and Tehama Sts., San Francisco; miscellaneous castings to San Francisco Eng. Co., 322 6th St., San Francisco, $835. Rejected bids for trenching and backfilling; new bids. Noted Apr. 26.

Sewers

PROPOSED WORK

Conn., Hartford—Rejected bids 2,000 ft. 36 in. rein.-con., and 3,000 ft. 18 in. vitr. clay sewer, Granby St., to exceed $25,000; 1,000 ft. 45 in. rein.-con. and 1,000 ft. 15 in. vitr. clay sewer New Britain Ave., to exceed $25,000. Will readvertise.

Pa., Erie—Plans 11 sewer drains. $56,090. F. G. Lynch, city engr.

Pa., Erie—Plans sewers in Victory Park. $70,500. F. G. Lynch, city engr.

Pa., Sharon—Soon receives bids 2 sewage disposal plants to be built in 2 units. $200,000. L. E. Burnside, city engr. Noted Dec. 7.

Fla., St. Petersburg—City rejected bids for sanitary sewers in 1st Alley south, 1st Alley north and 2nd Alley north. R. D. Brodie, St. Petersburg, engr. Noted Apr. 19.

Ala., Birmingham—Takes bids about July 1, laying 3 mi. vitr. clay sanitary sewers in suburb of Ensley, at South 69th and 7th Sts., 52nd Pl., 4th and 10th Aves. $25,100.

Ala., Dothan—City sold $121,000 bonds sanitary sewers in eastern part of town and storm sewers in business section.

O., Canton—Stark Co. and cities of Canton and North Canton plan sewers and water mains from Canton to North Canton, and will serve intervening territory. $200,000. W. E. Sarver, City Hall, Canton, engr.

O., Bedford—For 8,000 ft. 8-16 in. vitr. clay sewers and 7,000 ft. 6 in. c.i. water mains in Columbus St., to W. B. Smith, 1350 West 89th St., Cleveland, $43,000. Noted May 31.

O., Columbus—See "Streets and Roads."

Ill., Rockford—Making plans sewers in 18th St. Dist. $60,700. B. C. Harvey, city engr.

Minn., Faribault—Plans storm sewer extensions, watermains and curbing. $38,000. A. W. Bedell, city engr.

Wyo., Casper—See "Waterworks."

Okla., Erick — Having plans prepared sewerage system and disposal plant. $60,000. C. T. Derr, 200 East Main St., Oklahoma City, engr.

Okla., Oklahoma City — Having preliminary plans prepared outfall sewerage system and disposal plant. Plans election to vote on $1,500,000 bonds for project. B. M. Hart, city engr.

Wash., Tacoma—Made plans trunk sewerage system in Gallagher Gulch Dist. $75,000. J. C. Manley, city engr.

Calif., Corte Madera—See "Miscellaneous."

Calif., Irvington—Irvington Sanitary Dist. had plans prepared sanitary sewerage system, $75,000 bonds voted. G. A. Posey, Courthouse, Oakland, engr.

Calif., Long Beach—Having plans prepared 24 in. sewers in various streets. $28,000. A. L. Ferver, Long Beach, engr.

Calif., Newark — Union Sanitary Dist. had plans prepared sewerage system. $75,000 bonds voted. G. A. Posey, Courthouse, Oakland, engr.

Calif., Niles—Niles Sanitary Dist. had plans prepared sewerage system. $65,000 bonds voted. G. A. Posey, Courthouse, Oakland, engr.

Calif., Santa Rosa — Having estimates made improving sewage disposal plant, incl. Imhoff tank, trickling filter plant, etc. To exceed $150,000. C. E. Smith, 716 Santa Barbara Rd., Berkeley, consult. engr.

Ont., Ft. William — City Council plans 12,000 ft. vitr. sanitary sewers, 8 in. up. $33,000. C. B. Symes, city engr.

Ont., Toronto—City Council plans storm sewerage system, known as Rosedale Heights Drainage System, in Clifton Rd., Rosedale Heights Dr., Swanick, Hudson, Errington and Maclennan Aves., 11,000 ft. 8-18 in. vitr. pipe. $30,000. R. C. Harris, city engr.

BIDS DESIRED

N. Y., East Aurora—See "Streets and Roads."

Pa., Erie—June 15 for Sewer Projects 1, 2, 3 and 5. F. G. Lynch, city engr.; adv. this issue.

Pa., Erie—June 19, for 11 sanitary sewers in Frontier Park Place subdivision. $77,000. F. G. Lynch, city engr.

Pa., Media—June 19, by Boro Council, 8,000 lin.ft. 5-12 in. terra cotta sewers and 1 section proposed sewage disposal plant. Remington & Vosbury, 601 Market St., Camden, N. J., engrs.; adv. this issue.

Md., Linthicum Heights—June 21, by Sanitary Comn. Anne Arundel Co., sanitary sewers. F. M. Warnken, chn.; adv. this issue.

Ill., Chicago — June 12, by Bd. Local Impvts., 207 City Hall, tile pipe sewers in West Randolph St., Essex, South Michigan and Phillips Aves., brick sewers in South Park, Cottage Grove, Kensington, South Ridgeway and South Lawndale Aves., East 116th and West 51st Sts. C. D. Hill, ch. engr.

Wis., Milwaukee—June 15, by Sewerage Comn., furnishing and delivering 2,900 wood piles, to be used in connection with sewage disposal plant. J. H. Fowles, 508 Market St., secy.

Wis., Watertown—June 12, by F. Weber, city clk., 8,986 ft. 8-15 in. sanitary and 1,397 ft. 10-33 in. storm sewers in various streets. A. Kraeft, City Hall, engr.

O., Dayton—June 12, by Montgomery Co. 87,365 lin.ft. 8-18 in. vitr. sewers in Sects. A, B and C Belmont Sanitary Sewer Dist. 1, 3,000 cu.yd. rock excav., 66,800 lin.ft. 6-10 in. vitr. sub-drain, etc.; 44,650 lin.ft. 8-15 in. vitr. sewer in Sects. A and B Overlook Sanitary Sewer Dist. 1, 19,500 lin.ft. 6-8 in. vitr. sub-drain, 1,000 cu.yd. rock excav., etc. $500,000. K. B. Allen, Keith Theatre Bldg., engr.

Kan., Sterling—June 11, sanitary sewers incl. 53,112 ft. 8-12 in. vitr. pipe, pumping plant complete with pit, building and pumps, etc. Ruckel Eng. Co., Hutchinson, engrs.

Que., St. Therese — June 18, by J. E. Blanchard, town secy. and treas., about 7 mi. sewerage system, also supplying of materials. $200,000. S. Quimet, 76 St. Gabriel St., Montreal, engr.

BIDS RECEIVED

N. J., East Orange — Mayor and City Council, May 28, 7,500 lin.ft. 24 and 30 in. sewer in William St., from C. Ippolito, 252 Main St., East Orange, $101,473. Noted May 24.

D. C., Wash.—Dist. Comrs., 509 Dist. Bldg., 4,535 ft. sewer, (a) Falls Branch (b) Upper Potomac Interceptor Sewer, Sect. 5, from A. McCandlish, Wash. (street address not available), (a1) $1.25 (a2) $13.85 (a3) $40 (a4) $27; W. F. Cush, 3rd and R Sts., N. E., (a1) $1.95 (a2) $15.50 (a3) $40 (a4) $35 (b1) $3.60 (b2) $25.50 (b3) $45 (b4) $35; W. F. Brenizer Co., 101 New York Ave., N. E., (a1) $2.10 (a2) $17 (a3) $33 (a4) $40 (b1) $3 (b2) $22.50 (b3) $45 (b4) $35. Noted May 10.

Calif., Alhambra—Sewers on Birch, Main and Primrose Aves., etc., Sewer Dist. 2, 30,054 lin.ft. 8 in. vitr. pipe, etc. and on Almanson, Granada and Hidalgo Sts., etc., Sewer Dist. 4, 22,265 lin.ft. vitr. pipe, etc., from H. D. Churchill Co., 350 Merrick St., Los Angeles, $63,951 and $50,142.

Calif., Los Angeles—Sewers in J St. between Fries St. and Lagoon Ave., 12,885 lin.ft. 8 in. vitr. pipe sewers and 11,432 lin.ft. 6 in. vitr. house connections, etc., from M. C. Brkich, 1506 Pleasant Ave., $27,340.

CONTRACTS AWARDED

Md., Baltimore—Bd. Awards, 978 lin.ft. 10 in. and 3,858 lin.ft. 8 in. vitr. sewers, 3,552 lin.ft. house connections, 25 manholes, in Dist. 7-B, Contr. 193, to Catalano, Knickerbocker Bldg., $21,686. Noted May 24.

Fla., St. Petersburg — To Gedney & Murphy Co., 211 Lumber Exch., Minneapolis, Minn., storm water drains in West Central Ave. Dist. $91,726; Tangerine Ave. Dist. $41,481; 9th St. and Euclid Blvd. Dist. $97,691; 12th, 13th and Ridge Aves., Bayboro Dist. $64,403; 4th St. South and 5th St. South Dist. $25,289; 1st and Locust Sts., 17th, 13th and 16th Aves. Dist. $112,183, total $432,773. Noted Apr. 19.

Sewers (Continued)

O., Columbus—See "Streets and Roads."

Wis., La Crosse—Trunk sewers in various streets, to C. W. Noble, 206 State Bank Bldg., $69,379. Noted May 17.

Kan., Madison—Sanitary sewerage system and sewage disposal plant for entire city, 28,100 ft. 8-12 in. vitr. clay pipe, 2,000 cu.yd. rock trenching, Imhoff tank and filter, to C. J. McCoy, Emporia, $50,-705. Noted May 17.

Tex., Ft. Worth—Storm sewers Jennings Ave., 1,015 lin.ft. 36 and 40 in. sewer, 900 cu.yd. earth, 470 cu.yd. solid and 400 cu.yd. loose rock excav., etc., Rio Grande Ave., 345 lin.ft. 40 in. sewer, 200 cu.yd. earth, 100 cu.yd. solid and 100 cu.yd. loose rock excav., etc., Rosedale St., 2,900 lin.ft. 8 in. sewer, 7,000 cu.yd. earth, 3,500 cu.yd. loose and 1,500 cu.yd. solid rock excav., to H. W. Greenway, 214 Hemphill St., $69,725.

Calif., Visalia—See "Streets and Roads."

Waste Disposal

PROPOSED WORK

Pa., Bradford—Plans election to vote on $25,000 bonds for garbage incineerator plant. Engineer not announced.

O., Euclid — Plans garbage crematory, steel and concrete. $64,050. F. A. Pease Eng. Co., Marshall Bldg., Cleveland, engrs. Building

Bridges

PROPOSED WORK

Mass., Ware—Hampshire Co. (Northampton) plans 50x60 ft. rein.-con. bridge, 16 ft., Belchertown Rd., here. $80,000. N. S. Hitchcock, Easthampton, chn. comn. Private plans.

Conn., East Hartford (Hartford P. O.) —J. Hoffman & Son, 85 Connecticut Blvd., having plans prepared 200 ft. rein.-con. trestle. $25,000. H. H. Beckanstein, 1029 Main St., Hartford, engr.

New Jersey—Atlantic Co. (Mays Landing) and Burlington Co. (Mt. Holly) will build 800 ft. concrete bridge over Mullica River. $80,000. A. H. Nelson, 636 Guarantee Trust Bldg., Atlantic City, and H. B. Smith, Mt. Holly, engrs.

S. C., Walhalla—Supervs. Oconee Co., rejected bids bridge over Tugaloo River connecting Oconee Co. and Stephens Co., Ga. $40,000. Bids will likely be called for again later in summer. Noted May 3.

Fla., Ft. Pierce—Ft. Pierce Finance & Constr. Co., retained Cunningham & Hallowes, civil engrs., Ft. Pierce, to prepare plans 8,000 ft. causeway and bridge across Indian River, wood with steel swing channel draw span, about 30% bridge and balance earth causeway. Noted May 10.

Tennessee—See "Streets and Roads."

Kan., Arlington—Reno Co., (Hutchinson) having preliminary plans prepared 500 ft. steel or rein.-con. bridge, over Arkansas River on Federal Aid Project 15, north of here. W. A. Stacey, Hutchinson, co. engr.

Kan., Independence — See "Streets and Roads."

Missouri—State Hy. Dept., Jefferson City, plans one 40 ft. rein.-con. deck girder span, 2 rein.-con. abutments, Mercer Co.; fifteen 20 ft. rein.-con. slab spans, 16 rein.-con. pile bents, over overflow of Merramec River, St. Louis Co.; one 60 ft. steel truss and six 20 ft. rein.-con. slab spans, 6 rein.-con. pile bents, over 102 River, Buchanan Co.; three 120 ft. and two 200 ft. steel truss spans, etc. over Merramec River, St. Louis Co.; three 12 ft. and six 20 ft. rein.-con.. slab spans, over Grand River, Cass Co.; one 30 ft. I-beam span over ditch, one 20 ft. rein.-con. slab and one 50 ft. steel truss spans over Fenton Creek, St. Louis Co.; three 10 ft. rein.-con. slab spans over Spring Creek, Douglas Co.; three 80 ft. steel truss spans over 3rd fork of Platte River, Buchanan Co.; one 40 ft. rein.-con. deck girder span, Atchison Co.; one 100 ft. steel truss span, over Gladden Creek and one 50 ft. steel truss span over Spring Creek, Dent Co.; four 35 ft. rein.-con. deck girder spans, etc., over Bryant Creek, Douglas Co.; one 60 ft. steel truss and six 20 ft. rein.-con. slab spans over Platte River, Buchanan Co, B. H. Piepmeier, state highway engr.

Mo., Excelsior Springs—Plans viaduct on Bway. crossing Kansas City and Kimball Aves., also widening Thompson Ave. $130,000.

Tex., Brownwood—Brown Co. voted $35,-000 bonds for bridge over Pecan Bayou, probably concrete. M. Nichols, Georgetown, engr. Noted May 17.

Wash., Aberdeen—Election soon to vote on $150,000 bonds for steel and concrete bridge over Wishkah River. E. G. Hunt, Aberdeen, engr.

Wash., Everett—Snohomish Co. rejected bids opened May 21, 220 ft. bridge, 20 ft. steel span, concrete floor and piers, across Stillaguamish River at Arlington. $50,000. Will readvertise. Union Bridge Co., Central Bldg., Seattle, engrs. Noted Apr. 19.

California—State Hy. Dept., Sacramento, plans Douglas Bridge, over Klamath River near Requa, Del Norte Co. $225,000. R. M. Morton, state highway engr.

California—State Hy. Dept., Sacramento, having plans prepared curved arch bridge on Skyline Blvd., San Mateo Co., 30 ft. roadway, 1,400 cu.yd. concrete, 275,000 lb. reinforcing. R. M. Morton, state highway engr.

Ont., Guelph—Wellington Co. soon takes bids two 12 ft. and one 14 ft. slab bridges, 20 ft. beam bridge, one 24 ft. and two 40 ft. concrete through truss spans, from 16 to 22 ft. wide. $50,000. A. W. Connor, 34 Victoria St., Toronto, engr. Noted Apr. 19.

BIDS DESIRED

N. Y., Fine—June 12 (change of date), at office of F. H. Kelly, town clk., two 140 ft. rein.-con. bridges, over Oswegatchie and Little Rivers. Concrete Steel Eng. Co., 41 Park Row, New York City, engrs. Noted May 24.

N. Y., Norwich—June 15, by S. C. Nelson, Jr., clk. joint bodies, town board of town of Norwich and common council of city of Norwich, City Hall, South Broad St. bridge over Canasawacta Creek. Former bids rejected. E. F. Musson, civil engr. Noted May 17.

N. Y., Schuylerville—June 9, by Bd. Village Trustees, rein.-con. bridge over Fish Creek. To exceed $25,000.

Pa., Reading—June 29, by J. P. Wanner, controller Berks Co., rein.-con. bridge over Schuylkill River, on Schuylkill Ave.; adv. this issue.

Pa., Mercer—June 14, by M. Wagstaff, clk. Mercer Co., building 6 bridges at various points, incl. three 32 ft. bridges, also rein.-con. and steel bridge on Chestnut St., Sharon. $50,000. F. P. Graham, Grove City, co. engr.

Alabama—June 26, by W. S. Keller, state highway engineer., Montgomery, bridges on Montgomery Andalusia Rd. north of Luverne, Crenshaw Co., alternate bids on (1) using treated timber, 142,086 ft. treated timber structures, 6,790 lin.ft. treated timber piles, 1,244 sq.yd. 1½ in. bituminous surfacing, cold mix (2) using concrete, 1,127 cu.yd. concrete, 118,067 lb. reinforcing, 5,860 lin.ft. concrete piles; 605 ft. concrete bridges on road from Etowah Co. line to Jefferson Co. line, St. Clair Co., 1,334 cu.yd. concrete, 202,274 lb. reinforcing, 413 sq.yd. 1 in. concrete surfacing, 1:2:3.2 mix, etc.

Fla., Bradentown—See "Streets & Roads."

Alabama—July 3, by W. S. Keller, state highway engr., Montgomery, 612 lin.ft. concrete bridges on Oneonta-Village Springs Rd., Blount Co., 1,316 cu.yd. concrete, 168,-234 lb. reinforcing, 1,344 cu.yd. excav., etc.

Alabama — June 19, by W. S. Keller, state highway engr., Montgomery, 1,388 ft. bridges on Demoplis-Millers Rd., Marengo Co., one 102 ft. steel span, alternate bids on (1) using treated timber, 287,634 ft. treated timber, 12,984 lin.ft. treated timber, piles, etc., (2) using concrete, 2,043 cu.yd. concrete, 325,651 lb. reinforcing, etc.

Tennessee—See "Streets and Roads."

Ohio—See "Streets and Roads."

Ill., Chicago—June 11, at office of H. A. Zender, supt. Pub. Serv., Cook Co., rein.-con. substructure for Burnham Bascule Bridge, Sect. 28-15 D, on Torrance Ave., Burnham, $190,000; 5 span, rein.-con. Touhy Bridge, Sect. 109, 15-D, over Des Plaines River on Touhy Ave., Maine Twp., $41,100. Noted May 31.

Ia., Clarinda—June 15, by Auditor Page Co., 41 concrete box and 29 circular culverts, 4 culvert extensions, 7 I-beam spans and 2 pony trusses. I. H. Taggart, Clarinda, co. engr.

South Dakota—See "Streets and Roads."

Utah—See "Streets & Roads."

Wash., Omak — June 20, by Comrs. Okanogan Co. (Okanogan), 5 span arch bridge, 408 ft., 20 ft. roadway with 5 ft. walks, over Okanogan River, here. D. C. Warfel, Okanogan, engr.

Calif., San Leandro—June 11, by Supervs. Alameda Co. (Oakland), widening bridge over San Leandro Creek on East 14th St., 1,000 cu.yd. grading and excav., 700 cu.yd. concrete, 38,000 lb. reinforcing, 2,800 sq.ft. concrete and asphaltic concrete pavement, 800 sq.ft. asphaltic wearing surface, etc. $25,000. G. A. Posey, Oakland, co. surv.

Saskatchewan—June 11, by Dept. Hys. Regina, rein.-con. culvert and spillway, near Brora, 60 ft. rein.-con. suspended arch, near Wilcox, 40 ft. rein.-con. beam span, near Esterhazy. H. S. Carpenter, deputy minister of highways.

BIDS RECEIVED

Wis., South Milwaukee—See "Streets and Roads."

Ill., Edwardsville — See "Streets and Roads."

Wash., Seattle—King Co., May 21, rein.-con. bridge across Lake Washington, con-

SEWERS—RIVERSIDE, CALIF.

Following are lowest three bids opened by city, Apr. 24, for installing sewerage system. (A) H. D. Churchill Co., 350 Merrick St., Los Angeles (awarded contract); (B) C. E. Green, 416 Western Mutual Life Bldg., Los Angeles; (C) DeWaard & Cobham, Granger Bldg., San Diego. The unit bids were as follows:

	A	B	C
25,372 lin.ft. 6 in. vitrified pipe	$0.75	$1.00	$1.10
9,149 lin.ft. 8 in. vitrified pipe	.87	1.05	1.20
3,547 lin.ft. 10 in. vitrified pipe	.98	1.42	1.55
667 lin.ft. 12 in. vitrified pipe	1.50	1.68	1.45
4,196 lin.ft. 15 in. vitrified pipe	1.75	1.89	1.80
2,595 lin.ft. 18 in. vitrified pipe	2.25	2.46	3.50
2,636 lin.ft. 24 in. vitrified pipe	2.90	3.53	5.64
3,965 lin.ft. 18 in. reinforced-concrete pipe	3.56	5.00	4.33
3,965 lin.ft. 22 in. reinforced-concrete pipe	4.16	5.60	5.00
829 6 in. wye branches	1.60	2.97	1.53
128 8 in. wye branches	2.50	3.95	2.09
92 type "A" manholes	75.00	84.00	84.00
23 cleanouts	50.00	14.00	20.00
Sludge basin (lump sum)	2,519.00	1,917.30	1,100.00
3 reinforced-concrete boxes	250.00	498.40	450.00
600 ft. reinforced-concrete syphon on piling	35.82	21.00	49.00
Extended totals	$117,348	$133,802	$154,906

SEWERS—POTTSTOWN, PA.

Following are lowest three bids opened by Borough, Apr. 7, for constructing sanitary sewers, (A) D. H. Whitmer, Hagerstown, (awarded contract); (B) B. G. Coon Constr. Co.; (C) D. J. O'Rourke. The unit bids were as follows:

	A	B	C
18,740 cu.yd. earth excavation, 0-4 ft.	$1.10	$1.50	$2.25
8,794 cu.yd. earth excavation, 4-8 ft.	1.10	2.30	2.25
509 cu.yd. earth excavation, 8-12 ft.	2.00	3.00	3.00
28 cu.yd. earth excavation, 12-16 ft.	3.00	4.00	5.00
453 cu.yd. rock excavation, 0-4 ft.	3.00	3.00	3.00
2,856 cu.yd. rock excavation, 4-8 ft.	4.00	4.60	5.00
494 cu.yd. rock excavation, 8-12 ft.	6.00	7.00	6.00
46 cu.yd. rock excavation, 12-16 ft.	10.00	8.70	10.00
25,000 ft. 4 in. vitrified sewer	.35	.30	.30
19,100 ft. 6 in. vitrified sewer	.40	.50	.40
3,535 ft. 8 in. vitrified sewer	.60	.65	.55
330 ft. 10 in. vitrified sewer	.90	.90	.80
2,350 ft. 12 in. vitrified sewer	1.10	1.10	1.00
1,310 ft. 15 in. vitrified sewer	1.50	1.45	1.30
1,425 ft. 18 in. vitrified sewer	2.20	1.90	1.80
200 ft. 6 in. vertical pipe for lampholes	.50	.50	.1.50
100 cu.yd. concrete	14.00	16.00	18.00
92 brick manholes	110.00	90.00	165.00
5 M. ft. b.m. lumber	40.00	85.00	70.00
5 tons cast iron pipe	100.00	100.00	100.00
Extended totals	$86,409	$106,072	$124,776

Bridges (Continued)

necting Mercer Island with mainland, from J. R. Wood, 1733 Horton Ave., $43,990. Noted Feb. 8.

Calif., Los Angeles—Rein.-con. bridge over Pacoima Wash at Mulholland St., two 85 ft. arch spans, 24 ft. roadway, (a) lump sum for arch centers (b) lump sum for steel roads in place (c) 495 cu.yd. Class A concrete (d) 253 cu.yd. Class C concrete (e) 681 cu.yd. Class D concrete (f) 2,500 cu.yd. earth filling, from de Waard & Cobham, Granger Bldg., San Diego, (a) $1,300 (b) $2,525 (c) $16 (d) $17.50 (e) $15.90 (f) $0.80; Davison & Nicolsen, 180 Jessie St., San Francisco, (a) $2,798 (b) $2,400 (c) $20 (d) $21.50 (e) $13.60 (f) $1; W. M. Ledbetter & Co., Pacific Electric Bldg., (a) $3,000 (b) $2,400 (c) $18.40 (d) $18.40 (e) $18.40 (f) $0.80.

CONTRACTS AWARDED

N. J., Newark—G. C. Bergen, purch. agt. Essex Co., Court House, extending present 12 ft. single arch brown stone bridge by means of 12 ft. single span, rein.-con. flat slab, also removing two 12 ft. rubble masonry arches and replacing with 28 ft. single span I-beam encased in concrete, to F. W. Shrump, Eagle Rock Ave., West Orange, $21,423. Noted May 17.

O., Bedford—C. F. Miller, 150 ft. timber trestle with coal hoppers, to A. B. Cook, 5810 Clinton Ave., Cleveland. Engrs. est. $35,000.

Illinois—See "Streets and Roads."

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, following bridges: 1 rein.-con., Route 25, Federal Aid Project 61, Sect. 32-B Ford Co., to G. C. Fairclo, Lincoln, $13,900; 3 rein.-con., Route 42, Sect. 112, Cook Co., to E. E. Herdman, Winnetka, $125,554; 1 rein.-con., Route 44, Federal Aid Project 68, Sect. 19 B, Will Co., to Joliet Bridge & Constr. Co., Joliet, $18,194; 1 rein.-con., Route 17, Federal Aid Project 69, Sect. 1-B, Kankakee Co., to Porter-McCulley Constr. Co., Mackinaw, $44,524. Noted Mar. 29.

Ia., Decorah—Winneshiek Co., to J. W. Quinn, Waukon, 12 box culverts, $8,995; J. A. Dunkel, Webster City, one 2 span I-beam bridge, $19,620; Word & Teslow, Decorah, 2 box culverts and 1 truss floor, $1,133.

Minn., Red Lake Falls—Red Lake Co., Bridge 3986, 171 ft. truss span with two 60 ft. approach spans, to Minneapolis Bridge Co., 924 Metropolitan Life Bldg., Minneapolis, $32,000. Noted May 3 under "Streets and Roads."

South Dakota—See "Streets and Roads."

N. D., Minot—Ward Co., concrete bridge on Project 181, 72,893 lb. reinforcing, 891.6 cu.yd. concrete, to J. J. Rue & Son, Minot, $27,579.

Missouri—State Hy. Dept., Jefferson City, one 70 ft. steel truss and two 35 ft. rein.-con. deck girder spans, Texas Co., and two 70 ft. steel truss spans, Ripley Co., to Missouri Bridge & Iron Co., Fullerton Bldg., St. Louis, $20,675 and $20,740 respectively; one 26 ft. steel, three 16 ft. and three 20 ft. rein.-con. slab spans, St. Clair Co., to A. A. Davis Co., Grain Exch. Bldg., Oklahoma City, Okla., $8,880; three 20 ft. rein.-con. slab spans, Saline Co., to H. H. Hanenkratt, Kansas City (street address not available), $7,606; three 40 ft. 1-beam spans, Pemiscot Co., to Pittsburgh-Des Moines Steel Co., Tuttle and Southwest 10th St., Des Moines, Ia., $9,668; one 40 ft. rein.-con. deck girder span and two 10 x 12 ft. rein.-con. box culverts, Platte Co., to Land Constr. Co., Ballinger Bldg., St. Joseph, $10,787. Noted May 31.

Mo., Clayton—See "Streets and Roads."

Calif., Santa Rosa—Rein.-con. slab and girder bridge, over Santa Rosa Creek on A St., from J. Kristich, King City, $24,980. Noted May 17.

Dams

PROPOSED WORK

Calif., Oakdale—Oakdale and South San Joaquin Irrigation Dist. defeated $112,000 bonds to purchase dam site. Noted May 7.

Calif., Santa Barbara—See "Excavation, Drainage, Irrigation."

BIDS DESIRED

N. Y., Fairport—See "Waterworks."

Railways

PROPOSED WORK

Florida — Florida East Coast Ry., 120 Bway., New York City, plans 15 mi. road to Pahokee as an extension of 20 mi. road already under contract for new line from Okeechokee to Miami. W. G. Brown, St. Augustine, Eng. M. W. H. R. Rodenbaugh, St. Augustine, genl. mgr.

Ohio—Lima & Defiance R.R., Lima, plans rebuilding line between Lima and Defiance, to include new rails, ties and cars, improving all stations along line, and extension of service into heart of Defiance. $110,000. C. G. Taylor, c/o owner, vice pres.

California—Atchison, Topeka & Santa Fe R.R. Co., Kerckhoff Bldg., Los Angeles, had plans prepared constructing single track line between San Pedro and Los Angeles. R. B. Ball, Kerckhoff Bldg., Los Angeles, ch. engr.

Ontario—Hamilton Street Ry., 129 James St., N. Hamilton, plans to lay new tracks, $45,000. E. P. Coleman, c/o owner, engr.

BIDS DESIRED

Ontario—June 12, by at office of Secretary Treasurer, Nipissing Central Ry., North Bay, constructing roadbed, ready for ties, rails and track-laying, ballasting and fencing on 25 mi. branch from Swastika to point near Larder Lake. S. B. Clement, ch. engr. Noted May 17.

CONTRACTS AWARDED

Minnesota—Duluth Street Ry. Co., 2631 West Superior St., Duluth, will extend street railway 4,631 ft. and double track 2,051 ft. in 8th St., from 13th Ave. E. to intersection of Woodland Ave. and Kent Rd., by day labor. $50,000. J. Carson, ch. engr.

Mexico — Southern Pacific R.R. Co., Southern Pacific Bldg., San Francisco, Calif., constructing 85 mi. roadway for railroad and tunnels from La Quemada to Tepis, here, to Utah Constr. Co., Phelan Bldg., San Francisco, Calif., $6,000,000. Rails will be laid by owners.

Excavation, Drainage Irrigation

PROPOSED WORK

Wis., Prairie du Chien, Wis.—See "Miscellaneous."

Minn., Olivia—Renville Co. plans Co. Ditch 97, 45,000 lin.ft. tile, $20,000; Judicial Ditch 26, 21,000 lin.ft. tile, $6,900. E. L. Chamberlain, Olivia, engr.

Kan., Ottawa — Drainage Dist. 2 had plans prepared draining high water zone along Marais des Cygnes River. $250,000. Harrington Howard & Ash, Orear Leslie Bldg., Kansas City, Mo., engrs.

Tex., Edinburg — Hidalgo Co. Water Impvt. Dist. 4, voted $1,500,000 bonds to purchase and reconstruct Edinburg Irrigation Co.'s project, district includes 39,000 acres, ½ of which is now in cultivation. W. L. Rockwell, supervising engr.

Calif., El Centro — Imperial Irrigation Dist. having surveys made drainage canal in Westmoreland Dist. To exceed $5,000,000. R. S. Carberry, El Centro, ch. engr.

Calif., Fresno—Stinson Irrigation Dist. will sell $360,000 bonds constructing canals, involving 150,000 cu.yd. excav.; sinking 10 wells; installing pumps, motors, etc. Quinton, Code & Hill, Hollingsworth, Bldg., Los Angeles, engrs. Noted Mar. 1.

Calif., Long Beach — Soon takes bids 900,000 yd. dredging in Long Beach Harbor channel.

Calif., Oroville—Table Mountain Irrigation Dist. plan election June 15, to vote on $125,000 bonds for irrigation work. J. M. Howells, 530 Bush St., San Francisco, ch. engr. S. J. Norris, Oroville, resident engr.

Railways

Calif., Santa Barbara—Montecito County Water Dist., having plans prepared irrigation system, concrete, 150 acres, and 6,000 ft. tunnel, 135 ft. high, 300 ft. long on top and 50 ft. on bottom, 30 mi. pipe line. Leeds & Barnard, Central Bldg., Los Angeles, engrs.

Wash., Olympia—Thurston Co. to vote June 26, improving harbor, incl. channel 35 ft. deep, at low water with turning basin, also tideflat and fill.

BIDS DESIRED

Ill., Savanna — June 26, by Carroll Co. Drainage and Levee Dist. 1, at office of H. P. Greison, secy., pumping plant, also building to houseplant. Elliott & Harman Eng. Co., Peoria, engrs.; adv. this issue.

CONTRACTS AWARDED

N. Y., Brooklyn—J. H. Delaney, comr. Docks, Pier "A," foot of Battery Pl., North River, New York, dikes and dredging channel between Mill Basin and Paerdegat basin, Jamaica Bay, here. Contr. 1797, to Arundel Corp., foot of Fulton St., $172,220. Noted May 24.

Ky., Clifton Forge—Chesapeake & Ohio R.R. Co., 61 Bway., New York City, 2,000,000 cu.yd. excav. and fill for new yards, here, to Brooks Callaway Co., Forsyth Bldg. Atlanta, Go. Cost to exceed $25,000.

Ill., Fairfield—Wayne Co., 843,000 cu.yd. levee and 571,000 cu.yd. ditch work in Union D.D., to Leeck Bros., Golden Gate. Noted May 3.

Wis., Manitowoc — Dredging Manitowoc River, to Fitzsimmons & Connell Dredge Co., 10 South La Salle St., Chicago, 23,000 cu. yd. hard pan $2.30 per cu.yd., 70,000 cu. yd. softer material $0.44. Noted May 24.

Wis., Manitowoc—Holy Family Hospital, Alverno, excavation for 4 story and basement, 52 x 248 ft., brick and concrete hospital, plain foundation, to Schuette Constr. Co., Manitowoc. See item under Buildings.

Streets and Roads

PROPOSED WORK

Conn., Hartford—High School Com. plans to grade and lay walks in vicinity of Weaver High School. To exceed $25,000. Address J. T. Henderson, 750 Main St., engr.

N. Y., Batavia—Plans paving Seaver Pl., Walnut and Jackson Sts., concrete or asphalt. $50,000. F. D. Emerson, city engr.

N. Y., Boonville—Voted $30,000 bonds concrete paving Charles and Schuyler Sts.

N. Y., Dolgeville—Plans election in June to vote on $30,000 bonds concrete paving Lamberson and Ransom Sts.

N. Y., Geneva — Plans paving various streets. $145,300. J. W. Brennan, city engr.

N. Y., Utica—Plans asphalt paving various streets. $180,000. R. S. Cookinham, city engr.

Pa., Ebensburg—Cambria Co. plans paving 4,200 ft. Knepper Mill Rd., Croyle Twp., brick, 16 ft., $30,000, 10,560 ft. Frankstown Rd. to Summerhill line, brick, 16 ft., $75,000, O. P. Thomas, Park Bldg. Johnstown, engr.; 16,136 ft. Wilfore Rd. Cambria Twp., Telford base and asphalt bound macadam, 16 ft., $120,000, 2 mi. Nicktown Rd. to Ebensburg, brick or concrete, 16 ft., $70,000. H. T. Jones, controller.

Fla., Titusville — Brevard Co. election June 19, to vote on $30,000 bonds constructing roads in new Special Road and Bridge Dist., from Georgiana to Tropic. A. F. Harley, Titusville, engr.

Ala., Birmingham — Takes bids about July 1, paving with 2 in. asphaltic concrete on 5 in. concrete, about ½ mi. 5th Ave. and 40th St., 30 ft. $84,175.

Ala., Dothan—City sold $125,000 bonds grading and asphalt, paving various streets in business section; also plans sidewalks, $48,000.

Tennessee—State Hy. Dept., Nashville, plans to build, oil and surface, etc. 432.288 mi. roads in various counties, also build bridges over Sulphur Fork, Stones River and Caney Fork. J. G. Creveling, State Capitol, comr. Highways and Pub. Wks.

Tenn., Waynesboro — Wayne Co. soon takes bids grading, surfacing and bridging 12 mi. road from here to Lawrence Co. line, 16 ft., chert or gravel. $150,000. J. G. Creveling, Nashville, comr.

Kentucky—State Hy. Dept., Frankfort, having plans prepared grading 11.32 mi. Salyersville-Morgan Co. Line Rd., Magoffin Co.; 27.8 mi. Harlan-Whitesburg Rd., State Project 6, Harlan Co. J. S. Boggs, state highway engr.

O., Canton—Plans paving about 1 mi. 8th St. N. W., $40,000, and about 1 mi. 4th St. N. W., $42,000, both 20 ft. C. E. Sarver, City Hall, engr.

O., Canton—Stark Co. plans improving 3 mi. Canton-Massillon Rd., 18 ft., brick, $165,000. State appropriated $80,000 toward cost. G. L. Sickafoose, Court House, engr.

O., Cincinnati—Hamilton Co. withdrew advertisement for bids (to be opened June 8) grading and paving 60,000 sq.yd. Cleves and Warsaw Rds.. Noted May 31.

O., Columbus — Making plans grading, laying necessary water services and sewer connections and paving 6,452 ft. Clinton Pl., Park St. S., Jaeger St., Findlay and Allen Aves., alley west of 11th St., brick, concrete or asphalt; 4,892 ft. 6-10 in. vitr. sewer, etc. in Bulen Ave., $9,698. R. H. Simpson, city engr.

O., Dayton—Plans paving 9,000 sq.yd. Summit St., brick on concrete, $45,814; 15,000 sq.yd. Superior Ave., wood block or sheet asphalt, $64,965; 4,000 sq.yd. Kumler Ave., brick, asphalt or concrete, $17,432. I. E. Houk, city engr.

Michigan—State Hy. Dept., Lansing, rejected bids grading and surfacing 5.3 mi. Project 65-6, Sect. A, Monroe Co. Noted May 17.

Michigan—State Hy. Dept., Lansing, rejected bids grading and surfacing 0.96 mi. State Trunk Line 34-6 and 1.407 mi. State Trunk Line Rd. 34-2, Sect. A, both 20 ft., Hillsdale Co. Noted Apr. 19.

Ill., Rockford—Plans paving Oxford and Brown Sts., warrenite, $29,300; Knight St. and 5th Ave., concrete. $25,660. B. C. Harvey, city engr.

Ill., Rockford—Winnebago Co. making plans concrete paving 4 mi. Seward Project. $115,000. A. R. Carter, Court House, engr.

Wis., Oconomowoc—Soon takes Bids 9,200 sq.yd. pavement, 2,500 lin.ft. concrete curb and gutter on Hickory and 2nd Sts., alternate bids on 1 course rein.-con., asphaltic concrete and vitr. brick, 2,500 lin.ft. concrete curb and gutter on South Main St. J. A. Stemper, City Hall, engr. Noted Mar. 1.

Streets and Roads (Continued)

Minn., Faribault—See "Sewers."

Kan., Hiawatha—Soon takes bids 20,000 sq.yd. paving, different types. Black & Veatch, 701 Mutual Bldg., Kansas City, Mo., engrs.

Kan., Independence—Montgomery Co. was allotted $200,000 Federal aid for road between here and Cherryvale, gravel and macadam, also small bridges. L. R. Tillotson, c/o State Highway Comn., Topeka, engr.

Missouri—State Hy. Dept., Jefferson City, plans grading, etc. about 100 mi. roads, 30 ft. wide, in Stone, Dent, Iron, Worth, Shelby, St. Francis, Monroe, Atchison, Lafayette, Newton, Gasconade, Perry, DeKalb, Cass, Mercer, Barton, Douglas, Osage and Pettis Counties. B. H. Piepmeier, state highway engr.

Mo., Excelsior Springs—See "Bridges."

Tex., Coleman — Coleman Co. defeated $150,000 bond issue for roads in Precinct 1. W. E. Dickerson, co. engr. Noted Apr. 26.

Tex., Honey Grove—Fannin Co. (Bonham) soon takes bids grading and gravel surfacing 6 mi. Trenton Dist. 24. $25,000. P. B. Price, co. engr.

Tex., Memphis—Hall Co. election June 16 to vote on $200,000 bonds to grade, gravel surface, etc. Colorado-Gulf Highway and roads in Estelline Rd. Dist. A. C. Hoffman, co. judge. Engineer not selected.

Tex., Waxahachie — Ellis Co. election June 30 to vote on $750,000 bonds to construct 30 mi. State Highways 6 and 34, and improve 75 mi. lateral county roads. Total cost $1,150,000. State and Federal Aid to supplement funds. H. R. Stovall, co. judge. Engineer not selected.

Oklahoma—State Hy. Comn., Oklahoma City, election June 12, to vote on $625,000 bonds grading, bridging and paving 45 mi. roads in Noble Co. M. L. Cunningham, state highway engr.

Okla., Oklahoma City—Making plans paving 10 blocks various streets, different types. V. V. Long & Co., 1300 Colcord Bldg., engrs.

Ariz., Tucson—Making plans paving, laying curb and sidewalks on 1.75 mi. East 6th St. from Stone to Campbell Aves., 48 ft., 0.5 mi. West Franklin St.; paving 0.25 mi. West Congress St., 55 ft., alternate bids on various types pavement; grading, concrete curbing and building sewers 6.25 mi. Helen and Mable Sts, 80 ft. G. H. Atchley, city engr.

Wash. Mt. Vernon—Skagit Co. plans 5 mi. Anacortes Highway. $160,000 ($80,000 appropriated by State). F. Gilley, Mt. Vernon, engr.

Wash., Seattle—Rejected bids opened May 25, paving 3rd Ave. W., 28,420 sq.yd. 6 in. concrete, alternate bids on 4,780 sq.yd. 6 in. and 23,640 sq.yd. 7 in. concrete. Will readvertise. Engrs. est. $97,872 for 6 in. and $103,782 for 7 in. concrete.

California—State Hy. Dept., Sacramento, having plans prepared constructing 16 mi. highway in Yosemite Valley between Briceberg and El Portal. R. M. Morton, state highway engr.

Calif., Auburn—Plans to vote on $85,000 bonds paving streets. J. Blarieau, city engr.

Calif., Calistoga—Plans paving 25 blocks. $75,000.

Calif., Compton — Had plans prepared improving Wilmington St., 71,700 sq.ft. 5 in. concrete pavement, etc.; Acacia, Olive and Raymond Sts., 16,160 sq.ft. walks, 261,500 sq.ft. 5 in. concrete pavement, etc.; Myrrh St., 96,340 sq.ft. 5 in. concrete pavement, etc. E. M. Lyon, Central Bldg., Los Angeles, engr.

Calif., Corte Madera—See "Miscellaneous."

Calif., Merced—Soon takes bids grading, curbing, guttering and paving portions M, 25th and 26th Sts., 220,925 sq.ft. grading, 197,630 sq.ft. paving, 17,054 sq.ft. concrete gutter etc.

Calif., Modesto — Had plans prepared grading, concrete curbing, guttering, paving with 1½ in. warrenite bitulithic on 2½ in. asphaltic concrete, and installing Barbelite electroliers with conduits, etc., on portions of F and Hackberry Sts. To exceed $25,000. W. F. McCarton, city engr.

Calif., Redding—Having plans prepared concrete curbing, guttering and paving with 1½ in. warrenite bitulithic on 2½ in. asphaltic concrete portions North, Trinity, Court and Oregon Sts., etc. To exceed $25,000. E. A. Rolison, Redding, engr.

Calif., Salinas—Had plans prepared grading, curbing, guttering and paving Maple, Chestnut and California Sts., 175,075 sq. ft. grading, 38,204 sq.ft. 1½ in. warrenite bitulithic on 2½ in. asphaltic concrete 117,621 sq.ft. 1½ in. warrenite bitulithic on 3 in. asphaltic concrete, etc.; West St., 46,345 sq.ft., grading, 43,461 sq.ft. 1½ in. warrenite bitulithic on 2½ in. asphaltic concrete, etc.; A, B and C Aves., 34,912 sq.ft. grading, 31,824 sq.ft. waterbound macadam, etc. H. F. Cozzens, city engr.

Calif., San Bernardino—San Bernardino Co. will take new bids or postpone construction indefinitely for grading and paving with 8 in. oil macadam 5 mi. Bear Lake Rd. H. H. Lienau, contractor, 426 Brookside Ave., Redlands, refused to proceed with work questioning legality of contract. Noted May 10.

Calif., San Jose—Had plans prepared paving with 1½ in. warrenite bitulithic on 3 in. bituminous base, etc., San Pedro St., 30,564 sq.ft. concrete gutter, 25,567 lin.ft. concrete curb, etc. W. Popp, city engr.

Calif., San Jose — Had plans prepared curbing, guttering and paving 12th St. between Santa Clara and Julian Sts., 57,507 sq.ft. 3 in. Durite asphaltic concrete base with 1½ in. surface, etc. Vine St. between Balbach and Willow Sts., 108,003 sq.ft. pavement, etc. W. Popp, city engr.

Calif., Sausalito—Had plans prepared improving streets in 1st Dist., 14,000 cu. yd. excav., 110,000 sq.ft. 5 in. concrete pavement, 132,000 sq.ft. bituminous macadam, 15,000 lin.ft. granite rubble gutter, etc. Howe & Peters, 24 California St., San Francisco, engrs.

Ont., Ft. William—City Council plans 4 mi. concrete sidewalks. $25,000. C. B. Symes, city engr.

Ont., Ottawa—City Plans grading and paving Gladstone and Groves Aves., asphalt on concrete. $72,700. A. F. Macallum, City Hall, engr.

Ont., Peterboro—Soon takes bids improving George and Hunter Sts., 7,500 cu.yd. asphalt or concrete, 5,100 lin.ft. concrete curb and gutter, etc. $30,000. R. H. Parsons, City Hall, engr.

Ont., Toronto—Plans grading and concrete paving 1,200 ft. lanes, 20 ft., from Galley to Garden Aves. and from Constance to Marmaduke Sts. $25,000. R. C. Harris, city engr.

BIDS DESIRED

Massachusetts—June 12, by W. F. Williams, state highway engr., Boston, sand and asphalt surfacing 8 mi. highway, 20 ft., through Edgartown and West Tisbury, $80,000; bituminous macadam surfacing 22,130 ft. highway, 20 ft., in Brimfield, $25,000. Noted May 3.

New York—June 15, by F. S. Greene, comr. State Hy. Dept., Albany, reconstructing highways in Albany, Broome, Chenango, Herkimer, Jefferson, Madison, Montgomery, Orange and Saratoga Counties; adv. this issue.

N. Y., Brooklyn—June 13, by E. Riegelmann, boro pres., Boro Hall, grading, curbing and flagging Ave. I; laying sidewalks on Flatbush Ave.; curbing and laying sidewalks on West 25th St.

N. Y., East Aurora—June 19, by Bd. Village Trustees, grading, curbing and paving Fillmore Ave., brick asphalt or asphalt block, also storm sewer in Whaley Ave. G. C. Diehl, 575 Ellicott Sq., Buffalo, engr.; adv. this issue. Former bids rejected. Noted May 24.

N. Y., Hudson—June 15, by Comn. Pub. Wks., paving 39,000 sq.yd. streets, plain concrete and asphaltic concrete. M. J. O'Hara, city engr.; adv. this issue.

N. Y., New York—June 13, by J. Miller, pres. Manhattan Boro, Municipal Bldg., repaving 70th, West 74th, East 73rd, East 63rd, West 71st, West 188th, West 189th and 114th Sts., sheet asphalt.

N. Y., New York—June 15, by J. Miller, pres. Manhattan Boro, Municipal Bldg., widening and repaving with sheet asphalt on concrete, 57th St.; repaving with sheet asphalt on concrete, 6th St. from Avenue B to Lewis St., 6th St. from 1st to 2nd Aves., 7th, 12th, 15th and 57th Sts.

N. Y., Perry—June 8, concrete paving 2 streets. $50,000. R. H. How, village engr. Noted May 17.

N. Y., Port Jervis—June 18, by J. F. Cleary, city clk., constructing rein.-con. pavements; adv. this issue.

N. Y., St. George—June 12, by J. A. Lynch, pres. Richmond Boro, Boro Hall, repaving Castleton Ave., special granite block.

N. J., Newton—June 21, by Sussex Co., rein.-con. paving Mill St. in Sussex and Newton Stanhope Rd., Sect. 3 A, in Andover. H. Snook, Newton, co. engr.; adv. this issue.

N. J., Trenton—June 19, by Bd. of Freeholders Mercer Co., Court House, for 1.7 mi. 8 in. rein.-con. road. H. F. Harris, Court House, engr.; adv. this issue.

N. J., Trenton—June 26, by Freeholders Mercer Co., paving 1.9 mi. Hamilton Ave., 20 ft., sheet asphalt. $70,000; penetration job on Upper Perry Rd. from Trenton Junction to Delaware River, $35,000. H. F. Harris, Court House, co. engr.

Pa., Ebensburg—June 15, by Southmont Boro, c/o Cambria Co. Controller, paving 1,008 ft. Diamond Blvd., Millcreek Rd., vitr. brick block on cement concrete with 6 x 24 in. concrete header curb. R. G. Wertz, secy. S. E. Dickey & Co., 809 Johnstown Trust Co., Johnstown, engrs.

Maryland—June 19, by State Rds. Comn., Baltimore, concrete paving highways, Contrs. Cl. 40 and Q-26, Carroll and Queen Annes Counties; gravel surfacing, Contrs. AA-34 and Ch-27, Anne Arundel and Charles Counties; macadam resurfacing Contr. F-60, Frederick Co. J. N. Mackall, chn.; adv. this issue.

Md., Baltimore—June 13, by Bd. Awards, Contr. 237-OCOANA, 2,070 sq.yd. concrete, relaying 750 sq.yd. old granite block, Contr. 238-OANA, 10,810 sq.yd. concrete; Contr. 239-OANA, 13,215 sq.yd. sheet asphalt, 940 sq.yd. granite blocks redressed as liners. R. K. Compton, chn.

Wash., D. C.—June 11, by Dist. Comrs., 509 Dist. Bldg., laying approximately 35,000 sq.yd. cement sidewalks.

S. C., Orangeburg—June 15, by Orangeburg Co., improving 8.4 mi. State Route 27, from Dorange through Branchville to Edisto River, 59,536 cu.yd. excav., 20,831 cu.yd. sand clay surfacing, etc. W. C. Cathey, Orangeburg, engr.

S. C., Sumter—June 14, by Sumter Co., improving 1.9 State Route 3, from Mayesville to Black River, 27,000 cu.yd. excav., 18,960 sq.yd. concrete surfacing or 17,786 sq.yd. asphaltic concrete or sheet asphalt on concrete, 4 creosoted timber bridges, etc.; 1.9 mi. extension of Federal Aid Project 42, and 4 mi. Sect. B of Camden Rd., several types of hard surface pavement. Lee, Pennell & Murray, Sumter, engrs.

Fla., Bradentown — June 14, by Bd. Comrs. Manatee Co., grading, filling concrete bridge and creosoted piling 28 mi. A, B, D and E Sts., Miakka Special Rd. and Bridge Dist., $50,000; grading, paving with shell or limestone rock compacted 8 in., concrete bridges and creosoted piling, 20 mi. Rd. C, Miakka Special Road and Bridge Dist., $100,000. McElroy Eng. Co., 32-34 Giddens Bldg., Tampa, engrs.

Fla., Stark — June 19, by Bd. Bond Trustees of Bradford Co., C. A. Futch, secy., grading and surfacing 13 mi. road from Brooker to State Aid Rd. 102, 28,000 cu.yd. excav., 5,000 cu.yd. sand clay, etc. $30,000. E. R. Neff, Stark, engr.

Alabama—June 19, by W. S. Keller, state highway engr., Montgomery, grading, bridging and gravel surfacing 6.19 mi. road from Thomasville to point 1 mi. south of Sunny South, Clarke Co., 38,866 cu.yd. excav., 17,200 cu.yd. gravel surfacing within 1 mi. haul, 50,000 cu.yd. ½ mi. units additional haul on gravel, 170 cu.yd. concrete, etc., alternate bids on bridge at Sta. 136-60, using (1) treated timber (2) concrete; grading and gravel surfacing 23.655 mi. road from Demopolis to Millers via Linden, Marengo Co., 145,734 cu.yd. excav., 926 cu.yd. concrete, 56,000 cu.yd. imported gravel surfacing, etc.

Alabama—June 26, by W. S. Keller, state highway engr., Montgomery, grading and gravel surfacing 12.647 mi. Montgomery-Andalusia Rd., from Montgomery Co. line to point near Luverne, Crenshaw Co., 150,938 cu.yd. excav., 95,369 sta.yd. overhaul, 33,389 cu.yd. imported gravel surfacing, 90,000 lb. reinforcing, etc.; grading and surfacing with chert Birmingham-Gadsden Rd., from Etowah Co. line to Jefferson Co. line, St. Clair Co., Sect. A, includes 16.286 mi. and involves 20,642 cu.yd. excav., 70,675 sta.yd. overhaul, 1,059 cu.yd. concrete, 100,389 lb. reinforcing, 42,500 cu.yd. chert surfacing within 1 mi. haul, 60,000 ½ mi. units overhaul on surfacing, etc., Sect. B, 15.717 mi., 123,555 cu.yd. excav., 67,867 sta.yd. overhaul, 1,747 cu.yd. concrete, 90,172 lb. reinforcing, 40,950 cu.yd. chert surfacing within 1 mi. haul, 115,500 ½ mi. units overhaul on surfacing, etc.

Alabama—July 3, by W. S. Keller, state highway engr., Montgomery, grading and surfacing with gravel or chert 16.284 mi. road from Oneonta to Village Springs, Blount Co., 98,946 cu.yd. excav., 860 cu.yd. concrete, 69,500 lb. reinforcing, 40,000 cu.yd. chert or gravel, etc.

Louisiana—June 19, by State Hy. Comn., Baton Rouge, grading, bridging and gravel surfacing 9.23 mi. State Project 329, Vermillion Parish, Sect. A, Abbeville-Jennings Highway from Abbeville to Kaplan, Sect. B from Kaplan to end of gravel road ½ mi. west of Mulvey; constructing rein.-con. culvert in Bayou Poydras and building necessary earth embankment and gravel surfacing Lake-Land-Erwinsville Spur on New Roads-Baton Rouge Highway, 2 mi. south of Lakeland, Point Coupee Parish. J. M. Fourmy, state highway engr.

Tennessee—June 22, by State Hy. Dept., Nashville, surfacing, paving, etc., 13.24 mi. Project 117, Overton Co., waterbound macadam; 21.2 mi. Project 114, Grundy Co., burnt slate surfacing, also bridges; 14.7 mi. Project 69, Haywood Co., cement concrete; 12.06 mi. Project 118, Overton Co., bituminous macadam on hand placed coarse stone base "C"; 5.1 mi. Project 101, Coffee

Streets and Roads (Continued)

Co., bituminous macadam on reconstructed base. J. G. Creveling, Jr., Nashville, comr.

Kentucky—June 20, by State Hy. Comn., Frankfort, shaping and grading 13.855 mi. roads in Pike and Powell Counties, 104,935 cu.yd. earth, 9,102 cu.yd. loose rock, 19,206 cu.yd. solid rock and 70,034 cu.yd. borrow excav., 59,671 sta.yd. overhaul, etc.; shaping and surfacing to width of 16 ft. with waterbound macadam or waterbound macadam on napped limestone or waterbound macadam surface treated 4.995 mi. Lexington-Harrodsburg Rd., State Project 47, Sect. A, Jessamine Co. J. S. Boggs, state highway engr.

Ky., Henderson—June 29, by J. C. Cunningham, comr. Pub. Wks. and Property, 25,000 sq.yd. sheet asphalt paving on various streets. $50,000. Noted May 24.

Ill., Chicago—June 11, at office H. A. Zender, supt. Pub. Serv. Cook Co., paving with (a) bituminous concrete with binder course, (b) bituminous concrete without binder course (c) cement concrete 7,975 ft. Sect. 165-15D-27, Route 29, Worth Twp., 27 ft., (a) $91,259 (b) $86,303 (c) $72,134; 2,639 ft. Sect. 165-15-D27. Route 29, Worth Twp., 27 ft., (a) $29,338 (b) $27,700 (c) $23,082.

Ohio—June 15, by Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving 28.987 mi. roads in Belmont, Highland, Holmes, Huron, Lawrence, Lorain, Medina, Sciota, Columbiana and Williams Counties, brick, rein.-con., Kentucky rock asphalt, bituminous concrete, bituminous macadam or waterbound macadam; grading, etc., 4.88 mi. roads in Holmes and Lawrence Counties, $49,827. L. C. Herrick, dir. highways.

Ohio—June 19, by Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving 53.257 mi. roads in Auglaise, Darke, Fayette, Franklin, Harrison, Lawrence, Medina, Monroe, Morgan, Morrow, Preble, Stark, Trumbull, Wood and Hardin Counties, brick, plain concrete, bituminous macadam asphalt or tar, rein.-con., sheet asphalt, bituminous concrete or Kentucky rock asphalt; bridge on Sect. "N" Ohio River Rd., Lawrence Co., $13,327. L. C. Herrick, dir. highways.

O., Cleveland—Bd. Educ., East 6th St. and Rockwell Ave., taking bids grading and landscaping Glenville, Rawlings Junior Highs and Euclid Park schools. To exceed $40,000. W. R. McCornack, East 6th St. and Rockwell Ave., engr.

O., Columbus—June 18, by R. W. Smith, clk. Franklin Co., improving and waterbound macadamizing 3.13 mi. Poth Rd., Jefferson, Mifflin and Truro Twps. $54,023.

O., Upper Arlington (Columbus, P. O.)—June 12, by E. D. Howard, clk., grading, sewers and asphalt paving 25,650 ft. Arlington Ave., North and South Parkways, Kensington and Southway Drives, Andover, Waltham, Wickford, Oxford, Club, Westover and Guilford Rds. $282,000. D. Sayre, 52 West Gay St., engr. Noted May 17.

Wisconsin—June 12, by State Hy. Comn. at div. office 9, Teller Bldg., Lancaster, grading and surfacing Sect. 1 Fennimore-Montfort Rd., Grant Co. 7,750 sq.yd. one course concrete surfacing, alternate 7,000 sq.yd. bituminous surfacing, etc. R. Hirst, Madison, highway engr.

Wis., Elkhorn—June 12, by H. J. Peters, highway comr. Walworth Co., concrete paving, etc., 13,241 sq.yd. Sharon-Darien Rd., graveling 6,000 cu.yd. Delavan-Walworth Rd. Wisconsin Hy. Comn., Division Office, Milwaukee, engrs.

Minn., Cloquet—June 11, 6,246 sq.yd. pavement, various types, 1,532 lin.ft. integral curb, etc. $25,000. J. A. Parks, city clk.

Minn., New Ulm — June 11, by City Clerk, grading 24 blocks, 31,000 yd. excav., 6,100 ft. Class B c.i. watermains and 4,900 ft. 4 in. Class B. c.i. pipe and specials. F. D. Minium, city engr.

South Dakota — June 12, by State Hy. Comn., Pierre, grading, gravel surfacing Federal Aid Project 146 A Corson Co., 81,176 cu.yd. common excav., etc.; Federal Aid Project 130 A, Custer Co., 30,925 cu. yd. rock and 9,159 cu.yd. common excav., etc.; Federal Aid Project 100, Pennington Co., 1,618 cu.yd. rock and 57,560 cu.yd. common excav., etc.; Federal Aid Project 54, Grant Co., 8,980 cu.yd. gravel, etc.; Federal Aid Project 146 A, Corson Co., 24 ft. I-beam bridge; Federal Aid Project 151, Ziebach Co., 150 ft. through truss bridge; Federal Aid Project 67 B, Clay Co., 238 ft. concrete viaduct; Federal Aid Project 100, Pennington Co., 414 Ft. concrete bridges. F. D. Hudgins, state highway engr.

Tex., Brenham—June 15, by J. H. Chappell, judge Washington Co., grading, bridging, etc., 17.3 mi. State Highway 36, Project 358, 24 ft., $185,000; 19.2 mi. Brenham-Washington Rd., 18 ft. $200,000. G. A. Bracher, Brenham, co. engr.

Tex., Gonzales—June 12, by J. C. Romberg, judge Gonzales Co., grading, gravel surfacing, etc., 11,567 cu.yd. State Highway 29, Project 183-B. $48,120. J. G. Irby, Gonzales, co. engr.

Colorado—June 12, by J. W. Johnson, dist. engr., Bureau Pub. Roads, Custom House Bldg., Denver, grading, etc., 4,764 mi. Ironton Sect. of Red Mountain, Natl. Forest Road Project, Ouray Co.; 5.51 mi. Cumbres Pass, Natl. Forest Road Project, Conejos Co.

Utah—June 11, by State Rd. Comn., Salt Lake City, improving 5.2 mi. portion of highway and constructing bridges between Ft. Duchesne and Vernal, Federal Aid Project 10 B, Uintah Co., 7,700 cu.yd. common and 12,300 cu.yd. borrow excav., surfacing with 6 in. gravel strip 18 ft. wide, with alternate of 0.7 mi. surfacing with native asphalt in Vernal, 10 ft., 15 ft. and two 20 ft. span timber bridges, etc. H. C. Means, state highway engr.

Utah—June 18, by State Rd. Comn., Salt Lake City, grading and gravel surfacing 7,395 mi. portion of State highway between Woodruff and Wyoming State line, Federal Aid Project 46, 4,490 cu.yd. common and 52,700 cu.yd. borrow excav., 15,000 cu.yd. gravel surfacing. H. C. Means, state highway engr.

Wash., Seattle—June 18, by King Co., grading and graveling 5 mi. A. Solberg Rd. $88,121. T. R. Beeman, co. engr.

Calif., Eureka — June 12, by Supervs. Humboldt Co., constructing wagon road and 4 wooden truss bridges on 5½ mi. road between Briceland and State Highway. A. J. Logan, co. surv. Noted Apr. 26.

Calif., Oakland—June 11, by Supervs. Alameda Co., grading, concrete curbing, guttering, sidewalks and paving road in vicinity of county hospital grounds, 65,000 sq.ft. 5 in. concrete, etc. $25,000. G. A. Posey, co. surv.

Quebec — June 12, by J. L. Perroro, minister of roads, Quebec, resurfacing with 3 in. tar macadam which will be oiled by another contract, 35 mi. various roads in town of Rigaud, and Beauharnois, Chateauguay, Laval and Vandreuie Counties. $300,000. M. Nectkar, Dept. of Roads, engr.

Quebec — June 15, by J. L. Boulanger, deputy minister, Dept. of Roads, Quebec, gravel surfacing 30,250 ft. Montreal-Ottawa-Hoel Highway in Calumet, Notre Dame du Bourecours, Lochaber, Thurso and Templeton municipalities; 21,689 ft. Levis-Sherbrook Highway, in Shipton Twp.; 58,829 ft. Victorianele-Woburn Highway, in St. Christophe Parish and Chester West Twp. G. Henry, Dept. of Roads, Quebec, engr.

Que., Verdun—City receiving bids paving with tar macadam 1 mi. Wellington St. from Willroads to Woodland Ave., $70,000, and 1/3 mi. Wellington St. from Hickson to Regina Ave., $45,000. H. Hadley, city engr. Noted Jan. 18.

Saskatchewan—June 13, by Dept. Hys., Regina, grading, etc., Project 32, Sect. D, incl., 34,000 cu.yd. earth excav.; Project 13, Sect. M, Subsection B, 30,600 cu.yd. earth excav.; Project 33, Sect. E, Subsection A, 23,000 cu.yd. earth excav. H. S. Carpenter, deputy minister of highways.

BIDS RECEIVED

Massachusetts — Dept. Pub. Wks., Div. Highways, Boston, rein.-con. paving, etc., 3 mi. highway, 20 ft., in Easton, from Powers Bros., 167 North Montello St., Brockton, $259,753, engrs. etc. $250,000; 14,203 ft., 20 ft., in Lanesboro, from Lane Constr. 35 Colony St., Meriden, $175,165, engrs. est. $175,000.

Maryland—State Rds. Comn., Baltimore, May 29, concrete surfacing, Contr. G-23, Garrett Co., from F. A. Denison Co., 206 10th St. N. W., Wash., D. C., $26,148; 9,050 sq.yd., Contr. M-44, Montgomery Co., from M. J. Grove Lime Co., Lime Kiln, $30,160; 12,300 sq.yd., Contr. Wo-30, Worcester Co., from Hannamann-Burroughs Co., Salisbury, $35,666; 7,100 sq.yd. concrete shoulders, Contr. 141-A, Montgomery Co., from Corson & Gruman Co., 33rd and K. Sts., Wash., D. C., $22,507; 10,250 sq.yd. concrete shoulders, Contr. 46-A, Baltimore Co., from A. C. Knight, 2,200 Linden Ave., Baltimore, $30,175; Contr. W-27, Washington Co., 14,100 tons bituminous macadam, 18,300 tons rein.-con. base, from Gosnell, Russell & Co., Frederick, $189,666. Noted May 17.

Florida—State Rd. Dept., Tallahassee, constructing rock base on 11.81 mi. road between Oceola Co. line and Melbourne, Brevard Co. and concrete surfacing 2 mi. road between Florida East Coast R.R. and Beer Park, Oceola Co., from Noll & Noll, Crescent City, $200,246 and $48,735 respectively. Noted May 17.

Fla., Tampa—From W. L. Harwell, 721 South Orleans Ave., 15,765 sq.yd. 2½ in. asphalt block paving, 8,500 lin.ft. granite curbing, 1,500 lin.ft. relaying granite curbing, on Durham, Fremont and Westland Sts., $44,488.

Louisiana — State Hy. Comn., Baton Rouge, grading and gravel surfacing 9.36 mi. Abbeville-New Iberia Highway, Vermillion Parish, from Burke & Jones, New Iberia, $41,725; 10.36 mi. Coushatta-Shreveport Highway, Red River Parish, from W. B. Butler, Coushatta, $71,792. Noted May 10.

Kentucky—State Hy. Dept., Frankfort, improving **13.1 mi. Dawson Springs-Earlington Rd., State Project 55, Sect. A, Hopkins Co.,** (1) bank gravel (2) waterbound macadam (3) surface treatment only, (4) rein.-con., (a) vitr. pipe (b) concrete pipe, from W. E. Stone & Co., Madisonville, (1a) $257,534 (1b) $255,095 (2a) $348,836 (2b) $346,397, Southern Oil & Tar Co., Clay and Fulton Sts., Louisville, (3) $18,675, **12.14 mi. New Castle-Carrollton Rd., State Project 46, Sect. A, Henry, Trimble and Carroll Counties,** from Clark Constr. Co., Winchester, (2a) $295,930 (2b) $292,736, R. B. Tyler Co., 114 South 4th St., Louisville, (3) $14,921, **9.352 mi. Lexington-Covington Rd., State Project 5, Sects. B and C, Kenton and Boone Counties,** from J. Wrol Co., Dayton, O. (street address not available), (4a) $319,602 (4b) $316,789; **9.36 mi. Hopkinsville-Gracey Rd., State Project 1, Sect. C, Christian Co.,** from Christian Co. Constr. Co., Hopkinsville, (2a) $195,691 (2b) $198,167, Breslin & Durrett, Louisville (street address not available), (3) $12,122; grading **16 mi. Louisville-Paducah Rd., State Project 8, Sect. B, Union Co.,** from W. W. Carter, Clay, (a) $126,884 (b) $123,455; **6.811 mi. Pikeville-Williamson Rd., State Project 36, Sect. C, Pike Co.,** from N. K. Snead Co., Camp 201, near Cincinnati and Ohio R.R., Huntington, W. Va., (a) $125,387 (b) $123,093; reconstructing **7 mi. Maysville-North Fork Rd., State Project 20, Sect. L, Mason Co.,** from Bates Paynter Co., Danville, $47,511. Noted May 10.

Ohio—Joint Bd. Comrs. Franklin and Delaware Counties, at Columbus, May 23, grading and paving 4.69 mi. Franklin Delaware Co. line Rd., 16 ft., waterbound macadam, bituminous surface treatment, from R. K. McNamara, Delaware, $71,226. Noted May 17.

Ohio—Dept. Highways and Pub. Wks., Columbus, May 25, grading, bridging and paving roads with **(a)** brick **(b)** rein.-con. **(c)** bituminous macadam asphalt **(d)** bituminous macadam tar **(e)** oil or lake macadam **(f)** plain concrete, **(1)** 1.679 mi. Sect. "B" Mansfield-Wooster Rd., Ashland Co. **(2)** 0.536 mi. Sect. "Mifflin" Mansfield-Wooster Rd., Ashland Co. **(3)** 3.731 mi. Sect. "B" Mansfield-Wooster Rd., Ashland Co. **(4)** 0.344 mi. Sect. "Hayesville" Mansfield-Wooster Rd., Ashland Co. **(5)** 3.241 mi. Sect. "G-1" Springfield-Xenia Rd., Clark Co. **(6)** 2.548 mi. Sect. "G-2" Springfield-Zenia Rd., Clark Co. **(7)** 2.778 mi. Sect. "A" Deshler-Findlay Rd., Hancock Co. **(8)** 0.436 mi. Sect. "E." Ottawa-Findlay Rd., Hancock Co. **(9)** 3.123 mi. Sect. "J," Bridgeport-Cadiz Rd., Harrison Co. **(10)** 5.287 mi. Sect. "B-1." Toledo-Napoleon Rd., Henry Co. **(11)** 0.65 mi. Sect. "Napoleon," Toledo-Napoleon Rd., Henry Co. **(12)** 2.623 mi. Sect. "A-2." Logan-McArthur Rd., Hocking Co. **(13)** 3.833 mi. Sect. "F." Fremont-Port Clinton Rd., Ottawa Co. **(14)** 0.433 mi. Sect. "Port Clinton." Fremont-Port Clinton Rd., Ottawa Co. **(15)** 1.9 mi. Sect. "G." Piqua-St. Marys Rd., Shelby Co., concrete curbing **(16)** 2.381 mi. Sect. "11" Mansfield-Millersburg Rd., Holmes Co. **(17)** 5.446 mi. Sects. "K" and "L" Norwalk-Bellevue Rd., Huron Co. **(18)** 7.715 mi. Sect. "J" Cleveland-Buffalo Rd., Lake Co. **(19)** 5.433 mi. Sect. "A" Cleveland-Buffalo Rd., Lake Co., 2 bridges on **(20)** Sect. "B" Rd. 419, Van Wert Co., from F. J. Mann & Sons, Ashland, (a1) $95,709 (b1) $88,584 (a2) $33,516 (b2) $31,303 (a3) $229,356 (b3) $215,358 (a4) $16,334; E. L. Reeb, Lima, (street address not available), (b4) $14,872; M. J. Cooney, 633 York St., Springfield, (a5) $120,959 (a6) $95,945; C. V. Rector, Lima, (street address not available), (c5) $74,353 (c6) $60,592 (d6) $60,593 (b15) $84,370 (c15) $71,477 (d15) $71,845; Straw & Huber, Paulding, (b7) $83,491 (b8) $12,930 (a12) $89,267 (e12) $60,442; N. B. Putnam, Van Wert, (c7) $64,115 (d7) $63,980 (c8) $10,456 (d8) $10,435 (c10) $97,207 (d10) $96,957; Curry & Hayes, Cadix, (c9) $114,974 (d9) $115,579; O. L. Smith, Liepsic, (b11) $20,784; J. H. Murphy, Burgoon, (b13) $115,933 (b14) $26,573; Hill & Hill, Elyria, (street address not available), (c13) $103,419 (c14) $24,299; Modern Constr. Co., Fremont, (c14) $25,537; Allen Paving Co., Lima, (street address not available), (f16) $47,674; Putnam & Shindeldecker, Van Wert, (17) $49,766; E. A. Freshwater Co., Painesville, (18) $64,762 (19) $46,764; A. Bates, Convoy, (20) $5,052; Putnam & Sunday, Van Wert, (20) $5,052. Noted May 17.

Streets and Roads (Continued)

O., Cleveland — Repaving 42,900 sq.yd. Euclid Ave., asphalt over granite block and 9,550 sq.yd. East 17th St., asphalt, from Cleveland Trinidad Paving Co., The Arcade, $233,682 and $39,543 respectively; 2,340 sq. yd. East 82nd St., brick, from Bentley Bros., Union Bldg., $13,450; 5,360 sq.yd. Woodland Ave., asphalt, from Rieley Bros., The Arcade, $22,551. Noted May 17.

O., Columbus—Franklin Co., May 31, grading and paving 2.95 mi. Hard Rd., 16 ft., Perry and Sharon Twps., from D. C. Worthington, $45,978; 0.85 mi. Harrison Rd., 18 ft., Franklin Twp., from A. W. Burns & Co., 316-25 South High St., $11,382, both waterbound macadam. Noted May 24.

O., Shaker Heights (Cleveland P. O.)—Grading, curbing and paving with (a) asphalt (b) brick, (1) Lee Rd. Sect. 1 (2) Lee Rd. Sect. 2 (3) Mayfield Rd. Sects. 1 and 2 (4) Euclid Heights Blvd. (5) Ridgefield Rd. from Bentley Bros., Ulmer Bldg., Cleveland, (a1) $37,561 (b1) $51,038 (a2) $50,925 (b2) $64,864; Cleveland Trinidad Paving Co., The Arcade, Cleveland, (a3) $203,910 (a4) $31,400; Spence Bros., 2078 Randon Rd., Cleveland, (a5) $6,023.

Ind., Kendalville—City Council, May 22, for 18,600 sq.yd. pavement and 11,840 ft. curb and gutter, from W. L. Johnson, Hicksville, O., $53,808. Noted May 10.

Ill., Edwardsville—Madison Co., concrete paving and building 2 small bridges on 42,240 sq.yd. St. Jacobs-Marine Rd., 14,080 cu.yd. rock excav., from Stoecker Gravel and Con. Co., Edwardsville, $131,680. Engrs. est. $135,000. Noted May 24.

Ill., St. Anne—Bd. Local Impvts., 33,000 sq.yd. rein.-con. pavement, from H. C. Finley Constr. Co., Hoopestown, $106,098. Noted Mar. 1.

Wis., Platteville—Paving 14,000 sq.yd. various streets, from C. E. Rich & Co., Lancaster, rein.-con. $3.43, tarvia macadam $2.37; E. L. Sweeney, Reedsburg, brick $2.50; F. P. Coughlin, 30 North La Salle St., Chicago, bitulithic $3.65. Noted May 10.

Wis., South Milwaukee — From Dean Constr. Co., 382 East North Ave., Milwaukee, 4,500 cu.yd. grading, $1.40 per cu.yd., 19,800 sq.yd. concrete pavement $2.74 per sq.yd., vibrolithic pavement $2.84, 530 cu.yd. concrete in bridge $26 per cu. yd. Noted May 24.

Mo., St. Louis — Bd. Pub. Serv., City Hall, paving 3,740 sq.yd. Slevin Ave., brick, and 3,070 sq.yd. Gimblin Ave., concrete, from J. E. Perkinson, 3237 Security Bldg., $21,418 and $15,227 respectively; 3,630 sq. yd. Smiley Ave., from Ivanhoe St. to tracks of St. Louis & San Francisco R.R., rein.-con., from Webb-Kunze Constr. Co., 5927 Fyler Ave., $16,814; 3,255 sq.yd. Smiley Ave. from Leola to Ivanhoe Sts., rein.-con. and 3,815 sq.yd. Lansdowne Ave. from January to Hampton Sts., asphaltic concrete, from Independent Quarry & Constr. Co., Fullerton Bldg., $12,371 and $14,381 respectively; 3,295 sq.yd. Lansdowne Ave. from Macklind to January Sts., asphaltic concrete, from Eyermann Constr. Co., 1216 South Grand Ave., $16,473; 5,240 sq.yd. Pershing Ave., bitulithic, from Granite Bituminous Paving Co., Ry. Exch. Bldg., $15,281; 9,405 sq.yd. Enright Ave., bitulithic, from Trinidad Asphalt Mfg. Co., Rankin Ave., $16,257. Noted May 3.

Tex., Cleburne—Johnson Co. grading, gravel surfacing, etc., 24,051 cu.yd. State Highway 2-B, Project 230, and 44,027 cu. yd. State Highway 2, Project 20-B, from McClung Constr. Co., Cleburne, $86,819 and $161,882 respectively. Engrs. est. $117,250 and $185,000 respectively.

Wash., Raymond—Paving 1st St. et al., 8 in. concrete, from R. L. Rowland, 620 Olympic Pl., Seattle, $31,027. Engrs. est. $33,135.

Calif., Oakland — Improving (1) Union Ave. from 18th St. northeasterly (a) 20,369 ft. grading (b) 10,114 ft. asphaltic concrete (c) 3,865 ft. cement walks (2) 48th Ave. between East 12th and East 14th Sts., (d) 22,979 ft. grading (e) 12,233 ft. oil macadam (f) 4,583 ft. cement walks, from D. Hutchinson, 1706 Bway., (1a) $0.055 (1b) $0.305 (1c) $0.175 (2d) $0.045 (2e) $0.11 (2f) $0.17; Oakland Paving Co., 5000 Bway., (1a) $0.06 (1b) $0.265 (1c) $0.18; S. De Guarda, 1363 88th Ave., (2d) 0.04 (2e) $0.11 (2f) $0.18.

Calif., San Francisco — City and San Francisco Co., grading and surfacing intersection of Great Highway and Sloat Blvd., from L. J. Cohn, 180 Jessie St., $42,156. Noted May 17.

Calif., Whittier—Grading, curbing and paving with 6 in. concrete Palm Ave. between Lemore St. and southwest city limits, from Independent Paving Co., 321 East 4th St., Long Beach, $56,496.

CONTRACTS AWARDED

Massachusetts—Dept. Pub. Wks., Div. of Highways, Boston, 3.25 mi. road in Plymouth, concrete and waterbound macadaam, to Powers Bros., 167 North Montello St., Brockton, $259,750. Engrs. est. $260,000.

Connecticut—State Hy. Dept., Hartford, concrete paving 1,500 sq.yd. Berlin Turnpike, in Berlin, and 4,000 sq.yd. Quaker Lane, in West Hartford, to L. Suzzio Constr. Co., State and Broad Sts., Meriden, $3,242 and $7,385 respectively; 1,766 ft. Main St., 32 ft., in Winchester, 7 in. concrete, and 14,000 sq.yd. Padanarum Rd. in Danbury, 7 in. waterbound macadam, to J. D. Michiel, Torrington, $31,088 and $29,315 respectively; 8,600 sq.yd. Center Groton Rd., in Groton, waterbound macadam, to F. D. Miller, R. F. D. 6, Norwich, $16,540; 4,600 sq.yd. Willetts Ave., in Waterford, bituminous macadam, to N. Benvenuti & Sons, 74 Goshen St., New London, $11,085. Noted May 17.

Conn., Bristol—Paving various streets, 4,000 lin.ft. concrete curb and sidewalk, 5,000 lin.ft. concrete gutter, to A. DiMarco, 61 East Main St., Plainville. Engrs. est. $30,000. Noted May 24.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, to Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., grading Bath Ave. $10,318, sheet asphalt paving East 37th St., $5,111; to Boro Asphalt Co., 1301 Metropolitan Ave., sheet asphalt paving Cedar Pl. $10,617, Union St. $7,939; to Uvalde Asphalt Paving Co., 1 Bway., New York, Clara Pl. $4,959, Tapscott St. $6,001, 78th St., $8,034; to Cranford Co., 52 9th St., East 10th St. $9,848, 10th Ave. $3,582, 17th Ave. $11,534, 19th Ave. $3,922, 70th St. $7,412; to Necaro Co., Inc., 97 Court St., curbing and paving Linden St. $84,317. Noted May 24.

N. Y., Herkimer—Concrete paving Henry St., Pleasant and Park Aves., to Newport Constr. Co., 200 North Main St., $10,699, $12,989 and $10,358 respectively. Noted May 10.

N. Y., Hornell—To Kennedy Co., Hornell, brick paving Taylor, Park, Union and Crosby Sts., $30,874, macadamizing West Genesee, Armory, Fulton, Wells, East Elm, Preston, State and Ontario Sts., $38,614. Noted May 17 and 21.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., sidewalks around subway grating on southerly portion of island at intersection of Bway and 7th Ave. from 46th to 47th Sts. to Kraemer & Leedecke, 114 East 52nd St., $1,862; curbing, recurbing, flagging, reflagging and sheet asphalt paving West 213th St., to Asphalt Constr. Co., 2199 Madison Ave., $17,256. Noted May 17.

N. Y., St. George—J. A. Lynch, pres. Richmond Boro, Boro Hall, grading and granite block paving, etc., Marginal St., to J. Johnson Sons, 455 Bway., West New Brighton, $21,731. Noted May 31.

N. Y., Utica—Oneida Co. will construct 23.8 mi. highways, bituminous macadam, by day labor under supervision of A. H. O'Brien, co. supt. highways. $71,800.

N. J., Irvington (branch of Newark)—For 1,400 lin.ft. bluestone curb and 2,300 sq.yd. 6 in. rein.-con. pavement on Normandy Pl., to J. Dover, Irvington, $4,069; 9,600 lin.ft. bluestone curb and 15,900 sq. yd. 6 in. rein.-con. pavement on Mt. Vernon and Chester Aves., Rosehill and Normandy Places, to McDermitt Inc., 141 South 8th St., Newark, $66,201. Noted May 3.

N. J., Newark—G. C. Bergen, purch. agt. Essex Co., Court House, supplying and applying asphaltic road oil on designated roads, quantity to be used not less than 10,000 gal. nor more than 60,000 gal., to J. P. Dosch, 501 Bloomfield Ave., Montclair, $0.0725 per gal. Noted May 17.

N. J., Newark — Dept. Streets & Pub. Impvts., City Hall, curbing and flagging Carolina Ave., to Filippone, Scanniello & Capozio, 246 Littleton Ave., $5,692; asphalt paving 29,250 sq.yd. Maple Pl., Leslie and Boylan Sts., Vassar, Vermont, Lindsley, 13th and Irving Aves., to Standard Bitulithic Co., 50 Church St., New York City, $146,836. Noted May 17.

Maryland—State Rds. Comn., Baltimore, concrete surfacing 9,400 sq.yd. Contr. M-39, Montgomery Co., to Gosnell, Russell Co., Frederick, $31,700; 13,100 sq.yd. Contr. B-54, Baltimore Co., to P. F. Reddington, 2 East Lexington St., Baltimore, $38,767; 13,000 sq.yd. Contr. D-33, Dorchester Co., to Holt Constr. Co., Federalsburg, $57,223; gravel surfacing 30,000 sq.yd. Contr. Ch-25, Charles Co., and 39,000 sq.yd. Contr. SM-23, St. Marys Co., to St. Marys Constr. Co., Mechanicsville, $28,616 and $38,875 respectively; 17,800 sq.yd. bituminous surface course on 6 in. concrete, Contr. Bc-43, Baltimore City, to Baltimore Asphalt Block & Tile Co., 1320 North Monroe St., Baltimore, $97,277; Contr. W-26, Washington Co., 4,450 tons bituminous macadam on 4,500 tons rein.-con. base, to Hester-Long Co., Hagerstown, $59,943; Contr. 45-A, Montgomery Co., 3,520 sq.yd. concrete shoulders, to J. H. Blankford, Brandywine, $11,264; 6,800 sq.yd. Contr. Wo-25, Worcester Co., to J. K. Wetter, Salisbury, $17,093. Noted May 31.

Md., Baltimore — Paving Contr. 235 OCNA, 11,725 sq.yd. cement concrete, 610 sq.yd. vitr. block, to Ryan Constr. Co., Real Estate Trust Bldg., Phila., Pa., $36,742; 42,090 sq.yd. asphalt, 595 sq.yd. vitr. block, 200 sq.yd. granite block liners, etc., Contr. 236 OCNA, to P. Flanigan & Son, Harford Rd. and Baltimore & Ohio R.R., $207,675. Noted May 24.

Md., Towson — Baltimore Co., concrete paving 2.5 mi. Greystone and Middletown Rds., to Aiello Constr. Co., Knickerbocker Bldg., Baltimore, $50,000; 2.7 mi. Tufton Ave., and 2 mi. Carroll and Jarretsville Rds., to H. T. Campbell Sons Co., Towson, $75,000 and $50,000 respectively; 7.5 mi. Caves Rd. and Green Spring Ave., to A. A. Dyer, Delight, $36,487; concrete culverts in 2nd and 4th Dists., to G. P. and C. F. Mays, Cockeysville, $4,795.

O., Barnesville — Brick paving South Chestnut St., to Miller-Wilson Co., Barnesville, $37,500.

O., Canton—Stark Co. improving 1.15 mi. Pigeon Run Rd., combination base and curb also 1.72 mi. Canton-Sherman Church Sect., brick, both 18 ft., to Urban Bros., Massillon, $46,000 and $68,443 respectively; 2.11 mi. Reedurban-McDonaldsville Rd., 18 ft., vitr. brick, to G. Hadley, 333 Market Ave. S., $84,265, engrs. est. $85,500; 1.51 mi. Canton-Middlebranch Rd., 18 ft., brick, to Burd Constr. Co., 1043 Spring Ave. N. E., $56,323, engrs. est. $65,000.

O., Cleveland—Grading, curbing and paving Mt. Overlook Ave., brick, and East 106th St. and driveways at city hospital, asphalt, to Rieley Bros., The Arcade, $37,808. Noted May 31.

O., Cleveland — Grading, curbing and paving East 125th St., vitr. brick, to Baldwin Bros., 4500 Euclid Ave., $14,941; East 125th St. and Oakwood Ave., vitr. brick, to Garland Bros., Pavers Exch., Society for Savings Bldg., $18,260 and $5,798 respectively; repaving Euclid Ave. and East 17th St., asphalt, to Cleveland Trinidad Paving Co., The Arcade, $195,757 and $39,543 respectively; East 82nd St., brick, to Bentley Bros., Union Bldg., $13,450; Woodland Ave., asphalt, to Rieley Bros., The Arcade, $22,551. Work involves 8,525 sq.yd. vitr. brick, 57,810 sq.yd. asphalt and 4,750 lin. ft. stone curb and 4 in. tile drain gutter, etc.

O., Columbus—To B. F. Patterson, 1214 Nell Ave., grading, laying necessary water services and sewer connections and paving 1,318 ft. Torrance Rd. $18,275, 931 ft. Weston Pl. $14,769, both asphalt; to R. J. Dienst, 480 South 5th St., 1,087 ft. alley west of Champion Ave. $8,852, 365 ft. alley north of Richmond Ave. $1,979 and 1,904 ft. 2nd alley west of 5th St. $8,213, all concrete; to Columbus Contg. Co., Columbus (street address not available), 509 ft. alley west of Garfield Ave., concrete, $3,356.

O., Columbus—W. H. Duffy, dir. Pub. Serv., to Federal Paving Co., 996 McAllister Ave., grading, laying necessary water services and sewer connections and paving 591 ft. alley west of Chicago Ave. $2,764, 455 ft. alley north of 4th Ave. $2,375, 400 ft. alley west of Henry St. $2,266, 287 ft. 2nd alley north of King Ave. $1,492; to Yale Constr. Co., 146 Yale Ave., 443 ft. alley north of Vermont Ave. $2,778, 375 ft. alley west of 3rd Ave. $2,305; to Columbus Contg. Co., 1471 East Broad St., 926 ft. alley west of Galloway Ave. $5,250, all foregoing concrete; to Knight & Wells, 483 Oak St., 1,186 ft. Sydney St., Mexican asphalt, $18,646. Noted May 24.

O., Euclid—Grading, cement curbing and asphalt paving Monterey, Renwood, Abbey, Nauman, Ormiston and Tyronne Rds., to Cleveland Trinidad Paving Co., The Arcade, Cleveland, $159,796. Noted May 17.

Ind., Bloomington—Indiana University, grading site for stadium, to Kerr & Murphy, Bloomington. To exceed $25,000.

Ind., Princeton — Paving 10,259 sq.yd. Main St., concrete, to Premier Constr. Co., 906 Lemcke Bldg., Indianapolis, $27,185. Engrs. est. $31,000.

Mich., Detroit—Paving with 3½ in. sheet asphalt (natural lake or oil) on 8 in. concrete, to Detroit Asphalt Paving Co., 20 McGraw Bldg., Carpenter Ave., $57,781, Fenkell Ave. Sect. 1, $48,484, Fenkell Ave. Sect. 2, $45,447, Harper Ave. Sect. 1, $109,676, Harper Ave. Sect. 2, $94,052, Hussar Ave., $6,772, Mack Ave., $25,348, Nardin Ave., $17,136, Quincy Ave., $13,349; to Cleveland Trinidad Paving Co., 402 Hammond Bldg., Linwood Ave., $48,005, Leslie Ave., $47,700, Normandy Ave., $47,505. Noted May 10.

Streets and Roads (Continued)

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, concrete paving (1) 0.2 mi. 1-2-11 Will, means 0.2 mi. Route 1, Federal Aid Project 2, Sect. 11, Will Co. (2) 4.07 mi. 1-52-4 White (3) 4.54 mi. 1-0-20 Crawford (4) 2.86 mi. 1-0-21 Crawford (5) 4.81 mi. 2-012 Union (6) 5.5 mi. 254-51 Macon (7) 7.04 mi. 9-56-18 Ford (8) 5.87 mi. 9-56-13 Ford (9) 5.12 mi. 16-58-18 Christian-Montgomery (10) 8.12 mi. 18-59-12 Kane-Kendall (11) 4.27 mi. 20-60-13 McHenry-Lake Co. (12) 5.34 mi. 21-24-2 Lake Co. (13) 5.58 mi. 22-59-15 Will (14) 5.19 mi. 22-59-16 Will-Kane-Kendall (15) 6.06 mi. 25-61-28 Champaign (16) 4.96 mi. 25-61-29 Champaign (17) 4.88 mi. 25-61-30 Champaign (18) 4.86 mi. 25-61-31 Champaign-Ford (19) 2.74 mi. 25-61-32 Ford (20) 2.73 mi. 27-39-1 Carroll (21) 4.4 mi. 28-63-4 Knox-Henry (22) 4.94 mi. 28-63-5 Henry (23) 5.45 mi. 31-65-21 Fulton (24) 7.95 mi. 32-66-3 Moultrie (25) 3.91 mi. 42-67-113 Lake (26) 1.18 mi. 3-47-66 Monroe (27) 0.11 mi. 8-0-38A Woodford (28) 0.14 mi. 8-27-38 Woodford (29) 1.08 mi. 21-24-2A Lake (30) 0.37 mi. 0-7-W La Salle, to J. M. Pierson & Co., Chicago Heights, (1) $5,740. C. J. Moritz, Inc., Effingham, (2) $73,443. J. W. Etchison, Casey, (3) and (4) $154,444 (24) $148,943. J. Kesl & Sons, Edwardsville, (5) $103,-476 (9) $110,888. McMahon Constr. Co., Rochester, Ind., (6) $87,576. I. D. Lain, Bloomington, (7) $144,046 (27) $2,642 (28) $2,562. C. W. Clarke Co., Terre Haute Trust Bldg., Terre Haute, Ind., (8) $96,-983. J. J. Dunnegan Constr. Co., Shenandoah, Ia., (10) $161,826 (11) $95,104 (25) $85,398. Northern States Contg. Co., Waterloo, Ia., (12) $107,969. Chicago Heights Coal Co., Chicago Heights, (13) and (14) $222,000. P. Verhey, Champaign (street address not available), (15), (16), (17), (18) and (19) $419,740. C. C. Vanderboom & Sons, Mt. Carroll, (20) $61,470. I. W. Bowman Co., 1117 3rd Ave., Peoria, (21) and (22) $171,973. R. Condon Constr. Co., Omaha, Neb. (street address not available), (23) $115,939. Dawson-Bowers Constr. Co., Century Bldg., St. Louis, Mo., (26) $17,495. J. Cape & Sons, 468 Water St., Racine, Wis., (29) $17,742. G. W. Comstock, 221 Cooper St., Peoria, (30) $7,203. Noted Apr. 26.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, concrete paving (12-70-5 Richland means Route 12, Federal Aid Project 70, Sect. 5, Richland Co.), (1) 6.6 mi. 12-70-5 Richland, (2) 5.56 mi. 14-71-4 Franklin, (3) 3.54 mi. 25-23-7 Clay, (4) 7.32 mi. 25-73-21 Douglas, (5) 5.62 mi. 26-74-2 Ogle, (6) 5.25 mi. 43-72-1 Mason, (7) 2 rein.-con. bridges 12-70-5B Richland, to Wabash Constr. Co., Vincennes, Ind., (1) $139,058; Keeley Bros. Contg. Co., 2100 State St., East St. Louis, (2) $129,-717; Edwardsville Constr. Co., Edwardsville, (3) $71,662; W. F. Smith & Co., 505 Illinois Natl. Bank Bldg., Springfield, (4) $122,260 (6) $104,191; The Webber Co., Iona, Mich., (5) $126,000; Varney & Connors, Jerseyville, (7) $20,924. Noted May 3.

Ill., Rockford—To Milburn Bros., 18th and Charles Sts., concrete paving 14th Ave., $99,900; F. N. Johnson, 821 Harlem Blvd., Winnebago St., 9th and Sunset Aves., engrs. est. $41,650; Hart & Page, 110 North Court St., North Main St., engrs. est. $62,-500, 10th and Bruce Sts., engrs. est. $55,150. Noted Mar. 22.

Ill., Rockford—Winnebago Co., to Milburn Bros., 18th and Charles Sts., concrete paving Sect. W, $151,779 and Extension of Sect. W, $74,287; Northern Steel & Concrete Co., 204 Van Buren St., Freeport, 2.1537 mi. Sect. V-15D, $54,372.

Wis., Racine — Concrete surfacing, etc. Middle Rd. 13,200 sq.yd. concrete, to J. R. Griffith Co., 1,500 9th St., $25,787.

Ia., Clinton—Paving, curbing and guttering 4th. 5th and 7th Sts., 6th, 8th and Wesley Aves., curbing and guttering Maple and 8th Aves., 13,520 sq.yd. new pavement, 1,970 sq.yd. resurfacing, 470 sq.yd. paving between car tracks, 6,540 lin.ft. curb and gutter, 900 lin. ft. gutter, to McCarthy Imprvt. Co., Kahl Bldg., Davenport, $58,041. Noted Apr. 19.

Ia., Clinton—Clinton Co., to McAndrews & Hannah, Keokuk, grading 2.116 mi. primary road northwest of Delmar, 44,488 cu.yd. excav., $0.30, total $13,346, and 3.94 mi. Lyons-Hauntown Rd., 69,000 cu.yd. excav., $0.31, total $21,390. Noted May 17.

Ia., Marshalltown—To A. Carlson, Woodburg Bldg., 19,481 sq.yd. vibrolithic concrete, on following basis: 6 blocks 9 in. $3.08, 2 blocks 7 in. $2.55, between car tracks, $5.75, total $71,807.

Minn., Crookston—Polk Co., Job 2301 60,-000 cu.yd. excav., to H. P. Lund, Thief River Falls, $17,869. Job 2302, 50,450 cu. yd. excav., to A. Johnson, Lancastetr, $4,-738; Job 2303, 100,500 cu.yd. excav., to J. L. Sieff, Red Lake Falls, $16,862; Job 2304, 62,140 cu.yd. excav., to G. H. Clear, Fergus Falls, $17,966. Noted Apr. 4.

Minn., Duluth—Concrete paving 5,330 sq. yd. Gary St., to Nelson & Shipman, 211 South 16th Ave. E., $24,731.

Minn., Preston — Fillmore Co., (1) Job 2301, State Rd. 9, 97,000 cu.yd. earth 17,-000 cu.yd. loose rock and 4,000 cu.yd. solid rock excav., 160,000 cu.yd. overhaul, culverts; (2) Job 2302, State Rd. 5, 25,000 cu. yd. earth, 380 cu.yd. loose rock and 380 cu. yd. solid rock excav., 12,000 cu.yd. overhaul, culverts; (3) Job 2303, State Rd. 10, 17,000 cu.yd. earth, 2,000 cu.yd. loose rock excav., 30,000 cu.yd. overhaul; (4) Job 2304, State Rd. 11, 24,000 cu.yd. earth, 5,000 cu.yd. loose rock and 1,600 cu.yd. solid rock excav., 28,000 cu.yd. overhaul, culverts, grading to S. J. Groves & Sons Co., 306 Globe Bldg., Minneapolis, (1) $50,810 (2) $9,142 (3) $8,-002 (4) $14,905; culverts to F. Chase, Stewartville, (1) $11,008 (2) $3,878 (4) $2,018. Noted Mar. 8.

Minn., Red Lake Falls—Red Lake Co., State Project 32-02, Federal Aid Project 273, 160,645 cu.yd. excav., to Reierson, Nohre, Moen & Sollom, Thief River Falls, $0.265 per cu.yd. Noted May 3.

Minn., Red Wing—Vibrolithic paving 39,-133 sq.yd. E Ave. and 4th St., 13,923 cu.yd. excav., to Ostrand & Hallett, Crosby, $75,-000. Noted May 3.

Kan., Topeka—Brick paving 12,600 sq. yd. various streets, to Ritchey & Ramsey, Topeka, (street address not available), brick, $3.70, $3.90 and $4.20 per sq.yd., grading $1, straight curb $1, curb and gutter $0.90, total $62,368; 35,800 yds. asphaltic concrete paving various streets, to Kaw Paving Co., 506 N E Bldg., Topeka, asphaltic concrete, $2.62, curb and gutter $0.94, grading $0.96, total $166,065. Noted May 24.

South Dakota—State Hy. Dept., Pierre, improving roads (125-McCook means Federal Aid Project 125, McCook Co.), 133,400 yd. excav. with overhaul, 590 yd. concrete on **125-McCook**, to W. D. Hackett, Marshall, Minn., $63,420; 70,000 yd. excav. with overhaul, 350 yd. concrete on **140-Lawrence and Mead**, to Cole & Wilson, Spearfish, $42,775; 60,000 yd. excav. with overhaul and 107 yd. concrete on **133-Miner**, to H. Pickus Constr. Co., 309 Mass Bldg., Sioux City, Ia., $26,-499; 74,000 yd. excav. with overhaul and 190 yd. concrete on **137-Lake**, to D. D. Bidwell, Egan, $31,165; 107,000 yd. excav. with overhaul and 330 yd. concrete, also bridge, 60 yd. concrete and 10,000 lb. steel, on **39-Davison**, to Pioneer Bridge Co., Mitchell, $48,374; 120,000 yd. excav. with overhaul and 355 yd. concrete, on **135A-Minnehaha**, to Western Bridge & Constr. Co., 748 Peters Trust Bldg., Omaha, Neb., $49,101; 107,000 yd. excav. with overhaul and 280 yd. concrete on **61B-Aurora and Brule**, to R. P. England, Murdo, $41,564; graveling 13,500 yd. with overhaul on **20A-Walworth**, to W. R. Larson Constr. Co., 519 Secy. Natl. Bank Bldg., Sioux Falls, $11,568; 10,000 yd. with overhaul on **87-Lake** and 8,500 yd. with overhaul on **93-Miner**, to Tobin & Maloney, Madison, $8,867 and $7,900 respectively; 14,500 yd. with overhaul on **55-Duel**, to H. Philips, Watertown, $11,942; bridges, 175 yd. concrete, 74 lb. steel, on **125-McCook**, to W. A. Barnhart Constr., Salem, $9,519; 550 yd. concrete and 162,000 lb. steel on **140-Lawrence and Mead**, to Concrete Eng. Co., Rapid City, $26,263; 140 yd. concrete and 22,000 lb. steel on **133-Miner**, to Youngberg Constr. Co., Aberdeen, $6,251; 170 yd. concrete and 32,000 lb. steel, on **137-Lake**, to A. L. Waite, Redfield, $7,434; 70 yd. concrete and 12,000 lb. steel on **61B-Aurora and Brule** to Diamond Eng. & Constr. Co., Grand Island, Neb., $3,032; 225 yd. concrete culverts on **73-Tripp**, to J. L. Lynn, Winner, $8,165. Noted May 17.

S. D., Mitchell—F. McGovern, city aud., paving 58,252 sq.yd. 2 course concrete on various streets, to Hanlon & Okes, 338 Lumber Exch., Minneapolis, Minn., $2.38 per sq.yd. Noted Apr. 19.

North Dakota — State Hy. Dept. Bismarck, 18.441 mi. earth road Project 181, Ward Co., 153,430 cu.yd. excav., etc. to Schultz Bros., Bowbells, $79,536; 17.402 mi. earth road Project 183, McIntosh Co., 123,-762 cu.yd. excav., etc., to R. Burnstad, Napoleon, $47,000; 12 mi. earth road Project 86, Ward Co., 114,956 cu.yd. excav. etc. to Druhl & Kemper, Minot, $60,266.

N. D., Napoleon—Logan Co., grading 20 mi. road from Fredonia north, to Stanley Bros., St. Cloud, Minn., $43,350; culverts to N. Brolander, Lidgerwood, $1,452.

Missouri—State Hy. Dept., Jefferson City, constructing roads (20-32-Saline means Route 20, Sect 32, Saline Co.) 4.059 mi. **20-32-Saline**, to A. W. Mosley, 529 Kansas City Ave., Excelsior Springs, $18,902; 5 mi. **64-11-Hickory**, to Vincennes Bridge Co., Vincennes, Ind., $16,112; 5 mi. **State Project 206, Ripley Co.** and 5 mi. **7-84-Texas**, to Missouri Bridge & Iron Co., Fullerton Bldg., St. Louis, $17,298 and $27,096 respectively; 2.061 mi. **16-94-Mississippi**, to Energy Supply Co. Poplar Bluff, $51,832; 5 mi. **25-4-St. Genevieve**, to H. A. Worman, Pittsfield, Ill., $28,305; 5 mi. **24-13-St. Clair**, to A. A. Davis Co., Grain Exch. Bldg., Oklahoma City, Okla., $49,260; 4.88 mi. **3-5-Mercer**, to M. Haase, Trenton, $6,724; 3.296 mi. **1-40-Clay** to J. C. Lyle, Kansas City (street address not available), $14,008; 0.54 mi. **3-33-Carroll**, to Cameron Joyce & Co., Keokuk, Ia., $21,040; 4.625 mi. **1-39-Platte**, to Land Constr. Co., Ballinger Bldg., St. Joseph, $30,038; 0.54 mi. **3-34-Carroll**, to O. J. Pemberton, Wakenda, $8,564; 5 mi. **1-23-Andrew**, to F. M. Clark, Savannah, $18,935; 4.897 mi. **20-31-Saline**, to H. H. Hanenkratt, Kansas City (street address not available) $31,264; **12-53-Franklin**, to Vedder & Kasmann, Union, $32,279; **7-27-Randolph**, to P. J. Murphy, Moberly, $14,100; 1.618 mi. **64-11-Hickory**, to Pioneer Constr. Co., 101 New York Life Bldg., Kansas City, $53,770. Noted May 31.

Mo., Clayton—St. Louis Co. concrete paving and bridging, etc., 12,575 cu.yd. Ozark Trail, to Cooper Constr. Serv. Co., Federal Reserve Bldg., St. Louis, $37,238. Noted May 24.

Mo., St. Charles—Reconstructing 4 mi. Booneslick Rd., 18 ft., tarvia and gravel, to Bangert Bros. Constr. Co., Ferguson, $119,377. Engrs. est. $120,000.

Tex., Abilene—For 15,000 sq. yd. warrenite bitulithic, black base, to West Texas Constr. Co., Cotton Exch. Ft. Worth, $2.80 sq.yd.

Tex., Angleton—Brazoria Co. grading, mud shell surfacing, etc., 5.58 mi. State Highway 19, 16 ft., 86.05 cu.yd. concrete, 20,487 cu.yd. roadway and 6,932 cu.yd. borrow excav., to P. G. Burns, San Bernardo, $22,960; 17,697 cu.yd. shell to be furnished by county, $38,200. Engrs. est. $65,000.

Tex., Cleburne — Johnson Co. grading, gravel surfacing, etc., 30 mi. State Highways 2 and 2-E, 30 ft., to McClung Constr. Co., Cleburne, $248,701. Noted May 17.

Tex., Ft. Worth—To West Texas Constr. Co., Cotton Exch., warrenite bitulithic paving West 7th St., from Colwyn to Camp Bowie Blvd., 13,400 sq.yd. pavement on 5 in. concrete base $3.18, 9,000 lin.ft. curb $0.45, 18,000 sq.yd. gutter $0.275, 4,000 sq.yd. excav. $0.90, earth rock $2.50, Denver Ave. from Central to Grand Sts., 4,300 sq. yd. paving $3.18, 2,900 sq.yd. gutter $0.275, 1,000 cu.yd. excav. $0.90; to General Constr. Co., Cotton Exch., Jennings Ave. from Railroad to Terrell Sts., 13,860 sq.yd. 1½ in. Uvalde rock asphalt $1.50, etc.

Tex., Hemphill—Sarbine Co., grading, gravel surfacing, etc., 4.41 mi. State Highway 21, 16 ft., 486.5 cu.yd. concrete, 44.859 cu.yd. roadway and 16,862 cu.yd. borrow excav., 51,709 lb. reinforcing, to R. H. Minturn, Hemphill, $39,145; 9,632 cu.yd. gravel furnished by county pits. Engrs. est. $44,119. Noted May 24.

Tex., Kountze — Hardin Co., grading, gravel surfacing, etc., 15.66 mi. State Highway 40, 16 ft., to Brammer & Wilder, 7308 Stewart Bldg., Houston, $82,155.

Tex., Palo Pinto—Palo Pinto Co. grading and surfacing 9.81 mi. State Highway 1. Project 369 and 5.81 mi. Highway 1, Project 356, to Smith Bros., Amer. Natl. Bank Bldg., Dallas, $154,400 and $81,945 respectively. Engrs. est. $177,500 and $100,000 respectively. Noted May 31.

Okla., Durant—Grading and paving 11 blocks Elm St., 15,000 sq.yd. concrete, to Maxey Constr. Co., Durant, $57,835. Noted Mar. 1.

Okla., Garber—Grading, concrete, curbing, guttering and paving 6 blocks Main St., 14,-500 sq.yd. asphalt, etc., to Western Paving Co., Tradesmens Bldg., Oklahoma City, $74,689. Noted May 17.

Colo., Denver—Concrete paving 12 blocks Alley Paving Dist. 91, and 12 blocks Alley Paving Dist. 94, to A. J. Collins, 2363 Blake St., $23,809 and $21,608 respectively, engrs. est. $27,703 and $25,860 respectively; 12 blocks Alley Paving Dist. 93, and 12 blocks Alley Paving Dist. 96, to J. Fred Roberts Constr. Co. Tramway Bldg., $16,369 and $20, 317 respectively, engrs. est. $21,468 and $23,105 respectively; 12 blocks Alley Paving Dist. 95, to R. M. Larsen, 1309 Kalamath St., $15,528. Engrs. est. $19,258. All foregoing 16-20 ft. Noted May 10.

Idaho — Commissioner Pub. Wks., 202 Pioneer Bldg., Lewiston, 23,409 cu.yd. crushed rock surfacing North and South Highway, Federal Aid Project 68, Idaho Co., to General Constr. Co., Spokane Savings and Loan Bldg., Spokane, Wash., $50,-602; District Engineer, Pocatello, 71,930 sy.yd. paving and one 24 x 70 ft. concrete bridge between Gibson and Blackfoot, Federal Aid Project 61, Bingham Co., 1,351 cu.yd. concret, 71,668 sq.yd. subgrade, 30,-371 cu.yd., earth excav., to J. C. Maguire, Pocatello, $177,528, grading and gravel surfacing, etc., 4.89 mi. Yellowstone Park Highway, Federal Aid Project 61-B, Bing-

Streets and Roads (Continued)

ham Co., 10,205 cu.yd. crushed rock or gravel surfacing, 3,100 cu.yd. excav., stripping pits, 14,174 cu.yd. earth excav., etc., to Gleim & Schafer, Pocatello, $25,411. Noted May 3.

Wash., Aberdeen—Paving Alder St., concrete, to Haukeli, Hagg & Co., Aberdeen, $29,981.

Wash., Burlington—Paving Main St., et al., 6 in. concrete, to Norris Bros., Burlington, $39,474. Engrs. est. $45,903.

Wash., Tacoma—Paving North Yakima Ave. from Division Ave. to North 13th St., bitulithic concrete, to C. E. Torkelson, 4339 East G. St., $39,500. Engrs. est. $43,006.

Ore., Portland—Multonan Co., Concrete paving Taylor's Ferry Rd., to Cochran Constr. Co., 415 South Syracuse St., 2,500 cu.yd. common excav. $0.50, 1,500 cu.yd. old macadam $0.90 and 1,600 cu.yd. solid rock $3.40, 200 lin.ft. 6 in. waterbound macadam, $2.75, 8,356 sq.yd. 7 in. concrete $2.30, 300 cu.yd. crushed rock $3.50, etc. total $29,218.

Calif., Auburn—Grading, curbing, guttering and paving portions Commercial and Court Sts., to Skeels & Hudson, P. O. Box 477, grading $0.10 per sq.ft., 5 in. concrete pavement $0.25, concrete curb and gutter $1.06, concrete gutter $0.60; Tuttle, Reamer, Cleveland and Center Sts., etc., to E. F. Hilliard, 1355 43rd St., Sacramento, 60,000 sq.ft. grading $0.07, 60,000 sq.ft. 5 in. concrete $0.24, 2,800 ft. concrete curb and gutter $1, etc.

Calif., Fresno—Grading, concrete curbing, guttering, sidewalks and paving Abbey St., 95,379 sq.ft. grading, 85,881 sq.ft. asphaltic pavement, etc., to T. A. Hanrahan, Brix Bldg., $31,100. Noted May 3.

Calif., Hayward—Grading, concrete curbing, guttering and paving with 2 in. asphaltic concrete on 3½ in. base B St., 110,000 sq.ft. grading, etc., to J. A. Costello, Jr., 1083 Shotwell St., San Francisco, $32,-900. Noted Apr. 19.

Calif., Los Angeles—Improving Van Ness Ave. between Beverly St. and Lemon Grove Ave., to Jahn & Bressi, Byrne Bldg., lump sum for grading $1,800, 160,651 sq.ft. concrete pavement $0.23, 1,413 lin.ft. concrete curb $0.65, 15,707 sq.ft. walks $0.20, 687 sq.ft. gutter $0.30, 127 ft. house sewers $0.75.

Calif., Visalia—Grading, concrete curbing, guttering, laying sewers and paving North and South Willis Sts., to Valley Paving & Constr. Co., Visalia, 2,807 cu.yd. grading $1.50, 194,370 sq.ft. 1½ in. warrenite on 2½ in. asphaltic concrete $0.205, 3,438 lin.ft. concrete curb $0.70, 7,452 lin. ft. concrete gutter $0.50, 1,078 ft. 8 in. vitr. sewer $1.50, etc. Noted May 17.

Quebec—Provincial Hy. Dept., Quebec, bituminous macadamizing 40 mi. highway from St. Johns, Iberville Co., to Rouses Point, N. Y., 16 ft., to W. S. Dalsin, Portland St., Sherbrooke, $259,000.

Ont., Burlington—Council, concrete, pavements, to McArthur Eng. Co., Douglas St., Guelph, $2.10 per sq.yd. Engrs. est. $35,000.

Ont., Leamington—Concrete paving Erie and Askew Sts., to Chick Constr. Co., McDougall St., Windsor, $49,500. Noted Apr. 19.

Ont., Ottawa—Suburban Rd. Comn., paving with asphaltic concrete Bowesville, Merivale and Metcalfe Rds., to Standard Paving Co., Elgin St., $83,336. Noted May 17.

Ont., Ottawa—Paving Sunset Ave. from Bronson Ave. to Driveway, and Carlington Ave. from Fairmont to Parkdale Aves., 7,500 sq.yd. asphalt, 5,200 lin.ft. concrete curb and gutter; Carlington Ave. to O'Leary Bros., Bank National Bldg., $25,000; Sunset Ave. will be done by day labor, $10,000.

Ont., Tavistock—Will pave 20,000 sq.yd. Main St., tarvia macadam, by day labor, $45,000. F. J. Ure & Sons, County Bldg., Woodstock, engrs.

Mexico—See "Railways."

Industrial Works

PROPOSED WORK

Mass., Boston—City having plans prepared by Mulhall & Holmes, 248 Boylston St., 2 story, 53 x 200 ft. garage with 30 x 65 ft. ell, rein.-con. and brick, Albany St. $150,000. Noted Apr. 5.

Conn., Danielson—Danielson Wet Wash Laundry, 19 Center St., plans 2 story, 50 x 70 ft. laundry, brick and steel, plain foundation, Center St. $40,000. Engineer and architect not selected.

Conn., East Hartford (Hartford P. O.)—Mutual Gas & Oil Co., 371 Windsor St., Hartford, plans 3 story garage and storage house, brick and steel, plain foundation, Tolland St., here. $60,000. Engineer and architect not selected.

Conn., Hartford—A. Bergman, 261 Pleasant St., having plans prepared by J. E. Marchetti, 721 Main St., 3 story, 45 x 60 ft. storage building, brick and steel, plain foundation, Market and Pleasant Sts. $40,000.

Conn., Hartford—Connecticut Beef Co., 53 Hoadley Pl., having plans prepared by W. T. Marchant, 36 Pearl St., 3 story, 50 x 150 ft. and 50 x 100 ft. warehouse, brick and timber, plain foundation, Huntley Pl. $150,000.

Conn., Hartford—H. A. Sillence, 19 Adelaide St., plans 2 story and basement, 50 x 60 ft. storage building, brick, plain foundation. $40,000. Private plans.

Conn., Middletown—B. Williams, 34 Silver St., South Farms, (Middletown P. O.), had plans prepared 1 story and small basement, 90 x 90 ft. garage, brick and steel, plain foundation, Center St., here. $40,000. Private plans.

Conn., New Haven—A. B. Hendryx Co., 86 Audubon St., had plans prepared by C. S. Palmer, 114 Whitney Ave., 4 story, 45 x 50 ft. factory, brick and steel, plain foundation, Audubon St. $75,000.

Conn., New Haven—C. Roessler, 60 Pearl St., having plans prepared by R. W. Fabian, 147 Bradley St., 1 and 2 story, 20 x 60 ft. and 30 x 80 ft. garage and factory, brick, plain foundation, State St. $60,000.

Conn., South Norwalk—Hatch & Bailey Co., Marshall St., having plans prepared by W. W. Dawson, Norwalk, 3 story, 35 x 40 ft. factory, $45,000; 3 story, 25 x 65 ft. kiln, $40,000; 2 story, 30 x 50 ft. storage building, all brick, plain foundations, Marshall St.

N. Y., Albany—Albany Garage Co. plans brick and steel garage addition, Beaver St. To exceed $50,000. C. D. Hakes, pres.

N. Y., Brooklyn—J. J. Frill, 1473 Bway., having plans prepared by M. Klein, archt. and engr., 37 Graham Ave., 1 story, 130 x 175 ft., brick, steel and concrete garage, plain foundation, Troy Ave. $75,000.

N. Y., Rochester—F. B. Rae Oil Co., Cliff St., plans rebuilding plant recently destroyed by fire. $100,000. Engineer and architect not announced.

N. Y., Utica—Utica Hygeia Ice Co. plans artificial ice plant, steel and concrete, Wurz Ave. $75,000. Address C. A. Schmidt, 1124 Pleasant St.

N. Y., Waterford—Ford Mfg. Co., plans brick and concrete addition to knitting plant. $150,000.

N. Y., Westfield—C. A. Reynolds, Falconer., plans gasoline, kerosene and oil distributing station, Main St., here. $40,000-$50,000. Engineer and architect not announced.

N. J., Keyport—Standard Motor Trading Co., c/o J. S. Crane, archt. and engr., 41 Park Row, New York City, soon takes bids 1 story, 171 x 196 ft., warehouse, fireproof, here. $75,000. Noted May 17.

Pa., Allentown—Exchange—Bell Telephone Co., Phila., plans brick building, Emaus St., here. $250,000. F. Roller, c/o owner, archt.

Pa., Dubois—Reliance Window Glass Mfg. Co. plans to rebuild factory recently destroyed by fire. $100,000. Engineer and architect not announced.

Pa., Erie—Continental Rubber Co., 12th and Liberty Sts., plans 3 story, 75 x 104 ft. factory addition, rein.-con. $55,000. Architect and engineer not announced.

Pa., Nanty Glo—Nanty Glo Businessmen's Assn., and New York Silk Mfg. Syndicate, plan 1 story power plant, and 3 story and basement, 80 x 140 ft. mill, steel, brick and concrete, along Blacklick River and Pennsylvania R.R. tracks. $150,000.

Ky., Hopkinsville—Dark Tobacco Growers Co-operative Assn. plans 25 warehouses, mostly brick, in various parts of Kentucky and Tennessee. $500,000.

Ky., Louisville—Summers-Herman Co., 905-11 South 3rd St., having plans prepared by D. X. Murphy & Bros., 714 Louisville Trust Bldg., 2 story, 95 x 100 ft. garage and sales building, 3rd and Breckinridge Sts. $75,000. Noted Feb. 1.

Ky., Newport—F. Voss & Sons, 417 West 7th St., plans to rebuild Major portion of lumber and planing mill, destroyed by fire. $125,000. Engineer and architect not announced.

Ky., Owensboro—Owensboro Clay Products Co., plans plant (with power house). $150,000.

O., Cleveland—J. Parrish, c/o Dickman-DeGroot Co., Williamson Bldg., having plans prepared by N. Petti, Williamson Bldg., 1 story, brick and steel garage and show room building, on 35 x 192 ft. site, 7310 Carnegie Ave. $50,000.

Ind., Kendallville—Plans addition to electric light and waterworks plant, brick. $40,000. H. H. Mortoroff, city engr.

Ind., Vincennes—Blackford Window Glass Co. plans plant. $500,000. Simplex Eng. Co., Washington, Pa., engrs.

Mich., Detroit—Book Estate, Book Bldg., having plans prepared by L. Kamper, Kamper Bldg., Cass Ave., 20 story and basement, 100 x 175 ft., brick, steel and rein-con. garage, caisson foundation, Washington Blvd. $450,000.

Wis., Berlin—Schaefer Mfg. Co., making plans 1 story, 60 x 120 ft., machine and service shop, brick, rein.-con. and steel, plain foundation. $40,000. F. D. Chapman, genl. mgr. Private plans.

Wis., Fond du Lac—St. Agnes Hospital, 309 East Division St., having plans prepared by R. E. Schmidt, 104 South Michigan St., Chicago, 1 story, 50 x 90 ft., brick, rein.-con. and steel, power plant, plain foundation. $40,000.

Wis., Milwaukee—M. Carpenter Baking Co., 102 7th St., having revised plans prepared by C. Barkhausen, 79 Wisconsin St., 1 story and basement, 42 x 104 ft. and 50 x 52 ft., brick and concrete baking additions, plain foundations. Noted Apr. 26.

Wis., Strum—J. Maloney making plans 1 story, 50 x 70 ft., garage and repair shop, brick and timber, plain foundation. $40,-000. Private plans.

Wis., Tomahawk—Tomahawk Shoe Co. making plans 2 story, 50 x 90 ft., brick, rein.-con. and steel factory addition, plain foundation. $50,000. Private plans.

Minn., Minneapolis—L. Kinsell, 409 East 18th St., having plans prepared by Ekman, Holm & Co., 302 Phoenix Bldg., 2 story and basement, 132 x 157 ft. garage, rein.-con., brick and tile, 5th Ave. S. and 3rd St. $125,000.

Minn., Moorhead—C. Schill having plans prepared by J. E. Rosatti, 117 Bway., Fargo, N. D., 2 story and basement, 50 x 140 ft. garage, rein.-con. and brick. $45,000.

N. D., Minot—K. Kulaas soon lets contract 2 story and basement, 80 x 150 ft., rein.-con., brick and tile garage. $45,000. T. L. Rush, Minot, archt. Noted Apr. 26.

Mo., Kansas City—J. W. Griffin, c/o Wilkinson & Crans, archts., 608 Interstate Bldg., having plans prepared 1 story and part basement, 165 x 235 ft., brick and steel factory. $60,000.

Mo., St. Louis—Warren Steel Casting Co., 3400 Maury Ave., plans rebuilding 1 story, 100 x 200 ft. plant, recently destroyed by fire. $75,000. Engineer and architect not announced.

Tex., Childress—Ft. Worth & Denver City R. R., Record Bldg., Ft. Worth, making plans and soon takes bids rebuilding paint and machine shops, brick, recently destroyed by fire, here. $50,000-$75,000. M. A. Stainer, ch. engr.

Tex., Dallas—Dallas Pottery Co., Ft. Worth Pike, had plans prepared plant in Love Field Industrial Dist. $75,000. T. Jackson, mgr. Engineer and architect not announced.

Okla., Guthrie—Atchison, Topeka & Santa Fe R.R. Co., 179 West Jackson St., Chicago, soon takes bids 1 story, 50 x 200 ft., rein.-con. machine shop. H. W. Wagner, Topeka, Kan., div. engr.

Calif., Glendale—Crescent Creamery Co., 237 Winston Ave., Los Angeles, having plans prepared by Morgan, Walls & Morgan, Van Nuys Bldg., Los Angeles, rein.-con. dairy buildings, incl. 2 story, 95 x 190 ft. main building, 95 x 150 ft. boiler house, here. To exceed $75,000.

Calif., Hueneme—Siebel Air Spring Co., represented by C. Pilgrim, plans factory. To exceed $50,000.

Calif., Los Angeles—Central Mfg. Dist. of Los Angeles, Title Insurance Bldg., having plans prepared by F. D. Chase, Inc., Title Insurance Bldg., 6 story, 90 x 150 x 150 ft., industrial loft building, brick and concrete. To exceed $500,000.

Calif., Los Angeles—Garland & Dickson, c/o J. M. Cooper, archt., Marsh Strong Bldg., had plans prepared 2 story and basement, 100 x 150 ft., brick, auto sales supply building, Hill and 18th Sts.

Calif., Los Angeles—Pacific Coast Biscuit Co., 652 Imperial St., having plans prepared 4 story and basement factory, brick, Jessie and 6th Sts. To exceed $100,000. Private plans.

Calif., Los Angeles—J. W. Robinson Co., 600 West 7th St., had plans prepared by Norton & Wallis, Pacific Finance Bldg., 1 story, 105 x 185 ft., brick garage, 8th and Whittier Sts. $40,000.

Calif., Los Angeles—W. Volker Furniture Co., 532 South Alameda St., having plans prepared by A. C. Martin, Higgins Bldg., 3 story, 100 x 250 ft. factory, rein.-con., East 7th St. $150,000.

Calif., Merced—L. R. Lurie, 315 Montgomery St., San Francisco, had plans prepared by O'Brien Bros., Inc., 315 Montgomery St., San Francisco, 1 story, auto-sales and service station, concrete, here. $50,000. Fleutsch & Lewis Motor Co., Merced, lessee.

Calif., Oakland—Victor Talking Machine Co., c/o W. Knowles, archt., Hearst Bldg., San Francisco, having plans prepared factory, fireproof, 73rd Ave. $250,000.

Industrial Works (Continued)

Calif., Ontario—Citrus Fruit Assn. plans packing plant, San Antonio Ave. To exceed $50,000.

Calif., San Bernardino—Atchison, Topeka & Santa Fe Ry. Co., Kerckhoff Bldg., Los Angeles, plans machine, tin and pipe shops, here. To exceed $500,000. R. B. Ball, Kerckhoff Bldg., Los Angeles, ch. engr.

Calif., San Francisco — Pelton Water Wheel Co., 19th and Harrison Sts., plans 150 x 200 ft. factory, Harrison and 19th Sts. $300,000. Engineer and architect not selected.

Calif., San Francisco—Standard Sanitary Mfg. Co., 149 Bluxome St., having plans prepared by Weeks & Day, 315 Montgomery St., 5 story and basement, rein.-con. warehouse, Brannan and 9th Sts. To exceed $75,000.

Calif., San Pedro—See "Buildings."

Calif., Ventura—A. F. Gilmore Co., Van Nuys Bldg., Los Angeles, plans refinery, here. $40,000 or more.

Calif., Vernon (Watts P. O.) — Hoyt Heater Co., 2850 East 2nd St., Los Angeles, having plans prepared by Walker & Eisen, 325 Pacific Finance Bldg., Los Angeles, 2 story and basement, 100 x 125 ft., factory, brick, here. $75,000.

Que., Montreal — Harbor Comrs. of Montreal, plan 3 story, 50 x 50 ft. machine and blacksmith shop, concrete, Harbor Front. J. W. Harris, c/o owner, engr.

Ont., Kirkland Lake—Wright Hargreaves Mines Ltd. plans to increase mill from 70 tons to 400 or 500 tons per day. Private plans.

Ont., Renfrew—Renfrew Flour Mills Co. plans rebuilding flour mill, probably brick, recently destroyed by fire. $225,000. Engineer and architect not selected.

BIDS DESIRED

Conn., Stamford—J. and S. Gruber, 345 Summer St., taking bids and open same about June 12, 2 story, 80 x 90 ft., brick and steel garage, plain foundation, Beckley Ave., $55,000. Emmens & Abbott, Washington Bldg., archts. Noted May 31.

Md., Baltimore — June 10, by E. H. C. Browne, archt., Equitable Bldg., 1 story and basement, 45 x 100 ft. garage and store building, brick, 423 East Lombard St., for H. Gamse & Bro., 419 East Lombard St. $40,000.

Ky., Louisville—United States Foil Co., 30th and Hale Sts., receiving bids tin foil factory. $50,000.

Pa., Uniontown—Rankin Motor Co. c/o H. W. Altman, archt., Fayette Title and Trust Bldg., 2 story and basement, 52 x 102 ft., garage, Main St. $40,000. Work will be done by separate contracts. Contract for steel awarded W. N. Kratzer, 3212 Smallman St., Pittsburgh.

O., Cleveland—Cleveland Sanitary Wet Wash Co., c/o H. H. Hood, mgr., 6204 Central Ave., taking bids 1 story, 50 x 80 ft., brick and steel factory, Woodhill Rd. near Woodland Ave. $40,000. W. W. Launders, c/o owner, archt.

O., Orient—June 27, by Dept. Pub. Welfare, 9th and Oak Sts., Columbus, 1 story and basement, 48 x 115 ft. cold storage plant, brick and concrete, on grounds of Institution for Feeble Minded, here. $60,000. R. S. Harsh, Ohio-Hartman Bldg., Columbus, archt.

O., Gallipolis—See "Buildings."

Ill., Chicago—W. C. Presto, archt., 111 West Washington St., receiving bids 1 story, 175 x 200 ft. auto sales and service station, fireproof, Lawrence Ave. near Whipple St., for A. D. Schuller, c/o architect, $75,000.

Ill., Dolton—J. T. Hatton, archt., Hammond Bldg., Hammond, Ind., receiving bids 2 story, factory, rein.-con., brick and steel, 138th St. and Ingleside Ave., here, for Chin Chin Chemical Co., 8 South Dearborn St. $400,000.

Minn., Minneapolis—P. E. Crosier, archt., 915 New York Life Bldg., taking bids 1 story and basement, 150 x 150 ft. garage, brick and tile, Aldrich Ave. N and Bway. $65,000. W. H. Kuhlman Co., 605 West Bway., lessee.

Minn., St. Paul—June 12, by State Bd. of Control, Capitol, 3 story and basement dairy, rein.-con., brick and tile, College of Agriculture, State U. $210,000. C. H. Johnston, 715 Capital Bank Bldg., Archt. Noted July 20.

Calif., Los Angeles — Walker & Eisen, archts., Pacific Finance Bldg., receiving bids 4 story and basement, (ultimately 8 story), rein.-con. garage and store building, Kenmore and 6th Sts., for J. B. Lilly, et al, c/o architects.

CONTRACTS AWARDED

Mass., Boston—See "Buildings."

Mass., Boston—Gillette Safety Razor Co., 41 West 1st St., 8 story, 75 x 100 ft. factory, rein.-con. and brick, wood pile foundation, to W. A. and H. A. Root Co., 1 Beacon St., $400,000.

Mass Westfield—H. B. Smith Boiler Co., constructing foundry, 40,000 sq.ft. floor space, brick and steel, plain foundation, to Morrisey & Stowell, 137 State St., Springfield. Archts. est. $50,000.

Connecticut—Dixie Gas Co., Hartford, gas stations at Sunsbury, New London and Windsor Ave., Hartford, concrete and steel, plain foundations, to Lawrence & Coe Constr. Co., 372 Trumbull St., Hartford. Archts. est. $80,000.

Conn., Bristol—Blakesley Novelty Co., 83 Laurel St., 1 story, 40 x 50 ft. factory, brick and steel, plain foundation, Laurel St, to E. J. Anderson, 45 Harrison St. Archts. est. $40,000. Noted May 31.

Conn., East Hampton—Summit Thread Co., 19 Summit St., 3 story, 40 x 60 ft. factory, brick, plain foundation, to L. A. Miller, 22 Church St., Meriden. Archts. est. $45,000.

Conn., Hartford—See "Buildings."

Conn., Hartford—H. P. Townsend Mfg. Co., 5 Chestnut St., 2 story, 60 x 80 ft. brick and steel factory, plain foundation, Walnut St., to E. W. Canning & Co., 246 Laurel St. Archts. est. $65,000.

Conn., New Britain—Amer. Hardware Corp., Franklin St., 2 story, 15 x 80 ft. power plant, brick, plain foundation, Park St., to W. H. Allen Co., Hungerford Court. Archts. est. $50,000. Noted May 31.

Conn., New Haven—Natl. Folding Box & Paper Co., James St., 6 story, 60 x 120 ft. rein.-con. factory, plain foundation, to Dwight Building Co., 69 Church St. Archts. est. $170,000. Noted May 24.

Conn., Waterbury—S. Craicerstein, 14 Lafayette St., 2 story, 50 x 60 ft. storage plant, brick, plain foundation, Lafayette St., to M. Scavuzzo, 1028 North Main St. Archts. est. $40,000.

N. Y., Brooklyn—S. Ageloff, 26 Court St., will build brick, steel and concrete garage, plain foundation, Chauncey St., by day labor. $50,000. M. Klein, 37 Graham Ave., archt. and engr.

N. Y., Brooklyn—Terahin Realty Corp., c/o E. M. Adelsohn, archt. and engr., 1778 Pitkin Ave., will build brick, steel and concrete garage, plain foundation, 10th St., by day labor. $50,000.

N. Y., New York—Almond Realty Co., Inc., c/o Sugarman & Hess & Berger, archts. and engrs., 16 East 43rd St., 14 story, 85 x 98 ft. loft, brick, steel and stone, 251-259 West 36th St., to J. G. Siegel Inc., 343 Madison Ave., New York.

Pa., Brownsville—Ehrenpries Tire Sales Co., 2 story and basement, 37 x 90 ft., garage, to Brownsville Constr. Co., Brownsville. Archts. est. $40,000.

Pa., Latrobe—Railway Steel Spring Co., 30 Church St., New York City, 1 story, 178 x 1,000 ft. machine shop, manufacturing and office building, brick tile and steel, here, to McClintoc-Marshall Co., Oliver Bldg., Pittsburgh. Archts. est. $350,000. Noted May 24.

Fla., Orlando—I. W. Phillips & Sons, 1 story, garage, concrete, steel and stucco, Orange and Jackson Sts., to L. C. Townsend, Orlando, cost plus percentage basis. Est. cost $90,000.

Ala., East Thomas (Birmingham, P. O.) —St. Louis & San Francisco Ry., 900 Olive St., St. Louis, Mo., 20 stall round house, car repair shop, power house, mill shop, store room, etc., brick and concrete, here, to J. M. Olsen, 626 Delmar St., Springfield, Mo. Archts. est. $500,000. Noted Mar. 8.

Ky., Central City—Illinois Central R.R., 135 East 11th Pl., Chicago, engine house, here, to J. E. Nelson & Sons, 3240 South Michigan Ave., Chicago. Engrs. est. $300,000.

Ky., Paducah—Paducah Electric Co., enlarging power plant, to Stone & Webster, Inc., 147 Milk St., Boston, Mass. Archts. est. $300,000. Noted May 24.

O., Cleveland—Blazer Realty Co., 3402 Altoona Ave., 1 story, 40 x 126 ft., brick and timber garage, to H. E. Klefman Co., 2834 Lorain Ave. Archts. est. $40,000.

O., Cleveland—Cleveland Piston & Mfg. Co., 1388 West 70th St., 1 story, 60 x 100 ft., brick and timber factory, Scranton Rd., to Lehder Constr. Co., Rose Bldg. Archts. est. $40,000.

O., Cleveland—Superior-Forty-Ninth Co., c/o G. Paul, Fidelity Mortgage Bldg., 1 story, 182 x 218 ft. brick, steel and concrete garage, 5001 Superior Ave., to Paul Bros., Fidelity Mortgage Bldg. Archts. est. $100,000. Noted Apr. 5.

O., Cleveland Heights (Warrensville P. O.)—See "Buildings."

O., Norwood (Cincinnati P. O.)—Kemper-Thomas Co., Park Ave., 3 story, 60 x 240 ft., rein.-con. factory, plain foundation, to Ferro Concrete Constr. Co., 3rd and Elm Sts., Cincinnati, $200,000. Noted May 10.

Ind., South Bend — Studebaker Corp., Main and Bronson St., 1 story and mezzanine, 660 x 683 ft., brick, steel and concrete foundry, Prairie Ave., to H. G. Christman Co., 315 Stevens Bldg., Detroit, Mich. Noted May 10.

Mich., Lansing—Michigan Butter & Egg Co., 701 East Kalamazoo St., general contract 3 story, 50 x 50 ft., cold storage plant, brick, to G. Hagemerr, 610 Seymour Ave. Archts. est. $50,000.

Ill., Chicago—N. T. Brenner, 954 West 21st St., 1 story, 102 x 300 ft. factory, fireproof, 3436-52 South Kedzie Ave., to Complete Artificial Stone Co., 3222 Elston Ave. Archts. est. $300,000. Noted May 10.

Ill., Chicago—Curtis Ledger Fixtures Co., 1115 West Jackson Blvd., 6 story, 56 x 178 ft. factory, fireproof, 1119-1129 West Jackson Blvd., to C. B. Johnson Sons Co., 111 West Washington St. Archts. est. $225,000.

Ill., Chicago—M. Espert, 236 North Clark St., 6 story and basement, 100 x 123 ft., fireproof garage and service station, Dearborn and 26th Sts., to Wells Bros. Constr. Co., 53 West Jackson Blvd. Archts. est. $300,000.

Ill., Chicago—W. A. Jones Fdry. and Machine Co., 4401 West Roosevelt Rd., 1 story, factory, fireproof, 4415-27 West Roosevelt Rd., to C. B. Johnson & Sons, 111 West Washington St. Archts. est. $50,000.

Ill., Chicago — Link Belt Co., Stewart Ave. and Pershing Rd., 1 story, 41 x 70 ft. and 22 x 170 ft. factory, fireproof, 327-339 West Pershing Rd., to G. Thompson & Co., 30 North La Salle St. Archts. est. $150,000.

Ill., Chicago—J. T. Ryerson & Son, 16th and Rockwell Sts., 1 story, 110 x 116 ft. warehouse, fireproof, to G. Thompson & Son, 30 North La Salle St. Archts. est. $75,000.

Ill., Chicago—B. S. Schwartz, c/o D. S. Klafter, archt., 64 West Randolph St., 1 story, 125 x 150 ft. fireproof garage, Lawrence Ave. near Kentucky St., to Behrens Constr. Co., 2149 North Talman Ave. Archts. est. $50,000.

Ill., Chicago—Western Shade Co., 2100 South Jefferson St., 4 story, 80 x 290 ft. factory, fireproof, 2023-2136 Jefferson St., to J. Hammond, 2216 West Harrison St. Archts. est. $400,000.

Ill., Granite City—Commonwealth Steel Co., Granite City, 1 to 3 story, 100 x 400 ft. pattern shop, power house and foundry, 100 x 450 ft. core room, incl. crane, ovens and metal pattern shop, by day labor. Private plans. Noted May 24.

Ill., Freeport—Arcade Mfg. Co., 1 Columbus Ave., 3 story, 66 x 196 ft. factory addition, fireproof, by day labor, under supervision of B. C. Trueblood, 161 Whistler St., $100,000. C. W. Wolfley, Stewart Bldg., Rockford, archt.

Wis., Milwaukee — Building Finance & Constr. Co., 786 12th St., will build 2 story, 60 x 120 ft., brick and timber, laundry, plain foundation, National Ave., by day labor. $50,000. G. Zagel & Bro., 144 Oneida St., archts.

Minn., Minneapolis—Northwestern Glass Co., 219 2nd St. N., 4 story and basement, 61 x 66 x 162 ft. warehouse, rein.-con. and brick, 215 2nd St. N., general contract to Farnam Constr. Co., 5047 Gladstone Ave. Total $75,000.

Wis., Milwaukee—Lindemann-Hoverson Co., 2nd and Cleveland Aves., 1 story, 111 x 112 ft., brick and timber warehouse, plain foundation, Cleveland Ave., to Klug & Smith, 69 Wisconsin St. Engrs. est. $50,000.

Wis., Green Bay—A. Libert Machine Co., 324 North Roosevelt St., 1 story and part basement, 55 x 100 ft. machine shop, brick and timber, plain foundation, to O. Henkelmann, 1102 Chicago St., and J. H. Geniessee, 820 South Jackson St. Archts. est. $40,000. Noted May 3.

Minn., St. Paul—L. F. Dow Co., 381 Jackson St., 3 story and basement, 100 x 200 ft. factory, brick, tile and stone, University Ave. near Hampden Ave., general contract to Gauger-Korsmo Constr. Co., 604 Exchange Bank Bldg. Total $200,000.

Mont., Conrad—Distribution system and supply line from reservoir to city, 21,000 cu.yd. excav. and fill, 29,615 ft. 6-10 in. c.i. pipe, etc., to McLaughlin & O'Neal, Livingston, $21,894. Noted May 10.

Tex., Dallas — J. J. Lyons, c/o J. A. Pitzinger, archt., 808 Southwestern Life Bldg., 6 story, 100 x 120 ft., concrete, brick and steel, plain foundation, Hord and Carter Sts., to Inge Constr. Co., Swiss and Hawkins Sts., $100,000. Noted May 24.

Okla., Tulsa—J. Thomas, 118 East 1st St., 1 story and basement, 100 x 140 ft., rein.-con. and brick garage, to R. M. Gilliland, 203 Lynch Bldg., $40,000.

Wash., Seattle—Pacific Telephone & Telegraph Co., 2 story, 129 x 163 ft. garage, and 1 story addition to present garage, concrete and steel, 806 Fairview Ave., to Sound Constr. & Eng. Co., Lowman Bldg. Archts. est. $160,000.

Industrial Work (Continued)

Calif., San Francisco—American Can Co., Mills Bldg., 2 story, rein.-con. addition to factory, 3rd and 21st Sts., general contract to Lindgren Co., Monadnock Bldg., $300,000; reinforcing steel to Columbia Steel Co., Balfour Bldg.

N. H., Gorham—Twin State Gas & Electric Co., 160 State St., Boston, 42 x 62 ft. hydro-electric generating plant, 30 ft. high, here, to Sanders Eng. Co., Portland, Me. Archts. est. $250,000.

Buildings

PROPOSED WORK

Mass., Chelsea (Boston P. O.)—High School—Schoolhouse Dept., City Hall, takes bids about June 27, 3 story 100 x 150 ft., rein.-con. and brick, wood pile foundation. $700,000. S. S. Eisenberg, 46 Cornhill, Boston, archt.

Mass., Northampton—Gymnasium—Smith College soon lets contract 2 story and basement, 80 x 170 ft., brick and steel, plain foundation, Elm St. $400,000. Ames & Dodge, 15 Exchange St., Boston, archts. Noted Dec. 28.

Mass., Williamstown—High School—Town having plans prepared by Peare Quiner Nevin & Chickering, 6 Beacon St., Boston, 2 story, 58 x 133 ft., brick and steel, Spring St. $150,000.

Conn., Bristol—Block—W. J. Malone, Center Bldg., had plans prepared by J. Devine, Federal St., 3 story, 50 x 100 ft., brick, plain foundation, School St. $155,000.

Conn., Bristol—Church—St. Joseph Roman Catholic Church, c/o O. T. Magnell, pastor, 37 Queen St., had plans prepared by J. A. Jackson, 185 Church St., New Haven, 60 x 170 ft., granite, plain foundation. $250,000.

Conn., Hartford—Apartment—A. Parskey, 22 Barker St., had plans prepared by H. H. Beckanstein, 1029 Main St., 3 story, 40 x 90 ft. brick, plain foundation, Vine St. $150,000.

Conn., Hartford—Apartment—D. Tramonte, 109 Edwards St., plans 2 and 3 story, brick, plain foundation, Asylum and Huntington Sts. $200,000. Engineer and architect not selected.

Conn., Hartford — Business — Newton-Burnet Inc., 319 Asylum Ave., plans 4 story, 35 x 100 ft., brick and steel, plain foundation, Asylum Ave. $200,000. Engineer and architect not selected.

Conn., Hartford — Church — First Unitarian Society having plans prepared by M. S. Haymon, 36 Pearl St., granite, plain foundation, Pearl St. $160,000.

Conn., Hartford — Community — South Park Methodist Church, c/o W. Jennings, trustee, 33 Madison St., plans 3 story, brick, plain foundation, Main St. $150,000. Engineer and architect not selected.

Conn., Meriden—Community—All Saints Parish, c/o F. S. Lippitt, 201 West Main St., plans 3 story, brick, plain foundation, Morgan St. $150,000. C. S. Palmer, 114 Whitney Ave., New Haven, archt. Noted May 31.

Conn., New Haven—Apartment—H. Vernoff, Elm St., having plans prepared by J. Weinstein, Chapel St., 3 story, 50 x 100 ft., brick, plain foundation, Asylum St. $150,000.

Conn., New London—College—Connecticut College, Mohegan Ave., plans 2 story library, stone, $175,000; hall, brick, $250,000; 3 story, 80 x 100 ft. dormitory, brick and stone, $150,000; 3 story, 80 x 150 ft. dormitory, $175,000; chapel, brick and stone, $150,000; all plain foundations. B. T. Marshall, pres. Engineer and architect not selected.

Conn., Norwich—Hospital, etc.—F. M. Salmon, Comptroller of State, State Capitol, Hartford, receiving competitive plans 3 story nurses' home, and 2 story ward, brick, plain foundations, for Norwich State Hospital, here. $150,000 and $212,500 respectively. Noted Apr. 26.

Conn., Putnam — Nurses Home — Day-Kimball Hospital, 175 Pomfret St., plans 3 story, 40 x 80 ft. brick, plain foundation, $150,000. Engineer and architect not selected.

Conn., South Manchester—Church—St. Marys Episcopal Parish, c/o J. S. Neill, pastor, 49 Pearl St., plans church, probably brick, plain foundation. $160,000. Engineer and architect not selected.

Conn., South Manchester—Church—South Manchester Methodist Episcopal Church, plans native stone, plain foundation. $175,000. L. W. Case, Spring St., Highland Park, chn. building com. Engineers and architect not selected.

Conn., South Manchester—School—Fifth School Dist. plans 2 or 3 story, brick, plain foundation. $160,000. A. E. Loomis, Keeney St., chn. Engineer and architect not selected.

Conn., Stamford—Apartment—H. Grabsky, 234 Atlantic St., had plans prepared by W. R. Steinmetz, Gurley Bldg., two 3 story, brick, plain foundations, Henry St. $150,000 each.

N. Y., Brooklyn—Office—H. Wittemann, 188 Montague St., having plans prepared by M. Klein, archt. and engr., 37 Graham Ave., brick, steel and stone, plain foundation, Church Ave. and East 21st St. $600,000.

N. Y., Buffalo—Office—Walbridge Co., 392 Main St., having plans prepared 10 story, 94 x 102 ft., rein.-con., brick and steel, Court St. To exceed 500,000. Engineers and architects names withheld.

N. Y., Canton—Temple—V. P. Abbott, Gouverneur, and O. D. Young, 120 Bway., New York City, plan marble temple, on grounds of Beta Theta Pi Fraternity, here. $150,000-$200,000.

N. Y., Fairport—Bank—Fairport Natl. Bank, plans stone, concrete, brick and steel, South Main St. $160,000-$170,000.

N. Y., New York—Apartment—W. N. Smith, archt. and engr., 101 Park Ave., preparing plans 10 story, 50 x 100 ft., brick, steel and stone, plain foundation, 60th St. and Park Ave. Owner's name withheld.

N. Y., New York—Office—Northern Union Gas Co., 1815 Webster Ave., soon takes bids altering and building brick, steel and stone addition, plain foundation. $800,000. Jardine, Hill & Murdock, 50 East 42nd St., archts. and engrs.

N. Y., New York—Schools—Bd. Educ., 500 Park Ave., had plans prepared by W. H. Gompert, archt. and engr., Flatbush Ave. extension and Concord St., Brooklyn, P. S. 79, 5 story, 175 x 200 ft., West 181st St. and Morris Ave., $850,000, also P. S. 10, East 109th St., $1,000,000, both brick, steel and stone, plain foundations.

N. Y., New York—School—Bd. Educ., 500 Park Ave., having plans prepared by W. H. Gompert, archt. and engr., Flatbush Ave. extension and Concord St., Brooklyn, P. S. 78, brick, steel and stone, plain foundation, Fish Ave. $850,000.

N. Y., New York—School—Bd. Educ., 500 Park Ave., soon takes bids P. S. 74, brick, steel and stone, plain foundation, Crotona and Prospect Aves. $850,000. W. H. Gompert, Flatbush Ave. extension and Concord St., Brooklyn, archt. and engr.

N. Y., Watertown—Office and Store—Chamber of Commerce purchased site and plans office and storebuilding. $210,000. R. S. Baker, pres.

N. J., Camden—Theatre—Stanley Theatre Co., 13th and Market Sts., Phila., having plans prepared by Hoffman-Henon Co., Finance Bldg., Phila., 1 story and mezzanine, 110 x 160 ft., rein.-con., brick and steel, plain foundation, 6th and Market Sts., here. $1,000,000.

N. J., Trenton—Station—Pennsylvania R. R., Broad St. Sta., Phila., plans new passenger station, concrete platforms, here. $900,000 or $1,000,000. A. C. Shand, Broad St. Sta., Phila., engr.

Pa., Allentown—International Motor Co. plans 1 story, 50 x 70 ft. machine shop, steel, 10th and Harrison Sts. $50,000. Engineer and architect not announced.

Pa., Ridgeway—School—Bd. Educ. having plans prepared by M. E. Kressley, 13 4th St., Harrisburg, 2 story and basement, 75 x 250 ft. school. $150,000.

Pa., Uniontown — Hotel — White Swan Hotel Co., Uniontown, having plans prepared by Dreher & Churchman, Otis Bldg., Phila., 5 story and basement, 150 x 155 ft., brick and steel, West Main St., $500,000.

Md., Baltimore — Office — Chesapeake & Potomac Telephone Co., 725 13th St. N.W., Wash., D. C., having plans prepared by Stern & Tomlinson, Continental Trust Bldg., Wash., D. C., 20 story, brick and steel, St. Paul and Pleasant Sts., here. $2,000,000.

Md., Baltimore — Office — I. Silberstein, Equitable Bldg., had plans prepared by E. H. C. Browne, 607 Equitable Bldg., 5 story, 50 x 125 ft., concrete, Fayette and Paca Sts. $225,000.

Md., Crownsville—Dormitories—Crownsville State Hospital, 330 North Charles St., Baltimore, having plans prepared by H. P. Hopkins, 347 North Charles St., 2 and 3 story, 50 x 100 ft., brick. $200,000. A. P. Herring, supt.

W. Va., Charleston—Apartment—Rex Apartment Co., c/o Wysong & Jones, archts., Professional Bldg., having plans prepared 6 story and basement, 50 x 85 ft., brick, steel and tile, Virginia St. $150,000.

Fla., St. Petersburg—Hotel—R. E. Smith and associates had plans prepared by E. A. Nolan, St. Petersburg, 6 story, 90x90 ft., rein. con. and steel, 1st Ave. and 10th St. $200,000.

Ala., Montgomery—School—City plans 3 story, 100 x 200 ft., concrete, brick, stone and tile. $500,000. Engineer and architect not selected.

La., New Orleans — Store — Grunewald Music Co. Inc., 733 Canal St., plans 7 story, at 829 Canal St.

Tenn., Chattanooga—Hotel—J. B. Pounds, Pound Bldg., plans 12 story (150 rooms), annex to Hotel Patten, 11th and Market Sts. $200,000.

Tenn., Memphis — Schools — Shelby Co. having plans prepared by W. C. Lester, Madison Ave. Bldg., 3 story, 140 x 170 ft. at Hollywood, and 3 story, 135 x 136 ft. on Spottswood St., both brick and stone. $150,000 each. Noted May 13.

Tenn., Nashville—Church, etc.—Blakemore Methodist Church, Ashwood Ave., raising funds for church and Sunday school, West End and 30th Aves. $150,000. B. H. Klyce, 4th and 1st Natl. Bank Bldg., chn. building com.

Ky., Louisville — Apartment — Argonne Apartments, Inc., plans 4 story, 100 x 150 ft., 1st and Chestnut Sts. $300,000.

Ky., Louisville—Hotel—J. G. Brown, c/o Brown Lumber Co., 1522 6th St., plans 10 story, 300 room annex to hotel, 159 ft. frontage, Bway. $1,000,000.

Ky., Louisville — Terminal and Office — Louisville Ry. Co., 314 West Jefferson St., plans 100x400 ft. interurban tetrminal and office, 2nd and Liberty Sts. $1,000,000. Address J. P. Barnes, pres.

Ky., Murray—School—State Bd. Educ., Frankfort, plans State Normal School, here. $150,000. Joseph & Joseph, Francis Bldg., Louisville, archts.

O., Cincinnati—Cathedral—Masonic Building Com. plans cathedral, 5th and Sycamore Sts. $2,000,000. H. Hake, Telephone Bldg., archt.

O., Cincinnati—School—Bd. Educ. having plans prepared by S. Hannaford & Sons, 1024 Dixie Terminal Bldg., 2 story, 75 x 169 ft. addition to Avondale School, rein.-con., plain foundation, Reading Rd. $150,000.

O., Cleveland—Apartment—Bonar Realty Co., 309 Union Bldg., having plans prepared by Allen-Osborn Co., Rose Bldg., 4 story and basement, 40 suites, brick and steel, East 82nd St. near Euclid Ave. $300,000.

O., Cleveland — Apartment — S. Deckelbaum, 11502 Hopkins Ave., had plans prepared by M. Weis, 617 Union Bldg., 3 story, 37 x 124 ft., brick and timber, Cedar Rd. near Fairmount Blvd. $150,000.

O., Cleveland—Apartment—S. Glaser, 202 Ulmer Bldg., plans 6 story, 40 x 200 ft., brick and steel, 1900 Ansel Rd. $300,000. Engineer and architect not selected.

O., Cleveland—Sales, etc.—M. S. Koblitz, 422 Leader-News Bldg., plans 6 story, brick, steel and concrete sales and service building, on lot 60x190 ft., 1905 Prospect Ave. $200,000. P. Matzinger Co., Caxton Bldg., archts.

O., Cleveland — Store — McCrory Stores Corp., 1107 Bway., New York City, had plans prepared by W. M. Simpson, c/o owner, 4 story, 60 x 110 ft., brick, steel and concrete, 2041 East 4th St., here. $160,000. Noted Mar. 29.

O., Columbus—Hospital—St. Francis Hospital Assn., East State St., having plans prepared by McDonald, McDonald & McDonald, 1817 Clarion Ave., Cincinnati, 4 story and basement, 62½ x 187½, brick, stone and concrete, East State St. $200,000.

O., Youngstown — Church — Central Christian Church, South Market St., plans large addition to church and school. $175,000. M. M. Amundson, pastor. Engineer and architect not announced.

Ind., Bloomington—Dormitory and Memorial—University of Indiana plans dormitory and memorial, fireproof. $1,250,000. Lowe & Bollenbacher, 108 South LaSalle St., Chicago, archts.

Mich., Grand Rapids—Sanitarium and Hotel—Osgood & Osgood, archts., Fine Arts Bldg., making sketches and takes bids in Spring, 10 story and basement, 106 x 146 ft., fireproof, concrete pile foundation. Fulton St., for Burleson Sanitarium. $1,000,000.

Mich., Kalamazoo—Schools—Voted $160,000 bonds, 2 or 3 story, grade school, rein.-con., plain foundation, South Burdick St., and $275,000 bonds 2 or 3 story elementary school, Lovell St.

Mich., Lansing—Y. W. C. A., 210 Capitol St., plans home on South Capitol Ave. $350,000. Engineer and architect not announced.

Ill., Aurora—Storehouse—Chicago, Burlington & Quincy R.R., 547 West Jackson Blvd., Chicago, plans fireproof storehouse here, to replace one destroyed by fire. $500,000. W. T. Krausch, engr. of buildings.

Ill., Belleville—Academy—School Sisters of Notre Dame, 3rd and Race Sts., had plans prepared by V. J. Klutho 1215 Syndicate Trust Bldg., St. Louis, Mo., 3 story, 60 x 200 ft., rein. con. and brick, West Main and 62nd Sts. $300,000.

Ill., Chicago—Apartment—S. Cohn, 149 South Crawford St., plans 3 story and basement, 125x200 ft., fireproof, Coles St. and

Buildings (Continued)

75th Pl. $200,000. A. L. Himelblau, 30 North Dearborn St., archt.

Ill., Chicago—Apartment—J. S. Smith, 7401 Clyde Ave., plans 3 story and basement, 100 x 100 ft., fireproof, 73rd and Luella Sts. $225,000. J. Hocke, 7602 Chappel Ave., archt.

Ill., Chicago — Apartment-Hotel — Kurt, Rosenthal & Co., 11 South La Salle St., plans 3 story, 165 x 172 ft., fireproof, Lunt and Greenview Sts. $250,000. S. M. Eichberg, 64 West Randolph St., archt.

Ill., Chicago—Church, Sunday School and Community — Bryn Mawr Community Church c/o Lowe & Bollenbacher, archts., 108 South La Salle St., plans 2 story, 134 x 200 ft., fireproof, Jeffer and 70th Sts. $200,000.

Ill., Chicago — Store — Hillmans Department Store, 20 North State St., plans 16 story, fireproof, 18 North State St. $3,000,000. Architect or engineer not selected.

Ill., Freeport—Hospital—Methodist Hospital Assn. plans 4 story, 100 bed, fireproof, $300,000. A. Van Nuys, secy. and mgr. Architect will be selected by competition.

Ill., Jacksonville—Bank—Farrell State Bank, Jacksonville, having plans prepared by Childs & Smith, 64 East Van Buren St., Chicago, 1 story, 50 x 100 ft., rein.-con., stone and steel. $200,000.

Ill., Joliet—School—Bd. Educ. plans 2 story, fireproof, Pleasant St. $150,000. Ashby, Ashby & Schultz, 1511 West Jackson Blvd., Chicago, archts.

Ill., Rockford—School—Bd. Educ. plans Rock River School, 2 story, 75 x 212 ft., fireproof. $175,000. Peterson & Johnson, Swedish Amer. Bank Bldg., archts.

Wis., Madison—Hotel—H. Fauerbach, 938 Spaight St., having plans prepared by Balch & Lippert, Gay Bldg., 5 story, 100 x 150 ft., brick, rein.-con. and steel, plain foundation, Monroe St. $300,000.

Wis., Madison—Apartment—H. E. Nichols, 1151 Rutledge St., plans 4 story, brick, rein.-con. and steel, plain foundation, Monroe St. $150,000. Architect not selected.

Wis., Madison—Store, etc.—Piper Bros. Grocery Co., 31 North Pickney St., having plans prepared by Balch & Lippert, Gay Bldg., 4 story, 60 x 90 ft., store and warehouse, brick, rein.-con. and steel, plain foundation. $150,000.

Wis., Manitowoc — Hospital — E. Brielmaier & Sons, archts., 432 Bway., Milwaukee, soon take bids 4 story and basement, 52 x 248 ft., brick and concrete, plain foundation, for Holy Family Hospital, Alverno, here. $300,000. Noted Feb. 1.

Wis., Milwaukee — Office — Peacock & Frank, archts., 445 Milwaukee St., preparing preliminary plans 6 story and basement, 60 x 127 ft., brick and concrete, plain foundation. $175,000. Owner's name withheld.

Kan., Arkansas City—Store and Office—G. Gassman, 801 North 3rd St., had preliminary plans prepared by T. W. Williamson & Co., 312 Central Natl. Bank Bldg., Topeka, 5 story and basement, 40 x 100 ft., rein.-con., stone, brick and terra cotta. $200,000.

Kan., Coffeyville—Auditorium—City had plans prepared by T. W. Williamson & Co., 312 Central Natl. Bank Bldg., Topeka, 2 story and basement, 115 x 173 ft., brick, rein.-con. and stone. $175,000.

Kan., St. Francis—Courthouse—Cheyenne Co. had plans prepared by T. W. Williamson & Co., 312 Central Natl. Bank Bldg., Topeka, 4 story and basement, 75 x 100 ft. rein.-con., brick and stone. $150,000.

Neb., Beatrice—Schools—Plans election to vote on $400,000 bonds to remodel 4 schools.

Neb., Grand Island—High School—Bd. Educ., having preliminary plans prepared by Kirschke & Crocker, Ryan Bldg., 3 story and basement, 64 x 272 ft., with 100 x 102 ft. wing, rein.-con., brick and stone. $350,000.

N. D. Mandan—High School—Bd. Educ. having plans prepared by G. Horton, Jamestown, 2 or 3 story and basement, rein-con., brick, stone and tile. $200,000.

Mo., Kansas City—School—Redemptorist Fathers, 325 Hunter St., having plans prepared by E. P. Madorie, 1105 Republic Bldg., 3 story and basement, 160x186 ft., rein.-con., brick and stone. $300,000.

Mo., Kansas City—Store—D. Snower, c/o Snower Mfg. Co., 18th and Walnut Sts., having preliminary plans prepared by McKechnie & Trask, 719 Floyd Bldg., 12 story and basement, rein.-con. and brick, 925 Walnut St. $400,000.

Mo., St. Louis — Hospital — Christian Hospital, 3540 North Grand Blvd., having plans prepared by Hoener, Baum & Froese, 1519 Federal Reserve Bldg., 4 story, 65 x 160 ft., brick and stone, plain foundation, Carter and Newstead Aves. $275,000.

Mo., St. Louis — Store — B. Nugent & Bros. Dry Goods Co., Washington St. and Bway., had preliminary plans prepared 10 story, 160 x 160 ft., rein.-con. and brick, concrete pile foundation, $3,000,000. Private plans.

Tex., Ft. Worth—Club—South Side Lodge F. & A. M., Henderson and Magnolia Sts., takes bids in summer 4 story and basement, 75 x 100 ft., steel and brick, plain foundation. $150,000. E. O. Jameson, 1618 Amer. Exch. Natl. Bank, Dallas, engr. J. B. Davies, 1308 Hemphill St., Ft. Worth, archt.

Tex., Ft. Worth—Y. M. C. A. c/o R. E. Squires, secy., 914 Monroe St., takes bids about June 15, 4 story and basement, 100 x 145 ft., rein.-con., steel, stone and brick, plain foundation, 5th and Lamar Sts. $250,000. J. W. Clarkson, First Natl. Bank Bldg., archt. Noted May 10.

Tex., Houston — Laboratory — Rice Institute, W. W. Watkins, archt., 212 Scanlon Bldg., and Cram & Ferguson, archts., 248 Boylston St., Boston, Mass., takes bids about June 25, 3 story and basement, brick and limestone, brick foundation, Rice Institute campus. $375,000.

Tex., Houston—Library—City having plans prepared by L. A. Glover, archt., 604 Binz Bldg., and W. W. Watkins, associated archt., 212 Scanlan Bldg., 3 story (1st unit), brick, stone and rein.-con., McKinney and Smiths Sts. $200,000. Noted Dec. 28.

Tex., San Antonio—Office—Phelps & DeWees, archts., 718 Gunter Bldg., soon lets contract 9 story, 80 x 110 ft., rein.-con., brick, tile and stone, concrete pile foundation, for Travis-St. Marys Co., 407 Navarro St. $200,000. W. E. Simpson Co., N B C Bldg., Engrs. Noted Apr. 12.

Okla., Tulsa—Bank and Office—Central Natl. Bank, 2nd and Boston Sts., having plans prepared by D. H. Burnham & Co., Rookery Bldg., Chicago, and H. H. Mahler & Co., 231 Lynch Bldg., 15 story and basement, 50 x 140 ft., rein.-con., stone, terra cotta and brick. $2,000,000. Noted Dec. 28.

Colo., Denver—Office—Capitol Life Insurance Co., Colorado Theatre Bldg., takes bids about July 25, 2 story and basement, 160 x 250 ft., rein.-con. and marble, Sherman St. and 116th Ave. $600,000. H. J. Manning, Majestic Bldg., archt. Noted Mar. 15.

Wash., Yakima—High School—Yakima School Dist. voted $150,000 bonds for junior high school.

Calif., Alameda — Hospital — Alameda Sanatorium, 2054 Clinton Ave., having plans prepared by E. T. Foulkes, Crocker Bldg., San Francisco, 3 story, rein.-con., Willow St. $200,000 or more.

Calif., Corte Madera—Clubhouse and Store—See "Miscellaneous."

Calif., Fresno—Hotel and Store—M. P. Hall, et al., 921 Terrace Ave., plans 3 story and basement, 75 ft. frontage, fireproof, J St. $150,000.

Calif., Fullerton—Theater—G. H. Amerige had plans prepared 75 x 150 ft. theatre, fireproof. To exceed $150,000. Private plans.

Calif., Hanford—Auditorium—City will vote on $200,000 bonds for auditorium.

Calif., Hollywood—Auditorium—Hollywood High School Dist. had plans prepared by N. F. Marsh, Bway. Central Bldg., Los Angeles, 2 story and basement, rein.-con. and brick. To exceed $150,000.

Calif., Huntington Park—School—Huntington Park Union High School Dist. having plans prepared by Rea & Garstand, Trust and Savings Bldg., Los Angeles, school buildings, incl. gymnasium, main building, manual training structures, etc. To exceed $250,000.

Calif., La Jolla—Hotel—H. W. Orwig, Security Bldg., Los Angeles, at head of Building Assn., which had plans prepared by W. C. Pennell, Pacific Finance Bldg., Los Angeles, 3 story, stucco and frame, here. To exceed $150,000.

Calif., Lodi—City Hall—Plans to vote on $150,000 or more bonds for city hall.

Calif., Long Beach—Apartment—W. Garner, et al., 140 Locust St., had preliminary plans prepared by W. W. Smith, 245 East 12th St., 5 story, fireproof, Magnolia Ave. $175,000.

Calif., Long Beach—Apartment—C. H. Stillwell, 9th St. and Grand Ave., plans apartment, fireproof, 3rd St. and Cedar Ave. To exceed $500,000. Engineer and architect not selected.

Calif., Long Beach—Club—T. J. Cannon, c/o Cannon Drilling & Supply Co., 138 American Ave., is at head of syndicate which plans 8 story, fireproof, Ocean Ave. To exceed $300,000. Engineer and architect not selected.

Calif., Los Angeles—Apartment—L. L. Smith, Byrne Bldg., preparing plans 7 story and basement, rein.-con., 2nd and Flower Sts. $250,000. Owner's name withheld.

Calif., Los Angeles — Church — Swedish Methodist Episcopal Church, c/o E. P. and C. E. Norberg, archts. Union Bank Bldg., had plans prepared 1 story and basement, brick, 14th St. and Union Ave. $150,000.

Calif., Los Angeles — Loft — Revolving Fund Co. having plans prepared by Wallace & Bush, Van Nuys Bldg., 6 story, 100 x 160 ft., rein.-con., Winston and San Pedro Sts. Pacific Knittings Mills Co., 303 East 4th St., lessee.

Calif., Los Angeles—Office C. E. Page having plans prepared by Milwaukee Bldg. Co., Wright-Callender Bldg., 12 story and basement, 95 x 114 ft., rein.-con., 6th St. and Grand Ave. $850,000.

Calif., Los Angeles — School — Berkeley Hall School, 2241 4th Ave., plans school, Wilshire Blvd. To exceed $150,000.

Calif., Los Angeles — Store — Desmond Store Co., 553 South Spring St., having plans prepared by A. C. Martin, Higgins Bldg., 6 story and basement, 60 x 155 ft., rein.-con. and steel, Bway. between 6th and 7th Sts. $300,000.

Calif., Los Angeles—Store—Hamburger Dept. Store, having plans prepared by A. C. Martin, Higgins Bldg., 3 story, 100 x 250 ft., rein.-con. and steel addition, 8th St. and Bway. $500,000.

Calif., Los Angeles—Store and Loft—Cline-Cline Co., 214 West 3rd St., plans 6 story and basement, fireproof, Hollywood St. and Las Palmas Ave. To exceed $150,000.

Calif., Los Angeles—Store and Office—Court Drug Co., 860 South Hill St., plans about 12 story, fireproof, Grand Ave. and 12th St. To exceed $750,000.

Calif., Los Angeles—Store and Office—Frick-Martin & Co., 724 South Spring St., having plans prepared by Curlett & Beelman, Union Bank Bldg., 2 story and basement, rein.-con., Spring St. $150,000.

Calif., Los Angeles—Synagogue—Temple Emanu-El, 631 South Manhattan Pl., having plans prepared by Russell & Alpaugh, Story Bldg., 1 story and basement, brick, Manhattan Pl. $150,000.

Calif., Los Gatos — High School — Los Gatos Union High School Dist. plans to vote on $250,000 bonds for group of high school buildings. Engineer and architect not selected.

Calif., Oakland—Bank and Office—B. P. Fugazi, 2 Columbus Ave., San Francisco, having plans prepared by I. Zanolini, 604 Montgomery St., San Francisco, bank, office and store, fireproof, 8th St. and Bway., here. $150,000 or more.

Calif., Riverside — Hospital — Riverside Community Hospital, 1225 Walnut St., having plans prepared by M. Hunt, Hibernian Bldg., Los Angeles, 1 story, 300 x 300 ft., hollow tile. To exceed $150,000.

Calif., San Francisco—Home—Mt. Zion Hospital, Post and Scott Sts., having plans prepared by S. Schnattacher, 233 Post St., 6 story and basement, nurses home, incl. roof garden and auditorium, probably rein.-con., Sutter St. between Scott and Divisadero Sts. $500,000.

Calif., San Francisco — Hospital — A. Abrams, 2151 Sacramento St., had revised plans prepared by M. I. Schwartz, Nevada Bank Bldg., 10 story and basement, rein.-con. and steel, Sutter St. near Larkin St. $300,000. Former bids rejected. Noted Apr. 5.

Calif., San Francisco—Stores and Office—T. C. Kierulff, Balboa Bldg., had plans prepared by B. G. McDougall and J. H. Haenke, 381 Bush St., 6 story and basement, rein.-con., Sansome St. between Pine and California Sts. $150,000. Noted Apr. 26.

Calif., San Jose—Hotel and Apartment—M. L. Rose Co., Inc., Pacific Bldg., San Francisco, had plans prepared 4 story and basement, South Market St. $150,000. Private plans.

Calif., San Jose—Store and Office—Pacific Gas & Electric Co., 445 Sutter St., San Francisco, having plans prepared 3 story and basement, 75 x 150 ft., brick or concrete, North San Fernando St., here. $150,000. Private plans.

Calif., San Pedro—Station, etc.—Atchison, Topeka & Santa Fe R.R. Co., Kerckhoff Bldg., Los Angeles, having plans prepared station, freight terminal, etc., here. $1,000,000. R. B. Ball, Kerckhoff Bldg., Los Angeles, ch. engr.

Calif., Santa Monica — Schools — City plans to vote on $1,500,000 bonds for new schools and additions to present buildings.

Calif., Santa Monica—Theatre and Office—West Coast Theatres, Knickerbocker Bldg., Los Angeles, having plans prepared by Eng. Serv. Co., Washington Bldg., Los Angeles, 3 story, fireproof, Arizona and 3rd Sts., here. To exceed $150,000.

Buildings (Continued)

Calif., Whittier—Hospital—Murphy Memorial Hospital, East Bailey St., plans 3 story and basement addition, fireproof. $150,000 or more. Engineer and architect not selected.

BIDS DESIRED

Mass., Springfield — High School — June 21, by City Property Com., Room 12, City Hall, 3 story, 120 x 200 ft. brick addition, plain foundation, Spring St., $800,000. E. C. and G. C. Gardner, 33 Lyman St., archts.

Conn., Meriden—Business—M. Dubin, 125 Oakland St., Hartford, receiving bids and opens same about June 16 (by invitation only) 3 story, 80 x 100 ft., brick and steel, plain foundation, East Main St., here. $150,000. H. H. Beckanstein, 1029 Main St., Hartford, archt. Noted May 31.

N. Y., Brooklyn—Loft—H. Wittemann, 188 Montague St., will build brick, steel and stone, plain foundation, Jay St. $400,000. Work will be done by separate contracts under supervision of M. Klein, archt. and engr., 37 Graham Ave.

N. Y., Jamestown—Hotel—June 18, by Hotel Jamestown, Inc., 3rd and Cherry Sts., 10 story, brick, steel and stone, plain foundation. $1,225,000. W. L. Stoddart, 9 East 40th St., New York City, archt. and engr. Noted May 24.

N. Y., New York—Schools—June 12, by Bd. Educ., 500 Park Ave., P. S. 71, Roberts Ave. between Jarvis and Hobart Aves.; also P. S. 47, East 23rd near 2nd Ave., both brick, steel and stone, plain foundations. W. H. Gompert, Flatbush Ave. extension and Concord St., Brooklyn, archt and engr.

N. J., Asbury Park—High School—June 14, by Bd. Educ., brick, steel and stone, plain foundation. $600,000. E. A. Arend, 105 West 40th St., New York City, archt. and engr. Noted Apr. 19.

Pa., Confluence—School—June 12, by G. A. Frantz, secy. Bd. Educ., 3 story and basement, 90 x 120 ft., rein.-con., brick and steel, $150,000. E. H. Walker, Somerset, archt.

Md., Baltimore—Parsonage—June 12, by O. G. Simonson, Inc., archts., Casualty Tower, 2 story and basement, 55 x 160 ft., brick, Lombard and Catherine Sts., for St. Johns Evangelical Lutheran Church. $150,000. Noted May 10.

Ala., Birmingham—Auditorium—June 26, by City Comrs., 2 story, 100 x 250 ft., rein.-con. and brick, 8th Ave. $464,000. H. Martin, Empire Bldg., archt. Noted Nov. 2.

Ky., Louisville—Temple—June 30, by Joseph & Joseph, archts. and engrs., Francis Bldg., 7 story, 200 x 260 ft., 400 rooms, steel, Bway., for Kosairs Assn. $1,750,000. Noted May 17.

O., Cleveland—Apartment—Ohio Building Finance Co., Discount Bldg., taking bids 4 story and basement, 32 x 142 ft., brick and timber, 2,052 East 90th St., $150,000. W. A. Becker, Union Bldg., archt. Noted Apr. 5.

O., Cleveland—Apartment—Wullinger & Fishman, 5511 Ensign Ave., taking bids and open same about June 20, 4 story and basement, 48 x 119 ft., brick and timber, 1870 East 75th St. $150,000. Braverman & Havermaet, Ulmer Bldg., archts. Noted May 17.

O., Gallipolis—Hospital, Cottage, etc.—June 27, by J. E. Harper, dir. Dept. Pub. Welfare, 9th and Oak Sts., Columbus, 2 story and basement, 30 x 130 ft. cottage, $85,000, 2 story and basement hospital, $125,000, 1 story and basement, 80 x 130 ft. laundry, $35,000, all brick and concrete, on grounds of Ohio Hospital for Epileptics, here. R. S. Harsh, Ohio-Hartman Bldg., Columbus, archt.

Mich., Grand Rapids—Gymnasium and Auditorium—June 25, by H. H. Turner, archt., Michigan Trust Bldg., 2 story, 64 x 157 ft. gymnasium and 83 x 90 ft. auditorium, Ransom St., for Bd. Educ. $250,000.

Mich., Grand Rapids—High School, etc.—June 28, by H. H. Turner, archt., 923 Michigan Trust Bldg., 3 story and basement, 80 x 190 ft., rein.-con. and brick, incl. gymnasium and auditorium, Ranson St., for Bd. Educ. $300,000.

Mich., Ironwood—Church—St. Ambrose Congregation taking bids 55 x 140 ft., brick and tile, plain foundation. $150,000. E. Brielmaier & Sons Co., 432 Bway., Milwaukee, Wis., archts.

Mich., Paw Paw—High School, etc.—June 21, by E. S. Batterson, archt., Hanselman Bldg., Kalamazoo, 2 story, 102 x 396 ft., high school incl. 54 x 102 ft. gymnasium and auditorium, terra cotta and steel, plain foundation, for Bd. Educ., here. $250,000. Noted Dec. 14.

Ill., Chicago—Apartment—A. Fader, 22 West Monroe St., receiving bids 3 story and basement, 65 x 198 ft., fireproof, South Shore Dr. $150,000. L. M. Mitchell, 138 North La Salle St., archt.

Ill., Chicago—Apartment—Johnston Bros., 109 North Dearborn St., receiving bids 3 story and basement, 117 x 124 ft., fireproof, 2300-10 East 70th St. $185,000. L. M. Mitchell, 138 North La Salle St., archt.

Ill., Chicago—Hotel—D. S. Klafter, archt., 64 West Randolph St., receiving bids remodeling 5 story, 75 x 125 ft., fireproof, Clark and Center Sts., for B. I. Morris and B. Brell, c/o architect. $150,000.

Ill., Joliet—High School—D. H. Burnham & Co., archts., 105 West Monroe St., Chicago, receiving bids 4 story, fireproof addition, Eastman Ave., here, for Joliet Twp. High School Dist. $500,000.

Wis., Fond du Lac—Hotel—M. Tullgren & Sons, archts., 425 East Water St., taking bids and open same about June 12, 6 story and basement, 36 x 76 ft., brick and concrete, addition, plain foundation, for Hotel Wisconsin Realty Co., 86 Michigan St., Milwaukee. $150,000. Noted May 10.

Wis., Milwaukee—Apartment—R. B. Williamson, archt., 405 Bway., taking bids 4 story, 40 x 100 ft., brick and concrete, plain foundation, Grand Ave. $150,000. Owner's name withheld.

Wis., Verona — Asylum — June 15, by Dane Co. Bd. 4 story, 100 x 140 ft., brick, rein.-con. and steel, plain foundation. $150,000. A. D. Conover, 23 Tenney Bldg., Madison, archt. Noted May 10.

Wis., Viroqua—High School—June 18, by School Bd., 3 story and basement, 87 x 182 ft., brick, tile and concrete, plain foundation. $150,000. E. J. Hancock, Laycock Bldg., Eau Claire, archt.

Wis., West Allis — Theatre-Business — June 13, by R. Messmer & Bro., arcnt., 221 Grand Ave., Milwaukee, 2 story and basement, 60 x 120 ft., brick and concrete, plain foundation, for Greenfield Bldg. Corp., 6426 Greenfield Ave. $150,000.

Minn., Duluth — Business — June 12, by W. M. Prindle & Co., Lonsdale Bldg., representing R. M. Bodley Co., Boston, 5 story and basement, 109 x 115 ft., rein.-con. and brick, Superior St. and Lake Ave. $300,000. German & Jenssen, 411 Exchange Bldg., archts. and engrs.

Minn., Virginia — School — July 6, by Chairman Bd. Educ., 2 story and basement, 65 x 90 ft., rein.-con. brick and stone addition, 5th Ave. $150,000. C. W. Kelly, 505 Lonsdale Bldg., archt. and engr.

Kan., Leavenworth—High School—June 11, by C. A. Smith, archt., 602 Finance Bldg., Kansas City, Mo., 2 story and basement, 120 x 170 ft., rein.-con., stone, steel and brick, for Bd. Educ. $225,000. Noted May 24.

Tex., Denison—Hotel—June 21, by Barnett-Haynes-Barnett, archts., 915 Century Bldg., St. Louis, Mo., 6 story 50 x 150 ft., containing 85 rooms, rein.-con. and brick, plain foundation, Main St., for Denison Hotel Co. $175,000. Noted Apr. 26.

Okla., Pawhuska—Hotel—June 15, by E. Forsblom, archt., 305 Sedgwick Bldg., Wichita, Kan., 5 story, 52 x 190 ft., rein.-con. and brick, plain foundation, for C. A. and J. L. Duncan, here. $200,000. Noted Apr. 26.

Ore., Astoria—Hotel and Store—July 15 by T. Randles, (owner) Astoria, and W. Bruce, archt., 604 Journal Bldg., Portland, 5 story, 50 x 120 ft., rein.-con. and brick, wood pile foundation, 20th and Commercial Sts., here.

Calif., Glendale—Bank and Office—A. F. Priest, archt., Fay Bldg., Los Angeles, receiving bids 6 story and basement, brick, concrete and steel, Bway., here, for Security Trust and Savings Bank, 502 South Spring St., Los Angeles. To exceed $150,000.

Ont., Hamilton — Office — B. H. Prack, archt., 50 Bay St., Toronto, taking bids 8 story and basement, 115 x 135 ft., rein.-con., brick and steel, plain foundation, for J. E. Lister, 133 Glenfern Ave. $300,000. Noted May 17.

Ont., North Bay—Office—June 12, by W. H. Maund, secy. and treas., Temiskaming & Northern Ontario Ry. Co., 3 story and basement, 60 x 100 ft., rein.-con., brick and stone, Regina St. $150,000. S. B. Clement, North Bay, ch. engr.

BIDS RECEIVED

N. Y., Brooklyn.—School—W. H. Gompert, archt., Flatbush Ave. extension and Concord St., May 29, P.S. 177, 5 story, brick, steel and stone, Dahill Rd., from T. A. Clarke Co., 122 Livingston St., $883,000. Noted May 24.

N. Y., Hamburg — High School — Bd. Educ., general contract, rein.-con. and brick, Pleasant Ave., from Tifft Constr. Co., Inc., Iroquois Bldg., Buffalo, $342,270; heating, E. H. Monin, Inc., 70 Delaware Ave. Buffalo, $73,919. Noted May 10.

N. Y., Kenmore—High School—Bd. Educ. general contract Delaware Rd. school, from Eastern Concrete Steel Co., Morgan Bldg., Buffalo, $366,584; heating from F. Cook 145 Euclid Ave., $68,200. Noted Mar. 15.

N. Y., Syracuse—High School—Bd. Contr. & Supply, general contract 17th Ward Junior High School, 2 story and basement 200 x 300 ft., brick, steel and stone, Fellows Ave., from Jenks & Venton Constr. Co., S. A. & K. Bldg., $587,900. Noted May 31.

N. J., Hightstown—School—Bd. Educ. general contract 2 story, brick, steel and stone, plain foundation, from T. J. Holloran Co., 41 Central Ave., Newark, $137,472. Noted May 10.

O., Cleveland—Library—Cleveland Pub. Library Bd., c/o J. J. White, pres., Kinney-Levan Bldg., May 28, 4 story and basement, 199 x 216 ft., brick, steel, concrete and marble, East 3rd St. and Superior Ave. from Lundoff-Bicknell Co., 5716 Euclid Ave., $3,550,000. Noted May 3.

Ia., Keokuk—School—Bd. Educ., 3 story and basement, rein.-con., brick, tile and stone, from Currie-Simpson Co., 180 West 1st St., Waterloo, $267,990. Noted May 24.

Wash., Seattle—Hotel—Community Hotel Corp., constructing Hotel Olympic, from Grant Smith Co., Henry Bldg., $3,254,000.

CONTRACTS AWARDED

Mass., Boston — Apartment — Bay State Rd. Co., c/o Strickland, Blodgett & Law, archts., 26 Pembroke Sq., 8 story, 105 x 140 ft., rein.-con. and brick, wood pile foundation, 91 Bay State Rd., to Chase & Gilbert, 185 Devonshire St., $600,000.

Mass., Boston — School — Schoolhouse Dept., City Hall, 2 story, 95 x 100 ft., brick and timber, Brighton Dist. to J. Rugo, 80 Boylston St., $168,000. Archts. est. $175,000.

Mass., Boston—Store, etc.—E. V. Earle & Sons, 200 Devonshire St., will build 8 story, 95 x 152 ft. store and warehouse rein.-con., steel frame, wood pile foundation, 49 Federal St., by day labor. $750,000. G. N. Meserve, 200 Devonshire St., archt.

Mass., Springfield—Bank—Federal Land Bank, 145 State St., 2 story and basement, 80 x 175 ft., brick and steel, plain foundation, State and Byers St., to F. T. Ley Co., 495 Main St., $180,000.

Conn., Bristol—Business—W. J. Tracy, 2 Riverside Ave. and J. E. Condon, 38 Laurel St., 3 story, 65 x 110 ft., brick and steel, plain foundation, Main St., to L. A. Miller, 22 Church St., Meriden. Excavation to F. P. Helming, 60 Pleasant St. Archts. est. $150,000. This corrects report of May 10 issue.

Conn., Hartford—Apartment—Carabillo & Lombardo, 18 Seyms St., carpentry work for 3 story, 48 x 90 ft., brick, plain foundation, Vine St., to Zlotnick & Davidson, 29 Blake St. Owner will do masonry work. Archts. est. $150,000.

Conn., Hartford—Apartment—J. S. Guica, 115 Baltimore St., 3 story, 40 x 90 ft., brick, plain foundation, Bedford St., to Carabillo & Russo, Front St. Archts. est. $150,000.

Conn., Hartford—Apartment—J. J. Wall, 401 Farmington Ave., will build two 3 story, 64 x 90 ft., Spanish architecture, and two 3 story, 70 x 90 ft., English architecture, Farmington Ave., by day labor. $300,000 and $330,000 respectively. G. Zunner, 182 High St., archt. Noted May 3 and May 17.

Conn., Hartford—Apartment and Store—F. P. Carabillo Constr. Co., 96 Mather St., carpentry work for 3 story, 100 x 110 ft., brick, plain foundation, Garden and Mather Sts., to Zlotnick & Davidson, 29 Blake St. Owner will do masonry work. Archts. est. $160,000.

Conn., Hartford—Business—A. H. Carpenter, Bloomfield, 7 story, 50 x 112 ft., brick and steel, plain foundation, Asylum St., to M. A. Connor, 668 Broadview St. Archts. est. $200,000.

Conn., Hartford—Orphanage—Hartford Orphan Asylum, 171 Putnam St., to Porteus Walker Co., 13 Forrest St., 2 story, 60 x 82 ft. administration, $150,000; 2 story, 28 x 70 ft. cottage, $60,000; 2 story, 31 x 86 ft. superintent building, $70,000; 2 story, 30 x 74 ft laundry, $60,000; two 2 story, 45 x 70 ft. homes, $150,000; 2 story, 30 x 100 ft. infants building, $150,000; 2 story, 35 x 45 ft. infirmary, $40,000, all foregoing brick, plain foundations, Albany Ave. Noted Feb. 8.

N. Y., Brooklyn — Apartment — Fifty-Ninth St. Building Corp., c/o W. M. Adelsohn, archt. and engr., 1778 Pitkin Ave., will build 5 story, 100 x 100 ft., brick, steel and stone, plain foundation, Prospect Pl., by day labor. $200,000.

N. Y., Huntington—School—Bd. Educ., 68 x 150 ft., Woodbury Ave., to L. M. Nackerman Co., Inc., 103 Park Ave., New York, $169,890. Noted May 10.

N. Y., New York—Apartment—De Voe Park Realty Co., c/o W. J. Hohauser, archt. and engr., 16 West 39th St., will

Buildings (Continued)

build 6 story, 100 x 200 ft., brick, steel and stone, plain foundation, East 88th St., by day labor. $400,000.

N. Y., New York—School—W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, annex to P. S. 72, East 104th and East 105th Sts., here, to M. F. Kelley Co., 51 East 42nd St., $668,-945. Noted May 31.

N. Y., Lakewood—High School—Bd. Educ. general contract 2 story, 60 x 168 ft., brick, to C. A. Haas, 10th and Monroe Sts., Jamestown, $115,745. Noted May 10.

Pa., Latrobe — Office — See "Industrial Works."

Ky., Bowling Green—Hotel—Morehead Hotel, 4 story, 120 room, to Forbes Mfg. Co., Hopkinsville. Archts. est. $300,000.

Ky., Owensboro—Hotel—Hicks Hotel Co., Chicago, 4 story, 100 x 150 ft., 4th and Frederica Sts., here, to Hoffman Constr. Co., Furniture Bldg., Evansville, Ind. Est. cost, $300,000.

O., Cincinnati—School—Bd. Educ., excavation, rein.-con. and carpentry work for 2 story, 136 x 336 ft., brick, Springfield Ave., to D. Meinken & Son, 2126 Western Ave., $178,864; brickwork, hollow tile partitions, furring and cut stone work, to E. A. Curry, 1855 Kinney W. H., $125,529. Noted Apr. 26.

O., Cleveland—Infirmary—R. S. Harsh, archt., Ohio-Hartman Bldg., Columbus, 2 story and basement, 180 x 180 ft., brick, steel and concrete, Warner Rd., here, to Schirmer O'Hara Co., 2031 Euclid Ave., for Dept. Pub. Welfare, 9th and Oak Sts., Columbus. Archts. est. $225,000. Noted May 17.

O., Cleveland Heights (Warrensville, P. O.)—Apartment, etc.—L. Duchon, 3045 Essex Rd., Cleveland, 3 story and basement, 66 x 126 ft. apartment with 22 x 66 ft. wing, also 52 x 72 ft. garage, brick and timber, Hampshire and Overlook Rds., here, to I. and B. Dolinsky Constr. Co., 6317 Kinsman Rd., Cleveland.

Ill., Chicago—Apartment—J. L. Lelivelt, 38 South Dearborn St., 3 story, 100 x 125 ft., fireproof, 732-42 South Keeler Ave., to S. Moreno, 100 West Polk St. Archts. est. $150,000.

Ill., Chicago—Apartment—Miller & Melnick, 153 West Kinzie St., 3 story and basement, 103 x 192 ft., fireproof, 2617 Blaine Pl., to Melnick Constr. Co., 153 West Kinzie St. Archts. est. $200,000.

Ill., Chicago — Club — Racquet Club, c/o Rebori, Wentworth & Dewey, archts., 332 South Michigan Ave., 4 story, 85 x 156 ft., fireproof, Dearborn and Schiller Sts., to Dahl-Stedman, 11 South La Salle St. Archts. est. $500,000. Noted May 24.

Ill., Chicago—Recreation—C. C. Marzano, 3323 West 63rd St., 2 story, 100 x 125 ft., fireproof, 63rd St. near Homan St., by day labor. $150,000. A. V. Capraro, 64 West Randolph St., archt. Noted May 3.

Ill., Chicago—Science—De Paul University, 2300 Osgood St., 4 story, 37 x 119 ft., fireproof, 2316-26 Osgood St., to Anderson & Winblad, 6235 South Michigan Ave. Archts. est. $250,000.

Ill., Chicago—Store, Hall and Office—I. M. Mills, c/o D. S. Klafter, archt., 64 West Randolph St., 3 story, 150 x 207 ft., fireproof, Milwaukee and Crawford Aves., to L. Balkin, 538 South Clark St. Archts. est. $300,000. Noted Mar. 1.

Wis., Racine—Bank and Office—Racine City Bank, 1345 Washington Ave., 2 story and basement, 40 x 100 ft., brick, stone and concrete, plain foundation, to Nelson & Co., 408 Janes Blk. Archts. est. $150,000.

Wis., Milwaukee — Store and Office — Liberty Realty Co., c/o Herbst & Kuenzli, archt., 114 Grand Ave., 2 story and basement, 116 x 120 ft., brick, tile and concrete, plain foundation, Mitchell St., to C. A. Kleppe, 1026 1st St. $175,000.

Wis., Wausau—Clubhouse—Wausau Club, 309 McClellan St., will build 2 story and basement, 60 x 120 ft., brick and concrete addition, plain foundation, by day labor. $150,000. Oppenhamer & Obel, Spencer Bldg., archts.

Minn., Minneapolis—Electrical—State Bd. Control, 3 story and basement, rein.-con., brick and tile, State U, general contract to Carlsted Bros., 542 Builders Exch., $258,643. Noted May 24.

Kan., Wichita—Business—Western Union Telegraph Co., 114 East 1st St., 3 story, 60 x 140 ft., rein.-con., brick and steel plain foundation, Topeka and 1st Sts., to Collins Bros., 1600-02 Grand Ave., Kansas City, Mo. Archts. est. $150,000.

Kan., Wichita—Home—Kansas Masonic Home Assn., 400 South Seneca St., 2 story additions, incl. 25 x 63 ft. boys building, 33 x 64 ft. girls' building, 33 x 74 ft. men's building and dairy barn, all hollow tile and stucco, plain foundations, to Eberhardt Constr. Co., 2205 East Douglas St., Wichita, $77,400. Archts. est. $150,000.

Mo., St. Louis—Hotel—Stuyvesant R. & B. Co., 1012 International Life Bldg., will build 10 story, 39 x 177 ft. and 38 x 127 ft., rein.-con., brick and steel, concrete pile foundation, Spring Ave. and Lindell Blvd., by day labor. $1,000,000. P. J. Bradshaw, International Life Bldg., archt.

Tex., Houston—Hospital—Baptist Sanitarium 8 story, addition, to Henger & Chambers, Slaughter Bldg., Dallas, $500,000. Archts. est. $325,000.

Calif., Alhambra—High School—Alhambra High School Dist, auditorium for high school, to Larsen-Siegrist Co., Loew State Bldg., Los Angeles, $178,822. Bid does not include art stone work, sheet metal, plumbing, steel partitions, etc. Noted May 24.

Calif., Los Angeles—Hotel—R. Coombs, designer, 4853 Melrose Ave., will build 4 story and basement, brick, Flower and 2nd Sts., for K. Lundeen, Van Nuys Bldg., by day labor. $150,000 or more.

Calif., Los Angeles—Hotel and Apartment—Macdonald & Kahn, and A. C. Blumenthal, Loew State Bldg., 8 story and basement, rein.-con., 7th St. near Valencia St., to Macdonald & Kahn, 603 Loew State Bldg., $300,000.

Calif., Los Angeles — Loft and Store — United States Rubber Co., 932 South Los Angeles St., 3 story and basement, rein.-con., 8th St. near San Pedro St., to Weymouth-Crowell Co., 2026 West 9th St., approximately $150,000.

Calif., Los Angeles—Restaurant and Hall—E. N. Klarquist, 1642 Las Palmas St., will build 4 story and basement, rein.-con., restaurant and banquet halls, for Paulais Co., 741 South Bway., by day labor. $150,000.

Calif., Los Angeles—Theatre—Erlanger Estate, c/o Schultze & Weaver, archts., Pacific Mutual Bldg., rein.-con. and brick, Grand Ave. and 5th St., to Scofield Eng. Co., Pacific Finance Bldg., $500,000.

Calif., Pasadena — Church and Sunday School—First Methodist Church, remodeling church and Sunday school addition, concrete, to W. Taylor & Son, 966 Elizabeth St., $170,000.

Calif., Pasadena — School — Pasadena School Dist., group of buildings, brick, general contract to C. G. Wopschall, 380 South Raymond Ave., $146,760. Noted May 24.

Calif., San Francisco—Apartment—The Heights, Inc., c/o R. Whitney, Monadnock Bldg., 10 story and basement, rein.-con., Bway. near Octavia St., structural steel to Schrader Iron Wks., 1247 Harrison St., $33,129; concrete and carpentry work to Jacks & Irvine, 5426 California St., $38,660 and $31,025 respectively. Noted Apr. 12.

Calif., San Francisco—Hotel—St. Francis Hotel Co., Geary and Powell Sts., 5 story, annex, fireproof, Post St. near Powell St., to Lindgren Co., Monadnock Bldg., approximately $1,000,000. Noted May 17.

Calif., San Francisco — Loft — H. B. Blatchly, 53 3rd St., 6 or 7 story addition, brick or concrete, 2nd St., to M. Marcussen, Amer. Natl. Bank Bldg., $200,000.

Calif., San Francisco—School—Roman Catholic Archbishop of San Francisco, 1100 Franklin St., 4 story and basement, rein.-con., Pine St., to J. L. McLaughlin, 251 Kearny St., $150,000.

Calif., Taft — High School — Taft Union High School Dist., 3 rein.-con. buildings, general contract to Olchester, Potter & Kerr, Selma, $169,300. Noted May 31.

Ont., Oshawa—School—Bd. Educ., Dominion Bank Chambers, 2 story and basement, 10 rooms, brick and steel, plain foundation, Center St., general contract to W. J. Trick, 25 Albert St., $139,733. Archts. est. $175,000. Noted May 3.

Ont., St. Thomas—Hospital—Darrach & Findlay, archts., 430 Talbot St., 3 story and basement, brick, concrete and steel, plain foundation, for city, general contract to Ponsford Constr. Co., 605 Talbot St., $121,-791. Archts. est. $150,000. Noted May 3.

Federal Government Work

PROPOSED WORK

Fla., Pensacola—Pump House, etc.—Spec. 4793—Bureau Yards & Docks, Navy Dept., Wash., D. C., rejected bids pump house, timber trestle, equipment and piping at Naval Air Station, here. Noted May 10.

Panama—Towers—Spec. 4794—Bureau Yards & Docks, Navy Dept., Wash., D. C., rejected bids dismantling towers at St. Petersburg, Fla., and erecting same at La Palma, C. Z., here. Noted May 31.

BIDS DESIRED

N. Y., Niagara Falls—Extension—June 25, by Treas. Dept., Wash., D. C., extension to U. S. Post Office, here. J. A. Wetmore, acting superv. archt.

Pa., Middletown—Hangars—June 11, at office Constructing Quartermaster, Middletown, two airplane hangars at Air Intermediate Depot. For further information apply to Constructing Quartermaster, Edgewood Arsenal, Md. Noted May 24.

Md., Baltimore — Lumber — June 20 by Superintendent of Lighthouses, Baltimore, 66,112 ft. yellow pine lumber.

D. C., Wash.—Lumber—June 19, by Bureau Supplies & Accounts, Navy Dept., 970,-000 ft. Douglas fir.

Va., Yorktown—Power Plant Equipment, etc.—Spec. 4826—June 20, by Bureau Yards & Docks, Navy Dept., Wash., D. C., power plant equipment at Naval Marine Dept., here. Noted Apr. 19.

Fla., Pensacola—Extension—Spec. 4837—June 22, by Bureau Yards & Docks, Navy Dept., Wash., D. C., bulkhead extension, here. Noted Apr. 19.

Ala., Anniston—Extension—June 25, by Treas. Dept., Wash., D. C., extension to building and driveway at U. S. Post Office and Court House, here. J. A. Wetmore, acting superv. archt.; adv. this issue.

Tenn., Chattanooga—Lumber—June 15, at office U. S. Engineer, furnishing 425,000 ft. yellow pine for Widows Bar, Dam 420,000 ft. yellow pine for Widows Bar Dam on Tennessee River, 413,550 ft. yellow pine timber.

Ill., Chicago—Sewer Extension—Spec. 4851—June 27, by Bureau Yards & Docks, Navy Dept., Wash., D. C., Great Lakes Sewer outfall extension, here. Noted May 31.

Tex., El Paso—Addition and Alterations—June 18 at office Constructing Quartermaster, William Beaumont General Hospital, here, addition of Physio-Therapy Wing and alterations to Bldg. 5-B; adv. this issue.

Oregon—Road—U. S. Bureau Pub. Rds., Post Office Bldg., Portland, completed surveys for Cascade Mt. Highway from Lowell, Lane Co., to Crescent, Klamath Co., 89.2 mi., maximum grade 5 per cent, maximum curvature 28 degrees. C. R. Short, locating engr.

H. T., Pearl Harbor—Storage Facilities—Spec. 4760—July 18, by Bureau Yards & Docks, Navy Dept., Wash., D. C., additional mine storage facilities at Naval Operating Base, here. Noted Dec. 7.

BIDS RECEIVED

Mass., Rutland—Hospital—Quartermaster General, 2306 Munitions Bldg., Wash., D. C., 10 new buildings, rein.-con. and tile, central heating plant with distribution main and necessary extension to water, sewer and light lines, grading and roads, etc., at U. S. Veterans' Hospital, here, (1) work complete, from J. Miles & Sons Co., 393 Main St., Worcester, (1) $490,637 (2) $15,549 (3) $21,408 (4) $78,257 (5) $23,757 (6) $74,493 (7) $60,174 (8) $17,954 (9) deduct $116,200 (10) add $155 (11) add $2,300 (12) add $1,314 (13) add $2,650 (14) deduct $4,500 (15) add $19,537 (16) deduct $3,425 (17) deduct $17,211 (18) deduct $1,475 (19) unit prices (1) $0.20 per sq.yd. (2) $1 per sq.yd. (3) $3 (4) $1-$2.50 (5) $5 (6) $3.60 (7) $19 (8) $19 (9) $110 (10) $100 (11) $60 (12) $0.50 (13) $0.25 (410 days); M. Seretto, 3 Tremont Row, Boston, (1) $575,000 (2) $18,700 (3) $20,000 (4) $76,000 (5) $24,000 (6) $80,000 (7) $56,000 (8) $16,000 (9) $96,000 (10) $2,500 (11) $2,500 (12) $2,400 (13) $9,500 (14) deduct $4,500 (15) add $37,500 (16) deduct $3,500 (17) deduct $21,000 (18) $200 (19) (1) $3.50 (2) $2 (3) $4.40 (4) $2.75 (5) $4.50 (6) $3.15 (7) $24 (8) $28 (9) $120 (10) $125 (11) $60 (12) $50 (13) $0.30. (380 days). Noted May 31.

Va., Leesburg—Post Office—Treas. Dept., Wash., D. C., construction U. S. Post Office, here, from A. Blair, 11 South Lawrence St., Montgomery, Ala., $33,589. Noted May 10.

Wis., Green Bay—Dredging—U. S. Engineer, Milwaukee, dredging approximately 450,000 cu.yd. here, from Greiling Bros., 110 East Walnut St., $0.257. Noted May 3.

Oregon—Roads—From K. L. Hall, Eugene, grading 5.4 mi. Alsea Sect. 7, National Forest Rd., Lane Co., 3,500 cu.yd. rock excav. $1.40, 29,200 cu.yd. common excav. $0.50, etc., totals, using concrete culverts $39,619 using log culverts, $32,708, widening 1.3 mi. Alsea Sect. 10, National Forest Rd., Lane Co., 11,000 cu.yd. excav. $0.62, etc., total $9,021.

CONTRACTS AWARDED

N. H., Portsmouth—Remodeling—Spec. 4795—Bureau Yards & Docks, Navy Dept., Wash., D. C., remodeling marine barracks, Navy Yards, here, to W. F. Martens, 112 Cutler Bldg., Rochester, N. Y., $62,882 (240 days). Noted May 31.

N. Y., New York—Dredging—U. S. Engineer, 2nd Dist., Army Bldg., dredging in New York and New Jersey Channels, Area 1 to Great Lakes Dredge Co., 17 State St., $229,425; Area 4, to Morris & Cummings Dredging Co., 17 State St., $226,152; Areas 5 and 6 to Taylor Dredging Co., foot of Communipaw Ave., Jersey City, N. J., $330,534.

Federal Government Work (Continued)

N. Y., Plattsburg — Monument — U. S. Engineer, Army Bldg., 39 Whitehall St., New York, MacDonough Memorial, here, to J. Young, Jr., 103 Park Ave., New York City, $97,570. Noted May 10.

Pa., Phila.—Engine Testing Building—Spec. 4835—Bureau Rards & Docks, Navy Dept., Wash., D. C., engine testing building at aircraft factory, here, to Pearce Bros., Inc., 220 West 42nd St., New York City, $17,520 (120 days). Noted May 24.

Del., Wilmington—Dredging—U. S. Engineer, dredging Tuckerton Creek, N. J., to Delaware Dredging Co., 139 South 3rd St., Phila., Pa., $9,180. Noted May 24.

La., New Orleans—Earthwork—U. S. Engineer, 4th Dist., Custom House, 1,907,100 cu.yd. earthwork in Atchafalaya and surrounding districts: to D. B. Hearin & Son, New Reymond Bldg., Baton Rouge, St. Cloud Levee, $18,810; to O. O. Ogden, Roumain Bldg., Baton Rouge, Nina Levee, $77,400; to Lafourche Basin Levee Board, Donaldsville, Live Oak Levee, $20,700; to H. A. Schoenberger, Triumph, Ballay Levee, $4,025, Lee Rice Levee, $4,370, Crombie Levee, $2,208 and Bicks Levee $3,910; to Lower Coast Constr. Co., Ltd., 122 Chartres St., Bowden Levee, $18,720. Noted May 10.

Ky., Louisville—Lumber—U. S. Engineer, P. O. Box 72, furnishing 100 pieces 3 and 4 x 10 in. x 30 ft. rough oak, 125 pieces 12 x 12 in. x 12 ft. oak, 120 pieces 2 and 6 x 12 in. x 14 ft. oak and 35,000 ft. long leaf yellow pine, to Marsh & Truman Lumber Co., 332 South Michigan Ave., Chicago, $3,368, and Hayden & Wescott Lumber Co., 80 East Jackson Blvd., Chicago, $1,606. Noted May 17.

Ill., Chicago—Cement—U. S. Engineer, 537 South Dearborn St., 6,900 bbl. cement, to Universal Portland Cement Co., 210 South La Salle St., $17,250.

Ill., Chicago—Dredging, etc.—U. S. Engineer, 537 South Dearborn St., dredging and pier removal in Calumet Harbor and River, Illinois and Indiana, to FitzSimmons & Connell Dredge & Dock Co., 10 South La Salle St., $70,615. Noted Apr. 26.

Ill., Chicago—Stone—U. S. Engineer, 537 South Dearborn St., crushed stone or gravel in Calumet Harbor, to L. D. Smith Stone Co., Sturgeon Bay, Wis., $9,660.

Mo., St. Louis—Earthwork—Mississippi River Comn., 1311 International Life Bldg., 645,000 cu.yd. earthwork in Iowa River-Flint Creek Levee Dist. 16, Iowa, and 300,000 cu.yd. earthwork in Louisa Co. Levee Dist. 15, Iowa, to La Crosse Dredging Co., Plymouth Bldg., Minneapolis, Minn., $0.28 per cu.yd., total $180,000 and $0.1875 per cu.yd., total $56,250, respectively. Noted May 31.

Calif., San Diego—Roads—Spec. 4766—Bureau Yards & Docks, Navy Dept., Wash., D. C., walks, curbs and grading, at Naval Operating Base, here, to De Waard & Cobham, 207 Granger Bldg., $7,148 (40 days) Noted May 18.

Miscellaneous

PROPOSED WORK

Golf Course—Bristol, Conn.—Chippeny Country Club, Chippens Hill, plans golf course. $50,000. C. W. Buell, 175 Main St., engr.

Tower—Farmington, Conn.—Landowners Protective Assn. plans steel tower. $25,000. C. M. Saville, 1029 Main St., Hartford, engr.

Athletic Field—West Hartford (Hartford P. O.) Conn.—Amer. School for Deaf, North Main St. plans athletic field, etc. $75,000. H. A. Perkins, pres. Engineer not selected.

Conduit System—Erie, Pa.—Plans conduit system in East 10th, Upper Peach, West 31st, South Cherry, Parade, Liberty, and East 21st Sts. $70,8?b. F. G. Lynch, city engr.

Stadium—Erie, Pa.—Osborn Eng. Co., engrs., 2848 Prospect Ave., S. E., Cleveland, O., soon receives bids for stadium in connection with Academy High School, here, seating capacity 19,000, for Bd. Educ., Chamber of Commerce and Civic Organizations. Noted Mar. 22.

Steam Heating Plant, etc.—Madison, Wis.—New York Floral Co., 30 North Carroll St., plans to install steam heating plant, conveyors, hoist, etc. in proposed greenhouses. $25,000. F. Choles, mgr. Engineer not selected.

Levee, etc.—Prairie du Chien, Wis.—Crawford Co. Levee and D. D., Court House, had plans prepared 1,498,000 cu.yd. river levee work, 1,265,000 cu.yd. bluff diversion, 278,200 cu.yd. drainage ditches, 22 mi. transmission lines, pumping plant 80,000 g.p.m. capacity, 250 hp. pumps against 18 ft. head. $686,000. Central States Eng., Muscatine, Ia., engrs. Noted Nov. 16 under "Excavation, Drainage, Irrigation."

Townsite—Corte Madera, Calif.—Commercial Center Realty Co., 916 Kearny St., San Francisco, had plans prepared by M. J. Lyon, 916 Kearny St., San Francisco, Chevy chase between here and Larkspur, paving streets, constructing club house, auto service station, stores, cottage, gas, sewer and water systems. To exceed $500,000.

Park Improvements—Los Angeles, Calif.—City plans to vote on $1,500,000 bonds to purchase lands and improve same for park purposes.

Turntable — San Bernardino, Calif. — Atchison, Topeka & Santa Fe Ry. Co., Kerchoff Bldg., Los Angeles, plans turntable. $100,000. R. B. Ball, Kerchoff Bldg., Los Angeles, ch. engr.

Grain Elevator—Sarnia, Ont.—Hunt Bros. Ltd., c/o C. R. Hunt, Nightingale Ave., London, plans grain elevator, steel and concrete, on waterfront, here. $1,500,000. Prices wanted on materials and equipment.

Road Oil — Tara, Ont. — Town Council plans to purchase 6,000 gal. road oil, 50% asphalt. W. J. Taylor, clk.

Foundations—Trent River, Ont.—Hydro-Electric Power Comn. of Ontario, 190 University Ave., Toronto, plans foundation for power house, and tailrace excav., incl. 90,000 cu.yd. rock, 2,700 cu.yd. concrete, furnishing and setting reinforcing steel and rock fills, at Dam 8, here. $400,000. W. W. Pope, secy. Noted May 24.

BIDS DESIRED

Paving Blocks—New York, N. Y.—June 11, by Bd. Purch., Municipal Bldg., furnishing and delivering creosoted wood paving blocks.

Tunnel—New York, N. Y.—June 26, by New York State Bridge & Tunnel Comn., and New Jersey Interstate Bridge & Tunnel Comn., Hall of Records, portion of 2 tunnels as approaches to river section of vehicular tunnel under Hudson River, on Island of Manhattan, Contr. 5. T. Boettger, chn.; adv. this issue.

Sea Wall—Vicksburg, Miss.—July 2, at City Hall, concrete wall along river front. Miller-Butterworth Co., 624 Southern Trust Bldg., Little Rock, Ark., engrs.; adv. this issue.

Dock Front, etc. — Conneaut Harbor (Conneaut, P. O.), **O.** — June 25, by Bessemer & Lake Erie R.R., at office H. T. Porter, ch. engr., Greenville, Pa., rein.-con. dock front and dredging channel between present dock front and new dock front, etc., here; adv. this issue.

Tunnel—Orient, O.—June 16, by Dept. of Pub. Welfare, 9th and Oak Sts., Columbus, ¾ mi. concrete tunnel, here. $160,000. R. S. Harsh, Ohio-Hartman Bldg., Columbus, engr.

Stadium — Bloomington, Ind. — Osborn Eng. Co., 2848 Prospect Ave. S. E., Cleveland, O., taking bids concrete stadium, 20,000 seating capacity, for Indiana University, here. $250,000. Noted May 31.

Street Lighting System—Shorewood (Milwaukee P. O.), **Wis.**—June 11, by T. B. Olsen, village clk. materials and installation street lighting system. $80,000. A. J. Sweet, 531 Grand Ave., engr. Noted May 17.

Gas Mains—Duluth, Minn.—See "Waterworks."

Paving Materials, etc.—St. Paul, Minn.—June 11, by H. W. Austin, city purch. agt., 70,000 sewer brick for Water Dept.; reinforcing steel for Wabasha Ave. Bridge; materials for paving parts of Berkley, Stanford, Wellesley and Jefferson Aves. as follows, 1,816 bbl. cement, 1,277 cu.yd. crushed rock, 766 cu.yd. concrete sand, 132 cu.yd. crushed rock for curb, 138 tons asphalt, 578 cu.yd. fine and 173 cu.yd. coarse asphalt sand, 138 tons limestone dust, 370 cu.yd. binder stone, 1,788 sq.ft. tile sidewalk, 1,200 sewer brick, 14,025 lb. ½ in. reinforcing. G. M. Shepard, city engr.

Structural Steel—Rapid City, S. D.—June 13, by A. C. Hunt, secy. South Dakota State Cement Comn., structural steel frame work for 79 x 408 ft. raw storage building. J. C. Buckbee Co., First Natl. Bank Bldg., Chicago, engrs.

Breakwater — Rockport, Tex.—June 16, rubble mound or timber bulkhead breakwater. $50,000. F. M. Percival, city engr.; adv. this issue.

BIDS RECEIVED

Heating and Ventilating Apparatus, etc.—Brooklyn, N. Y.—Bd. Educ., 500 Park Ave., New York City. May 28, heating, ventilating and temperature regulation apparatus in P. S. 16, Wilson St., here, from Federal Heating Co., 300 Madison Ave., New York. $26,700. Noted May 24.

Binder Stone — New York, N. Y. — J. Miller, pres. Manhattan Boro. Municipal Bldg., June 1, 8,000 cu.yd. binder stone, from Calvin Tompkins Co., 30 Church St., $15,200. Noted May 24.

Freight Shed—New York, N. Y.—J. H. Delaney, comr. Docks, Pier "A," foot of Battery Pl., May 31, new freight shed on pier at foot of Roosevelt St., East River, Brooklyn Bridge Impvt., Manhattan Boro., Contr. 1809, from McHarg Barton Co., 132s Bway., $82,000. Noted May 24.

Miscellaneous Construction, etc.—New York, N. Y.—Transit Comn., 49 Lafayette St., miscellaneous construction and station finish for Rapid Transit Railroad in Boros of Manhattan, Bronx, Brooklyn and Queens, Agreement "BV," from D. C. Serber, 451 West 16th St., $15,020. Noted May 24.

Wharf and Dock—Detroit, Mich.—Pub. Lighting Comn., Atwater St., constructing wharf and dock, rein.-con., at site of proposed lighting plant, from Greiling Bros., 100 Blk. E, Walnut St., Green Bay, Wis., $417,400.

CONTRACTS AWARDED

Park Improvements—Boston, Mass.—Park Dept. will construct bleachers, baseball diamonds, bath houses, etc., in Wood Island Park, East Boston, by day labor. $100,000. A. A. Shurtleff, 89 State St., landscape archt. Bids soon on sand, gravel, lumber, cement, etc.

Grand Stand, etc. — Hartford, Conn. — Connecticut Fair Assn., c/o G. A. Long, pres., 32 Loraine St., combined grandstand and hall, steel and concrete, to Porteus-Walker Co., 13 Forrest St. Archts. est. $60,000.

Grandstand, etc. — South Manchester, Conn., — Cheney Bros., grandstand and bleachers, to Manchester Constr. Co., 953 Main St. Archts. est. $30,000. Noted May 24.

Gas Holder—Geneva, N. Y.—Empire Gas & Electric Co., 103 Castle St., 500,000 cu.ft. gas holder, to Stacey Bros. Gas Constr. Co., 5535 Carthage Pike, Elmwood, Cincinnati. $58,000. Noted May 10.

Subway — New York, N. Y. — Transit Comn., 49 Lafayette St., Sect. 2, Route 45, part of Bway.-4th Ave. Rapid Transit R.R., to Patrick McGovern, Inc., 50 East 42nd St., $5,976,086. Noted May 31.

Coaling Station—East Thomas (Birmingham, P. O.), **Ala.**—St. Louis and San Francisco R.R. Co., Frisco Bldg., St. Louis, Mo., automatic 300 ton rein.-con. coaling station, here, to Howlett Constr. Co., 1605 5th Ave., Moline, Ill., $30,000.

Dock—Superior, Wis.—Great Northern Ry., Railway Bldg., St. Paul, Minn., rebuilding ore dock No. 2, here, to Pepard & Fulton, 217 Bd. Trade Bldg. $1,000,000. Noted Mar. 15.

Wharves, etc. — Beaumont, Tex. — To Houston Constr. Co., 3102 McKinney Ave., Houston, 75,000 cu.yd. dredging and fill, $16,500, 4,500 sq.yd. porous backing $2,700, 45 cu.yd. Mass concrete $810, 1,400 lin.ft. wharf platform $119,000, 1,500 lin.ft. bulkhead $127,500, 300 tons stone rip rap $900, total $267,410. Noted May 24.

Retaining Wall, etc.—Astoria, Ore.—City building retaining walls, etc., (1) standard walls (2) stepdown walls, from J. Slotte & Co., 525 Exchange St., along Bond, 11th, 12th and 14th Sts., Dist. 1, 3,400 lin.ft. concrete retaining wall, 26,000 lin.ft. piling, 1,100 lin.ft. concrete tunnel, 3,000 lin.ft. 6-10 in. sewer, etc., (1) $99,209 (2) $97,04?. Commercial, 15th and 16th Sts., Dist. 2, 4,600 lin.ft. concrete retaining wall, 34,000 lin.ft. piling, 1,100 lin. ft. concrete tunnel, 4,800 lin.ft. 6-16 in. sewer, etc., (1) $130,356 (2) $123,491; Duane, 11th and 12th Sts., Dist. 3, 2,000 lin.ft. concrete retaining wall, 15,000 lin.ft. piling, 1,000 lin.ft. concrete tunnel, 2,500 lin.ft. 6-12 in. sewer, etc., (1) $65,427 (2) $62,262. Former bids rejected.

Steel Penstocks and Accessories—San Francisco, Calif.—City and San Francisco Co., steel penstocks and accessories for Moccasin Creek Power Plant, Hetch Hetchy Project, Sect. 1, under Prop. A, for riveted steel pipe to Western Pipe & Steel Co., 444 Market St., $213,017; Sect. 2, lower portion, Prop. G, welded steel pipe to M. W. Kellogg, 117 Westside Ave., Jersey City, N. J., $1,016,525. Noted Apr. 19.

Transmission Line—Paisley, Ont.—Hydro Electric Power Comn., of Ontario, 190 University Ave., Toronto, will build 15 mi. transmission line from Paisley to Chesley, by day labor. $50,000. F. A. Gaby, ch. engr.

CONSTRUCTION NEWS

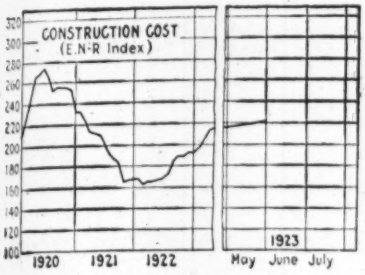
The Construction Barometer

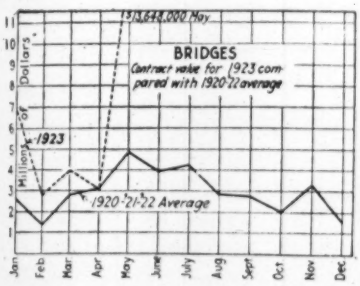
Few Price Changes—Drop in Industrial Building—Bridges Heavy

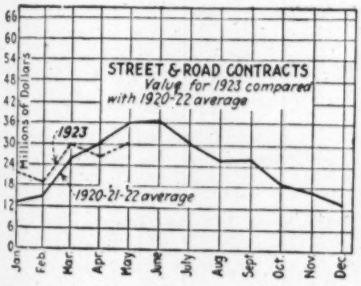
WITH the Cost Index at 220.7, the contract rate has fallen from $49,750,000 per week in April to $43,742,000 in May. The total for May, as reported in the five issues of *Engineering News-Record*, is $218,712,000, against $198,665,000 in the four issues of April. The most marked drop is in industrial building, while the principal rise was in bridges, as shown by the chart.

Prices throughout the country have been changed very little since the middle of May. Labor increases, however, have raised general cost nearly 4 per cent since then.

Number of large jobs out for bids in the last eight weeks (Apr. 19 to June 7) averaged 260; this week's number is 237. Next week the contract volume for the various sections of the country will be shown.







E. N.-R. Statistics

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ending	Public Work	Private Work	Total Contracts
May 24	$15,598,000	$18,816,000	$34,414,000
May 31	16,126,000	13,565,000	29,691,000
June 7	25,144,000	18,704,000	43,848,000
3 weeks	$56,868,000	$51,085,000	$107,953,000

LARGE BUILDING CONTRACTS—NUMBER AND VALUE

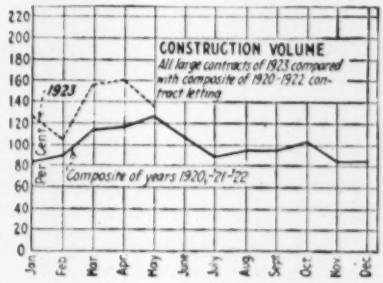
Week Ending	Public No.	Public Work	Private No.	Private Work
May 24	10	$2,509,000	35	12,481,000
May 31	11	2,555,000	33	8,528,000
June 7	13	2,558,000	37	11,303,000
3 weeks	34	$7,622,000	105	$32,312,000

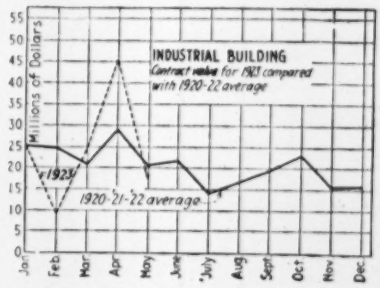
NUMBER OF LARGE JOBS NOW OUT FOR BIDS

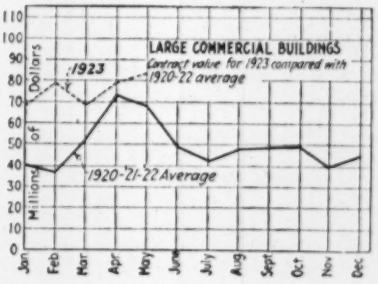
Week Ending	Private	Public All	Public Streets and Roads	Public Waterworks and Sewers	All Buildings
May 24	32	230	90	44	48
May 31	25	226	94	38	36
June 7	35	202	75	29	46

BASE PRICES UNCHANGED IN TWO WEEKS

	Quoted on June 14, at	Price Was	On
Structurals, Pittsburgh, 100 lb.	$2.50 @2.60	$2.50 @2.65	May 17
Cement, Chi., net bbl.	2.20	2.05	Feb. 1
Pine, N. Y., M.ft.	60.00	58.00	Apr. 5
Fir, San Fran., M.ft.	41.00	39.00	Apr. 5
Common labor, hr.	0.53	0.51	May 31







Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y., Albany—See "Miscellaneous."

N. Y., Ontario—Plans new water supply system. $85,000.

Ky., Danville—City plans new waterworks plant. $50,000. A. E. Harga, city engr. Architect not selected.

Wis., Fort Atkinson—Making plans brick, rein.-con. and steel pumping station, and rein.-con. reservoir, 60 ft. diameter, 15 ft. deep, etc., $25,000. J. R. and E. J. Law, First Central Bldg., Madison, archts., for pumping station. W. G. Kirchoffer, Dean Bldg., Madison, engr.

Wis., Genoa Junction — Making plans pumping station, rein.-con. storage reservoir, deep well and pump. $15,000. W. A. Pierce, 227 Clifford St., Madison, engr.

Idaho—Lewistown—Voted $380,000 bonds waterworks, incl. 6 m.g. filtration plant, new rein.-con. reservoir, mains, etc. Burns & McDonnell, 401 Interstate Bldg., Kansas City, Mo., engrs. Noted Apr. 19.

Mo., Burlington Junction — June 19, to vote on $39,000 bonds waterworks and sewer extensions. E. T. Archer & Co., 609 New England Bldg., Kansas City, engrs.

Mo., Cameron—June 22 to vote on $51,000 bonds waterworks. E. E. Harper, 3031 Park Ave., Kansas City, engr.

Mo., Chamois—See "Sewers."

Tex., Dallas—Koch & Fowler, engrs., Central State Bank, soon takes bids 300,000 ft. 2-6 in. pipe, 25,000 gal. tank and tower, on Bachman Creek at Cochran Chapel, for J. M. Stephenson, c/o Engineers.

Tex., Dallas—See "Streets and Roads."

Tex., Ft. Worth—Takes bids about June 26, new mains, etc., for Polytechnic Heights. $250,000. J. B. Hawley, Cotton Exch., consult. engr., D. L. Lewis, city engr.

Tex., Lufkin — City Comn. takes bids early in July concrete pump house and pipe lay out. $15,000. H. N. Roberts, 4227 Irving Pl., Dallas, engr.

Tex., Royse—Soon takes bids improving waterworks. $45,000. Mackintosh Co., 1st Natl. Bank Bldg., Oklahoma City, Okla., engrs.

Okla., Holdenville—Election June 20, to vote on $35,000 bonds new filtration plant and settling basins. C. Edge, city engr.

Okla., Okmulgee—City retained Burns & McDonnell, engrs., 402 Interstate Bldg., Kansas City, Mo., to make surveys and investigations for storage reservoir and dam on Deep Fork Creek, creating lake approximately 7 mi. long, covering 25,000 acres, etc. $2,000,000. Bond election in September.

Okla., Sayre—See "Sewers."

Neb., Crawford—Election June 18, to vote on $45,000 bonds for waterworks system and extensions. Engineer not selected.

Calif., Banning—Plans rebuilding portions of distributing system. $35,000.

Calif., Sacramento—State Reclamation Bd., Forum Bldg., takes bids in about 2 months drainage pumping plant, incl. centrifugal type pumps, with combined capacity of 120,000 gal. per minute with electric motors, priming equipment, pump house, etc., for Reclamation Dist. 1660. To exceed $90,000.

Calif., San Diego—City retained J. R. Freeman, engr., 815 Grosvenor Bldg., Providence, R. I., to investigate and make recommendations relative to construction of dam on San Diego River for municipal water impounding system. Noted Apr. 19.

Ont., Hamilton—Plans laying mains on Rose Ave., Dromore, Dalewood and Haddon Crescents, Whitton Rd., Benson, McKinstry

Waterworks (Continued)

and Cline Sts. $55,000. Prices wanted on all materials. W. L. McFaul, City Hall, engr.

Ont., Kingston—Pub. Utilities Comn. plans chlorination plant in waterworks station, probably liquid chlorine type. $25,000. H. S. Dick, City Hall, engr.

Ont., Lansing—North York Twp. plans laying 30,000 ft. c.i. mains as follows, 8 in. in Drury and Brooke Sts.; 10 in. in Donlands Ave., Yonge St. from Humberstone to Old Yonge Sts., Old Yonge and Donino Sts., and Yonge St. from Huberstone to Drury Sts.; 12 in. in Humberstone St. $114,732. James, Proctor & Redfern, 36 Toronto St., Toronto, engrs.

BIDS DESIRED

N. J., Pennington—June 25, 550 lin.ft. 2 in. w. i. and 3,250 lin.ft. 4-10 c. i. mains, water pumping station, etc. Remington & Vosbury, 601 Market St., Camden, engrs.

Pa., Du Bois—June 28, rein.-con. reservoir. J. C. Weaver, clk. Morris Knowles, Inc., 507 Westinghouse Bldg., Pittsburgh, engrs.; adv. this issue.

Md., Baltimore—June 20, by Bd. Awards, furnishing and delivering valves to Water Dept. $40,000. W. A. Megraw, City Hall, engr.

O., Cleveland—June 20, by Cuyahoga Co., 4,250 ft. 6 in. c.i. mains in Impvt. 29 of Co. Sewer Dist. 1. To exceed $25,000. R. F. MacDowell, Court House, engr.

O., Columbus—See "Streets and Roads."

Ill., Gridley — June 26, by Bd. Local Impvts., furnishing and laying c.i. mains, valves, etc. Taylor & Woltmann, Unity Bldg., Bloomington, engrs.; adv. this issue.

Minn., Clarkfield — June 22, by village, waterworks extension and improvements, 1,520 ft. 6 in. and 3,222 ft. 4 in. c.i. pipe, 10 hydrants, 4,000 lb. special castings, pump house and pumping equipment. $15,000. J. A. Rowat, Willmar, engr.

Minn., Emmons—June 29, waterworks system, incl. mains, well motor, pump house, tank and tower. $15,000. Toltz, King & Day, 1410 Pioneer Bldg., St. Paul, engrs.

Kan., Herrington—June 19, by Black & Veatch, engrs., 701 Mutual Bldg., Kansas City, Mo., waterworks improvements, for city. $250,000.

N. D., Bismarck — June 25, by M. H. Atkinson, city clk., pumping plant equipment, incl. 2 low service pumps, both with gasoline engine auxiliary and 3 high service pumps, one with gasoline engine auxiliary, ranging from 1,500 to 2,000 gal. capacity. Former bids rejected. T. R. Atkinson, city engr. L. P. Wolff, 1000 Guardian Life Bldg., St. Paul, Minn., engr. Noted May 10.

S. D., Esmond—June 30, 3,500 lin.ft. 4 in. c.i. pipe, 2,000 lb. c.i. fittings, one 100-140 gal. centrifugal pump or one 50 gal. triplex pump, one 20 x 40 ft. tile or brick pumphouse with underlying concrete reservoir, etc.; alternate bids on one 80 or 100 ft. steel tower and tank of 30,000 or 50,000 gal. capacity. $15,000. Druar & Milinowski, 500 Globe Bldg., St. Paul, Minn., engrs. Noted May 3.

Mo., Lathrop—June 20, by A. T. Archer & Co., engrs., 609 New England Bank Bldg., Kansas City, waterworks system for city. $60,000. Noted May 31.

Tex., Ft. Worth—July 3, by City Com., pump, 12 m.g. daily capacity, against 270 ft. head, electric motor or Diesel engine foundations, etc., at Holly Station on Fournier St. $80,000. D. L. Lewis, city engr. J. B. Hawley, Cotton Exch., consult. engr. Noted June 7.

Okla., Tulsa—Receiving bids two 300 hp. boilers, one 12 m.g. and one 10 m.g. turbine centrifugal pumps, 4 mi. 30 in. steel or c.i. force main pipe. Trammel & Holway, 508 Wright Bldg., engrs.

Colo., Lafayette — June 20, by Town Clerk improving waterworks system incl. 19,000 ft. Matthewson joint pipe and reconnecting 330 services.

Ont., New Toronto—June 16, by T. M. Staunton, chn. Pub. Utilities Comn., (1) supply of 1,100 ft. 30 in. steel pipe with specials and flexible joints for waterworks intake (2) laying waterworks intake. $42,000. A. H. R. Thomas, New Toronto, engr.

BIDS RECEIVED

N. Y., Buffalo—A. W. Kreinheder, comr. Pub. Wks., Municipal Bldg., June 4, forty 30 in., forty 24 in., eighty 20 in., forty 10 in. and two 36 in. flanged gate valves for filter plant, from Michigan Valve & Fdry. Co., 3631 Parkinson Ave., Detroit, Mich., $62,490. Noted May 24.

CONTRACTS AWARDED

Md., Baltimore—Bd. Awards, two 8 m.g. motor driven centrifugal pumps and electric equipment, for Druid Pumping Station, to DeLaval Steam Turbine Co., North Clinton St. and Pennsylvania R.R., Trenton, N. J., $23,125 (compensation method). Noted June 7.

N. C., Davidson—For 20,180 ft. water mains, 27,000 ft. sewer mains, one 100,000 gal. rein.-con. reservoir, one pumping station, 2 service and one fire pump, etc., to Boyd-Higgins & Goforth, Realty Bldg., Charlotte, $31,000. City to furnish all material except for reservoir and pump house. Noted May 24.

N. C., Winston—Salem-Buena Vista Co., water and sewer mains to connect with city water system, to Boyd-Higgins & Goforth, Realty Bldg., Charlotte, $15,000.

Ala., Talladega — Talladega Light & Water Co., complete water works system, incl. 4 mi. pipe line, etc., to Merkle Mchy. & Contg. Co., 1733 Walnut St., Kansas City, Mo., $166,000. Under present plan, city purchases c.i. pipe and contractor installs it. Noted May 10.

O., Cleveland — Coagulation basins at Baldwin filtration plant, Contr. 44, to Stange-Walsh Constr. Co., 2315 Fairmount Rd., $1,365,425. Noted June 7.

O., Cleveland—Cuyahoga Co. 21,300 ft. 12 in. c.i. mains in Impvt. 28 of Co. Sewer Dist., to D. Pfahl & Co., Berea Rd., $120,521. Noted June 7.

Ill., Highland Park—See "Sewers."

Ia., Oskaloosa—Waterworks Trustees, 2 m.g. rapid mechanical filtration plant, 1 story and basement, 40 x 80 ft., to Lanning Constr. Co., Ottumwa, $70,000. Noted May 24.

S. D., Faith—See "Sewers."

N. D., Bismarck — Distribution system material, to Amer. Cast Iron Pipe Co., 712 Plymouth Bldg., Minneapolis, Minn., $250,000, pipe laying to De Graff Wolff, 985 Scheffer St., St. Paul, Minn., $173,000; filtration plant and 2 rein.-con. reservoirs, each 750,000 gal., to Woodrick Constr. Co., 1141 Metropolitan Life Bldg., Minneapolis, Minn., $108,000 and $48,000 respectively, equipment, to McFarlan Eng. Co., Kansas City, Mo., $25,000. Noted May 10.

Neb., Platte Center — Waterworks improvements, incl. tank, tower, well, hydrants and pumps, to C. Robeck Co., 3818 Gold St., Omaha, $13,897; fittings, valves and c.i. pipe, to Crane Co., 10th and Harney Sts., Omaha, $3,276. Noted May 17.

Wash., Camas—Furnishing 8,600 ft. 8 in. and 600 ft. 8 in., 14 gage, 37,500 ft. 10 in., 2,700 ft. 4 in. and 1,400 ft. 6 in. pipe, 3,000 lb. c.i. fillings, to Coast Culvert & Flume Co., Columbia Blvd. and Derby St., Portland, Ore., $64,780.

Que., Montreal—City will lay 3,300 ft. 30 in. main in Sherbrook St. from Delormier to Wurtele Sts., by day labor. $92,000. Noted May 24.

Ont., Hanover—Waterworks system, incl. laying mains, concrete reservoir, pumps, motors, etc., general contract to Canadian Des Moines Steel Co., Inches Ave., Chatham; mechanical equipment, pumps, motors, etc., to W. Kennedy & Sons, Owen Sound. Engrs. est. $125,000. Noted Apr. 26.

Sewers

PROPOSED WORK

Mass., Medford—See "Streets and Roads."

N. C., Forest City—Making plans sewerage system. $75,000. Carolina Eng. Co., Wilmington, engrs.

O., Columbus—See "Streets and Roads."

O., Garfield Heights (Bedford, P. O.)—Taking bids 7,000 ft. 12-30 in. vitr. tile sewers. $115,000. R. Munz, Town Hall, engr.

O., New Philadelphia—Had plans prepared reconstructing sanitary sewers in Public Sq. on High St. also in Bway., South Side, 9th, 10th, Front, College and Hance Sts. $100,000. R. Arnold, City Hall, engr.

Mich., Springwells—Plans completed and soon takes bids 80,000 ft. of 8-24 in. crock lateral sewer together with trenching and backfilling. $400,000. A. Roth, 2348 Penobscot Bldg., Detroit, engr. Noted Apr. 19.

Mich., Springwells—Making plans trunk sewers in Chase Rd. and Mulkey Ave., brick or concrete. $660,000. A. Roth, 2348 Penobscot Bldg., Detroit, engr.

Ill., Edwardsville — Plans sewerage disposal plant. To exceed $25,000. Sheppard & Morgan, Edwardsville, engrs.

Wis., Fond du Lac—Making plans 5 mi. 18-30 in. cement or vitr. trunk sewer, addition to sewage disposal plant, sewage lift and approximately 10 mi. smaller sewers, etc. $40,000. W. G. Kirchoffer, Dixon Bldg., Madison, engr.

Neb., Burwell—Had plans prepared sanitary sewerage system. $40,000. Bruce & Grupe, 408 Finance Bldg., Omaha, engrs.

Neb., Elm Creek—Had plans prepared sanitary sewerage system, $35,000. Bruce & Grupe, 408 Finance Bldg., Omaha, engrs.

Neb., Plainview — Had plans prepared sanitary sewerage system, $135,000. Bruce & Grupe, 408 Finance Bldg., Omaha, engrs.

Neb., Syracuse—Had plans prepared sanitary sewerage system, $135,000. Bruce & Grupe, 408 Finance Bldg., Omaha, engrs.

Mo., Burlington Junction — See "Waterworks."

Mo., Cameron—June 22 to vote on $39,000 bonds sewers. E. E. Harper, 3031 Park Ave., Kansas City, engr.

Mo., Chamois — Voted $30,000 bonds sewers and waterworks. W. B. Rollins & Co., 521 Ry. Exch. Bldg., Kansas City, engrs.

Mo., Marshall—Making plans sanitary sewers in Sub-Sewer Dists. 13 and 14 of Sewer Dist. 2. $60,000. C. T. Hough, engr.

Mo., Richmond Heights (St. Louis P. O.)—Made plans 17,500 ft. 6-30 in. vitr. and 33-60 in. segmental block sewers, 12,000 cu. yd. excav. $65,000-$70,000. Pitzman Eng. & Survey Co., 615 Chestnut St., St. Louis, engrs.

Tex., Dallas—See "Streets and Roads."

Tex., Dallas—Making plans sewer mains and 12 new tanks in disposal plant in South Dallas. $500,000. E. A. Kingsley, city engr.

Tex., Dallas—J. M. Stephenson c/o Koch & Fowler, engrs., Central State Bank, making plans and soon takes bids 25,000 ft. 6-8 in. sanitary sewers, disposal plant and 2 mi. electric distribution system in Bachman Creek at Cockran Chapel.

Tex., Leakey—See "Streets and Roads."

Okla., Sand Springs—Takes bids about June 15, sanitary sewers. $75,000. Holway Eng. Co., 508 Wright Bldg., Tulsa, engrs.

Okla., Sayre — Having plans prepared sewer extensions, complete disposal plant, water mains and extensions, white way and power plant. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Oregon—State Hy. Comn., Salem, rejected bids 1,300 lin.ft. trestle and embankment, Lewis and Clark Bridge approaches, on Roosevelt Coast Highway, Clatsop Co. Work will be readvertised.

Calif., Los Angeles—Had plans prepared Sects. 11, 12, 13 and 14 of sewerage system to connect West Los Angeles Dist. with citys main outfall sewer, 18,014 lin.ft. 6 ft. 3 in., 1,808 lin.ft. 7 ft. 6 in., 6,204 lin.ft. 5 ft. 3 in. and 3,190 lin.ft. 4 ft. 9 in. Ferguson segmental block, brick-concrete or pre-cast concrete pipe with vitr. lining.

BIDS DESIRED

Me., Portland—June 25, at office E. M. Hunt, comr. Pub. Wks., City Hall, 1,107 ft. brick sewer in Forest Ave.; adv. this issue.

Mass., North Andover (Lawrence P. O.)—June 15, by R. H. Ellis, ch. engr. and supt. Pub. Wks., 5,000 ft. 18 in. trunk and 2,000 ft. 6, 8 and 10 in. lateral sewers. To exceed $50,000.

N. Y., Brooklyn—June 20, by E. Riegelmann, boro pres., Boro Hall, sewers in Church and Linden Aves., 48th, East 45th, 64th, 84th and East 31st Sts.

N. Y., Brooklyn—June 20, by E. Riegelmann, boro pres., Boro Hall, constructing Sect. 2C. modification and extension of Biological Plant, 26th Ward Disposal Works; reconstructing sewers in Fort Hamilton and Ocean Parkways, 60th and 47th Sts., 19th and Foster Aves.

N. Y., New York — See "Streets and Roads."

Pa., Erie—June 22, by City Council, intercepting sewerage system. $300,000. Former bids rejected. F. G. Lynch, city engr. Noted May 17.

D. C., Wash.—June 29, by Dist. Comrs., 509 Dist. Bldg., 4,414 lin.ft. sewer. Apply Room 427 Dist. Bldg.; adv. this issue.

Ga., Thomasville — See "Streets and Roads."

O., Idlewood (Cleveland Heights P. O.)—June 25, storm and sanitary sewers. F. A. Pease Eng. Co., Marshall Bldg., Cleveland, engrs.

Ia., North English—June 19, by W. C. Carson, clk., 9,500 ft. 8 in., 2,200 ft. 10 in., 2,800 ft. 12 in. sanitary sewers, 44 standard manholes, sewage disposal plant, etc. Howard R. Green Co., Bever Bldg., Cedar Rapids, engrs.

Sewers (Continued)

Minn., Emmons—June 29, sanitary sewer system, incl. mains, sewage treating plant, etc. $25,000. Toltz, King & Day, 1410 Pioneer Bldg., St. Paul, engrs.

Mo., Lathrop—June 20, sanitary sewers and disposal plant. $75,000. A. T. Archer & Co., 609 New England Bldg., Kansas City, engrs. Noted May 31.

Mo., St. Louis—July 3, by Bd. Pub. Serv., City Hall, South Gravois Ave. Sewer 4, 3,713 ft. 8-36 in. brick laid in cement or 2 ring segmental block and vitr. clay pipe, etc., $21,480; Harlem Creek Sewer 18, 10,015 ft. 8-42 in. segmental block pipe, 22,425 lb. wrought iron, 2,340 lb. cast iron, etc., $50,680; Harlem Creek Sewer 19, 1,525 ft. 8-18 in. vitr. clay pipe, etc., $19,000; Glaize Creek Sewer 23, 1,065 ft. 8-21 in. vitr. clay pipe, etc., $3,560; Rock Creek Sewer 8, 3,756 ft. 12-24 in. vitr. clay pipe, etc., $20,800; Arloe Sewer 2, 4,045 ft. 8-18 in. vitr. clay pipe, etc., $14,520; Grand Ave. Sewer 27, 1,150 ft. 8-21 in. vitr. clay pipe, etc., $5,000; Ohio Ave. Sewer 26, 305 ft. 8 and 12 in. vitr. clay pipe, etc., $1,350; Sublette Ave. Sewer, 6,383 ft. 12-42 in. brick laid in cement or 2 ring segmental block and vitr. clay pipe, etc., $21,320. W. W. Horner, city engr.

Ore., Silverton—June 25, for 8,700 lin.ft. sanitary sewer, 5,500 lin.ft. storm sewer and concrete septic tank. J. T. Hoblitt, city reedr.

Ont., Hamilton — June 20, by T. W. Jutten, mayor, 8,000 ft. vitr. tile sanitary sewers in Paisley, Newton, Barclay, Vansitmart Aves., also Tragina Ave. from Barton St. to Britannia Ave. and from Britannia Ave. to Main St. $50,000. W. L. McFaul, city engr.

BIDS RECEIVED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, June 6, sewers in (1) Ave. I (2) Ave. I (3) Banker St. (4) 72nd St. (5) Ave. J (6) 76th St. (7) Bay 28th St. (8) East 32nd St. (9) 12th Ave. (10) 48th St. (11) East 10th St., from S. Ambrosio, 1016 60th St., (1) 93% engrs. est. ($1,400) (2) 90% ($1,050); C. F. Vacharias, 645 40th St., (3) 105% ($700) (4) 95% ($400) (5) 94% ($400) (9)99% ($1,684) (10) 109% ($1,539) (11) 90% ($800); B. Peconi & Sons, (6) 87% ($11,265); Nazarro & Querriero, (7) 91% ($6,834); Tomassetti & Co., 1133 6th St., (8) 86.86% ($4,905). Noted May 31.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sewer in Foster Ave., from Seaside Contg. Co., 193 Beach 108th St., Rockaway Beach, Type A $21,856, Type B $21,265. Noted May 31.

N. J., Hightstown—Alterations and additions to sewage disposal plant, from P. A. Hennessey, Collingswood, $51,540. Noted May 17.

O., Cleveland—See "Streets and Roads."

Mo., Maplewood—(St. Louis, P. O.)—For 15,640 ft. 8-36 in. vitr. clay and 500 ft. 42 in. segmental block sewer in Manchester Sewer Dist. 2, 15,000 cu.yd. earth trenching, from Frazier-Davis Constr. Co., Arcade Bldg., St. Louis, $97,156. Noted May 24.

CONTRACTS AWARDED

Mass., Andover—For 1,250 lin.ft. 18 in. and 6,925 lin.ft. 24 in. c.i. force main, and 4,800 lin.ft. 30 in. tile sewer, one 24 in. c.i. outlet, from Shawsheen village to Merrimac River, to Cenedella & Co., Milford, $175,000. Engrs. est. $180,000. Noted Apr. 12.

Mass., Cambridge (Boston P. O.)—F. Callahan, 665 Cambridge St., 1 story, 77 x 150 ft. garage, brick, Baldwin St., to M. W. Ryan, 2 Central Sq., $78,000. Archts. est. $80,000.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, sewer in Vermont St., to Necaro Co., Inc., 97 Court St., 106.97% engrs. est. ($314,013); Utica Ave., to Nazzaro & Querriero, 87% ($10,405); Lefferts Ave., to Crooke & Dickinson, 93.8% ($9,164) 81st St. and Ft. IHamilton Parkway, to M. Tozzi, 1362 63rd St., 93% ($3,572) and 97% ($1,745) respectively; Troy Ave., to S. Ambrosio, 1016 60th St., 85% ($1,596). Noted May 31.

N. C., Davidson—See "Waterworks."

Ala., Sheffield—Constructing 9 mi. cement sidewalks to W. L. Hagler, Sheffield, $100,286. Engrs. est. $125,000.

O., Akron—W. F. Peters, dir. Pub. Serv., 1 mi. Hawkins Ave. interceptor sewer, 30 to 80 ft. wide, to Graham Henderson, Cleveland, $251,312. Engrs. est. $350,000. Noted May 17.

O., Akron—W. F. Peters, dir. Pub. Serv., to McAlonan Bros., 197 West Buchtel Ave., 6,940 ft. brick and vitr. sewer in Sawyer-Collinwood et al., $55,613, engrs. est. $51,134, 5,665 ft. brick and vitr. sewer in Murray-Mt. Vernon Ave. et al., $40,158, $36,550, 5,840 ft. vitr. sewer in Lakemont-Hite et al., $23,123, $21,263; to C. Ruhlin, 518 Metropolitan Bldg., 1,124 ft. 72 in. brick sewer in Firestone Blvd. $34,055, $41,273. Noted May 10.

O., Brooklyn Heights (Independence, P. O.)—Sewers in Schaaf Rd., to F. Phillips Co., Engineers Bldg., Cleveland, $32,500, West 11th St., to W. McDowell & Son, 10309 Miles Ave., Cleveland, $12,500. Work involves 8,815 ft. 15-30 in. vitr. clay and segmental block pipe. Noted May 17.

O., Columbus—R. W. Smith, clk. Franklin Co., for Contr. 3, Sewer Dist. Franklin 1, Joint Intercepting Sewer, 20,746 ft. 24-39 in segmental block or concrete pipe, to Sheets & Canfield, Guaranty Title and Trust Bldg., $176,641; Contr. 5, Sewer Dist. Franklin 1, East Main Branch Sewer, 19,567 ft. 10-24 in. vitr. pipe, to H. S. Bosler Constr. Co., Gugle Bldg., $59,650. Noted May 24.

Ill., Highland Park—For 1,498 lin.ft. 15 in., and 12,713 ft. 8 in. tile pipe sewer, 600 ft. 8 in. overflow sewer, 14,912 ft. 6 in. and 1,231 ft. 8 in. c.i. pipe, etc., to C. M. Porter Co., 1425 Conway Bldg., Chicago.

S. D., Hartford—Sanitary sewerage system also watermain extensions, to Bruce-Bickelhaupt Co., Yankton, $21,709 and $7,216 respectively. Noted May 24.

S. D., Faith — Sanitary sewerage and waterworks systems, to Mobridge Plumbing & Heating Co., F. Pfanstiehl, Mobridge, $46,000.

Tex., Elgin—City will build disposal plant and 30,000 ft. 6-8 in. sewer, by day labor. $40,000. E. L. Dalton, 1915½ Main St., Dallas, engr. Noted Feb. 22.

B. C., Nelson—Laying 23,000 ft. 6-15 in. vitr. sewers in various streets to Green Bros. & Burden, Nelson, $30,639. Engrs. est. $55,000. Noted Mar. 29.

Waste Disposal

PROPOSED WORK

Wis., Appleton — Cities of Appleton, Menasha and Neenah plan garbage disposal plant and equipment for joint use, rein.-con., brick and steel, plain foundation. E. L. Williams, City Hall, Appleton, clk. Engineer and architect not selected.

BIDS DESIRED

Pa., Phila.—June 18, by F. H. Caven, dir. Dept. Pub. Wks., Bureau of Highways, for Harrowgate Incinerator.

O., Youngstown—June 28, for garbage incinerator plant. $125,000. I. Turner, city engr. Noted Mar. 8.

BIDS RECEIVED

O., Cleveland—J. F. Malone, dir. Pub. Serv., City Hall, May 16, 500 ton garbage disposal plant, from C. O. Bartlett & Snow Co., French and Winter Aves., $930,550. Noted May 10.

CONTRACTS AWARDED

Okla., Tulsa—City, 2 story, 36 x 55 ft. incinerator, rein.-con., brick and steel, 3rd St., to Garbage Incinerator Co. of Texas, Tulsa, $40,000.

Bridges

PROPOSED WORK

Conn., Forrestville—City of Bristol plans 3 span concrete bridge, here. $45,000. C. Buell, city engr.

Pennsylvania — Commrs. Snyder Co. (Middleburg) Union Co. (Lewisburg) and Northumberland Co. (Sunbury) plan concrete and steel bridge over Susquehanna River between Blue Hill and Northumberland, to replace one recently destroyed by fire. $500,000.

Louisiana — State Hy. Comn., Baton Rouge, plans bridge across Mermentau River, 320 ft. span. J. F. Fourmy, state highway engr.

Mich., Marine City—State Hy. Dept., Lansing, rejected bids steel superstructure 135 ft. swing bridge No. 770901, here. Will readvertise. Noted Apr. 26.

Mich., Springwells—Village and Michigan Central Ry., La Salle St. Station, Chicago, having plans prepared 2 concrete girder viaducts over railway tracks, on Mulkey Ave. and Schaefer Rd. $1,200,000. A Roth, 2348 Penobscot Bldg., Detroit, village engr. C. W. Hubbell, 2348 Penobscot Bldg., Detroit, consult. engr.

Neb., Omaha—Union Stock Yards having preliminary plans prepared 2,000 ft. rein.-con. and steel viaduct, 70 ft. roadway, $200,000. F. W. Rice, 312 Finance Bldg., engr.

Missouri—State Hy. Dept., Jefferson City, plans one 180 ft. steel truss and four 20 ft. rein.-con. slab spans, etc., over Big St. Francis River, Madison Co.; six 80 ft. steel truss spans over Marias Des Cygnes Drainage Ditch, Bates Co.; one 50 ft. steel truss span, over Turkey Creek, Madison Co.; four 80 ft. steel truss spans, etc., over Salt River, Shelby Co.; three 100 ft. and two 60 ft. steel truss and eight 20 rein.-con. slab spans, etc., over Miami River, Bates Co. B. H. Piepmeier, state highway engr.

Missouri—State Hy. Dept., Jefferson City, plans one 80 ft. steel truss and six 20 ft. rein.-con. slab spans, etc., over Otter Creek, Monroe Co.; one 60 ft., one 80 ft. and one 140 ft. steel truss spans, etc., over Salt River, Monroe Co.; three 20 ft. rein.-con. slab spans, 4 rein.-con. bents, etc., Howell Co.; one 30 ft. and two 25 ft. rein.-con. deck girder spans, over Rock Creek, Saline Co.; one 40 ft. rein.-con. deck girder spans, 2 rein.-con. abutments, over Mill Race, Jasper Co.; one 70 ft. steel truss span, over Castile Branch, one 30 ft. rein.-con. deck girder span, over east branch Castile Creek, one 40 ft. rein.-con. deck girder span, etc., over west branch of Castile Creek, Dekalb Co.; one 50 ft. steel truss span, over Jordan Branch, one 25 ft. rein.-con. deck girder span, etc., over east branch Jordan Branch, Dekalb Co. B. H. Piepmeier, state highway engr.

Missouri—State Hy. Dept., Jefferson City, plans one 25 ft. and eight 35 ft. rein.-con. deck girder spans, etc., Cass Co., one 40 ft. and two 25 ft. rein.-con. deck girder spans, over Yellow Creek, Sullivan Co., one 25 ft. rein.-con. deck girder, two 12 ft. and four 10 ft. rein.-con. slab spans, Boone Co., three 60 ft. steel and four 16 ft. rein.-con. slab spans, etc., over Perche Creek, Boone Co., one 12 ft. rein.-con. slab and one 60 ft. steel truss span, Marion Co., one 120 ft. steel truss span, over River Des Peres, also two 200 ft. and two 120 ft. steel truss spans over Merramec River, St. Louis Co. B. H. Piepmeier, state highway engr.

Missouri—State Hy. Dept., Jefferson City, plans one 75 ft. steel truss and nine 20 ft. rein.-con. slab spans, etc., over Muddy Creek, Barton Co., one 25 ft. rein.-con. deck girder span, Newton Co., one 120 ft. steel truss, over Railey Creek and three 20 ft. rein.-con. slab spans, etc., over Pine Run Creek, Stone Co., three 10 ft. rein.-con. slab spans, etc., over Spring Creek, Douglas Co., three 30 ft. rein.-con. deck girder spans, over Bee Creek, and three 20 ft. rein.-con. slab spans, over Owl Creek, Platte Co. B. H. Piepmeier, state highway engr.

Calif., Los Angeles — Voted $2,000,000 bonds to pay citys share for 6 viaducts across Los Angeles River and adjacent railroad tracks.

Calif., Santa Barbara—Santa Barbara Co. appropriated $60,000 bonds for bridge at foot of H St. O. H. O'Neill, co. surv.

Ont., Toronto — Plans Vale of Avoca Bridge, 700 ft. long, 60 ft. wide, probably concrete piers and abutments, steel arches and wood block floor, on St. Clair Ave. E. $750,000. R. C. Harris, city engr.

BIDS DESIRED

Mass., Lowell—June 27, by Bd. Pub. Service, City Hall, repairing Aiken Bridge over Northern Canal. Fay, Spofford & Thorndike, 200 Devonshire St., Boston, engrs.; adv. this issue.

Mass., Salem — June 29, by Haverhill Lower Bridge Rebuilding Comn., at County Commissioners Office, rebuilding 804 ft. rein.-con. bridge, 66 ft. wide, over Merrimack River. R. R. Evans, engr.; adv. this issue.

Michigan—See "Streets and Roads."

Ill., Chicago—June 28, by H. E. Wallace, clk., at office Sanitary Dist. of Chicago, 910 South Michigan Ave., substructure of double leaf trunnion bascule bridge (Strauss type) over Main Drainage Channel on line of South California Ave. extended. W. O. Nance, chn.; adv. this issue.

Colorado—June 19, by State Hy. Dept., Denver, 150 truss bridge over Clear Creek, between Denver and Arvada, Federal Aid 120, Jefferson Co. $36,708. L. D. Blauvelt, state highway engr.

Colorado—See "Streets and Roads."

California—July 2, by State Hy. Comn., Sacramento, rein.-con. bridge over Crystal Springs dam near San Mateo, San Mateo Co., incl. 20 rein.-con. girder spans with necessary bents, abutment and wing walls. R. M. Morton, state highway engr.

BIDS RECEIVED

Wis., Milwaukee—Widening Folsom Pl. Bridge from 20 to 41 ft., substructure from S. M. Siesel, 160 Ogden Ave., $56,639; superstructure from Newton Eng. Corp., 185 Mason St., $77,900. Noted May 31.

Mo., St. Louis—Dept. Pub. Serv., June 5, 1,200 ft. rein.-con. viaduct, 80 ft., with 550 ft. southern and 200 ft. northern approaches, on 14th St., from F. A. Stiers, 4500 Enright Ave., $468,944. Noted May 10.

Bridges (Continued)

CONTRACTS AWARDED

Mass., Norwell—Plymouth Co., repairing bridge and approaches across North River between here and Marshfield, furnishing and placing additional rip-rap, to L. S. White, West St., Kingston, $27,525.

Pa., Muncy—Lycoming Co. (Williamsport) constructing Stolz Bridge, 120 ft., 3 span, rein.-con., over Muncy Creek, here, to A. C. Bailey, Philipsburg, $27,468. Noted May 24.

Florida—State Rd. Dept., Tallahassee, 901 ft. rein.-con. bridge with 65 ft. steel span, over Sebastian River, Project 39, Brevard and St. Lucie Counties, to A. Bentley & Sons, Amer. Natl. Bank Bldg., Jacksonville, $186,693. Noted May 24.

Ala., Flattop—Jefferson Co. (Birmingham), bridge over Locust Fork, Warrior River, here, to Nashville Bridge Co., foot of Shelby Ave., Nashville, Tenn., $83,913.

Ohio—See "Streets and Roads."

Wis., Fond du Lac — See "Streets and Roads."

Oregon—State Hy. Comn., Salem, concrete overhead crossing, Ore Dell, on Hilgard-La Grande Sect., Old Oregon Trail Highway, Union Co., to Illinois Bridge Co., 2243 Calumet St., Chicago, 310 cu.yd. Class A concrete $25, 185 cu.yd. Class B concrete, $22, 65,000 lb. reinforcing, $0.08, 295,000 lb. structural steel, $0.096, etc., total $44,885.

Tex., Linden—Bowie and Cass Counties, steel span bridge over Sulphur River at Pace Terry, timber pile trestle approaches, 166,000 lb. structural and 20,410 lb. reinforcing steel, 437 cu.yd. concrete, to Smith Bros., Amer. Natl. Bank Bldg., Dallas, $126,052. Engrs. est. $138,657.

Dams

PROPOSED WORK

N. Y., Norwood—See "Miscellaneous."

Okla., Okmulgee—See "Waterworks."

Tex., Wichita Falls — See "Excavation, Drainage, Irrigation."

Railways

PROPOSED WORK

Kentucky—Louisville & Nashville R. R. Co., 10th St. and Bway., Louisville, plans 30 mi. single track and 1 mi. tunnel from McRoberts to Elkhorn City, to connect Louisville & Nashville R. R. with Clinchfield, Carolina & Ohio R. R. Cost several million. G. R. Smiley, ch. engr. of constr.

Kentucky—Louisville & Nashville R. R. Co., 10th St. and Bway., Louisville, plans double tracking present single track line from Ft. Estill to Conway, 18.33 mi. $1,810,000. G. R. Smiley, ch. engr. of constr.

Ohio—Ann Arbor R.R., Owosso, Mich., plans 4½ mi. track from Toledo, O., westward, also about 4 mi. passing sidings. L. J. Allen, ch. engr.

Texas—Gulf, Colorado & Santa Fe R.R., 110 Field St., Dallas, soon takes bids 2 mi. trackage from Hale to West Dallas, and general terminal in West Dallas Industrial Dist. $250,000. F. Merritt, Union Sta. Bldg., Galveston, ch. engr.

Oklahoma—Toledo & Ohio Central Ry. Co., St. Clair Ave. and West 3rd St., Cleveland, O., plans rebuilding and electrifying present Shawnee branch of Missouri, Kansas and Texas Ry. Co., between Oklahoma City and Shawnee. $2,600,000. J. A. Stocker, Columbus, O., ch. engr.

Ontario—Michigan Central Ry. Co., 15th St., Detroit, Mich., plans 5 mi. new sidings, switches, etc., at St. Thomas yards. $500,000. J. F. Diemling, ch. engr.

BIDS DESIRED

New York—June 20, by Transit Comn., 49 Lafayette St., New York City, switch back track and other miscellaneous work east of Queensboro Plaza Station, Corona Branch, Queensboro Subway Rapid Transit R.R., Queens Boro, Routes 36 and 37, Sect. 1. G. McAneny, chn.

Wisconsin — Madison Street Rys., 2302 Fair Oaks Ave., Madison, taking bids for double tracks on East Johnson St. and University Ave., extending tracks on Monroe St. to Crandall Court. Private plans. Noted May 24.

CONTRACTS AWARDED

Tennessee—Illinois Central R.R., Hibernia Bldg., New Orleans, La., improvements and extensions, yards, terminals, repair shops, compression plant, etc., at Jackson, by day labor. $250,000. W. T. Atwill, New Orleans, La., genl. supt.

Wisconsin—See "Industrial Works" under Madison, Wis.

British Columbia—Merrill Ring Lumber Co., Ltd., 510 Hastings St., W., Vancouver, will build 6 mi. standard guage logging railway, at Theodosia Arm Malaopina Inlet, from logging camp to inlet near Lund. Work will be done by day labor. $60,000. W. L. Culliton, foreman.

Excavation, Drainage Irrigation

PROPOSED WORK

Minn., Jackson—Jackson Co., Minn., and Dickinson Co., Ia., plan draining 50,000 acres in former and 7,000 acres in latter county, work involves excavation, tile and 100 ft. bridge. $500,000. V. J. Buckeye, aud. of Jackson Co.

Tex., Wichita Falls—Wichita Co. Irrigation Dist. 2, plans ditches, dams, etc. $1,760,000 bonds passed. J. M. Isbell, co. engr.

Calif., Los Angeles—See "Miscellaneous."

Calif., Proberta — Prosperity Irrigation Dist., c/o F. H. Tibbetts, engr., Alaska Commercial Bldg., San Francisco, had preliminary plans prepared irrigating 93,690 acres land, here. $2,962,940.

BIDS DESIRED

Md., Baltimore—June 13, by Bd. Awards, dredging in harbor of Baltimore. $30,000. B. Hill, harbor engr.

Tenn., Memphis—June 19, by Bd. Water Comrs. at office 105-107 North 2nd St., excavating by machinery trenches for c.i. collecting conduit, tile drains and compressed air lines, in connection with Parkway Pumping Station. J. Sheahan, genl. supt.; adv. this issue.

Ia., Ottumwa—July 10, by F. W. Prosser, aud. Wapello Co., drainage ditch and improvements in D. D. 4 and 6.; adv. this issue.

Tex., Brownsville—June 23, by Bd. Dirs. Cameron Co. Water Dist. 1, 15 mi. drainage ditch, 300,000 cu.yd. excav., northern part of district. $60,000. W. W. Washington, co. engr. Noted Apr. 19.

Tex., Wichita Falls—Wichita Co. Irrigation Dist. 1, Staley Bldg., taking bids 30 mi. long, North Side Canal. 6-14 ft. deep, 1,000,000 cu.yd. excav., 2,000 ft. concrete or corrugated iron pipe, 400,000 ft. lumber, 5,800 cu.yd. concrete, distribution system involves 100 mi. ditch, 670,000 cu.yd. excav., 9,500 ft. concrete or corrugated iron pipe, 325,000 ft. lumber, 800 cu.yd. concrete, 1,400 ft. metal flume. $1,500,000. R. A. Thompson, Staley Bldg., ch. engr.

Calif., Paradise — Paradise Irrigation Dist., receiving bids (1) extension of mains (a) 27,890 ft. 18-24 in. trench and backfill (b) 29,810 ft. wood stave or riveted steel pipe and fittings (c) 2,409 ft. standard wrought iron pipe and fittings and accessories (d) hauling all pipe and fittings (e) laying all pipe and fittings (2) cement lining high line reservoir (f) furnishing 145 bbls. cement (g) furnishing 12,000 sq. ft. wire netting (h) hauling all material (i) hauling lining. J. E. Alley, supt. of dist.

Ontario—June 30, by R. C. Desrouchers, Parliament Bldgs., Ottawa, hydraulic dredging in harbors of Port Arthur and Ft. William, for Dominion of Canada, Ottawa. $50,000. K. M. Cameron, acting ch. engr.

BIDS RECEIVED

New Jersey—Navigation Dept., Trenton, June 5, for (1) dredging canal 75 ft. edge Manasquan River (2) removing remainder of material to widen canal bottom (3) dredging channel in Manasquan River, Ocean Co., from Delaware Dredging Co., 139 South 3rd St., Phila., (1) $0.54 (2) $0.54 (3) $0.54. Engrs. est. $70,000. Noted May 17.

Ia., Sidney—Fremont Co., for work in Missouri Valley D. D. 1, Plum Creek Diversion Ditch, 390,000 cu.yd. excav., Possum Creek Diversion Ditch, 378,000 cu.yd., Main Ditch, 515,000 cu.yd., Horse Creek Ditch, 60,000 cu.yd. Cooper Creek Ditch, 213,000 cu.yd., Knox Ditch, 54,000 cu.yd., Melitia Hollow Ditch, 38,000 cu.yd., Cresap Lateral 64,000 cu.yd., Mustard Lateral, 145,000 cu.yd., five laterals combined 95,000 cu.yd., from Briggs, Drew & Crane, Omaha, Neb., $0.07. Noted May 24.

CONTRACTS AWARDED

Wis., Milwaukee—B. E. Nickoll, 109 Wisconsin St., excavation for 10 story and basement, 42 x 100 ft., store and office, brick and concrete, plain and wood pile foundation, Grand Ave., to Froemming & Radthe, 1288 Humboldt Ave.; piling on above, to Great Lakes Dredge & Dock Co., 216 West Water St. See item under "Buildings."

Ark., Eudora—Eudora Western D. D. of Chicot Co., 3,543,000 cu.yd. excav. and 9.1 mi. channel clearing, Schedule D, to McWilliams Co., Inc., Exch. Bldg., Memphis, Tenn. Noted May 3.

Canada—Dept. Pub. Wks., Ottawa, Ont., to Soo Dredging and Constr. Co., Saulte Ste. Marie, Ont., dredging at Saulte Ste. Marie, Ont., $18,200; Randolph-MacDonald Co., Crown Office Bldg., Toronto, Ont., at Bowmanville, Ont., $6,500; Frontenac Dredging Co., Kingston, Ont., at Port Hope, Ont., $6,500; Dufresne & Marcheldon, Three Rivers, Que., at Nicolet, Que., $10,000 and St. Pierre, Que., $8,000; Lachance Ltd., 99 Dalhousie St., Quebec, Que., at Riviere du Loup, Que., $6,000. Noted May 3.

Streets and Roads

PROPOSED WORK

Mass., Medford — Voted $250,000 for street improvement, and $15,000 for new sewers. R. B. Coolidge, mayor. Engineer not selected.

Conn., Hartford—Plans covering Park River, rein.-con. slab, to be used for parking space. $180,000. R. N. Clark, city engr.

N. Y., Binghamton—Bd. Pub. Wks. and W. E. Weller, city engr., preparing plans paving 15,500 sq.yd. Court St., granite blocks. $100,000.

N. Y., Medina—Voted $36,000 bonds rein.-con. paving Park Ave. C. H. Peddie, village pres. Noted Mar. 15.

New Jersey—Clerk Joint Bridge Com. of Essex Co. (Newark) and Hudson Co. (Jersey City) soon takes bids reconstructing deck of Jackson St. bridge over Passaic River, concrete and wood block. $60,000. W. A. Stickel, Court House, Newark, and F. Radigan, Court House, Jersey City, engrs.

N. J., Trenton—Plans paving ½ mi. West Hanover St., sheet asphalt. J. E. English, City Hall, engr.

Pa., Erie—Making plans asphalt paving 31st St. $11,500, and 21st St. $13,500. F. G. Lynch, city engr.

Pa., Erie—Plans asphalt paving 29th St. $44,700. F. G. Lynch, city engr.

Pa., Erie—Plans asphalt paving Lincoln Park St. $35,600. F. G. Lynch, city engr.

Pa., Lewistown—Takes bids about July 1, paving 1 mi. Walnut St., brick and concrete, 20 ft., $40,000. R. H. Craig, Paxtang, Harrisburg, engr.

Pa., Scranton—Rejected bids opened June 7, asphalt paving South Webster and Willow Aves. Engrs. est. $59,616 and $11,634 respectively. Will readvertise. W. La Fontaine, dir. pub. wks.

W. Va., Parkersburg—Harris Dist., Wood Co., election June 26, to vote on $88,000 bonds for road work. B. C. Woodyard, Parkersburg, engr.

W. Va., Williamson—Hardee Dist., Mingo Co. election June 23 to vote on $160,000 bonds for road work. H. Cook, co. engr.

Fla., Tallahasse—Rd. Comrs. Leon Co. plan election to vote on $1,150,000 bonds constructing various roads.

Tenn., Dandridge — Jefferson Co. voted $82,000 bonds for various roads. Engineer not announced.

Tenn., London — London Co. making plans improving 4½ mi. road, 18 ft., probably limestone base. J. C. Creveling, Nashville, comr.

Kentucky—State Rd. Dept., Frankfort, having plans prepared constructing and surfacing 3.15 mi. Sect. A, and 3.4 mi. Sect. B, Newport-Falmouth Rd., State Project 21, Campbell Co., 18 ft. J. S. Boggs, state highway engr.

Kentucky — State Rd. Dept., Frankfort, having plans prepared grading 2.65 mi. Jackson-Hazard Rd., State Project 4, Sect. B, Perry Co.; surfacing 14.581 mi. Whitley City-Somerset Rd., State Project 22, Sect. D, McCreary Co. J. S. Boggs, state highway engr.

Ky., Madisonville — Hopkins Co. plans waterbound macadam paving 12.83 mi. Federal Aid Project 97. $287,840.

Ohio—Dept. Highways and Pub. Wks., Columbus, rejected bids May 25, grading, bridging and paving 11.076 mi. roads in Clark and Henry Counties. Noted June 7.

O., Steubenville—Soon takes bids repaving 4th St., asphalt $59,654, wood block $69,029. G. Teaff, city engr.

Ind., New Albany—Plans improving portions Jay St., Ekin and Vance Aves. To exceed $25,000. S. T. Mann, city engr.

Ind., Terre Haute—Vigo Co. plans concrete paving Co. Rd. 10, 34,128 sq.yd. Sect. 1 and 29,862 sq.yd. Sect. 2, $107,297 and $93,258 respectively; Co. Unit Rd. 9, 54,000 sq.yd. Sect. 1 and 48,310 sq.yd. Sect. 2, $138,444 and $131,698 respectively. R. E. Gibbons, Terre Haute, engr.

Michigan—State Hy. Dept., Lansing, rejected bids grading and concrete surfacing 14,303 sq.yd. State Trunk Line Rd. 11-32 Sect. B, Oceana Co. Noted Mar. 15.

Ia., Lamoni—Having preliminary plans prepared for paving, various types. $30,000. Shockley Eng. Co., 800 Graphic Arts Bldg., engrs.

Neb., Schuyler—Plans paving 35 blocks various streets, different types.

Streets and Roads (Continued)

Neb., Winnebago—Plans 15 blocks paving. W. E. Buell & Co., 205 Davidson Bldg., Sioux City, Ia., engrs.

Missouri—State Hy. Dept., Jefferson City, plans grading, etc., 8 mi. roads, 30 ft., in Newton, Madison and Livingston Counties; 2 mi. road, 22 ft., rock asphalt, in St. Louis Co. B. H. Piepmeier, state highway engr.

Mo., Richmond Heights (St. Louis P. O.) Made plans concrete curbing, guttering and paving 17,600 sq.yd. Bellevue Ave., asphaltic penetration. $65,000-$70,000. Pitzman Eng. & Survey Co., 615 Chestnut St., St. Louis, engrs.

Tex., Crockett—Soon takes bids paving 16,000-20,000 sq.yd. bituminous, brick or concrete. $40,000. Baker & Von Zuben, Ellison Bldg., Ft. Worth, engrs.

Tex., Dallas—E. L. Dalton, engr., 1915½ Main St., soon takes bids 2 mi. of 20 ft. graveling, 4 mi. sidewalks, sewer and water mains, Brightside addition, for R. D. Lindley, Southwestern Life Bldg. $40,000.

Tex., Dallas—Koch & Fowler, engrs., Central State Bank Bldg., soon takes bids grading and graveling 4 mi. various streets on Bachman Creek at Cochrans Chapel, for J. M. Stephenson, c/o engineers. $30,000.

Tex., Dallas—Making plans traffic control, changes in viaduct approaches (Oak Cliff), opening Arlington St. to Jefferson St., widening Jefferson St. at Union Terminal and building an underpass for truck traffic. $250,000. E. A. Kingsley, city engr.

Tex., Ennis—Making surveys and takes bids in summer paving various streets. $65,000. H. McCanless, city engr. Noted Apr. 19.

Tex., Floresville — Wilson Co. election June 23, to vote on $200,000 bonds hard surfacing State Highway 9. Eligible to Federal aid. J. E. Canfield, co. judge.

Tex., Floresville—Wilson Co. voted $215,000 to be supplemented by State and Federal Aid, hard surfacing highways in Precincts 1, 3, and 4, 18 ft., total cost $500,000. J. E. Canfield, co. judge.

Tex., Jacksonville—Making plans paving 30,000 sq.yd. various streets, bitulithic, brick or concrete. $100,000. H. N. Roberts, 4227 Irving Pl., Dallas, engr.

Tex., Leakey—Real Co. making plans grading and bridging 18 mi. State Highway 41, 24 ft. $70,000. W. E. Simpson Co., Natl. Bank of Commerce Bldg., San Antonio, engrs.

Tex., Paris—Lamar Co. making plans grading, concrete paving, etc., 11 mi. State Highway 5, 18 ft. $328,000. W. M. Foosheé, co. engr.

Tex., Pecos—Reeves Co. making plans grading and gravel surfacing 14 mi. Bankhead Highway, 18 ft. $101,740. S. S. Posey, resident engr.

Tex., San Antonio—Bexar Co. making plans grading, surfacing with gravel and 8 in. bituminous topping 3.26 mi. State Highway 3, 18 ft. $37,950. A. C. Pancoast, co. engr.

Tex., Sierra Blanca—Hudspeth Co. making plans grading, gravel surfacing, etc., 9 mi. State Highway 1, 18 ft. $26,000. J. W. Carter, El Paso, co. surveyor.

Okla., Broken Arrow—Plans paving Dist. 8, 12,110 sq.yd. concrete, 2,150 cu.yd. excav., 8,210 ft. curbing. $45,000. Wood & Witten, 246 Lynch Bldg., Tulsa, engrs.

Okla., Muskogee—Soon takes bids concrete paving, curbing and guttering various streets. $125,000. J. R. March, Muskogee, engr.

Okla., Sayre—Plans paving 10 blocks various streets. $55,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Okla., Weleetka—Soon takes bids paving Dists. 2 and 3, 7,500 sq.yd. vitr. brick, 20,000 sq.yd. 3 in. vertical fiber brick. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Wash., Seattle — Rejected bids grading and curbing 15th Ave. S. $44,636. Noted May 31.

California—State Hy. Comn., Sacramento, had plans prepared widening highway from 26 to 40 ft., incl. construction of two 8 ft. concrete shoulders, 8 in. thick, and new macadam surface over all, 5 mi. highway between San Mateo and San Bruno, San Mateo Co., 1.25 mi. highway south of San Mateo, San Mateo Co., 8 mi. highway in vicinity of Treacy, San Joaquin Co.; grading and gravel surfacing 11.5 mi. highway near Shelville, Sonoma Co. R. M. Morton, state highway engr.

Calif., Chula Vista—Voted $44,000 bonds paving National Ave.

Calif., Long Beach—Rescinded contract improving streets in Belmont Shore Dist. Will readvertise. Noted May 10.

Calif., Madera—Soon takes bids grading, concrete curbing, guttering and bituminous paving West Yosemite Ave., 6th and B Sts. Former contract rescinded, due to irregularities in proceedings. Noted May 10.

Calif., Redwood City—Had revised plans prepared improving various streets in Oak Knoll Manor, 9,785 cu.yd. excav., 305,400 sq.ft. oil macadam, 7,330 lin.ft. concrete curb and gutter, etc. To exceed $75,000. C. L. Dimmitt, city engr. Noted May 3.

Calif., San Diego—Common Council plans improving 30th St. from Adams to University Aves., 281,941 sq.ft. 1½ in. asphaltic concrete on 4 in. concrete, etc. F. A. Rhodes, city engr.

Calif., Santa Ana—S. Finley (contractor), Santa Ana, refused to sign contract due to alleged irregularities in proceedings for concrete curbing, guttering and paving Rd. Dist. 20, for Orange Co. Probably new bids. Noted May 17.

Calif., Santa Barbara—Santa Barbara Co. having plans prepared constructing H St. road between State Highway and Harris Station. To exceed $100,000. O. H. O'Neill, co. surv.

Que., Montreal—Plans paving various streets, 11,869 ft. asphalt, $287,064; 5,490 ft. concrete, $97,919; 35,187 ft. concrete sidewalk, $161,386; 18,041 ft. cement slab sidewalks, $14,612. H. Hadley, city engr.

Ont., Hamilton — Plans asphalt paving Dunsmure Rd., Robert, Sanford, Morros and East Bend Aves. $45,000. Prices wanted on materials. W. L. McFaul, City Hall, engr.

BIDS DESIRED

Rhode Island—June 22, by State Bd. Pub. Rds., Providence, paving 5.51 mi. Federal Aid Project 18, Contr. 2305; adv. this issue.

R. I., Central Falls—June 25, at office of Bd. Street, Water and Sewer Comrs., City Hall, widening and granite block paving Broad St. S. P. Cummings, city engr.

N. Y., Brooklyn—June 20, by E. Riegelmann, boro pres., Boro Hall, grading, curbing, flagging and concrete paving Coney Island Ave.; grading, curbing and flagging Kings Highway, 76th, 77th and 81st Sts.; curbing and flagging Lefferts Ave.; asphalt paving Newport, Osborn and Tehama Sts.

N. Y., Brooklyn—June 21, by Park Bd., Municipal Bldg., New York, grading, curbing and sheet asphalt paving Fort Hamilton Parkway, here. F. D. Gallatin, pres.

N. Y., Lockport—June 19, by F. Krull, clk. Bd. Supervs. Niagara Co., bituminous macadamizing 4.644 mi. Road 46, and concrete paving 0.743 mi. Military Rd. 49. T. J. Brennan, Lockport, co. engr.

N. Y., Long Island City—June 19, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., grading sidewalk and gutter space and laying sidewalks where necessary on Andrews St.; sheet asphalt paving Crescent and Linden Sts.; grading, curbing, laying sidewalks and sheet asphalt paving Gates Ave., Doubleday and Palmetto Sts.; grading southeasterly sidewalk space, laying sidewalks and crosswalks on Jay Ave.; grading and curbing Troutman St.; grading, curbing and laying sidewalks on Van Cott Ave. and 101st St.; curbing and sheet asphalt paving Queens Blvd.

N. Y., New York—June 21, by H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., repaving with granite block White Plains Rd., Melrose Ave., Boston Rd., Jerome Ave. from Clinton Pl. to Fordham Rd., Jerome Ave. from Cromwell Ave. to East 176th St.; curbing, laying sidewalks and bituminous concrete paving East 172nd and West 238th Sts.; sheet asphalt paving Charlotte St.; granite block and sheet asphalt paving Tiebout Ave.; grading Godwin Terrace; grading, curbing and laying sidewalks on Cruger Ave. and East 157th St.; grading, regrading, laying sidewalks and asphalt paving Bryant Ave.; sewers in Bronx and Pelham Parkways, Jarvis, Wayne and Tryon Aves.

N. Y., New York—June 21, by J. Miller, pres. Manhattan Boro, Municipal Bldg., changing park strips on Park Ave. from 34th and 39th Sts.

N. Y., New York—June 21, by Park Bd., Municipal Bldg., repaving Mosholu Ave., Van Cortlandt Park from Bway. to Golf Links Rd. F. D. Gallatin, pres.

New Jersey—June 25, by State Hy. Dept., Trenton, paving Route 4, Sect. 21, Point Pleasant-Laurelton Rd., Ocean Co., rein.-con., and Route 5, Sect. 10, Chatham-Brantwood Rd., Morris, Essex and Union Counties, sheet asphalt, granite block and rein.-con. A. L. Grover, ch. clk.; adv. this issue.

N. J., Mount Holly — June 29, by Bd. Freeholders Burlington Co., reconstructing Rd. 19, Bridgeboro to Chester Ave., Delran and Moorestown Twps., Rd. 3, Vincentown-Cross Roads Rd., Southampton Twp., also Rd. 15, Florence Rd., Florence Twp. H. B. Smith, co. engr.; adv. this issue.

N. J., Newton—June 27, Sandystone Twp. Com. of Sussex Co., at Grange Hall, Layton, macadamizing Sandystone Twp. Rd. 2. H. Snook, Newton, engr.; adv. this issue.

N. J., Trenton—June 22, for sheet asphalt and granite block pavement on 6 in. concrete. J. E. English, engr. of streets; adv. this issue.

Pa., Ebensburg—June 20, by Susquehanna Twp., c/o H. T. Jones, controller Cambria Co., 3.25 mi. Susquehanna Twp. Rd., 16 ft., one course rein.-con. and brick on concrete. $120,000. C. E. Schlicher, Spangler, engr. Noted May 3.

Pa., Erie — June 22, asphalt paving 7 streets in Frontier Pl. Subdivision. $250,000. F. G. Lynch, city engr. Noted Mar. 15.

Pa., Greensburg—July 6, by Comrs. Westmoreland Co., reconstructing 1 mi. Bolivar-West Fairfield Rd., Fairfield Twp., 2.4 mi. Irwin-Hahntown-Herminie Rd., Sewickley Twp., 4,170 ft. Edgecliff-Braeburn Rd., Lower Burrell Twp. W. A. Arter, co. controller.

Pa., Roaring Spring—June 21, by Boro Council paving Park Ave. and West Main St., 5,500 sq.yd. rein.-con., 1,750 cu.yd. excav., 1,300 lin.ft. 18 in. curb, etc. $25,000. J. L. Henry, Walsh Bldg., Hollidaysburg, engr.

Pa., Washington—June 18, for 6,000 sq. yd. paving, vitr. brick on concrete (brick to be furnished by boro). J. F. Curran, pres.

Delaware—June 27, by State Hy. Dept., Dover, improving 4.58 mi. Contr. CN 13, 6 mi. Contr. CK 16, 1.58 mi. Contr. 45, and Contr. M 8; adv. this issue.

North Carolina—June 27, by State Hy. Comn., Raleigh, hardsurfacing with concrete or asphalt various roads in Hyde, Wilson, Pitt, Greene, Craven, Harnett, Alamance, Rowan and Henderson Counties; topsoiling, sand clay, gravel or grading various roads in Halifax, Hertford, Bertie, Northhampton, Person, Anson, Alleghany, Stokes, Burke, Henderson, McDowell and Yancey Counties; penetration or water bound macadam paving roads in Alamance, Guilford, Montgomery, Avery, Graham and Macon Counties; bridge in Bladen Co.; overhead crossing in Burke Co.; adv. this issue.

Ga., Augusta—June 25, by Permanent Paving and Civic Impvts. Com. of City Council, paving 5th, Twiggs and Broad Sts., Savannah and Milledgeville Rds. W. H. Wise, city engr. and comr. Pub. Wks.; adv. this issue.

Ga., Thomasville—June 25, by Mayor and Council, City Hall, Contr. A, 17,304 lin.ft. concrete curb and gutter, 1,364 lin.ft. granite curb, 10,919 sq.yd. sidewalk, Contr. B, 13,891 sq.yd. street paving, 3,003 cu.yd. excav.; 1,775 lin.ft. 18-24 in. storm sewer in various streets. C. G. Wright, Albany, engr.

Tennessee—June 22, by State Dept. Hys. and Pub. Wks., Nashville, improving 10.7 mi. State Aid Project 119, Robertson Co., 10,693 cu.yd. common excav., 100,441 sq.yd. broken stone base course "B" "3," 100,441 sq.yd. 2½ in. bituminous surface penetration; grading, surfacing and constructing base on approach to Cumberland River Bridge, Federal Aid Project 16, Sect. C, constructing and placing pipe necessary to draining lowlands adjacent to bridge site, Federal Aid Project 16, Sect. D., 2.04 mi. grading and surfacing Federal Aid Project 91, Montgomery Co., 36,279 cu.yd. common, 7,394 cu.yd. solid rock and 51,983 cu.yd. borrow excav., 27,470 cu.yd. overhaul, 21,340 sq.yd. hand placed coarse stone base "C," 20,693 sq.yd. 2½ in. bituminous macadam surface, etc. J. G. Creveling, Jr., Nashville, comr.

Ky., Central City—June 22, for 22,604 sq.yd. rock asphalt paving, part on macadam and part on concrete. Other standard types of paving will be considered. C. W. Wardle, city engr.

Ohio—June 22, by L. C. Herrick, dir. Highways and Pub. Wks., Columbus, grading, curbing and paving 7.11 mi. Cincinnati-Chillicothe Rd. I. C. H. 8, 20 ft., 72,000 sq.yd. bitulithic or bitoslog, etc., $575,077.

O., Akron—June 20, by S. Porter, clk. Summit Co., grading and graveling 6,000 sq.yd. Sharon-Fairlawn Rd., $14,670; grading and paving 45,700 sq.yd. Richfield-Hudson Rd., Sect. SE-1, E-2, F and G, bituminous concrete or bituminous macadam, $160,078; 4.12 mi. Cleveland-East Liverpool Rd. 12, 16 ft., bituminous macadam or bituminous concrete with macadam base; 2.05 mi. Barberton-Springfield Rd. 14, Sect. D, 17 ft., bituminous concrete or brick; 0.27 mi. East Akron-Brimfield Rd. 90, 16 and 18 ft., granulated slag, tarvia bound macadam or asphalvic concrete. J. Weaver Court House, engr.

O., Akron—June 20, by Summit Co. paving 2 mi. Barberton-Springfield Rd. 14, Sect. D, $111,237; 0.77 mi. East Akron-Bromfield Rd. 90, Sect. A1, $28,762; 4.12 mi. Cleveland-East Liverpool Rd. 12; 5 mi.

Streets and Roads (Continued)

Richfield-Hudson Rd. 19, Sect. E, $160,000, all 18 ft. wide, macadam or asphalt. J. Weaver, Court House, engr.

O., Akron—June 25, by W. F. Peters, dir. Pub. Serv., grading and laying cement sidewalks on 4,400 ft. Bacon and Noble Aves., $37,000; grading, laying sidewalks and paving 7,735 ft. Work Dr., Annadale and Madison Aves., 26 ft., River, Johnston and Factory Sts., 30 ft., $198,400; widening, laying sewers and resurfacing 2,162 ft. South Main St. and Ira Ave., 40 ft., $68,-000; grading, laying sewers and paving 4,000 ft. South Main St., 40 ft., $119,000, vitr. brick, asphalt or granite block. E. A. Kemmler, Delaware Bldg., engr.

O., Akron—July 3, by S. Porter, clk. Summit Co., grading and paving county home grounds, 20,000 cu.yd. earth excav., 4,100 sq.yd. 5 in. waterbound macadam and 1½ in. asphaltic top, etc. $26,260. J. Weaver, Court House, engr.

O., Cleveland—June 20, by Cuyahoga Co. paving Lander Rd., 4,500 cu.yd. earth excav. and 14,000 sq.yd. 8 in. concrete, etc. $67,244. F. Lander, Court House, engr.

O., Columbus—June 19, by W. H. Duffy, dir. Pub. Serv., grading, laying water services and sewer connections and paving 3,138 ft. Broderick and Bradley Sts., alley north of Gates St., alley west of Summit St., alley north of King Ave. and alley north of Reinhard Ave., brick, concrete or asphalt; 6,941 ft. 12-30 in. vitr. storm sewer extending over several streets and alleys from alley west of Chase Ave. to Crescent Dr., $7,523. R. H. Simpson, city engr.

O., Garfield Heights (Bedford, P. O.)—June 26, for 30,000 sq.yd. vitr. brick or asphalt pavement on concrete, on East 107th, 108th, 109th and 111th Sts., Runnymead, Langton and Wadsworth Aves. $200,000. R. Munz, Town Hall, engr.

Ind., Portland—June 16, by Auditor Jay Co., concrete paving 16,742 sq.yd. Arbaugh Rd. $47,200. H. Teeters, Portland, engr.

Michigan — June 22, by F. F. Rogers, comr. State Hy. Dept., Lansing, concrete paving 1,564 mi. State Trunk Line Rd. 16-12 and 0.872 mi. State Trunk Line Rd. 39-7, both 20 ft., Ionia Co.

Michigan — June 26, by R. F. Rogers, comr. State Hy. Dept., Lansing, concrete paving 0.635 mi. Federal Aid Rd. 60, Sect. B, 1.785 mi. Federal Aid Rd. 69, Sect. A, both Livingston Co., 3.919 mi. Federal Aid Rd. 70, Sect. A, Oakland Co., 6.665 mi. Federal Aid Rd. 88, Sect. A, Ingham Co., all 20 ft.

Michigan — June 27, by F. F. Rogers, comr. State Hy. Dept., Lansing, grading and 0.994 mi. Federal Aid Rd. 98, Sect. B and 2.748 mi. Federal Aid Rd., 1 Sect. A, Kent Co.

Michigan — June 28, by F. F. Rogers, comr. State Hy. Dept., Lansing, concrete paving, etc., 2.048 mi. Federal Aid Rd. 117, Sect. A, Ottawa Co., 3.025 mi. Federal Aid Rd. 117, Sects. B and C, Muskegon Co., both 18 ft; grading 0.663 mi. Federal Aid Rd. 120, Sect. B, Ottawa Co.; Bridge File No. 700402, 90 ft. concrete girder, Bridge File No. 701602, 40 ft. concrete girder, both Ottawa Co.

Michigan — June 29, by F. F. Rogers, comr. State Hy. Dept., Lansing, concrete paving, etc., 1.251 mi. State Trunk Line Rd. 13-22, Allegan Co., and 5.811 mi. Federal Aid Rd. 101, Van Buren Co., both 20 ft.

Ill., Elmhurst—June 18, concrete paving West Park Ave. $36,000. E. Hancock, 2047 Ogden Ave., Chicago, engr.

Ill., Sycamore—June 19, by J. G. Betty, clk., 7 in. concrete paving 5,913 sq.yd. Maple and Sycamore Sts. W. M. Hay, city engr.

Wis., Milwaukee—June 18, by Dept. Pub. Wks., for 50,786 sq.yd. concrete paving, etc., in 14 alleys.

Minn., St. Paul—June 18, by G. J. Ries, aud. Ramsey Co., improving Project 23-65, 2,620 sq.yd. one course concrete pavement, 1,674 sq.yd. bituminous filled brick pavement on concrete base, 1,037 gutter, plain rubble; Project 23-05, 3,523 sq.yd. one course concrete or vibrolithic pavement. $30,000. P. N. Coates, co. surv.

Minn., St. Paul—July 2, by G. J. Ries, aud. Ramsey Co., paving New Brighton Rd., 24,561 sq.yd. one course concrete, 1,360 lin. ft. concrete curb, 8,291 cu.yd. excav., $70,000; Edgerton St., 11,496 sq.yd. one course concrete, 4,818 cu.yd. excav., etc., $35,000. P. N. Coates, co. surv.

Kan., Holton — June 22, by Black & Veatch, engrs., 701 Mutual Bldg., Kansas City, Mo., paving various streets, different types, for city.

Kan., Kansas City—June 25, by O. K. Williamson, engr., Kansas City, constructing road between Wyandotte Co. and Bonner Springs, 2,500 yd. concrete, 6,000 yd. concrete or rock asphalt, for Wyandotte Co. and city. $30,000.

Kan., Kansas City—June 30, by O. K. Williamson, engr. Wyandotte Co., constructing concrete or bituminous macadam road, 16 ft. $100,000.

Neb., Valley — June 25, by Henningson Eng. Co., Natl. Bank Bldg., Omaha, 8,000 sq.yd. paving, for city. $25,000.

Mo., Maplewood (St. Louis P. O.)—July 5, 8,546 sq.yd. 6½ in. concrete paving and 2,031 cu.yd. grading on Richmond Pl., Commonwealth and Bellevue Sts. $31,351. A. H. Beard, 616 Title Guaranty Bldg., St. Louis, engr. Noted May 24.

Tex., Dallas—E. L. Dalton, engr., 1915½ Main St., taking bids paving various streets, 14,000 sq.yd. asphaltic concrete, 13,000 ft. concrete curb and gutter, 54,000 sq.ft. sidewalk, for S. A. Temple, 3659 Maplewood St. $35,000.

Colorado—June 19, by State Hy. Dept., Denver, concrete paving 5.0659 mi. Federal Aid 135, Jefferson Co., 1,544 cu.yd. concrete, 60,600 cu.yd. earth and 1,600 cu.yd. rock excav., 53,330 sq.yd. 1 course concrete, alternate bids on bituminous surfacing on concrete, $212,445; gravel surfacing 4.748 mi. Federal Aid Project 208-C, Mesa Co., 421 cu.yd. concrete, 50,200 sq.yd. gravel surfacing, 13,400 cu.yd. earth and 100 cu.yd. rock excav., $59,830; grading and gravel surfacing 2.144 mi. State Project 714, Garfield Co., 22,640 sq.yd. gravel, 3,300 cu.yd. common and 500 cu.yd. solid rock excav., 3,000 cu.yd. borrow fill, $12,839. L. D. Blauvelt, state highway engr.

Colorado—June 20, by State Hy. Dept., Denver, gravel surfacing 2.082 mi. Federal Aid Project 214, La Plata Co., 19,550 sq.yd. gravel, etc., $60,21'; concrete paving 2.702 mi. Federal Aid Project 225-A, Morgan Co., 28,520 sq.yd. one course plain cement concrete, alternate bids on side drain culverts and bituminous surfacing on concrete, $89,-988, 2,868 mi. Federal Aid Project 226-B, Weld Co., 30,180 sq.yd. one course concrete, alternate bids on bituminous surfacing on concrete, etc., $106,611; gravel surfacing and bridging 0.587 mi. Federal Aid Project 229, Fremont Co., 5,940 sq.yd. gravel, 16,300 lb. structural, 18,900 lb. reinforcing 273 cu.yd. concrete, Bridge Sta. 968, 464 cu.yd. concrete, 122,000 lb. structural and 42,500 lb. reinforcing steel, etc., $37,930. L. D. Blauvelt, state highway engr.

California — July 2, by State Highway Comn., Sacramento, grading and gravel surfacing 4.5 mi. highway between Gilroy and San Felipe, Santa Clara Co. R. M. Morton, state highway engr.

Calif., San Bruno—City Trustees receiving bids improving Tucker, Linden and Cypress Sts., etc., 30,000 cu.yd. grading, 246,000 sq.ft. waterbound macadam, etc. To exceed $25,000. G. A. Kneese, Redwood City, co. surv. Noted May 10.

Calif., Santa Monica—City Trustees receiving bids improving Kensington Rd., 7th and Cedar Sts., etc., 157,541 sq.ft. grading, 109,467 sq.ft. oil and rock pavement, 33,283 sq.ft. walks, etc. J. A. Morton, city engr.

Calif., Stockton—City Council receiving bids improving Ash, Laurel, B and East Hazelton Sts., etc., 33,862 sq.ft. walks, 122,-730 sq.ft. 2 in. asphaltic macadam on 4 in. cementing gravel, etc. To exceed $25,000. W. B. Hogan, city engr. Noted May 10.

Calif., Stockton—City Council receiving bids improving Channel St., between Center and Cross Sts., and Cross St. between Channel and Merchant Sts., 17,901 sq.ft. 3 in. cementing gravel base, 3 in. asphaltic concrete base with 2 in. asphaltic concrete surface, etc.; East Weber Ave. and C St., 30,122 sq.ft. 7 in. pavement, 2½ in. crushed base, 2½ in. asphaltic concrete base with 2 in. asphaltic concrete surface, 8,469 sq.ft. 3 in. crushed rock base with 2 in. asphaltic concrete surface, etc.; portion Court St., 21,702 sq.ft. 3 in. crushed rock base, 2 in. asphaltic macadam surface, etc. W. B. Hogan, city engr.

BIDS RECEIVED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, June 6, curbing and asphalt paving (1) Bay 22nd St. (2) Farragut Rd. (3) Ave. L (4) Louis St. (5) Ovington Ave. (6) Stoddard Pl. (7) 7th Ave. (8) 16th Ave. (9) 56th St. (10) 58th St. (11) 78th St. from 15th to 16th Aves. (12) 78th St. from 17th to 18th Aves. (13) 83rd St. (14) Bay 35th St. (15) Bergen Pl. (16) Delamere Pl. (17) East 8th St. (18) East 9th St. (19) East 10th St. (20) East 15th St. (21) Highlawn Ave. (22) Ave L (23) 17th Ave. (24) 54th St. (25) 54th St. (26) 61st St. (27) 73rd St. (28) 75th St., from Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., (1) $3,557 (8) $25,628 (19) $18,763 (21) $17,384; Uvalde Asphalt Paving Co., 1 Bway., New York, (2) $9,722 (6) $2,693 (7) $4,278 (16) $12,-570 (25) $18,414; Cranford Co., 52 9th St., (3) $4,399 (9) $9,316 (10) $9,419 (11) $8,512 (12) $9,179 (13) $10,768 (14) $19,-224 (20) $10,332 (26) $10,006 (28) $12,346; Borough Asphalt Co., 1301 Metropolitan Ave., (4) $12,303 (5) $16,694; W. J. McHale Contg. Co., 1250 Jefferson St., (15) $4,817 (22) $6,540 (23) $2,756 (24) $3,17[illegible] (27) $6,590; Cleveland Trinidad Paving Co., Flushing, (17) $26,609 (18) $10,701. Noted May 31.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., June 5, from Uvalde Asphalt Paving Co., 1 Bway., New York, sheet asphalt paving Havemeyer St. $17,905, 107th St. $19,085 curbing, laying sidewalks and sheet asphalt paving Roosevelt Ave. $11,315, Beach 117th St. $22,050, Beach 122nd St. $45,535; from Kennedy & Smith, 15 Amity St., Flushing, 107th St. $9,470. Noted May 31.

New Jersey—State Hy. Dept., Trenton, June 4, from C. T. Kavanaugh, West 23rd St., Bayonne, concrete paving 38,613 sq.yd. Route 4, Sect. 19, Sea Girt-Belmar Rd., Monmouth Co., 99.47% engrs. est. ($178,-369), 44,673 sq.yd. Route 5, Sect. 2 A, Hackettstown-Draketown Rd., Morris and Warren Counties, 104.83% engrs. est. ($185,329), 39,130 sq.yd. Route 16, Sect. 6, Passaic River to Morris Twp., Morris County, 103.94% engrs. est. ($201,326); from J. Dorer, 644 Nye Ave., Irvington, 28,696 sq.yd. Route 9, Sect. 10, Bound Brook to Lincoln Ave., Middlesex Co., 108% engrs. est. ($162,754). Noted May 17.

N. J., Freehold—Monmouth Co., improving 2.39 mi. Allenton-Red Valley Rd., gravel on slag, from W. H. Flitcroft, Farmingdale, $42,220.

N. J., South Orange—Streets & Highways Com. of Bd. Trustees, June 4, grading, curbing and paving 4,000 ft. Prospect St., 30 and 36 ft., 3 in. sheet asphalt on 6 in. concrete, from J. Sellito, 320 Clarke St., $79,797. Engrs. est. $30,000. Noted May 10.

Pennsylvania—State Hy Comn., Harrisburg, June 7, paving with bituminous on concrete or one course rein.-con., Application 2112, Economy Twp., Beaver Co., 6,659 ft., from H. V. Kirker Co., 3223 5th Ave., Beaver Falls, $77,086; Application 2246, Springboro Borough, Crawford Co., 6,241 ft., H. W. Horst Co., Horst Bldg., Rock Island, Ill., $46,762; Application 2308, Route 304, North East Twp., Erie Co., 12,214 ft., C. H. Fry Constr. Co., 609 West 19th St., Erie, $100,552; Application 2307, Route 88, Venango Twp., Erie Co., 24,395 ft., Meredith & McVaugh, 220 Horton Ave., Detroit, Mich., $190,583; Application 2271, Route 233, Scott and Plain Grove Twps., Lawrence Co., 18,189 ft., Burns & Burt, 411 Wayne Ave., Ellwood City, $199,392; Application 2175, Route 216, Sect. 3, Chanceford Twp., York Co., 26,812 ft., Comerford Constr. Co., 125 South 5th St., Phila., $235,-183; Route 73, Center and Butler Twps., Butler Co., 11,202 ft., C. E. Walter, Butler, $106,977; Route 18, Loyalsock Twp., Lycoming Co., G. I. Thompson, Co., Clearfield, $91,358; one course rein.-con. and hillside vitr. brick, Applications 1928, 1929, 1930 and 1931, Route 218, Edenburg Borough, Clarion Co., 6,996 ft., G. V. Barnard, Clarion, $70,373; one course rein.-con., Application 2217, Route 91, Washington Twp., Clarion Co., 12,696 ft., R. V. Baldwin, 1361 4th Ave., Corapolis, $122,279; Route 68, White Twp., Indiana Co., 2,727 ft., Owen & Plummer, Inc., Otto Bldg., Johnstown, $29,-972; Applications 2202 and 2203, Hanover and East Allen Twps., Northampton Co., 22,886 ft., W. A. Palmer, 431 East North St., Bethlehem, $176,316; Route 175, Upper Nazareth Twp., Northampton Co., 20,586 ft., Ward & Tulley, Inc., 189 Montague St., Brooklyn, N. Y., $138,096; bituminous macadam (penetration method) on reconstructed base, Routes 69 and 70, South Buffalo and Buffalo Twps., Armstrong and Butler Counties, 14,368 ft., Garvey-Weyenberg Constr. Co., 807 College Ave., Appleton, Wis., $93,-824; Route 141, Tilden Twp., Berks Co., 21,666 ft., W. Supplee Co., Wayne, $93,160; Route 170, Fairview and Hanover Twps., Luzerne Co., 19,618 ft., H. B. Sproul Constr. Co., Inc., 218 Adams Ave., Scranton, $73,-991; bituminous macadam (penetration method) or bituminous surface course on reconstructed base course, R-247 Rostraver and Washington Twps., Westmoreland and Fayette Counties, 12,262 ft., Gravey-Weyenberg Constr. Co., 807 College Ave., Appleton, Wis., $66,732; Route 117, North Union Twp., Fayette Co., 8,374 ft., Warren Bros. Co., 9 Cambridge St., Boston, Mass., Spec. "D" $54,357; Route 69, Hempfield Twp., Westmoreland Co., 10,300 ft. and Route 108, North and South Strabane Twps., Washington Co., 16,413 ft., Smith Constr. Co., 707 Wick Bldg., Youngstown, O., Spec. "D," $56,327 and $92,864 respectively. Noted May 24.

Pennsylvania—State Hy. Comn., Harrisburg, June 8, paving bituminous surface course on concrete or one course rein.-con., Application 1942, Route 204, Chippewa and Patterson Twps., Beaver Co., 7,979 ft., from

Streets and Roads (Continued)

H. V. Kirker Co., 3223 5th Ave., Beaver Falls, $75,948; Application 1940, Routes 214 and 311, Sligo Borough, Clarion Co., 5,187 ft., T. W. Munroe & Co., DuBois, $55,307; Applications 2325 and 2326, Route 83, Pine and Conneaut Twps., Crawford Co., 20,149 ft., H. E. Bunce, Cambridge Springs, $155,501; Application 2329, Route 304, Amity Twp., Erie Co., 12,508 ft., J. C. Devine Co., Linden and Columbia Sts., Alliance, O., $102,717; Route 73, Mercer Twp., Butler Co., 10,548 ft., C. Winters Constr. Co., Renfrew, $88,264; Route 196, Richmond and Covington Twps., Tioga Co., 13,977 ft., J. De Long, 129 West 4th St., Williamsport, $150,648; Application 1950, Hopewell Twp., Beaver Co., 5,147 ft., H. V. Kirker Co., 3225 5th Ave., Beaver Falls, $50,102; Application 2309 and 2310, East Allen and Hanover Twps., Northampton Co., 15,537 ft., W. A. Palmer, 431 East North St., Bethlehem, $116,990; Applications 2268 and 2269, Route 50, Confluence Boro., Somerset Co., 2,875 ft., M. F. McCabe & Co., 309 Deveny Bldg., Fairmount, W. Va., $42,834; one course rein.-con. or one course rein.-con. and bituminous macadam (penetration method) on broken stone, Application 2025, Derry and Londonderry Twps., Dauphin Co., 22,890 ft., Stucker Bros. Constr. Co., 9 Russ Bldg., Harrisburg, $158,827; bituminous surface course on concrete and hillside vitr. brick or one course rein.-con. and hillside vitr. brick, Application 2005, Routes 165 and 166, Wind Gap Boro., Northampton Co., McInerny & McNeal, Inc., 702 Northampton Natl. Bank Bldg., Easton, $134,918; bituminous macadam (penetration method) on reconstructed base course, Route 53, Juniata, Blair and Allegheny Twps., Blair Co., 26,018 ft., Paul Constr. Co., Inc., 718 Harris Bldg., Phila., $100,870; Route 281, Middletown Twp., Bucks Co., 22,080 ft., J. J. Barrett, P. O. Box 704, Trenton, N. J., Spec. "D," $77,223; Route 152, Doylestown and Buckingham Twps., Bucks Co., 16,803 ft., W. C. Guncheon & Co., Smethport, $78,426; bituminous macadam (penetration method) or bituminous surface course on reconstructed base course, Route 247, Perry and Dunbar Twps., Fayette Co., 23,849 ft., Jones Constr. Co., Salem, O., $133,019; Route 111, Franklin Twp., Greene Co., 12,017 ft., Reed & Moore, Waynesburg, Spec. "D," $82,589; Route 163, South Whitehall Twp., Lehigh Co., 19,500 ft., S. N. Weaver as Weaver Contg. Co., 1409 Linden St., Allentown, $97,338; Route 118, Hempfield Twp., Westmoreland Co., 23,917 ft., Smith Constr. Co., 707 Wick Bldg., Youngstown, O., Spec. "D," $123,312. Noted May 24.

Delaware—State Hy. Dept., Dover, improving 5.59 mi. Kenton-Smyrna Rd., Contr. CK-7, from Hammil & Moriarity, Baltimore, Md., $195,665; 0.738 mi. Viola-Canterbury Rd., Contr. CK-12, from Baton Constr. Co., Presser Bldg., Phila., stone concrete $32,715, slag concrete, $32,128; 3.557 mi. Hartly-Pearsons Rd., Contr. CK-5, from Harrison Eng. & Constr. Co., Ellicott Sq., Buffalo, N. Y., $112,214; 6.3 mi. Leipsic-Symrna Rd., Contr. CK-15, from Golove Eng. & Constr. Co., Phila., $200,403. Noted May 24.

D. C., Wash.—Dist. Comrs. 509 Dist. Bldg., laying approximately 35,000 sq.yd. cement sidewalks, from W. F. Brenizer & Co., 101 New York Ave., Class A $2.31, Class B $2.45. Noted June 7.

Ky., Paducah—Bd. Pub. Wks., 67,000 sq. yd. concrete paving, 9,000 lin.ft. curbing, etc., from Yancey & Johnson, Paducah, $170,000. Noted May 17.

O., Akron—W. F. Peters, dir. Pub. Serv., May 28, repaving and widening with (1) vitr. brick (2) granite block (3) asphalt, (a) 715 ft. West Market St. (b) 2,400 ft. Delia Ave. (c) 1,400 ft. South Arlington St., from T. E. McShaffrey Constr. Co., 171 South Forge St., (1a) $40,359 (1b) $61,937 (1c) $37,780 (2a) $78,342 (2c) $71,884; McAlonan Bros., 197 West Buchtel Ave., (3a) $25,973. Noted May 3.

O., Cincinnati—Hamilton Co., June 8, grading and paving 13,100 sq.yd. Boomer Rd., bituminous macadam, from W. P. Flynn, Dana and Chase Sts., $30,688; Zig Zag and Elm Rds., from A. C. Pickelheimer, 3555 Mooney Ave., $27,890 and $9,834 respectively. Noted May 31.

O., Cleveland—Grading, curbing and paving 12,400 sq.yd. West Blvd., asphalt, from Baldwin Bros., 4500 Euclid Ave., $62,844. 8,400 sq.yd. East 82nd St., asphalt from Bentley Bros., Union Bldg., $24,256. Noted May 24.

O., Cleveland—Improving Woodland Ave., 19,600 lin.ft. 4 in. French drain gutter, 17,100 cu.yd. earth excav., 56,450 sq.yd. 3 in. (a) lake or (b) oil asphalt on 8 in. concrete, from Cleveland Trinidad Paving Co., The Arcade, (a) $311,833 (b) $305,059. Noted May 31.

O., Cleveland—Cuyahoga Co. improving Snow Rd., 13,000 cu.yd. earth excav., 18,440 sq.yd. vitr. brick, 3,880 cu.yd. 8 in. concrete base, 19,500 ft. of 4 in. sewer pipe, etc., from Ohio Contg. Co., Elyria, $116,687. Noted May 31.

Ind., Jeffersonville—Clark Co., June 4, gravel surfacing 8.8 mi. Wm. D. Taylor Rd., Owen and Washington Twps., from J. Smith, Jeffersonville, $71,488, engrs. est. $85,187; surfacing 4.78 mi. George Lindemeyer Rd., Oregon Twp., from Denny & Horton, Jeffersonville, $44,808, engrs. est. $46,776. Noted May 17 and 31.

Wis., La Crosse—Bd. Pub. Wks. paving 12 streets, from White Constr. Co., 68 Wisconsin St., Milwaukee, asphalt $127,955, asphaltic concrete $131,296, warrenite bitulithic $135,172 and $138,513 (using asphalt seal coat); T. E. Wooley, 148 West Ave. S., 3 in. brick $134,587. Noted May 24.

Minn., Minneapolis — Bd. Park Comrs., June 5, colored cement sidewalks, 6,500 sq. yd. on Lake of the Isles Blvd., and south and west shores Cedar Lake, 9,000 sq.yd. St. Anthony Blvd. and 8,000 sq.yd. Minnehaha Parkway, from Simonson & Emstad, Albert Lea, $1.43 per sq.yd., total $33,605. Noted May 24.

Neb., Lincoln—State and Douglas Co., paving 11½ mi. Military Rd., from Natl. Paving Co., 310 Arthur Bldg., Omaha, brick $543,074; A. H. Read Constr. Co., 329 Leflang Bldg., Omaha, asphalt $383,279, asphaltic concrete $352,522; American Paving Co., 1325 Grace St., concrete $341,875.

Calif., Los Angeles—Grading and paving Badger Ave. and Dock St., 317,775 sq.ft. 2 in. warrenite bitulithic on 8 in. concrete, from H. H. Peterson, Spreckels Bldg., San Diego, $113,314, on 7 in. concrete from W. D. McCray, Amer. Bank Bldg., $102,879; 2 in. warrenite bitulithic surfacing from Griffith Co., Railway Bldg., $30,188. Noted May 24.

Calif., Los Angeles—Los Angeles Co., improving Alameda St., 90,417 sq.ft. shaping roadbed, 90,417 sq.yd. concrete, 1,050 sq.yd. asphaltic concrete, 4,400 tons disintegrated granite shoulders, 1,050 sq.yd. flush coat, etc., from Southwest Paving Co., Washington Bldg., $149,008. Noted May 17.

Calif., Los Angeles—Los Angeles Co., improving road between Fish Canyon Rd. and Azusa, 17,700 cu.yd. embankment, 2,800 cu. yd. concrete, etc., from W. D. McCray, Amer. Bank Bldg., $43,348.

Calif., San Diego—Common Council, improving East St. from 16th to 25th Sts., from California Constr. Co., Union Bldg., 146,186 sq.ft. 1½ in. warrenite on 2½ in. bituminous, at $0.20 per sq.ft., etc., total $30,049. Noted Apr. 5.

CONTRACTS AWARDED

Mass., Boston—Bitulithic paving 2,000 ft. Gloucester and Hereford Sts., 20-25 ft., to Warren Bros., Parkman Bldg., $29,921; sheet asphalt paving 2,000 ft. Concord St., 20-25 ft., to Central Constr. Co., 228 Southampton St., Roxbury (Boston, P. O.), $34,645.

N. Y., Buffalo—A. W. Kreinheder, com. Pub. Wks., to Rock Asphalt Paving Co., Morgan Bldg., asphalt paving 7th St., $44,520, Delaware Ave. (new part) $30,724, Florida St. $22,679, 4th St. $6,184, Delaware Ave. (new part) $99,258; to H. P. Burgard Co., 1968 Fillmore Ave., Arthur Ave. $29,380, Dewitt St. $15,535. Noted Apr. 26.

N. Y., Herkimer—Herkimer Co. will construct Smoky Hollow Rd., bituminous macadam, $11,409, Elizabethtown Rd., concrete, $83,600, Litchfield St., concrete, $41,000 and Welsh-Bush Rd., bituminous macadam, $7,342, by day labor under supervision of R. J. Curtis, co. supt. highways.

N. Y., Niagara Falls—Paving Maple Ave., sheet asphalt, and Ashland Ave., bitulithic, to Read-Coddington Eng. Co., Niagara Falls, $15,574 and $24,193 respectively; Sugar St., rein.-con., 5th and 13th alleys, both concrete, to J. F. Kinney Corp., Gluck Bldg., $39,998, $6,601 and $2,377 respectively. Noted May 3 and 21.

N. Y., Poughkeepsie—Bd. Pub. Wks., Eastman Park Mansion, asphalt, granite block and brick pavements, etc., to Spoor-Lasher Co., Inc., Market St., $316,691. Noted May 3.

N. Y., Schenectady—Bd. Contr. & Supply, resurfacing State St., granite block, to W. P. McDonald Constr. Co., 613 Peek St., $27,822.

N. Y., Troy—Bd. Contr. & Supply, concrete paving Lanin Court, 6th Ave., 2nd, 18th and 23rd Sts., to Fitzgerald Bros. Constr. Co., Proctor Bldg., $170,503.

N. J., Audubon—Boro Comrs., concrete paving various streets, to Union Paving Co., 30th and Locust Sts., Phila., $321,718. Noted May 17.

N. J., New Brunswick—Middlesex Co., paving ½ mi. Colonial Rd., 8 in. concrete, to Ford Constr. Co., Fords, $49,477.

Pa., Corry—Asphalt and brick paving 11 streets, to Keystone Constr. Co., Meadville. Noted May 3.

Pa., Scranton—Asphalt pavement on Harrison Ave., to Sweeney Bros., Scranton, $73,522; Wheeler Ave., to H. B. Sproul Constr. Co., Scranton, $97,822.

Pa., Scranton — Asphalt paving Monsey Ave., to M. Stipp & Son, 1015 North Main Ave., $27,021. Noted Nov. 30.

Maryland—State Rds. Comn., Baltimore, concrete surfacing 6,200 sq.yd. Contr. G-23, Garrett Co., to F. A. Denison Co., 206 10th St., N. W., Wash., D. C., $26,148; 9,050 sq. yd. Contr. M-44, Montgomery Co., to M. J. Grove Lime Co., Lime Kiln, $30,160; 12,300 sq.yd. Contr. Wo-30, Worcester Co., to Hannamann-Burroughs Co., Salisbury, $35,666; 7,100 sq.yd. concrete shoulders, Contr. 141A, Montgomery Co., to Corson & Gruman Co., 33rd and K Sts., Wash., D. C., $22,507; 10,250 sq.yd. concrete shoulders, Contr. 46-A, Baltimore Co., to A. C. Knight, 2200 Linden Ave., Baltimore, $30,175; Contr. W-27, Washington Co., 14,100 tons bituminous macadam surface course, 18,300 tons rein.-con. base, to Gosnell, Russell Co., Frederick, $189,666. Noted June 7.

N. C., Spencer—Hardsurfacing various streets, to R. G. Lassiter Constr. Co., Citizens Bank Bldg., Raleigh, $200,000.

S. C., Spartanburg — Spartanburg Co. Highway Comn., hard surfacing Federal Aid Project 202, to Southern Paving & Contg. Co., East 11th St., Chattanooga, Tenn., $62,962. Noted May 24.

Fla., Tampa—To W. L. Harwell, 721 South Orleans Ave., 15,765 sq.yd. 2½ in. asphalt block paving, 8,500 lin.ft. granite curbing, relaying 1,500 lin.ft. granite curbing, on Durham, Fremont and Westland Sts., $44,488. Noted June 7.

Ala., Birmingham—Jefferson Co. grading 11 mi. Porter Elbow Rd., 20 ft., to E. H. Self and M. Meyers, Birmingham, $28,220.

Ala., Geneva—Constructing 5 mi. cement sidewalks on Commerce, North Commerce, Church and Live Oak Sts., to J. R. Carter, Geneva, $74,700; grading and asphalt paving 1 mi. Commerce and Town Sts., to Southern Roads Co., Amer. Trust Bldg., Birmingham, $98,001.

Ohio—Dept. Highways and Pub. Wks., Columbus, to F. J. Mann & Sons, Ashland, grading, bridging and paving 1.679 mi. Sect. "A" Mansfield-Wooster Rd. $95,709, 0.536 mi. Sect. "Mifflin" Mansfield-Wooster Rd. $33,516, 3.731 mi. Sect. "B" Mansfield-Wooster Rd. $229,356, 0.344 mi. Sect. "Hayesville" Mansfield-Wooster Rd., $16,334, all foregoing brick, Ashland Co.; to Acton Bros., Vaughnsville, 2.778 mi. Sect. "A" Deshler-Findlay Rd., $83,069 and 0.436 mi. Sect. "E" Ottawa-Findlay Rd., $13,095, both rein.-con., Hancock Co.; to Curry & Hayes, Cadiz, 3.183 mi. Sect. "J" Bridgeport-Cadiz Rd., bituminous macadam, Harrison Co., $114,974; to Straw & Huber, Paulding, 2.623 mi. Sect. "A-2" Logan-McArthur Rd., Hocking Co., brick, $89,267; to G. B. Smith Co., Youngstown, 2.531 mi. Sect. "Z" Canfield-Poland Rd., Mahoning Co., bituminous macadam, tar, $55,613; to Modern Constr. Co., Fremont, 3.833 mi. Sect. "F" Fremont-Port Clinton Rd., $117,354, and 0.433 mi. Sect. "Port Clinton" Fremont-Port Clinton Rd., $26,904, both rein.-con., Ottawa Co., to J. Frantz, Sidney, 1.9 mi. Sect. "G" Piqua-St. Marys Rd., Shelby Co., rein.-con., $94,685; to Putnam & Shindeldecker, Van Wert, widening with concrete curb 5.446 mi. Sect. "K" and "L" Norwalk-Bellevue Rd., Huron Co., $49,766; to E. A. Freshwater Co., Painesville, 2 in. concrete curbing 7.715 mi. Sect. "J" and 5.433 mi. Sect. "Q" Cleveland-Buffalo Rd., Lake Co., $64,762 and $46,764 respectively; to A. Bates, Convoy, 2 bridges on Sect. "B" Van Wert-Fort Wayne Rd., Van Wert Co., $5,052. Noted June 7.

Ohio—Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving roads in following counties: **Holmes Co., Sect. "C-2" Navarre-Berlin Rd.**, 2.977 mi., plain concrete, to Griggs & Anderson Co., Millersburg, $67,490. **Holmes Co., Sect. "1-1" Mansfield-Millersburg Rd.**, 2.381 mi., plain concrete, to Allen Co. Paving Co., Lima, $47,674. **Jefferson Co., Sect. "L" Bridgeport-Cadiz Rd.**, 2.564 mi., Bituminous macadam, asphalt, to J. Stringer Co., Steubenville, $74,802. **Logan Co., Sect. "C-1" Bellefontaine-Marysville Rd.**, 0.297 mi., rein.-con., to Lewis & Copeland, Lima, $42,806. **Mahoning Co., Sect. "Z" Canfield-Poland Rd.**, 2.531 mi., bituminous macadam, tar, to G. B. Smith Co., Youngstown, $55,613. **Miami Co., Sect. "F" Dayton-Greenville Rd.**, 0.748 mi., rein.-con., to McArthur Constr. Co., Kenton, $23,296. **Lorain Co., Sects. "S" and "R" Oberlin-Elyria Rd.**, constructing one bridge, repairing one bridge and building bridge approaches, to C. C. Bobinson Co., Columbus, $21,258. **Lorain Co., Sect. "T" Oberlin-Elyria Rd.**, constructing bridge, wearing surface to be of warrenite bitulithic, to C. C. Robinson Co., Columbus, $3,634. Noted May 17.

Streets and Roads (Continued)

O., Akron—Dept. Pub. Serv., paving and widening South Arlington St., standard brick, asphalt fill on 6 in., to McAlonan Bros., 197 West Buchtel Ave., $26,442; laying walks and paving Chitty Ave., sheet asphalt, brick gutter, asphalt fill, Mexican, on 6 in., to Columbus Asphalt Paving Co., 394 Buckeye Bldg., $11,703; grading and laying walks on Carpenter St., cinders, to Timmis & Gotschall, Akron, $6,065; repaving and widening West Market St., sheet asphalt, Trinidad, brick between tracks, and laying walks and paving Delia Ave., sheet asphalt, brick gutter, asphalt fill, Texaco on 6 in., to T. E. McShaffrey Constr. Co., 171 Forge St., $37,780 and $70,759 respectively.

O., Cincinnati—Paving 6,681 ft. Liston Ave., 24 ft., to Henkel & Sullivan, 105 Bell Blk., $179,086. Engrs. est. $181,827.

O., Cleveland—Grading, curbing and paving 1,220 sq.yd. Gray Ave., brick on concrete, to River Constr. Co., 2402 Mapleside Rd., $5,743; resurfacing 8,400 sq.yd. East 82nd St., asphalt, to Bentley Bros., Union Bldg., $24,250.

O., Cleveland — Improving Union Ave., 8,700 lin.ft. stone curb, 9,700 lin.ft. 4 in. tile drain gutter, 9,080 cu.yd. earth excav. and 22,820 sq.yd. vitr. brick on concrete, to A. M. Pajsa Paving Co., Euclid Heights Blvd., Cleveland Heights, $145,970. Noted May 24.

O., Cleveland Heights (Warrensville P. O.)—Grading, curbing and asphalt paving 2 sections Lee Rd., to Bentley Bros., Union Bldg., Cleveland, $88,486. Noted May 31.

O., Massillon—Repaving 32,000 yd. Main St., to Elmer Vogt Paving Co., Massillon, $110,000. Noted May 17.

O., St. Clairsville—Belmont Co., paving 1¼ mi. Flushing-Holloway Rd., vitr. brick, to Miller & Wilson, Barnesville, $52,000.

Ind., Albion—Noble Co., concrete paving 75,696 sq.yd. Stacy Street Rd., to W. L. Johnson Constr. Co., 1205 North Bellview Pl., Indianapolis. $136,645. Engrs. est. $138,394. Noted May 31.

Ind., Indianapolis—Marion Co., concrete paving 78,643 sq.yd. Northwestern Ave., to McCoun Constr. Co., Noblesville, $196,643. Engrs. est. $204,672. Noted May 31.

Mich., Bay City—Bay Co. grading and concrete surfacing 1.884 mi. Beaver Rd., 9 ft., to Meagher & Schumann, Bay City, $27,930; 1.846 mi. Portsmouth Rd., 9 ft., to Geneva Constr. Co., North Bradley, $25,974.

Mich., Grand Rapids—Kent Co. grading and gravel surfacing 26,407 sq.yd. Assessment Dist. Rd. 43, to Vander Veen Constr. Co., 320 Briarwood Ave., $26,500. Noted May 17.

Mich., Marshall—Calhoun Co. grading and concrete surfacing 1.994 mi. Assessment Dist. Rd. 17, and 2.17 mi. Assessment Dist. Rd. 16, both 20 ft., to Vander Veen Constr. Co., 320 Briarwood Ave., Grand Rapids, $59,372 and $56,711 respectively. Noted May 10.

Ill., Edwardsville—Madison Co., concrete paving and building bridges and culverts on 23,384 ft. Marine-St. Jacob Rd., 17,438 cu.yd. excav., 46,811 sq.yd. concrete base, 47,260 lb. reinforcing and 44,970 lb. structural steel, etc., to Stocker Gravel & Constr. Co., Highland, $131,700. Noted June 7.

Ill., St. Anne—Bd. Local Impvts., 33,000 sq.yd. rein.-con., paving, to H. C. Finley Constr. Co., Hoopeston, $106,098. Noted June 7.

Wis., Fond du Lac—Fond du Lac Co. Road and Bridge Com., gravel surfacing, etc., 6.24 mi. Waupun-Brandon Rd., to J. L. Burch, 2009 Madison St., Madison, $40,533; 6.09 mi. Campbellsport-St. Killian Rd., to M. Fisch, Kilbourn, $56,063; 4.26 mi. rip rap, bridge, etc., on Fond du Lac-Oakfield-Waupun Rd., also 125 cu.yd. concrete, for Millpond Bridge, to Whitewater Bridge Co., Whitewater, $16,925 and $3,750 respectively.

Wis., Madison—See "Industrial Works."

Wis., Milwaukee—Milwaukee Co. concrete surfacing, etc., Howard Ave., to R. H. Gumz, 831 13th Ave., 5,000 cu.yd. earth excav. $1, 120 cu. yd. concrete in culverts $25, 14,000 sq.yd. concrete surfacing $2.56, total $43,840; widening Silver Spring Rd., in Village of Whitefish Bay to Clayton Constr. Co., 397 Farwell Ave., 900 cu.yd. excav. $0.90, 5,300 sq.yd. concrete surfacing $2.55, total $14,325. Noted May 31.

Ia., Council Bluffs—For 10,000 yd. asphaltic concrete paving, to E. A. Wickham, 19 Scott St., $40,000. Noted Mar. 29.

Ia., Hull—For 14,000 sq.yd. concrete paving, to M. L. Flynn Paving Co., 218 Grain Exch. Bldg., Sioux City, $2.12. Noted May 10.

Ia., Ireton — Concrete paving approximately 16,000 sq.yd. various streets, to A. W. Gardner, Ireton, $2.24 per sq.yd. Noted May 31.

Ia., Jefferson—Greene Co., grading 16.916 mi. Federal Aid Project 193, to Peterson, Shirley & Gunther, Woodmen of World Bldg., Omaha, Neb., 154,107 cu.yd. excav. $0.24, total $40,056.

Ia., Marshalltown—Gravel surfacing various streets, to A. Carlson, Marshalltown, $75,091. Noted May 10.

Ia., Sioux City—City, 15,000 yd. asphalt paving, to Western Asphalt Paving Corp., Sioux City, $3.23.

Ia., Sioux City—Woodbury Co., grading and incidental work on 16.21 mi. Sioux City-Correctionville Rd. between Moville and Correctionville, 247,000 cu.yd. excav., etc., to G. W. Condon Co., Farnam Bldg., Omaha, Neb., $0.213. Noted May 24.

Ia., Wapello—Vibrolithic paving 23,573 sq.yd. various streets, to Union Constr. Co., Des Moines, $84,785. Noted May 17.

Minn., Breckinridge — Paving various streets, 21,500 sq.yd. rock concrete, to W. E. Kennedy, Fargo, N. D., $2.69 per sq.yd. Noted May 31.

Minn., St. Cloud—Paving 29,300 sq.yd. streets, 24 blocks bitulithic, to Lawrence & McCann, Eveleth, $91,150; 6 blocks, concrete, to Gruber Co., St. Cloud, $5,780.

Minn., St. Paul—Paving South Wabasha St. and Dodd Rd., Joint Project 23-51, 2,375 cu.yd. excav., 9,893 sq.yd. one course concrete, etc., to Campbell Constr. Co., 3050 Hennepin Ave., Minneapolis, $28,764; grading and paving Projects 23-02 and 23-55, 61,619 sq.yd. concrete paving, 48,000 cu.yd. excav., 147,129 cu.yd. overhaul, 21,650 lin. ft. 6 in. tile drain, etc., to Hanlon & Okes, 338 Lumber Exchange Bldg., Minneapolis, $176,638. Noted May 3 and 24.

Minn., St. Paul—Ramsey Co., to McCree & Co., 711 Merchants National Bank Bldg., County Project 23-52, White Bear Rd., 25,475 cu.yd. excav., 36,135 cu.yd. overhaul, 62,465 sq.yd. paving, 1,377 lin.ft. culverts, $162,710; Co. Project 23-01, 48,248 sq.yd. paving, 19,014 cu.yd. excav., 31,543 cu.yd. overhaul, $125,769. Both one course concrete, A aggregate. Noted May 17.

Minn., Wabasha—Wabasha Co., grading, etc., 3.5 mi. Job 2301, State Rd. A, grading to Roach Bros., Pine Island, $22,985; monolithic culverts to A. Bechman Co., Lake City, $1,318; corrugated metal culverts to Austin Western Road Mchy. Co., 375 Cedar St., Minneapolis, $1,236.

Minn., Warren—Marshall Co., Grading 6.5 mi. Job 2302, Div. 1, State Aid Rd. A, and 7 mi. Job 2302, Div. 2, State Aid Rd. A, to Anderson & Solberg, Warren, $0.165 and $0.145 per cu.yd. respectively; 13 mi. Job 2304, State Aid Rd. J, to Shanks & Moen, Middle River, $0.165 per cu.yd. Total $26,000. Noted Apr. 12.

Kan., Kansas City—Wyandotte Co., paving 3.583 mi. Walcott Rd., 16 ft. 1 course concrete, to Davidson Constr. Co., 2958 East 30th St., Kansas City, Mo., $160,819. Noted Mar. 8.

Kan., Wichita—To H. T. Ritchey, 124 North Fountain St., asphaltic concrete paving, 4,178 sq.yd. East St., $2.54 per sq.yd., 4,178 sq.yd. sand fill $0.24, 2,349 sq.yd. excav. $0.86, 8,664 sq.yd. Marsh Ave. $2.54, 8,664 sq.yd. sand fill $0.24, 9,943 cu.yd. excav. $0.86, 2,043 sq.yd Exposition St. $2.54, 582 cu.yd. excav. $0.89, 2,194 sq.yd. Mathewson St. $2.54, 2,223 sq.yd. Athenian St. $2.54, 734 cu.yd. excav. $0.89, 3,143 sq.yd. University St. $2.78, 2,938 sq.yd. Circle Dr. $2.54, 2,938 sq.yd. sand fill $0.24, 979 cu.yd. excav. $0.89; to Cornelison & Kelly Paving Contrs., 405 Caldwell Murdock Bldg., concrete paving 1,739 sq.yd. St. Clair Ave., $1.85, 490 cu.yd. excav. $0.90.

Neb., Lincoln—State and Douglas Co., brick paving 4½ mi. Lincoln Highway and 4½ mi. Q St. Rd., to National Constr. Co., 310 Arthur Bldg., Omaha, $161,597 and $157,444 respectively.

Neb., Scribner—For 8,550 yd. brick and 12,850 yd. rein.-con. paving, to Reed Constr. Co., Omaha, $71,121.

North Dakota—State Hy. Comn., Bismarck, constructing 4.397 mi. earth road north and west of Velva, Federal Aid Project 164, McHenry Co., 30,010 cu.yd. earth and 1,300 cu.yd. rock excav., etc., to Stevens Bros., Minneapolis, Minn., $28,000; 5.008 mi. gravel road north of Carrington, Federal Aid Project 2 A, Foster Co., 12,000 cu.yd. earth excav., 6,859 cu.yd. gravel, etc., to W. H. Noel, Jamestown, $27,000; 14 mi. earth road from Van Hook to Stanley, Federal Aid Project 190, Mountrail Co., 119,939 cu.yd. earth and 5,160 cu.yd. rock excav., etc., to Hall & Booth, Stanley, $70,000.

N. D., Minot—R. W. Kennard, aud. Ward Co., constructing earth roads, 8.196 mi. Project 182 and 9.111 mi. Project 82, to Drunl & Kemper, Minot, $60,266; 18.441 mi. Project 181, to Schultz Bros., Bowbells, $79,563. Noted May 3.

Wyo., Cheyenne—City, 22,500 yd. asphalt paving, to A. H. Reed, Omaha, Neb., $56,433.

Wyo., Cheyenne—Grading, curbing and paving Capitol Ave. from 15th to 24th Sts., 20,600 sq.yd. asphalt on concrete, 5,000 lin.ft. concrete curb and 5,000 lin.ft. concrete gutter, to A. H. Reed & Co., Omaha, Neb., $53,750. Noted May 18.

Mo., St. Joseph—Brick paving various streets, to Land Constr. Co., Ballinger Bldg., $32,863.

Mo., St. Louis—Bd. Pub. Serv., City Hall, curbing and paving 3,740 sq.yd. Slevin Ave., brick, and 3,070 sq.yd. Gimblin Ave., concrete, to J. E. Perkinson, 3237 Carter Ave., $21,418 and $14,227, respectively; 3,630 sq.yd. Smiley Ave., rein.-con., to Webb-Kunze Constr. Co., 5927 Fyler Ave., $16,814; 3,295 sq.yd. Lansdowne Ave., bituminous macadam, to Everman Constr. Co., 1216 South Grand Ave., $16,473; 5,240 sq.yd. Pershing Ave., warrenite, to Granite Bituminous Paving Co., Ry. Exch. Bldg., $15,381; 9,405 sq.yd. Enright Ave., asphalt, to Trinidad Asphalt Mfg. Co., Title Guaranty Bldg., $16,257. Noted June 7.

Tex., Dallas — Dallas Co., Lancaster Wilmer Rd. Belt Line 3, macadam base only, to Hill, Wilson & Watson, North Texas Bldg., $25,190; 10,600-63,000 sq.yd. asphaltic concrete paving Scyene Rd., to Smith Bros., Amer. Exch. Natl. Bank Bldg., $1 per sq.yd. Noted May 17.

Tex., Dallas—North Texas Trust Co., Merc. Bank Bldg., for 22,000 sq.yd. bituminous paving, asphaltic concrete and concrete sidewalks, curb and gutter in Owenwood Addition, to Fuller Constr. Co., Southland Life Bldg., $120,000. Engrs. est. $115,000.

Tex., Nacogdoches — Paving various streets, 15,000 sq.yd. 7 in. concrete, to J. P. McDonald, 1208 West 6th St., Austin, $60,000; 17,000 sq.yd. 3 in. vertical fibre brick on 5 in. concrete, to Panhandle Paving Co., Lubbock, $65,000.

Okla., Garber—Asphalt paving Dist. 1, to Western Paving Co., Tradesman Natl. Bank Bldg., Oklahoma City, $74,689. Noted May 24.

Arizona — State Hy. Comn., Phoenix, grading, paving with 2 in. asphaltic concrete on 4 in. bituminous, and building neecssary structures on 7.4631 mi. Solomonville-Geronimo Rd., Federal Aid Project 63, Maricopa Co., to El Paso Bitulithic Co., Piedras St., El Paso, Tex., $205,360.

Wash., Long Beach — For 302 sq.yd. gravel surfacing, 5,340 sq.yd. 6 in. concrete paving, 3,808 lin.ft. concrete curbing to Soliem & Gustafson, Astoria, $33,504.

Oregon—State Hy. Comn., Salem, rejected bids widening and grading 4 mi. Roosevelt Highway, Yamhill Co. Work will be done by force account.

Oregon—State Hy. Comn., Salem, 9.94 mi. grading and 10.43 mi. surfacing Prineville-Lake View Highway, Chewanca, Lake Co., 16 ft., to H. J. Heldeburn, Grants Pass, 41,000 cu.yd. excav., $0.29, 8,500 cu.yd. crushed rock base course, $1.75, 8,500 cu.yd. crushed rock top course, $1.75, 1,000 cu.yd. crushed rock for maintenance, $1.75, etc., total, $54,355.

Calif., Burlingame—Improving San Mateo Dr. between Oak Grove and city limits, 148,500 sq.ft. grading, 110,000 sq.ft. 1½ in. topeka on 5 in. concrete, 17,000 sq.ft. sidewalks, etc., to Pacific States Constr. Co., Call Bldg., San Francisco, $49,846. Noted Feb. 22.

Calif., Los Angeles—Grading and concrete paving 360,396 sq.ft. Compton Ave. between Vernon and south city limits, to Jahn & Bressi, Bryne Bldg., $79,003.

Calif., San Francisco — City and San Francisco Co., grading and asphaltic concrete surfacing intersection of Great Highway and Sloat Blvd., to L. J. Cohn, 180 Jessie St., $42,156. Noted June 7.

Calif., San Jose—Improving Salvador St. between 10th and 16th Sts., to R. H. Crummey, 5th and Keyes Sts., 60,025 sq.ft. 1½ in. warrenite bitulithic on 3 in. asphaltic concrete $0.25 (incl. grading), 3,030 sq.ft. concrete gutter $0.24, 2,431 lin.ft. concrete curb $0.70, etc.

Ontario—Dept. Pub. Highways, Toronto, concrete paving 2 mi. Talbot Rd., Elgin Co., to Brennan Constr. Co., Hamilton. Engrs. est. $150,000.

Ont., Birchcliff—Twp. of Scarboro, constructing 4½ mi. of 4½-6 ft. sidewalks on Ellward Blvd., Byng, Mansion, Kenworth, Leyton, Madeline and Robinson Aves., Contr. 1, Woodrow Blvd., Preston St. and Maxwell Ave., Contr. 2, to E. J. Elliott, 269 Main St., E., Toronto, concrete walks at $0.195, earth excav. $0.65, earth fill $0.80; Ballahula Blvd., Kingston Rd., Cornell, Queensbury, Haig and Lakeside Aves., Contr. 3, to W. B. Hughes, 53 Victoria Park Ave., Toronto, concrete walks $0.17, earth excav. $0.70, earth fill $1.25. Noted May 10.

Ont., Burlington — Concrete paving 5 streets, to MacArthur Paving Co., Guelph, $86,386.

Streets and Roads (Continued)

Ont., Chatham—Kent Co., concrete paving 2 mi. highways, 16 and 18 ft., to McCoy & Shaw, Wallaceburg, $2 per sq.yd. Engrs. est. $120,000.

Ont., Ottawa — Ottawa Suburban Rd. Comm., 26 Wellington St., asphaltic concrete paving 4.5 mi. Metcalfe and Bowesville Rds., 20 ft., to Standard Paving Co., Central Chambers. Engrs. est. $50,000. Noted Feb. 15.

B. C., Windermere — Regrading and graveling 12 mi. Columbia River Rd., 16 ft., to B. D. Griffin & Co., 739 Hastings St. W., Vancouver, $48,000. Engrs. est. $50,000.

Industrial Works

PROPOSED WORK

Conn., Plainville—Standard Steel & Ball Bearings, Inc., Woodford Ave., plans 2 story 50 x 200 ft. and 2 story, 60 x 150 ft. factory, both brick, plain foundations, $75,000 and $60,000 respectively. Private plans.

N. Y., Albany—P. McNamee, 90 State St., plans 2 story, brick, concrete and steel garage, storage building and service station, 89-95 Central Ave. $125,000-$135,000.

N. Y., Buffalo—Buffalo General Electric Co., Electric Bldg., plans 2 story, 120 x 200 ft., steel and concrete garage, 990 Niagara St. $100,000.

N. Y., Elmira—J. R. and M. L. Melvin, 709 East Water St., plan brick, concrete and steel garage and machine shop addition, High and Water Sts. $30,000-$40,000.

N. Y., Elmira — Standard Oil Co., 26 Bway., New York City, plans garage, machine shop and service station at intersection of Lake, 5th and William Sts., here. $50,000. Address A. E. Carr, 1001 Stowell St., Elmira, mgr.

N. Y., Mineville—Witherbee Sherman Co. plans repairs to power house at Cookshaft, recently damaged by fire. $75,000-$100,000.

N. Y., Norwood—See "Miscellaneous."

N. Y., Utica—See "Buildings."

N. Y., Utica—Utica Baking Co., 610 Jay St., plans 2 story, 100 x 120 ft. bakery, brick, concrete and steel, Elizabeth St. $40,000-$50,000.

Pa., Phila.—J. S. Ivins Sons, Inc., 625 North Broad St., had plans prepared by W. E. S. Dyer, Land Title Bldg., and soon takes bids 5 story bakery with detached power plant, fireproof, 4811 Germantown Ave. $600,000.

Pa., Washington—Beaver Refining Co. plans to rebuild oil refinery recently destroyed by fire. $500,000. Engineer and architect not announced.

Md., Baltimore—Baltimore & Ohio R.R., Charles and Baltimore Sts., having plans prepared by M. L. Kimball, company engr., 3 story pattern shop and office, brick and steel, Mt. Clare. $75,000.

W. Va., Keyser—Keyser Worsted Mills Co., having plans prepared by T. W. Biddle, Jr., MacFarland Bldg., Cumberland, Md., 1 story and basement, 65 x 120 ft. woolen mill addition. $40,000.

N. C., Sanford—Virginia & Carolina Mining Co., Winston-Salem, plans power house and pumping unit to be connected with mining works, here. $100,000.

N. C., Waynesville—Pigeon River Power Co. plans hydroelectric generating plant on Pigeon River. $250,000. Engineer not selected.

Fla., Tampa—Chemical Constr. Co., Trust Bldg., Charlotte, N. C., plans phosphate plant, on Hillsborough River, near here. $1,500,000. C. C. Nott, pres. of board.

Miss., Greenwood—Standard Handle Co., Division St., Macon, Ga., plans plant, here. $50,000. Engineer and architect not announced.

La., New Orleans—Cloverland Dairy Co., Carrolton Ave. and Olive St., had plans prepared by Favret & Livaudais, Hibernia Bank Bldg., 3 story building with power house, etc., rein.-con. $300,000. Address G. J. Glover, Whitney Bank Bldg.

Tenn., Athens—Tennessee Electric Power Co., Hamilton Natl. Bank Bldg., Chattanooga, plans to construct and operate electric power plant, here.

Kentucky—Dark Tobacco Growers Assn., Tompkinsville, plans 10 or more tobacco warehouses in various towns, first one to be built soon at Tompkinsville. $25,000 each. J. G. Cook, Tompkinsville, dir.

Ky., Louisville—Gulf Refining Co., 7th St. Rd., plans 2 story, 60 x 135 ft. brick warehouse, 7th and Mix Sts. $40,000.

Ky., Louisville — St. Joseph's Infirmary, 4th St., having plans prepared by D. X. Murphy & Bro., Louisville Trust Bldg., laundry building in connection with infirmary, Eastern Parkway. $60,000.

Ky., Paducah — Tymo Utility Co. plans new plant. $40,000. Engineer and architect not selected.

Ind., Evansville — Jenkins Packing Co. having plans prepared by H. E. Boyle, Furniture Bldg., 2 story and basement, 90 x 140 ft., rein.-con. and brick plant. $40,000.

Ind., Peru—Hotel—Peru Hotel Corp. plans plans 4 story and basement, 66 x 132 ft., rein.-con., steel and brick. $200,000.

Ind., St. Paul—St. Paul Tire & Rubber Co., plans 1 story, brick and steel factory. $200,000. Engineer and architect not selected.

Ind., Washington—Leonard Range Co., Roosevelt and Columbia Aves., plans 2 story and basement, rein.-con. and brick factory. $100,000. Private plans.

O., East Pelestone—City retained H. O. Swoboda, Inc., consult. electrical and mechanical engrs., Empire Bldg., Pittsburgh, Pa., to prepare plans for additional unit to municipal plant.

O., Ravenna — A. C. Williams Co. will build new molding room, 2nd cupola, cleaning and sand storage rooms, new industrial tracks to handle raw material.

Mich., Detroit—Detroit Lubricator Co., 5938 Trumbull Ave., having plans prepared by Smith, Hinchman & Grylls, 800 Marquette Bldg., 4 story, 120 x 140 ft., brick, steel and rein.-con. factory addition, plain foundation, Trumbull Ave.

Ill., Alton—Standard Tilton Milling Co., Pierce Bldg., St. Louis, Mo., having plans prepared by R. C. Stone Eng. Co., archts and engrs., Merchants Exch., St. Louis, Mo., 5 story, 75 x 110 ft. mill and warehouse, rein.-con., Bway., here. $200,000.

Ill., Princeton—Southern Ry., 1300 Pennsylvania Ave., Wash., D. C., plans planing mill, here. To exceed $40,000. A. A. Woods, Ingalls Bldg., Cincinnati, O., ch. engr. maintenance of way and structures.

Wis., Antigo — Kelley Auto Sales Co. plans 2 story, garage and repair shop, brick, rein.-con. and steel, plain foundation, Edison St. $40,000. Engineer and architect not selected.

Wis., Benton — Kistler-Stephens Co., Platteville, having plans prepared by C. Lawyer, engr., Benton, 2 story, 60 x 95 ft., brick, rein.-con. and steel, mill, plain foundation, here. $50,000.

Wis., Green Bay—See "Buildings."

Wis., Madison—Madison Auditorium Co., 119 East Washington Ave., having plans prepared by Balch & Lippert, Gay Bldg., 1 story, 50 x 90 ft. heating plant, rein.-con., steel and brick, plain foundation, Main St. $100,000.

Wis., Madison — Madison Ford Garage, 210 East Washington Ave., having plans prepared by Small & Flad, Ellsworth Bldg., 1 story, 60 x 87 ft., brick, rein.-con. and steel garage, plain foundation. $40,000.

Wis., Manitowoc—Manitowoc Portland Cement Co., c/o L. E. Geer, 16th and River Sts., making plans 1 story, 75 x 500 ft., brick and rein.-con., mill, plain foundation, incl. kiln to manufacture 3,000 bbl. cement daily, South 26th St. $1,000,000. Private plans.

Wis., Milwaukee — H. T. Schramek, archt., 608 Majestic Bldg., preparing plans 1 story, 110 x 125 ft., brick and concrete addition to garage, plain foundation. $50,000. Owner's name withheld.

Ia., Denison—Armour Creameries, c/o J. W. Handford, Denison, having plans prepared 2 story and basement, creamery, brick and title, $75,000. Private plans.

Mo., Cameron—June 22 to vote on $85,000 bonds electric light plant and transmission lines, etc. E. E. Harper, 3031 Park Ave., Kansas City, engr.

Mo., St. Louis—Endicott-Johnson Corp., 105 Clinton St., Binghamton, N. Y., plans 3 story and basement, 150 x 150 ft., rein.-con. and brick warehouse, plain foundation, 12th St., here. $175,000. Private plans.

Ark., Camden—Morris Oil Co. plans oil refinery, 3,000 bbl., daily capacity. $250,000. Engineer and architect not announced.

Tex., Ranger—Paltic Gas Co., c/o E. D. Finney, Ranger, takes bids latter part of month, casing head gasoline plant. $100,000. Private plans.

Okla., Antlers — Oklahoma Powder Co., Oklahoma City, plans hydro electric plant, on Kiamichi River, near here. $500,000. Engineer not selected.

Okla., Sayre—See "Sewers."

Calif., Hayward—Hayward Farm Products Sales Co., C and Castro Sts., plans packing plant and warehouse, B St. To exceed $40,000.

Calif., Lodi—Gloria Ice Cream Co., Oak and Aurora Sts. Stockton, plans 55 x 220 ft. warehouse and refrigerating plant, Lockeford St., here. To exceed $50,000.

Calif., Los Angeles—See "Miscellaneous."

Calif., Los Angeles—I. Nussbaum, 942 West 58th St., having plans prepared by W. F. Bowen, Union League Bldg., 5 story and basement, rein.-con. warehouse, Vermont Ave. To exceed $200,000.

Calif., Los Angeles—Pacific Coast Biscuit Co., 652 Imperial St., had plans prepared by J. F. Rhodes, 414 Central Bldg., 4 story and basement, 120 x 134 ft. factory, Imperial St. near 6th St. $130,000. Noted June 7.

Calif., Oakland—California Transit Co., et al., 55 5th St., San Francisco, plans motor truck bus factory, here. $500,000. Engineer and architect not selected.

Calif., Oakland—Montgomery-Ward Co., c/o W. Q. Bateman, Pacific coast mgr., 27th and Vaughn Sts., Portland, Ore., having plans prepared by A. McAuley, Chicago, rein.-con. warehouse, 29th Ave. and East 14th St., here. $200,000.

Calif., San Francisco — Merganthaler Linotype Co., 638 Sacramento St., had plans prepared by A. A. Cantin, 68 Post St., 3 story and basement, 22½ x 1,120 ft., rein.-con. warehouse addition. $75,000.

Calif., San Francisco — National Ice Cream Co., 666 Guerrero St., had plans prepared 1 story, concrete, service building, Guerrero and 16th Sts. $70,000. A. J. Mazureth, 366 Guerrero St., engr.

Calif., San Francisco—Pacific Gas & Electric Co., 445 Sutter St., had plans prepared pump house, incl. 48 in. diam. rein.-con. conduit, 275 ft. long, concrete intake on one end and pump house on other, two 18 in. pumps, 7,000 gal. per min. capacity, will be installed, miscellaneous discharge pipe and 2 story, rein.-con. pump house. $110,000. Private plans.

Calif., San Francisco — H. Shermund, archt., Hearst Bldg., prepared plans 5 story, 100 x 120 ft., warehouse, rein.-con. and mill construction, vicinity Vermont and 18th Sts. $100,000. Owner's name withheld.

Ont., Collingwood—R. Dodds, Dodds Iron Wks., plans plant for manufacture of flour mill equipment. $50,000.

Ont., Cooksville—Harper & Sons, 152 Franklin St., Toronto, plans wood working, sash and door mill, here.

Ont., Ford City—Ford Motor Co. of Canada had plans prepared by A. Kahn, 1000 Marquette Bldg., Detroit, Mich., 2 story, 112 x 148 ft., power house, rein.-con., brick and steel also 27 x 31 ft. rein.-con. screen house, Sandwich St.

Ont., Hamilton—Canadian Westinghouse Co., Traders Bank Bldg., Toronto, having plans prepared by B. H. Prack, 50 Bay St., Toronto, 2 or 3 story, addition to factory, rein.-con., brick and steel, here. $1,250,000.

Ont., Kenora—Backus Brooks Co., International Falls, Minn., plans paper mill, 100 tons daily capacity, here. $150,000. J. T. McLellan, c/o owner, engr.

Ont., Kingsville—J. Ross & Co., Owensborough, Ky., plans 100 x 300 ft. tobacco drying and processing plant, here. $75,000.

Ont., Kitchener—Arch-Scheider Packing Co., 145 Queen St., plans 2 and 3 story and basement, brick and steel plant addition, plain foundation. $150,000. Engineer and architect not selected.

Ont., Niagara Falls—Canadian Niagara Power Co., plans transformer station, concrete, plain foundation. $150,000. Private plans.

Ont., Oakville—Oakville Basket Co. plans to rebuild factory, destroyed by fire, 2 or 3 story, brick and wood. $150,000. Engineer and architect not selected.

Ont., Weston—Toronto Free Hospital for Consumptives soon lets contract central heating plant incl. boiler house, brick and concrete, chimney, brick or concrete, concrete pipe conduits, etc. $100,000. M. F. Thomas, 229 College St., Toronto, engr.

B. C., Ruskin—British Columbia Electric Ry., 425 Carroll St., Vancouver, had plans prepared 10,000 kw., 3 phase light and power plant, at Stave Lake. $750,000. Also having preliminary surveys made dam and power plant, 80,000-100,000 kw., on Stave River, 2 mi. north of here. $6,000,000-$8,000,000. R. S. Kelsch, 702 Power Bldg., Montreal, consult. engr.

BIDS DESIRED

Mass., Boston—June 21, by Dept. Pub. Wks., 2 story, 53 x 220 ft. garage with 31 x 65 ft. ell, rein.-con., wood pile foundation, Albany St. $150,000. Mulhall & Holmes, 248 Boylston St., archts. Noted June 7.

O., Cleveland—W. S. Lougee, archt., Marshall Bldg., taking bids and opens same about June 20, 2 story and basement, 75 x

Industrial Works (Continued)

100 ft. auto sales and 2 story and basement, 80 x 110 ft. garage, brick, steel and concrete, 6604 Euclid Ave., for J. J. Klein and G. B. Harris, Engineers Bldg. $150,000. Noted Apr. 12.

Mich., Detroit—H. Kohn and F. Richardson, c/o H. Farwell, archt., 35 Ford Ave., Highland Park, taking bids 3 story, 40 x 125 ft., garage and service station, rein.-con. and brick, plain foundation, Hamilton Ave. $50,000. W. H. Adams, 431 Griswod St., engr.

Ill., Chicago — Minchin, Spitz & Co., archts., 19 West Jackson Blvd., receiving bids 1 story, 50 x 125 ft. garage, fireproof, Division St. near Spaulding Ave., for J. Greenburg, c/o architect. $40,000.

Ill., Chicago—Leichenko & Esser, archts., 38 South Dearborn St., receiving bids 2 story, 25 x 100 ft. auto sales and service station, fireproof, 6618 Cottage Grove Ave., for I. W. Lederer, c/o architect.

Wis., Milwaukee—C. Barkhausen, archt., 79 Wisconsin St., taking bids 1 story, 42 x 104 ft. and 50 x 52 ft. bakery additions, brick and concrete, plain foundation, 7th St., for M. Carpenter Banking Co., 102 7th St. Noted June 7.

Okla., Okmulgee—Smith & Senter, archts., 401 Commerce Bldg., receiving bids 3 story and basement, 75 x 118 ft. garage, rein.-con., brick and stone, for X. R. Gill Co. $125,000. Noted May 3.

Calif., San Francisco — O'Brien Bros., Inc., archts., 315 Montgomery St., receiving bids 1 story and basement, (ultimately 4 story), garage, rein.-con., Eddy St. near Hyde St., for L. W. Allen, c/o architects.

Calif., San Rafael—Engineering Dept. of Pacific Gas and Electric Co., 445 Sutter St., San Francisco, receiving bids rein.-con. garage, and timber meter shop, paint shop, warehouse, etc. To exceed $40,000. Noted May 17.

CONTRACTS AWARDED

Mass., Cambridge (Boston, P. O.)—C. Baratta, 263 Atlantic Ave., Boston, 1 story, 50 x 115 ft. garage, brick, wood pile foundation, Carlton St., here, to J. J. Bowes, 27 School St., Boston, $60,000.

Mass., Monson — Rubwood Wheel Inc., c/o H. N. Atwood, 2 story, 50 x 80 ft. factory, concrete and stone, plain foundation, to Cummings Constr. Co., Ware, $60,000.

Mass., North Andover (Lawrence P. O.) —M. T. Stevens & Sons Co., power plant, 1,700 hp., at Stevens Mill, will be connected to mill by concrete tunnel, to M. C. Tuttle Co., 22 Chestnut Terrace, Boston.

Conn., Meriden—I. Limon, 127 South Colony St., 3 story, 70 x 130 ft. storehouse and garage, brick and steel, plain foundation, 13 Cherry St., to F. A. Lanouette, 24 Lanouette St. Archts. est. $100,000. Noted Apr. 26.

Conn., Meriden — Wolf New Process Abrasive Wheel Inc., 711 Hanover St., 1 story, 60 x 180 ft. factory, brick and steel, plain foundation, Hanover St., to L. A. Miller, 22 Church St. Archts. est. $80,000.

Conn., Watertown—Watertown Mfg. Co., Watertown St., 1 story, 70 x 120 ft. factory, brick and steel, plain foundation, to H. Wales Lines Co., 134 State St., Meriden. Archts. est. $45,000.

N. Y., Watertown—City, hydraulic electric plant, to T. F. Breslin Co., Woolworth Bldg., $314,316. Noted May 10.

Pa., Erie—Continental Rubber Wks., 19th and Liberty Sts., general contract 3 story and basement, 75 x 104 ft. rein.-con. and brick, factory addition, to H. Shenk Co., 12th and Sassafras Sts. Archts. est. $75,000. Noted June 7.

Pa., Pitcairn—Pennsylvania R.R., Central Region, Broad St. Sta., Phila., 1 story and pit, 42 x 90 ft., boiler, machine and transformer shop, here, to W. Sutherland Constr. Co., Compton Bldg., St. Louis, Mo.

Pa., Pittsburgh—T. Donaldson, 837 West North Ave., 1 and 6 story and basement, 50 x 120 ft. and 60 x 140 ft. warehouse, Western Ave., to D. T. Riffle, 1006 Forbes St. Archts. est. $150,000.

Fla., Miami—L. D. Shackleford Motor Co., 3 story, 103 x 178 ft., rein.-con. and steel garage, 38th St. and Dixie Highway, to Watson Corp., 12th and Court Sts., $120,000.

La., New Orleans—New Orleans Pub. Serv. Inc., to Phoenix Utility Co., Tchoupitoulas and Nuns Sts., and 71 Bway., New York City, 63 x 151 ft. substation, rein.-con., brick faced, Polymia and Baronne Sts., $300,000; remodeling and extending boiler house, Market and South Peters Sts., $100,000, also 2 oil storage tanks on Market and South Peters Sts., and 1 on Magazine and Poydras Sts., $50,000 each.

Tenn., Jackson—See "Railways."

Ky., Louisville—Louisville Gas & Electric Co., 317 West Chestnut St., constructing gas plant; 1,000,000 cu.ft. gas holder to Stacey Mfg. Co., Elmwood St., Cincinnati, O.; dry purifiers to Western Gas Constr. Co., 1429 Buchanan St., Ft. Wayne, Ind.; liquid purification system to Coppers Co.; compressors to Ingersoll-Rand Co., 11 Bway., New York City; exhausters to P. H. and F. M. Rootes Co.; water gas machinery to United Gas Impvt. Co., Broad and Arch Sts., Phila., Pa. Noted May 10.

Ky., Louisville—Public Garage, 4th St., 1 story, 150 x 150 ft. top addition, brick, 4th St., to General Constr. Co., 229 5th St. Est. cost $50,000.

O., Cincinnati—See "Buildings."

O., Cleveland—See "Buildings."

O., Cleveland—K. V. Painter, 6521 Euclid Ave., 1 and 2 story, 50 x 140 ft., brick, steel and concrete garage and show rooms, East 66th St. north of Euclid Ave., to H. K. Ferguson Co., 6523 Euclid Ave. Archts. est. $50,000.

Ind., Huntington—Orton-Steinbreuner Co., 1 story, 100 x 240 ft. machine shop, brick and steel, to H. W. Elser, Huntington. Archts. est. $80,000.

Mich., Detroit — Hall — Dodds Co., 2526 Grand River Ave., general contract for garage, service station and sales room, Grand River and Brooklyn Aves., to Everett Winters Co., 751-754 Book Bldg., $125,000.

Mich., Detroit—C. M. Hall Lamp Co., 1035 East Hancock Ave., structural steel framework for 1 story, 80 x 172 ft., addition to factory, brick, steel and rein.-con., plain foundation, to Russell Wheel & Fdry. Co., Chene St., archts. est. $50,000; masonry work for above to E. Chase, Penobscot Bldg. archts. est. $75,000. Noted May 17.

Mich., Detroit—Paige Detroit Motor Co., Fort St. and McKinstry Ave., 1 story, 280 x 988 ft. auto assembly plant, brick, concrete and steel, Warren Ave., to W. E. Wood Co., 1805 Ford Bldg.

Mich., River Rouge—Mulkey Salt Co., Dix Ave. and River Rouge St., 2 story, brick, steel and rein.-con. plant addition, plain foundation, to C. Keller Co., 4628 Moran St., Detroit, $40,000.

Ill., Chicago—A. I. Epstein, 712 West Madison St., 1 story fireproof garage, 18-24 Sangamon St., to Neslo-Wagstad-Carlson Co., 1743 North Crawford Ave. Archts. est. $60,000.

Ill., Chicago—A. D. Schuller, 4634 North Kedzie Ave., 1 story, 125 x 200 ft., fireproof auto sales building and garage, 3016-32 Lawrence Ave., to F. Watzke, 500 North Kildare St. Archts. est. $60,000. Noted June 7.

Wis., Madison—Chicago & Northwestern R.R., 226 West Jackson St., Chicago, round house, here, to G. W. Gimble Co., Chicago; grading and track work to Duffy & Jutton, Milwaukee. Engrs. est. $300,000.

Wis., Manitowoc—Invincible Metal Furnace Co., 26th and Franklin Sts., 1 story, 85 x 185 ft., rein.-con., brick and steel, factory, plain foundation, to Schuette Constr. Co., South 8th St. Archts. est. $40,000.

Wis., Shiocton—Big Wolf Kraut Co., c/o G. H. Lonkey, will build 1 story, 70 x 250 ft., brick and timber factory, plain foundation, by day labor. $45,000. Private plans.

Wis., South Milwaukee—Mid Western Shoe Mfg. Co., c/o S. Doerman, 1612 Lake Ave., 3 story, 54 x 130 ft., brick and timber factory, plain foundation, Michigan Ave., to W. F. Tubesing Co., 139 West Chestnut St., Wauwatosa. Archts. est. $50,000.

Ia., Centerville—G. Morris, general contract 1 story and basement, 40 x 60 ft. garage, to J. M. and J. J. Leeper, Centerville. Archts. est. $75,000.

Mo., Kansas City—United Motor Service Co., 1416 McGee St., general contract 1 story and basement, 100 x 100 ft., salesroom and garage, to G. F. Green, 424 Rialto Bldg., $50,000.

Mo., St. Louis—Great Western Smelting & Refining Co., 3100 North Bway., general contract 1 and 2 story, 100 x 400 ft., brick, concrete and steel foundry, plain foundation, Bway., to C. B. McCormack & Son, Columbia Bldg.; steel work, to Mississippi Valley Structural Steel Co., 811 Park St. Archts. est. $150,000. Noted May 31.

Mo., St. Louis—Keller Sign Co., 900 North Bway., general contract 2 story, 50 x 120 ft., brick and concrete factory and office building, plain foundation, Washington St., to A. Winkel, 816 North Leffingwell St. Archts. est. $40,000.

Mo., St. Louis—Westerback Realty Co., 128 Madison St., 3 story, 263 x 346 ft., rein.-con. and brick factory, plain foundation, Natural Bridge Rd., to Widmer Eng. Co., Laclede Gas Bldg. Archts. est. $250,000. Columbia Can Co., lessee.

Calif., San Diego—Motor Transit Co., 860 1st St., will build 1 story, 100 x 200 ft., auto stage depot, brick, 2nd and E Sts., by day labor. To exceed $75,000.

Calif., San Francisco—J. Allec, 2140 Folsom St., 1 story and mezzanine, rein.-con. shop, Folsom and 17th Sts., to Cahill Bros., 110 Sutter St., $70,000. E. R. Bacon Co., 51 Minna St., lessee. Noted May 31.

Calif., San Francisco—Crystal Laundry Co., c/o A. G. Headman, archt., New Call Bldg., 2 story, rein.-con. laundry, 13th and Folsom Sts., to R. McLeran Co., Hearst Bldg., $50,000.

Calif., San Francisco—Hollingshead Co., 1 story, rein.-con. warehouse and factory, 17th and Connecticut Sts., to G. Wagner, 251 Kearney St., $60,000.

Calif., San Francisco—Standard Oil Co., Standard Oil Bldg., several rein.-con. buildings, tanks, etc., for oil distributing plant, on block bounded by Beach, Jefferson, Jones and Leavenworth Sts., to R. McLeran Co., Hearst Bldg. Engrs. est. $500,000.

Ont., Niagara Falls—Canadian Niagara Power Co., will build 26 x 150 ft. transformer station, brick, concrete and steel, by day labor. $150,000.

Ont., Saulte Ste Marie—Great Northern Gas Co., Ltd., will build gas plant and mains, by day labor. R. G. Finnegan, supt.

Ont., Toronto—City Dairy Co., Ltd., Spadina Crescent, general contract 4 story, 80 x 100 ft., rein.-con. and brick garage, Bancroft St. to Sullivan & Fried, 81 Victoria St. Engrs. est. $160,000.

Ont., Toroto — Toronto Transportation Comn., 35 Yonge St., 1 story, 135 x 285 ft. car barns and repair shops, rein.-con., steel and brick, 2 story, 42 x 118 ft. office, brick and steel, Roncesvalles and Queen Sts., general contract to Sullivan & Fried, 81 Victoria St., $300,000.

Buildings

PROPOSED WORK

Me., Hebron — Gymnasium — Hebron Academy takes bids about July 15, 2 story, 60 x 100 ft., rein.-con. and brick, plain foundation. $150,000. F. O. Stanley, Waverly Ave., Newton, Mass., pres. Bd. Trustees. J. C. Stevens & Sons, Portland, archts.

N. H., Berlin—High School—School Com. had plans prepared by T. M. James Co., 3 Park St., Boston, and takes bids in summer, 3 story, about 125 x 150 ft., rein.con. and brick, wood pile foundation. $200,000-$300,000.

Mass., Boston—Apartment—Goggin & Ripley, 350 Madison Ave., New York City, had plans prepared by Parker, Thomas & Rice, 177 State St., 7 story, 50 x 90 ft., brick and steel, wood pile foundation, 301 Berkely St. $750,000.

Mass., Chicopee — Dormitory — Roman Catholic Bishop, Elliot St., Springfield, had plans prepared by J. W. Donohue, 476 Main St., Springfield, 2 story, 80 x 130 ft., brick and steel, Springfield St., here. $150,000.

Mass., Medford—City Hall—Voted $250,000 for City Hall. R. B. Coolidge, mayor. Engineer and architect not selected.

Mass., Middleboro—High School—Town had plans prepared by E. I. Wilson, 109 State St., Boston, and soon takes bids 3 story, 100 x 150 ft., rein.con. and brick, wood pile foundation. $225,000. Noted Feb. 8.

Mass., Worcester—School—City plans 2 story, Hamilton St. $150,000. Engineer and architect not selected.

Conn., Manchester—Business—J. Guinipero plans 3 story, 60 x 160 ft., brick, plain foundation, Main St. $150,000. Engineer and architect not selected.

N. Y., Binghamton—Church—High St. Methodist Episcopal Society, plans brick, stone, concrete and steel, Vestal Ave. and High St. $150,000. F. D. Cornell, chn. building com.

N. Y., Binghamton—School—Bd. Educ. plans 20 room school, Broad Ave. and Robinson St. $400,000. Engineer and architect not selected.

N. Y., Binghamton — School — Common Council and Bd. Educ. plan new 40 room school, Sherman Pl. $400,000. W. E. Weller, city engr. Architect not selected.

N. Y., Brooklyn — High School — Bd. Educ., 500 Park Ave., New York, soon takes bids 5 story, 65 x 215 ft., brick, steel and stone, plain foundation, Union and President Sts. here. $2,000,000. W. H. Gompert, Flatbush Ave. extension and Concord St., archt. and engr.

N. Y., Brooklyn—Theatre—Fourth Ave. and Dean St. Corp., c/o E. De Rosa, archt. and engr., 110 West 40th St., New York, soon takes bids 2 story, 60 x 100 ft., brick, steel and stone, plain foundation, 4th Ave. and Dean St. $200,000.

Buildings (Continued)

N. Y., Buffalo—Bank and Office—Liberty Bank soon takes bids 15 story, brick, steel and stone, plain foundation, Main St. A. C. Bossom, 680 5th Ave., New York City, archt. and engr.

N. Y., Buffalo—Hotel—Selden Mfg. Co., 45 Selden St., Detroit, Mich., had plans prepared by Lewis & Hill, 892 Main St., 4 story, stone, brick, concrete and steel, West Utica St., here. $250,000.

N. Y., Gouverneur—Office and Theatre—W. Gauthier had plans prepared by C. M. Curtis, 301 Tallman St., Syracuse, and soon takes bids 3 story, brick, concrete and steel. $150,000. Noted May 10.

N. Y., Ilion — Clubhouse — Ilion Lodge 1444 B. P. O. E. plans 3 story and basement, 60 x 100 ft., concrete, steel, tapestry, brick and limestone, West St. $150,000.

N. Y., Lockport—Home and Hospital—Niagara Co. had plans prepared by R. Kidd, Buffalo, brick, rein.-con. and steel. $1,600,000.

N. Y., Mt. Vernon—Bank and Office—Eastchester Savings Bank soon takes bids 6 story, brick, steel and stone, plain foundation. $500,000. Holmes & Winslow, 134 East 44th St., New York City, archts. and engrs. Noted Mar. 1.

N. Y., New York—Bank and Office—Harriman Natl. Bank, 44th St. and 5th Ave., plans 15 story, brick, steel and stone, plain foundation. Engineer and architect not selected.

N. Y., New York—Office—Kaufman Dress Co., c/o C. H. Meyers, archt. and engr., 31 Union Sq., soon takes bids 17 story, 90 x 100 ft., brick, steel and stone, plain foundation, West 35th St. $850,000.

N. Y., Riverhead—Bank—Riverhead Savings Bank having sketches made by Holmes & Winslow, archts. and engrs., 134 East 44th St., New York, 1 story, 50 x 100 ft., brick, steel and stone, plain foundation. $250,000. Noted Jan. 11.

N. Y., Rochester—Mercantile — Sibley, Lindsay & Curr Co., 250 Main St. E., soon take bids 6 story, 24 x 235 ft., brick and steel addition. $500,000. T. B. Ryder, pres.

N. Y., Utica—Office, etc.—Utica Gas & Electric Co., 222 Genesee St., plans 6 story, brick, concrete and steel office and testing building, Lafayette and Cornelia Sts. $175,000-$200,000.

N. J., Jersey City—Bank—Greenville Bank & Trust Co., Ocean Ave., soon takes bids 1 story and mezzanine, 55 x 105 ft., brick and stone, plain foundation, Ocean and Lemback Aves. $200,000. A. C. Bossom, 680 5th Ave., New York City, archt. and engr. Noted May 10.

N. J., Jersey City—Church—St. Marys Roman Catholic Church, 246 2nd St., soon takes bids brick and stone top addition, 3rd and Erie Sts. $200,000. R. J. Reiley, 477 5th Ave., New York City, archt. Noted May 3.

N. J., Hightstown — High School — Bd. Educ. rejected bids 2 story, brick, steel and stone, plain foundation. $150,000. Will readvertise. Guilbert & Bettelle, 2 Lombardy St., Newark, archts. and engrs. Noted June 7.

N. J., Trenton — Office — State Building Comn. plans large office building adjoining Capitol, West State St. Address N. A. K. Bugbee, c/o State House Comn. Engineer and architect not selected.

Pa., Altoona — Synagogue — Agudath Achim Congregation, 1306 17th St., having plans prepared by Shor & Friedman, archts., Pittsburgh, 2 story and basement, 44 x 85 ft., rein.-con., brick and steel, 17th St. $150,000. S. Strauss, rabbi. Noted Jan. 11.

Pa., Johnstown — Hospital — Directors Conemaugh Valley Memorial Hospital, take bids about June 19, 4 story and basement, 60 x 130 ft., rein.-con., brick and steel, Franklin St. F. Krebs, pres. W. R. Myton, 1204 1st Natl. Bank Bldg., archt.

D. C., Wash.—Apartment—Washington Automobile Apartment Corp., c/o J. M. House, pres., Washington Mortage & Finance Co., International Bldg., plans apartment, New York Ave. between 13th and 14th Sts., N. W., $1,000,000. Engineer or architect not selected.

Fla., Bradentown—Hotel—I. T. Roberts and associates, Birmingham, Ala., having plans prepared by M. L. Elliott, Citizens Bank Bldg., Tampa, 6 and 8 story hotel, Manatee River east of Manatee. $2,000,000.

Fla., Miami—Bank and Office—Bank of Bay Biscayne, 12th St. and Ave. D, having plans prepared by Weary & Alford, 1923 Calumet Ave., Chicago, and G. L. Preiffer, Miami, 5 story (ultimately 12 story), stone and steel, West Flagler St. and North Miami Ave. $220,000.

La., New Orleans—Hotel—Grunewald Hotel Com. having plans prepared by Favrot & Livaudais, Hibernia Bank Bldg., and Toledano, Wogan & Bernard, Title & Guarantee Bldg., and takes bids in December, 20 story, Baronne St. $3,000,000-$4,000,000. J. Vaccaro, pres.

La., New Orleans—Opera House—E. Weil, archt., Whitney Central Bldg., preparing plans and takes bids about Sept. 3, constructing opera house, concrete and steel, Louisiana and Crockett Sts., here., for Ehrlish Bros., Shreveport, $750,000.

Ky., Covington—Hospital—Salvation Army, 120 West 14th St., New York City, rejected bids 4 story, brick, stone and steel, here. $150,000. Will readvertise. H. D. Chase, 120 West 14th St., New York City, archt. and engr. Noted Oct. 12.

O., Cincinnati—School, etc.—University of Cincinnati plans School of Applied Arts $600,000, addition to Engineering Building $200,000, Tanners Council of America Research Building $110,000, and College of Law Building $250,000, rein.-con., plain foundations. H. Lake, Telephone Bldg., archt.

Ind., Indianapolis—Church—Holy Rosary Church plans 2 story and basement, 125 x 145 ft., rein.-con., steel and brick, Stevens St. $150,000. Kopf & Woolling, Pythian Bldg., archts.

Ind., Logansport—Hospital—Bd. Hospital Trustees, c/o R. Leonard, archt., Frankfort, having plans prepared 3 story and basement, 100 x 150 ft., brick, here. $150,000.

Ind., Princeton—Memorial—Owner, c/o J. W. Gaddis, archt., Vincennes, plans 3 story and basement, rein.-con., steel and brick, here. $150,000.

Ind., South Bend—Club House—Progress Club plans 3 story, 66 x 165 ft., fireproof. $225,000. E. A. Mayo, 53 West Jackson St., archts.

Mich., Battle Creek—Apartment—Billingham & Cobb, archts., Kalamazoo, making sketches and takes bids in September, 7 story and basement, rein.-con. and brick, concrete pile foundation, Marshall St., here, for G. C. Maass, 67 Yuba St. $500,000.

Mich., Detroit—Apartment—Beckett & Akitt, archts., 73 Monroe Ave., preparing plans 13 story and basement, 50 x 140 ft., brick and steel, plain foundation, Cass Ave. $500,000. Owner's name withheld.

Mich., Detroit—Apartment — Buckingham Apartments, c/o H. J. Darling, archt., 901 Empire Bldg., preparing plans 4 story and basement, 45 x 90 ft., brick and steel, plain foundation, West Grand Blvd. and 3rd St. $150,000.

Mich., Detroit—Church—Redeemer Presbyterian Church, c/o G. D. Mason & Co., archts., 508 Griswold St., had plans prepared 2 story and basement, 70 x 160 ft. with wing, brick, steel and stone, plain foundation, West Grand Blvd. and Trumbull Ave. $200,000.

Mich., Detroit — International Com., Y.M.C.A., 1926 S. Antoine St., having plans prepared by Donaldson & Meier, 1314 Penobscot Bldg., 6 story and basement, 100 x 150 ft., brick, steel and rein.-con., plain foundation, Elizabeth St. $450,000.

Mich., Ecorse—Hotel—P. Pehenczy, c/o P. R. Rossello, archt., 406 Congress Bldg., preparing plans 2 story and basement, 80 x 110 ft., brick and steel, plain foundation. $150,000.

Ill., Chicago—Apartment—Addison Building Corp., c/o B. L. Steif, archt., 64 West Randolph St., plans 6 story, fireproof, Bway. and Addison Sts. $500,000.

Ill., Chicago—Lodge—Lafayette Council 361, Knights of Columbus, 1307 Milwaukee Ave., plans 5 story, fireproof, Fairfield, Washtenaw and Fullerton Sts. $500,000. Shattuck & Layer, 19 South La Salle St., archts.

Ill., Chicago—Store—Apartment and Hotel—Edelson & Paulson, 11 South La Salle St., plan 8 story, 80 x 125 ft., fireproof, 840 Sheridan Rd. $900,000. Lowenberg & Loewenberg, 111 West Monroe St., archts.

Ill., Chicago—Theatre—Baldban & Katz, 181 North State St., plans fireproof theatre, 5,000 seats, Bway. and Lawrence Ave. $5,000,000. Rapp & Rapp, 190 North State St., archts.

Ill., Eldorado—Hotel—Eldorado Hotel Co., having plans prepared by A. P. Barnes, Palace Bldg., Harrisburgh, 3 story and basement, 50 x 110 ft., rein.-con., and brick, concrete pile foundation. $150,000.

Ill., Evanston—Apartment—A. H. Quitsow, archt., 11 South La Salle St., Chicago, preparing plans 3 story, 118 x 138 ft., fireproof, here. $350,000. Owner's name withheld.

Ill., Litchfield—High School—Bd. Educ., having plans prepared by Liese & Ludwig, Temple Bldg., Danville, 2 story and basement, rein.-con. and brick, plain foundation, $150,000.

Wis., Beloit—City Hall—Having plans prepared by F. A. Carpenter, Brown Bldg., Rockford, Ill., 2 story and basement, 78 x 90 ft., fireproof, Public St. near State St. $150,000.

Wis., Fond du Lac—School—St. Patrick's Congregation, 19 East Follett St., rejected bids 2 story and basement, brick and concrete, plain foundation. $150,000. Will readvertise later. Stepnoski & Mehner, Forest Ave., archts. Noted May 17.

Wis., Green Bay—Temple, etc.—Federated Trades Council, City Hall, plans temple and heating plant, brick, rein.-con. and steel, plain foundation. $150,000. W. Weisner, City Hall, pres. Engineer and architect not selected.

Wis., Milwaukee—Apartment—Wisconsin Bond & Mortgage Co., 440 Bway., having revised plans prepared by Voelz & Siebert, archts., 373 Bway., 4 story, 80 x 100 ft., brick, tile and concrete, plain foundation, Juneau Ave. $200,000.

Wis., Milwaukee — Office — Leenhouts & Guthrie, archts., 424 Jefferson St., preparing plans 3 story and basement, 85 x 100 ft., brick and concrete, plain foundation, Prospect Ave. $200,000. Owner's name withheld.

Ia., Clear Lake—Club—Clear Lake Golf Club having plans prepared by E. O. Broaten, Mason City, 2 story and basement, 100 x 100 ft., brick and stone. $150,000.

Ia., Marion — High School — Bd. Educ. having plans prepared by W. J. Brown, Bever Bldg., Cedar Rapids, 3 story and basement, rein.-con., brick and stone. $150,000.

Ia., Waterloo—Church—Linden Methodist Episcopal Society, c/o J. Harnuf, having plans prepared by Netcott & Netcott Co., 517 Black Bldg., 3 story and basement, 100 x 125 ft., steel, brick and tile. $250,000.

Ia., Winfield—School—Bd. Educ., takes bids latter part of month, 2 story and basement, brick and stone. $160,000. Rich & Woodburn, 320 Valley Natl. Bank Bldg., Des Moines, archts. Noted May 10.

Minn., Minneapolis—Store and Office—H. M. Steiner, pres. Amer. Linen Co., 911 La-Salle Ave., had plans prepared by Colburn & Forsell, 210 South 9th St., 10 story addition, 70 x 225 ft., rein.-con. and brick, 9th St. and LaSalle Ave. $300,000.

Minn., St. Paul—Store and Office—Citizens Service Corp., 601 Selby Ave., having plans prepared by Toltz, King & Day, 1410 Pioneer Bldg., 12 story and basement, rein.-con., brick and tile, 6th and Jackson Sts. $800,000.

S. D., Sioux Falls—City Hall—Plans 3 or 4 story and basement, rein.-con., brick and tile. $225,000.

N. D., Fargo—Hospital—Cass Co. plans rein.-con., brick and tile, probably 3 story and basement, $150,000. W. R. Tucker, c. aud. Engineer and architect not selected.

N. D., Jamestown—Club—Knights of Columbus, Council 1883, having plans prepared by E. Rosatti, 117 Bway., Fargo, 3 story and basement, 50 x 110 ft., rein.-con., brick, tile, steel and terra cotta. $150,000.

Mo., Kansas City — School — Barstow School having preliminary plans prepared by Holt, Price & Barnes, 800 Davidson Bldg., rein.-con. and brick, 48th and Rock Hill Sts. $150,000.

Mo., Sedalia—Court House—Pettis Co. had plans prepared by W. E. Hulse & Co., Hoke Bldg., Hutchinson, Kan., 3 story and basement, 100 x 130 ft., rein.-con., brick and stone. $350,000. Noted Apr. 19.

Mo., Unionville—Court House—Putnam Co. voted $150,000 bonds for court house. Engineer and architect not selected.

Mo., Warrensburg—High School—Bd. Educ., having plans prepared by J. H. Felt & Co., 800 Grand Ave. Temple, Kansas City, 2 story and basement, rein.-con., brick and stone. $200,000. Noted May 17.

Tex., Dallas—Hotel—J. O. Taft, archt., 1714 Corsicana St., soon takes bids 9 story and basement, 90 x 103 ft., concrete, brick and stone, plain foundation, Harwood and Jackson Sts., for E. D. Gonzales, 3029 Bryan St. $311,000.

Tex., Ft. Worth—Apartment—L. E. Callicotte, Burkburnett Bldg., had plans prepared by E. T. Glasgow, F. & M. Bldg., 4 story and basement, 70 x 100 ft., brick, stone, steel and timber, plain foundation, Bway. $150,000.

Tex., San Antonio—Y. M. C. A. takes bids about July 10, 8 story, 90 x 120 ft., rein.-con., brick and stone, concrete pile foundation, Pecan and Navarro Sts. $400,000. W. E. Simpson Co., N. B. C. Bldg., engrs. Adams & Adams, 517 Gibbs Bldg., archts. Noted Nov. 16.

Tex., Texarkana—Bank and Office—First Natl. Bank takes bids about July 1, 8 story and basement, steel, concrete and brick, plain foundation. $250,000. Sanguinet, Staats & Herrick, First Natl. Bank Bldg., Ft. Worth, and Siebert & Halsey, Texarkana, archts.

Tex., Waco—City Hall—Defeated $325,000 bonds 4 story and basement. A. T. Koch, city engr. Noted Apr. 19.

Buildings (Continued)

Okla., Chickasha—Industrial Art—State Bd. of Officers, Oklahoma City, having plans prepared by Layton, Smith & Forsyth, 701 Southwest Natl. Bank Bldg., Oklahoma City, 3 story and basement, 70 x 160 ft., rein.-con., brick and stone, here.

Okla., Tulsa—Office—Chamber of Commerce, City Hall, plans 5 story and basement, 75 x 140 ft., rein.-con., brick and stone, 5th and Cincinnati Sts. $150,000. Engineer and architect not selected.

Colo., Denver — Church — Congregation Emanuel, 16th Ave. and Pearl St., having plans prepared by R. Vieger, Chamber Commerce Bldg., 50 x 100 ft., brick and steel, plain foundation. $150,000.

Colo., Greeley—College—Bd. Educ. having plans prepared by W. B. Ittner, 910 Locust St., St. Louis, Mo., 2 story and basement, rein.-con. and brick, plain foundation. $200,000.

Ore., Astoria—Hospital—Fraternal Hospital, Inc., plans 3 story and basement, 40 x 175 ft., rein.-con., Franklin Ave. $150,000. J. E. Wicks, Astoria, archt.

Ore., Portland—Academy—Hill Military Academy plans group of 10 college buildings at Rocky Butte, near here. $500,000. Address J. A. Hill, c/o owner. Engineer or architect not selected.

Calif., Hanford — Auditorium — Election June 20, to vote on $190,000 bonds for municipal auditorium.

Calif., Hollister—School—San Benito Co. High School Dist., having plans prepared by W. H. Weeks, 369 Pine St., San Francisco, 1 and 2 story, rein.-con. buildings, incl. main building, auditorium and gymnasium. $200,000.

Calif., Los Angeles—Apartment—J. A. Fitch, c/o Russell & Alpaugh, archts., Story Bldg., having plans prepared 4 story and basement, 90 x 150 ft., brick, 11th and Lake Sts. $150,000.

Calif., Los Angeles—City Hall—Voted $7,500,000 bonds to acquire necessary land and construct new city hall. Noted Apr. 4.

Calif., Los Angeles—Hotel—S. H. Blevin, c/o Walker & Eisen, archts., Pacific Finance Bldg., having plans prepared 10 story, rein.-con., Wilshire and Hampshire Sts. To exceed $500,000.

Calif., Los Angeles — Library — Voted $500,000 bonds to acquire more land as site for new public library.

Calif., Los Angeles—Theatre and Store—W. Hast, et al., c/o M. Hunt, archt., Hibernian Bldg., having plans prepared 2 story and basement, rein.con., Vine St. $150,000 or more.

Calif., Oakland — Office — C. W. McCall, archt., Central Bldg., preparing plans 5 story, rein.-con., downtown section of city. $200,000. Owner's name withheld.

Calif., San Francisco—Apartment—W. E. Hudson, archt., Chronicle Bldg., preparing preliminary plans 6 story and basement, fireproof, Sutter and Leavenworth Sts. $150,000. Owner's name withheld.

Calif., San Francisco—Church—Grace Cathedral, c/o L. P. Hobart, archt., Crocker Bldg., having plans prepared, stone and fireproof, block bounded by Jones, California, Taylor and Sacramento Sts. $2,000,000.

Calif., San Francisco—Store, etc.—L. R. Lurie, 315 Montgomery St., having plans prepared by O'Brien Bros., Inc., 315 Montgomery St., 2 story and basement store, loft and auto stage depot, rein.-con., Jessie and 5th Sts. $200,000. Pickwick Stages, 683 Market St., and Pacific Auto Stages, Inc., 3730 Mission St., will occupy building.

Calif., Stockton—City Hall—Opens bids about June 15 (change of date) for city hall, fireproof, on block bounded by El Dorado, Center, Fremont and Lindsey Sts. $600,000. Noted May 3.

Calif., Stockton—Office—G. Allen, archt., 37 South Aurora St., preparing plans 5 story and basement, rein.-con., Sutter and Channel Sts. $200,000. Owner's name withheld.

Calif., Turlock—Academy—Turlock Union High School Dist., having plans prepared by W. H. Weeks, 369 Pine St., San Francisco, 2 story, rein.-con. and brick. $200,000.

Calif., Watsonville—Schools—City plans election to vote on $100,000 bonds for grade schools and $100,000 bonds for new high school.

Ont., St. Catherines—Station—Niagara, St. Catherines & Toronto Ry., plans passenger and freight station, here. $300,000. R. L. Harrison, St. Catherines, ch. engr.

Ont., Toronto—Hospital—City having plans prepared by G. W. F. Price, City Hall, 2 or 3 story and basement, rein.-con. and brick, plain foundation, Surrey Pl. $200,000.

Ont., Toronto—Hospital—St. Michaels Hospital, 30 Bond St., plans brick and steel, Victoria St. $500,000. Engineer and architect not selected.

Ont., Toronto—Theatre—V. Glaser, 764 Yonge St., plans 2 story and basement, rein.-con., brick, stone and marble, plain foundation. Engineer and architect not selected.

BIDS DESIRED

N. Y., Brooklyn—Police Station—June 18, by R. E. Enright, police comr. at Bookkeepers Office, 240 Centre St, New York, new 105th Precinct Police Station House and garage, Meserole Ave. and Lorimer St., here.

N. Y., New York—Office—Fifth Ave. and 46th St. Corp., c/o Schwartz & Gross, archts. and engrs., 347 5th Ave., will build 16 story, 100 x 100 ft., brick, steel and stone, plain foundation, 2 West 46th St. $1,000,000. Work will be done by separate contracts under supervision of architects.

N. Y., New York—Schools—June 22, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, P. S. 60, East 12th St., also P. S. 73, 3 story, West 166th St. and Woodycrest Ave., both brick, steel and stone, plain foundation, for Bd. Educ., 500 Park Ave. $850,000 and $425,000 respectively. Noted Feb. 1 and May 10.

N. J., Bergenfield—School—July 3, by Bd. Educ., Washington School, Summit and Taylor Aves., new school. E. Sibley, archt., L. C. Licht, Hacker & Hacker, associated archts., Edgewood Lane and Bluff Rd., Palisade; adv. this issue. Noted Apr. 26.

Pa., Bedford Springs—Hotel—June 19, by Rutas, Russell & Wood, archts., Century Bldg., Pittsburgh, 4 and 5 story and basement, 42 x 336 ft. and 42 x 66 ft., 2 story and basement, 65 x 125 ft., and 1 story and basement, 60 x 125 ft. additions, here, for Bedford Springs Hotel Co. $500,000.

Md., Baltimore—Church, etc.—June 21, by H. P. Baker, pastor and chn. building com., Wilkens Ave. Methodist Episcopal Church, 306 South Mount St., 3 story, 66 x 113 ft. church and Sunday school, Wilkens Ave. and Vincent St. $155,000. H. L. Cain, 12 North 9th St., Richmond, Va., archt.

W. Va., Charleston—Club—June 18, by L. Lott, archt., 1004 Commercial Bldg., Dayton, O., 2 story and basement, 60 x 103 ft., Spring Hill, for Kanawha Country Club. $200,000. Noted Nov. 30.

Ky., Louisville — Temple — June 29, by Nevin, Wischmeyer & Morgan, archts., Starks Bldg., temple, 4th and Breckenridge Sts., for Scottish Rite Assn., 438 - 6th St. $750,000. Noted May 10.

O., Akron—Store, Shop and Theatre—Rapp & Rapp, archts., 190 North State St., Chicago, taking bids 3 story, fireproof, Main and High Sts., here, for Akron Enterprises Corp.

O., Cleveland—Commercial and Office—H. T. Jeffrey, archt., 621 Hanna Annex, taking bids and opens same about June 24, 4 story and basement, 132 x 132 ft., brick, steel and concrete, 12th St. and Chester Ave., for Chester-12th Building Co., c/o J. E. Andrews, 631 Hanna Annex. $300,000.

O., Columbus—School—July 2, by E. L. McCune, clk. Bd. Educ., Town and High Sts., 2 story, 72 x 166 ft., rein.-con. and brick, Markinson and 19th Sts. $140,000. Former bids rejected. H. D. Smith, 50 East Town St., archt. Noted Apr. 26.

Ill., Chicago—Apartment—W. A. Morrow & Co., archts., 30 North Michigan Ave., receiving bids 3 story, 110 x 110 ft., fireproof, South Park Blvd. near 108th St., for E. P. Waldron, 5733 Calumet Ave. $200,000.

Ill., Chicago—Hotel—F. U. Malmin, 54 West Randolph St., and R. D. Huszagh, archt., 105 North Clark St., receiving bids 3 story, 100 x 150 ft., fireproof, Bway. and Buena Park. $250,000.

Mich., Lansing — Temple — June 19, (change of date) by E. A. Bowd, archt., 127 West Allegan St., 7 story, 100 x 165 ft., south Capitol Ave., for Masonic Temple Assn., Amer. State Savings Bank Bldg. $750,000. Noted May 31.

Wis., Verone—Asylum—June 29, (change of date) by Dane Co. c/o M. Sommers, 512 West Wilson St., 4 story, 100 x 140 ft., brick, rein.-con. and steel, plain foundation. $150,000. A. D. Conover, Tenney Bldg., Madison, archt. Noted June 7.

Wis., Milwaukee — Science and Law School—June 20, by A. C. Eschweiler, archt., 141 Wisconsin St., brick and concrete, plain foundation, for Marquette University, 1115 Grand Ave.

Wis., Milwaukee—Store and Office—June 20, by Herbst & Kuenzli, archts., 114 Grand Ave., 10 story and basement, brick and concrete, plain foundation, for B. E. Nicholl, 109 Wisconsin St. $350,000. Noted May 3.

Ia., Oelwein—High School—June 27, by W. Gordon, archt., 317 Hubbell Bldg., Des Moines, 2 story and basement, brick and stone, here, for Bd. Educ. $200,000. Noted Apr. 19.

Minn., St. Paul—School—June 15, by H. W. Austin, city purch. agt., 3 story and basement, rein.-con., brick and tile, 14th and Jackson Sts. $225,000. F. Z. Tewes, city archt.

Tex., Houston — Chemical — June 25, by W. W. Watkins, archt., Scanlan Bldg., 3 story and basement, concrete, tile and brick, plain foundation, for Rice Institute. $375,000.

S. D., Flandreau—School—June 22, by Bd. Educ., 2 story and basement, rein.-con., brick, tile and stone. $150,000. Schuemacher & Finkelhor, 315 Paulton Blk., Sioux Falls, archts.

BIDS RECEIVED

Wis., La Crosse—Schools—Bd. Industrial Educ., 1 and 2 story, 140 x 206 ft. vocational school, and 3 story and part basement, 114 x 155 ft., Lincoln Grade School, both brick, tile and concrete, plain foundations, from Grahn & Bathhurst, 638 Plymouth Bldg., Minneapolis, Minn., $138,900 and $176,940 respectively. Noted May 24.

Calif., San Francisco—School—City and San Francisco Co., rein.-con. school, Powell St. near Francisco St., general contract from R. Trost, 26th and Howard Sts., $191,865. Noted May 31.

Calif., Torrance—High School—Torrance High School Dist., constructing brick high school, general contract from J. C. Bannister, Marsh-Strong Bldg., Los Angeles, $137,654. Noted May 24.

CONTRACTS AWARDED

Me., Sanford—Office—Preble Lodge Masons 143, 4 story, 76 x 96 ft., brick and timber, plain foundation, to Turner Constr. Co., 178 Tremont St., Boston, $150,000. Archts. est. $155,000.

Mass., Boston — Apartment — Pilgrim Court Corp., 17 Congress St., will build 5 story, rein.-con., brick and stone, wood pile foundation, Riverway, by day labor. $750,000. Silverman, Brown & Heenan, 51 Cornhill, archts.

N. Y., New York — Apartment — J. Diamond, c/o G. Nordham, archt. and engr., 18 West 34th St., will build 6 story, 100 x 125 ft., brick, steel and stone, plain foundation, Bryant Ave., by day labor. $250,000.

N. Y., New York—Apartments—Finkelstein & Schwartz, c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 5 story, 100 x 100 ft., Sheridan Ave., $250,000, and 6 story, Westchester Ave., $200,000, both brick, steel and stone, plain foundations, by day labor.

N. Y., New York—Apartment—M. Perlbinder, c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 5 story, brick, steel and stone, plain foundation, West Farms Rd., by day labor. $250,000.

Pa., Altoona — Nurses Home — Altoona Hospital, 4 story and basement, 40 x 105 ft. brick, limestone and terra cotta addition, by day labor. Archts. est. $150,000. Steel contract to Phoenix Bridge Co., Phoenixville. Crow, Lewis & Wick, 200 5th Ave., New York City, archts. Noted Mar. 22.

Pa., Pittsburgh—Office—Bell Telephone Co. of Pennsylvania, Phila., general contract 3 story and basement, East Diamond and Montgomery Sts., here, to W. F. Trimble & Sons Co., 1719 Pennsylvania Ave. Archts. est. $150,000.

Pa., Pittsburgh—Synagogue—Adath Jashuras Congregation, c/o R. Friedberg, archt., Farmers Bank, 1 story and basement, 70 x 93 ft., St. Clair and Margarette Sts., to H. Rubenstein, 601 West Euclid Ave. Archts. est. $150,000. Noted July 13.

W. Va., Wierton — High School — Bd. Educ., 2 story and basement, 95 x 157 ft., Orchard St., to Steubenville Stone Building Co., Steubenville, O., $176,515. Noted May 24.

N. C., Goldsboro — Office — Independent Order Odd Fellows, State Grand Lodge, 10 story, 65 x 96 ft., concrete, steel, brick and terra cotta, to J. E. Beaman, Commercial Bank Bldg., Raleigh, $400,000.

Fla., Miami — Hotel and Store — E. C. McAllister, 320 - 12th St., 9 story, 100 x 140 ft., rein.-con., Flagler St., to G. W. Langford Co., Miami, $500,000 plus percentage basis.

Ky., Nazareth — Convent — Convent of Nazareth, 3 story convent, to J. Meyer, Jr., Cincinnati, O. Archts. est. $150,000. Noted May 24.

O., Cincinnati—Office, etc.—S. Rosenthal & Co., 15 West 6th St., 6 story, 70 x 120 ft.,

Buildings (Continued)

rein.-con. and brick office and printing shop, plain foundation, 12th and Jackson Sts., to Ferro Concrete Constr. Co., 3rd and Elm Sts., $200,000.

O., Cleveland — Hospital — Associated Building Co., East 93rd St. and Euclid Ave., 6 story and basement, 50 x 164 ft., brick, steel and concrete, to Lundoff-Bicknell Co., 5716 Euclid Ave. Archts. est. $400,000. Noted May 24.

O., Cleveland—Library—Cleveland Pub. Library Bd., c/o E. H. Whitlock, Kinney-Levan Bldg., 4 story, 199 x 216 ft., brick, steel, concrete and marble, East 3rd St. and Superior Ave., to Lundoff-Bicknell Co., 5716 Euclid Ave. Archts. est. $4,000,000. Noted June 7.

O., Cleveland—Office, etc.—Six Thousand Three Hundred Euclid Co., c/o J. G. Russell, Ulmer Bldg., 3 story and basement, 72 x 153 ft. office and 3 story and basement, 85 x 120 ft. warehouse, brick and steel, 6300 Euclid Ave., to H. K. Ferguson Co., 4900 Euclid Av. Archts. est. $200,000.

O., Columbus — Office — F. L. Packard, archt., 16 East Broad St., 8 story and basement, 80 x 96 ft., brick, concrete and terra cotta, 4th and Broad Sts., to E. H. Latham, 60 East Broad St., for M. L. Yuster, Parkview Ave. and Broad St. $341,680. Noted May 17.

O., Toledo—Store—F. W. Woolworth & Co., Woolworth Bldg., New York City, 2 story and basement, 120 x 120 ft., brick, steel and terra cotta, plain foundation, Adams and Superior Sts., here, to A. Bentley & Sons Co., 201 Belmont Ave., $200,000. Noted May 24.

Mich., Detroit—Apartment—G. J. Hilsendegen, 185 Lochmoor Blvd., 10 story and basement, 113 x 128 ft. rein.-con., brick and steel, plain foundation, John R St., to O. Misch Co., 159 East Columbia Ave.

Mich., Detroit—Apartment—A. V. Lee, c/o L. Kamper, archt., Kamper Bldg., Cass Ave., 9 story and basement, 60 x 125 ft., brick, steel and rein.-con., plain foundation, Sproat St., to O. Misch Co., 159 East Columbia St., $350,000. Noted May 3.

Mich., Detroit—High School—St. Leo's Parish, 14th and Warren Aves., 3 story, 72 x 145 ft., brick, steel, stone and concrete, plain foundation, to Hazelton & Clark Co., 1359 Book Bldg., $150,000.

Ill., Chicago—Apartment—G. Peterson, 29 South La Salle St., 3 story, 98 x 200 ft., fireproof, 4800 Ellis Ave., to Salmon-Waterton Co., 230 East Ohio St. Archts. est. $250,000.

Ill., Chicago—Apartment—M. Sugar, 4839 North Avers Ave., will build 3 story, 125 x 150 ft., fireproof, Whipple St. near Monrose St., by day labor. $200,000. A. L. Himelblau, 30 North Dearborn St., archt.

Ill., Chicago — Apartment-Hotel — J. Schmitt, 8258 Halsted St., 3 story, 50 x 260 ft., fireproof, 5510 Cornell St., to J. McHugh & Co., 7031 Morgan St. Archts. est. $150,000.

Ill., Chicago — School — Bd. Educ., 650 South Clark St., 3 story, 184 x 275 ft., fireproof, 1426-38 North Parkside Ave., to F. Burke & Son, 35 South Dearborn St. Archts. est. $650,000.

Ill., Chicago—School—Bd. Educ., 650 South Clark St., 3 story, 135 x 168 ft., fireproof, 1620 South Spaulding Ave., to S. N. Nielsen, 3059 Augusta St. Archts. est. $600,000.

Ill., Chicago—Theatre, Store and Office—Fitzpatrick-McElroy Co., 200 South State St., 3 story, 125 x 125 ft., fireproof, 3149-59 West 63rd St., to West Englewood Constr. Co., 6237 South Ashland Ave. Archts. est. $200,000.

Ill., Evanston—Club—Evanston Country Club, 2 story, 72 x 170 ft., fireproof, Grove St., to MacLean Constr. Co., 76 West Monroe St., Chicago. Archts. est. $250,000.

Wis., De Forest—High School Bd. Educ., brick, rein.-con. and steel, plain foundation, to De Forest Lumber Co., De Forest. Archts. est. $150,000. Noted Jan. 18.

Wis., Madison—Store and Apartment—Piper Bros. Co., 31 North Pinckney St., 3 story, 66 x 100 ft., brick, rein.-con. and steel, plain foundation, to J. H. Keeley, 2013 Madison St. Archts. est. $150,000. Noted June 7.

Wis., Platteville—Temple—Melody Lodge 2, c/o J. Buris, Jr., will build 2 story, 90 x 100 ft., brick, rein.-con. and steel, plain foundation, by day labor. Noted Apr. 26.

Ia., Keokuk—School—Bd. Educ., general contract 3 story and basement, rein.-con., brick, tile and stone, to Currie-Simpson Co., 180 West 1st St., Waterloo, $257,000. Noted June 7.

Minn., Ely — High School — Bd. Educ., general contract 3 story, 169 x 208 ft., brick, stone and steel, to Jacobson Bros., 410 Columbia Bldg., Duluth, $539,700. Total $700,000. Noted May 17.

Neb., Omaha—Office and Store—George & Co., 902 City Natl. Bank Bldg., 4 story and basement, 70 x 420 ft., rein.-con., brick and stone, general contract to J. Black Masonry & Contg. Co., 515 Federal Reserve Bank Bldg. Archts. est. $750,000.

Mo., Clayton — School — John Burroughs Country Day School, Wall Bldg., St. Louis, 2 story and basement, 50 x 330 ft., rein.-con. and brick, plain foundation, Price and Clayton Sts., here, to Gamble Constr. Co., 619 Chestnut St., St. Louis. Archts. est. $200,000. Noted Jan. 25.

Mo., Kansas City—Office—Kansas City Life Insurance Co., Rialto Bldg., general contract 3 story and basement, 140 x 160 ft., rein.-con. and brick, Bway. and Armour Blvd., to Collins Bros., 1600 Grand Ave. Archts. est. $600,000. Noted Mar. 15.

Mo., Trenton—High School—Bd. Educ. general contract 3 story and basement, 100 x 150 ft., brick and stone, to C. C. Ebbe, Trenton, $157,026. Noted May 3.

Tex., Dallas—Theatre—J. H. Yeargan, Jr., Republic Natl. Bank, 3 story and basement, terra cotta, steel, concrete and brick, plain foundation, Bryan and Masten Sts., to Vilbig Bros., Paris and Bourbon Sts., $150,000. Noted Apr. 26.

Okla., Tulsa—Church—Trinity Episcopal Congregation, general contract 2 story and basement, rein.-con., brick and steel, 5th and Cincinnati Sts., to Bricknert & Garbett Constr. Co., 924 South Main St. Archts. est. $300,000. Noted Mar. 22.

Ore., Portland—Apartment—Commodore Investment Co., 512 Chamber of Commerce Bldg., general contract, 4 story and basement, 90 x 139 ft., rein.-con., plain foundation, Glison and 20th Sts., to McHolland Bros., Abbington Bldg., $200,000.

Calif., Long Beach—Store, Hotel and Club—C. J. Harper, Sea Gull Apartments, 10 story, concrete and steel, Ocean Blvd., to A. W. Baruch, 236 South Plymouth St., Hollywood, $750,000. Noted May 10.

Calif., Los Angeles—School, etc.—Cumnock School of Expression, 200 South Vermont St., will build 2 and 3 story, school, auditorium and dormitory, timber, Las Plumas and 3rd Sts., by day labor. $200,000. A. S. Heiman, San Fernando Bldg., archt. Noted June 1.

Calif., Los Angeles—Theatre—Erlanger Syndicate, 100 x 140 ft., 5th St. and Grand Ave., to Scofield Eng. Constr. Co., Pacific Finance Bldg., $500,000.

Calif., Modesto—Hotel—G. F. Covell, c/o A. W. Cornelius, archt., Merchants Natl. Bank Bldg., San Francisco, 5 story, brick and steel, here, to Hansen & Buchen, 1116 H St., $150,000. Noted May 24.

Calif., San Francisco—Apartment and Store—P. Bradley and I. E. O'Connell, 180 Jessie St., 6 story and basement, rein.-con., Sutter and Larkin Sts., to Fennell & Chisholm, 180 Jessie St., $150,000.

Ont., Toronto—Apartment—Roberts Bros., 241 Dovercourt Rd., will build 5 story and basement, brick and steel, plain foundation, Russell Hill Rd., by day labor. $250,000. N. G. Beggs, 6 Jean St., archt.

Ont., Toronto—Hospital—City, 3 story and basement, concrete, brick and steel, plain foundation, Surrey Pl., masonry work to Holtky Bros., Hepbourne St., $197,000; carpentry to F. Wilson, 22 Bank St., $40,465. Noted May 3.

Ont., Toronto — Office — See "Industrial Works."

Federal Government Work

PROPOSED WORK

Virginia—Quarters, etc.—Spec. 4855—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans inspector's quarters and improvements, St. Julien's Creek, here.

Ky., Louisville—Laundry—Treas. Dept., Wash., D. C., plans laundry and equipment, also extensions to Marine Hospital, here.

Ky., Owensboro—Lock and Dam—U. S. Engineer, P. O. Box 72, Louisville, plans 110 x 600 ft. lock also Dam 46, 3,000 ft. long, Ohio River, near here.

Washington—Road—Bureau Pub. Rds., Post Office Bldg., Portland, Ore., rejected bids clearing 45 acres and grubbing 34 acres on 9.3 mi. Olympic Highway, National Forest Rd., here. G. H. Purcell, dist. engr.

Wash., Puget Sound—Storehouses, etc.—Spec. 4860—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans 2 storehouses and magazines at Naval Ammunition Depot, here.

H. T., Pearl Harbor—Storehouse—Spec. 4859—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans 1 story storehouse, here.

BIDS DESIRED

Del., Wilmington—Dredging—July 9, at office U. S. Engineer, Wilmington, dredging Maurice and Cohansey Rivers, N. J.; adv. this issue.

Md., Perryville—Building—June 25, by U. S. Veterans Bureau, Arlington Bldg., occupational therapy building, complete, at U. S. Veteran's Hospital, 42, here.

La., New Orleans—Pumps—July 5 at office U. S. Engineer, 329 Custom House, two 20 in. dredging pumps.

New Orleans, La.—Steel Rail—June 18, by 4th Dist. Mississippi River Comn., 140 Decatur St., 2,090 lb. steel rail, to be cut in 15 ft. lengths.

Ky., Frankfort—Remodeling—July 3, by Treas. Dept., Wash., D. C., remodeling and extension U. S. Post Office and Court House, here. J. A. Wetmore, acting superv. archt.; adv. this issue.

Montana — Road — June 28, by District Engineer, U. S. Bureau Pub. Rds., Glacier Park, clearing, grading and building small bridges on 8-10 mi., in Glacier National Park. G. E. Goodwin, 811 Conch Bldg., Portland, Ore., ch. engr.

Colo., Denver—Steps—July 9, by Treas. Dept., Wash., D. C., furnishing and setting granite steps, U. S. Post Office, here. J. A. Wetmore, acting superv. archt.; adv. this issue.

Arizona — Road — June 18, by E. S. Wheeler, dist. engr., U. S. Bureau Pub. Rds., Dept. Agriculture, 242 West Washington St., Phoenix, clearing, grading, etc., 7.57 mi. Clifton-Springerville Forest Rd., Apache National Forest, Apache Co.

H. T., Pearl Harbor—Piers and Wharf—Spec. 4799—Aug. 8 by Bureau Yards & Docks, Navy Dept., Wash., D. C., rein.-con. piers and wharf at Submarine Base, here. Noted Mar. 29.

BIDS RECEIVED

R. I., Providence—Dredging—U. S. Engineer, Providence, dredging in Duck Island Harbor, Conn., from Columbia Dredging Co., 30 Church St., New York City, $0.16 per cu.yd. scow measurement, total, $36,800. Noted May 3.

Pa., Phila.—Dredging—U. S. Engineer, 815 Witherspoon Bldg., dredging in Delaware River, Philadelphia Harbor, 201,000 cu.yd. excav., maximu mallowable overdepth 84,000 cu.yd., from Amer. Dredging Co., Mariner and Merchant Bldg., $0.34. Noted May 3.

Del., Wilmington—Dredging—U. S. Engineer, dredging mouth of Christiana River, Wilmington Harbor, 2,300,000 cu.yd. excav., from United States Dredging Co., 233 Bway., New York City, $0.1468 per cu.yd. Noted May 10.

D. C., Wash. — Repairs — Spec. 4822 — Bureau Yards & Docks, Navy Dept., Wash., D. C., repairs to wharf at Naval Militia Barracks, here, from Clark & Winston, Inc., 10th and Water Sts., (1) $3,440 (2) add $0.50 deduct $0.05 (3) add $0.75 deduct $0.10 (4) $200 and $175 per M. ft.; McLean Contg. Co., 1415 Fidelity Bldg., Baltimore, Md., (1) $3,845 (2) add $0.50 deduct $0.05 (3) add $0.60 deduct $0.05 (4) $180 (5) $140; Imbach, Wozney & McCoy, 700 Knickerbocker Bldg., Baltimore, (1) $6,968 (2) add $200 (3) add $2.20 deduct $0.25 (4) $120 (5) add $100. Noted Mar. 29.

La., New Orleans—Dredging—U. S. Engineer, 329 Custom House, dredging Calcasieu-Sabine Sect., Intracostal Waterway, 2,125,000 cu.yd., from Atlantic, Gulf & Pacific Co., 13 Park Row, New York City, $0.1648, total $350,000. Noted May 10.

New Mexico—Road—Bureau Pub. Rds., U. S. Dept., Agriculture, 242 West Washington St., Phoenix, Ariz., constructing or improving 11.09 mi. Glenwood-Reserve Sect. 4, Forest Highway, Datil National Forest, Catron Co., here, from G. W. Orr, County Rd., El Paso, Tex., on Condition "B," Alternate "B," $211,639. Noted May 3.

Calif., San Diego—Barracks—Spec. 4765—Bureau Yards & Docks, Navy Dept., Wash., D. C., barracks at Naval Base, here, from R. E. Campbell, 607 Bancroft Bldg., $390,000 (360 days) telegraphic modification add $97,718, total $487,718. Noted May 18.

CONTRACTS AWARDED

N. Y., Dunkirk—Superstructure—U. S. Engineer, Federal Bldg., Buffalo, stone superstructure on breakwater, here, to Central Dredging Co., Bangor Bldg., Cleveland, O., $58,860. Noted May 18.

La., New Orleans—Dredging—U. S. Engineer, 329 Custom House, dredging Intracostal Waterway between Bayou Black and Bayou Terrebonne, 333,000 cu.yd., to Grant, Smith & Co., Raceland, $0.23 per cu.yd. Noted Mar. 15.

Ky., Addison—Steel Piling—U. S. Engineer, P. O. Box 72, Louisville, furnishing 435 tons steel sheet piling, for Dam 45, Ohio River, here, f.o.b. Louisville, to Bethlehem Steel Co., Bethlehem, $26,000. Noted May 31.

Calif., Los Angeles—Dredging—U. S. Engineer, widening Los Angeles Inner Har-

Federal Government Work (Continued)

bor entrance channel, to San Francisco Bridge Co., Nevada Bank Bldg., San Francisco, Area 3, $419,226; F. C. Franks Constr. Co., American Natl. Bank Bldg., San Francisco, Areas 4, 5 and 6, $337,953. Noted May 31.

Calif., Richmond—Dredging, etc.—U. S. Engineer, Custom House, San Francisco, to United Dredging Co., 414 13th St., Oakland, 910,000 cu.yd. dredging, $181,454; to Healy-Tibbitts Constr. Co., 64 Pine St., San Francisco, 2,000 ft. training wall, with sheet piling core with riprap, $12,960. Noted May 18.

H. T., Pearl Harbor—Storehouse—Spec. 4692—Bureau Yards & Docks, Navy Dept., Wash., D.C., complete 2 story, concrete, tile and steel storehouse, at Naval Operating Base, here, to L. R. Smith, 1576 Pensacola St., Honolulu, $147,505 (315 days). Noted May 31.

Miscellaneous

PROPOSED WORK

Power Development—Norwood, N. Y.—Power Corp. of New York, Light and Power Bldg., Watertown, plans hydro-electric development, incl. dam, powerhouse, etc., on Racquette River, here. $750,000. W. P. Creager, Northern New York Trust Co. Bldg., Watertown, ch. engr.

Grain Elevator—Troy, N. Y.—New York State Canal Bd., Albany, having specifications prepared grain elevator, rein.-con. and steel, concrete pile foundation, at Barge Canal terminal, Front St. $1,000,000. A. La Du, Albany, state engr.

Levee—New Orleans, La.—Louisville & Nashville R.R., 10th St. and Bway., Louisville, Ky., and Southern Pacific R.R., 165 Bway., New York City, plan levee along Mississippi River near here. $100,000. G. R. Smiley, 10th and Bway., Louisville, Ky., ch. engr. of constr.

Stadium—Lexington, Ky.—University of Kentucky plans concrete and steel stadium, 20,000 seating capacity. $140,000. Engineer and architect not selected.

Athletic Field, etc. — Cincinnati, O. — Hughes High School Alumni Assn., Clifton and McMillan Sts., plans athletic field and stadium. $100,000. J. Stewart, 1309 Traction Bldg., engr.

Elevator — Indianapolis, Ind. — Perins Mills Inc., Emerson Ave. and Pendleton Pike, plans 5 story, 150 x 500 ft. and 1 story, 120 x 200 ft. elevator, rein.-con., Pendleton Pike, $250,000. Engineering Investment Co., c/o owner, engrs.

Grade Separation—Milwaukee, Wis.—Greenfield Twp. soon takes bids grade separation, excavation, rein.-con. retaining walls, etc., along tracks Chicago & Northwestern Ry. on Kilbourn Rd., near here. $25,000. J. Schwada, City Hall, Milwaukee, engr.

Transmission Lines — Cameron, Mo. — See "Industrial Works."

Underpass—Dallas, Tex.—See "Streets and Roads."

White Way—Sayre, Okla.—See "Sewers."

Tank, etc.—Linton (Portland P. O.), **Ore.**—Associated Oil Co., Yeon Bldg., Portland, plans 55,000 gal. oil tank, steel, side track and truck filling stand. $75,000. Private plans. R. H. Cook, mgr. Work will probably be done by day labor.

Harbor Development—Los Angeles, Calif.—Voted $15,000,000 bonds for development of harbor, incl. docks, wharves, warehouses, elevators, bunkers, railroad terminals, channels, breakwaters, jetties, dykes, etc.

BIDS DESIRED

Asphalt Binder—New York, N. Y.—June 22, by Bd. Purch., Municipal Bldg., asphalt binder and binder oil to Dept. Parks-Bronx. G. A. Whalen, chn.

Subway Changes—New York, N. Y.—June 21, by Transit Comn., 49 Lafayette St., making changes in subway structure at Bway. incidental to widening of West 32nd St. and constructing ventilation flue at West 32nd St. and Bway., Routes 4 and 36, Sect. 2, Manhattan Boro. G. McAneny, chn.

Stadium—Erie, Pa.—Osborn Eng. Co., 2848 Prospect Ave., S. E., Cleveland, O., receiving bids rein.-con. single deck stadium, 20,000 seating capacity, for Bd. Educ., here. $175,000. Noted June 7.

Heating and Ventilating Apparatus—Cincinnati, O.—June 25, by Clerk Bd. Educ., 7th and Race Sts., heating and ventilating apparatus in Hughes High School, Clifton and McMillan Sts., and Hartwell Public School, Springfield Pike and Hartwell Ave. To exceed $50,000. W. E. Bodenstein, 405 2nd Natl. Bank Bldg., engr.

Street Lighting System—Shorewood (Milwaukee P. O.), Wis.—June 18 (change of date), by T. B. Olsen, clk., street lighting system. A. J. Sweet, 531 Grand Ave., engr. $80,000.

Portland Cement—St. Paul, Minn.—June 18, by H. W. Austin, city purch. agt., 253 bbl. portland cement for Dept. Pub. Wks. G. M. Shepard, city engr.

Sandstone Blocks—St. Paul, Minn.—June 18, by H. W. Austin, city purch. agt., 800 sq.yd. sandstone block for Dept. Pub. Wks. G. M. Shepard, city engr.

Lighting System—Joplin, Mo.—June 19, to vote on $80,000 bonds extending lighting system, etc. S. P. Ashcroft, Jr., Joplin, engr.

Subway—Ontario—June 25, by W. A. McLean, deputy minister of highways, Toronto, steel subway under Canadian National Ry. tracks 1 mi. east of Toronto, 20 ft. high, 66 ft. wide, carrying double track railway. $50,000-$100,000. G. Hogarth, 110 University Ave., Toronto, engr.

BIDS RECEIVED

Modification of Railroad Structure—New York — Transit Comn., 49 Lafayette St., New York City, June 7, modification of railroad structure east of Boulevard to allow raising street grade, Route 61, Boro of Queens, Agreement "CM," from Hamme & Jackson, Inc., 1014 East 14th St., Brooklyn, $37,735. Noted May 31.

Dock and Warehouse—New Orleans, La.—Bd. Port Comrs., June 7, reconstructing portion of Celeste St. dock warehouse, from Dalgran Constr. Co., Louisiana Bldg., $150,404.

Standium—Madison, Wis. — University of Wisconsin, rein.-con. and steel stadium, from G. Nelson, 1117 West Johnson St., Madison, $50,499. Noted May 24.

CONTRACTS AWARDED

Pier, etc.—Boston, Mass.—City, rebuilding piers, bulkhead and dolphins, for East Boston ferry, 100,000 ft. more or less piles and timber, to Rendle Stoddard Co., Main St., Chelsea, $31,700.

Binder Stone—New York, N. Y.—J. Miller, pres. Manhattan Boro., Municipal Bldg., 8,000 cu.yd. binder stone, to Calvin Tompkins Co., 30 Church St., $15,200. Noted June 7.

Miscellaneous Construction, etc. — New York, N. Y.—Transit Comn., 49 Lafayette St., miscellaneous construction and station finish for Rapid Transit R.R., in Boroughs of Manhattan, Bronx, Brooklyn and Queens, Agreement "BV," to D. C. Serber, 451 West 16th St., $15,020. Noted June 7.

Paving Blocks—New York, N. Y.—Bd. Purch., creosoted wood paving blocks to Dept. Plant & Structures, to Amer. Creosoting Co., 17 Battery Pl., $1,886. Noted May 24.

Lumber — New Orleans, La. — Bd. Port Comrs., 200 New Court Bldg., furnishing and delivering 520,000 ft. creosoted lumber and 1,228 creosoted piles in 70, 75, 80 and 85 ft. lengths, lumber to Creosoted Materials Co., Queen and Crescent Bldg., $37,-124; piles to Amer. Creosoting Co., Bogalusa, $0.57 per lin.ft.

Wharf—New Orleans, La.—Bd. Port Comrs., first unit of Claiborne Ave., wharf, concrete, 2,600 ft. long, to R. P. Farnsworth & Co., New Orleans, $475,354. Noted Mar. 22.

Terminals, etc. — Jackson, Tenn. — See "Railways."

Piling—Milwaukee, Wis.—See "Excavation, Drainage and Irrigation."

Creosoted Wood Blocks—St. Paul, Minn.—For 1,000 sq.yd. creosoted wood block, 3½ in., for Dept. Pub. Wks., to Republic Creosoting Co., St. Louis Park, $2.73 per sq.yd. f.o.b. St. Paul. Noted May 24.

Road Oil—St. Paul, Minn.—Ramsey Co., 200,000 gal. road oil, medium grade O. C., and heavy grade O. H., to Minnesota Road Equipment Co., 4536 Dupont Ave. S., Minneapolis, $0.065 and $0.066 per gal. Noted May 24.

Aviation Field — Bridgeton, Mo. — St. Louis Aviation Field Corp., Arcade Bldg., St. Louis, will grade, etc., 55 acre tract for aviation field, 300,000 cu.yd. excav., construct 2 small hangars, knockdown steel, here, by day labor. Pitzman Eng. & Survey Co., 615 Chestnut St., St. Louis, engrs.

Levees—Yuba City, Calif.—Recl. Dist. 1660, c/o State Recl. Bd., Forum Bldg., Sacramento, constructing levees, here, to Callahan Constr. Co., City Natl. Bank Bldg., Wichita Falls, Tex., $500,000 or more. Noted Apr. 26.

Grain Elevator—Montreal, Que.—Harbor Comrs. extension to grain elevator "B" at Windmill Point, providing additional handling capacity of 1,272,000 bushels, to E. G. M. Cape Co., Ltd., 10 Cathcart St.

OFFICIAL PROPOSALS

Bids: June 30.

Building Alterations

Saratoga Springs, N. Y.

Sealed proposals for the furnishing of all materials and performing the necessary labor for the proposed alterations and repairs to the kitchen, pantry and dining-room of the Casino in Congress Park at Saratoga Springs, N. Y., will be received by the Commissioner of Public Works of the City of Saratoga Springs, N. Y., at his office in the City Hall, on or before noon of the 30th day of June, 1923.

All proposals must be on forms annexed to the specifications to which they must be attached. All proposals must be accompanied by a certified check for 5% of the contract price.

The major portion of the work consists of the removal of a brick stack from the north side of the kitchen and the removal and rebuilding of a portion of the north wall of the kitchen; removal and rebuilding of the east wall of the dining-room and a portion of the north wall; the construction of a reinforced concrete foundation under the east, west and north walls of the dining-room; the construction of reinforced concrete foundations under the main bearing piers carrying the roof of the dining-room and the construction of a reinforced concrete foundation under the piers carrying the floor of the dining-room; repairing the outer and inner walls of the building where necessary, painting and kalsomining the interior of the dining-room and painting the exterior wood work; detaching and leveling and replacing the six circular windows; leveling and repairing the floor of the dining-room. Placing a Barrett Specification felt, pitch and slag roof on the three buildings together with the proper flashings, etc. Removing a switchboard panel from the basement to the pantry, rebuilding transformer house, etc.

Plans, Specifications and forms of contract and proposals can be obtained at the office of the Commissioner of Public Works between the hours of 9 a.m. and 5 p.m. except on Saturdays on which days the office will be open from 9 a.m. to 12 m.

Contractors must visit the site of the work and ascertain for themselves the exact character of the work required.

The City Council reserves the right to reject any and all bids if they deem it to the interest of the City so to do.

GEORGE W. AINSWORTH,
Commissioner of Public Works.

Bids: June 26.

Bridges

Baltimore, Md.

SEALED PROPOSALS for building the following bridges:

Frederick Co.—Cont. F-58. Reinforced concrete arch bridge over Catoctin Creek near Middletown on the Hagerstown Pike, consisting of a single span 85' 0" clear and a 24' 0" clear Roadway.

Montgomery Co.—Cont. M-18. Reinforced concrete arch bridge over Seneca Creek near Dawsonville on the road from Darnstown to Dawsonville, consisting of a double span each 46' 0" clear and a 24' 0" clear Roadway.

Hartford Co.—Cont. H-35. Reinforced concrete arch bridge over Bynum Run near Belair on the Belair-Aberdeen Road, consisting of a single span 40' 0" clear and a 24' 0" clear Roadway.

will be received by the State Roads Commission, at its offices, 601 Barrett Building, Baltimore, Maryland, until 12 M. on the 26th day of June, 1923, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of $1.00, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of Five Hundred ($500) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

BY ORDER of the State Roads Commission this 12th day of June, 1923.

JOHN N. MACKALL,
Chairman.

L. H. STEUART,
Secretary.

CONSTRUCTION NEWS

The Construction Barometer

Decrease in Contract Volume—Gain in Public Work Now Out For Bids—Lumber Declines

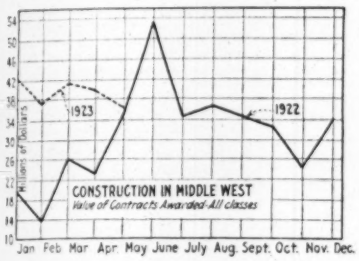
CONTRACT volume fell off 14 per cent in May and was 23 per cent less than for May, 1922. The only gains were in the South and Far West. The charts show the trends.

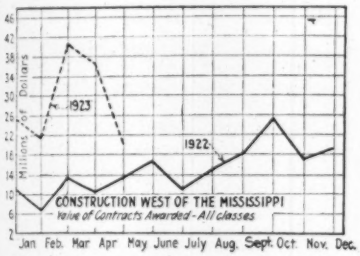
Value of large contracts fell off nearly 14 per cent during the week ending June 14, but gained 26 per cent over the lettings for the week of May 31.

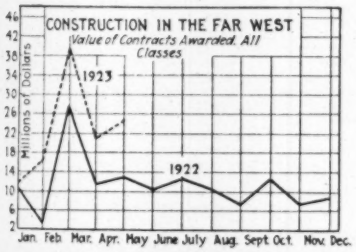
Public building awards, however, increased 166 per cent during the week ending June 14, while private commercial buildings dropped 9 per cent.

A slight increase in large public jobs now out for bid, developed during the week of June 14, compared with a falling off in buildings and private work.

The only change in basic materials prices occurred in pine lumber, which dropped $1 per M ft. in New York, during the current week.







E. N.-R. Statistics

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

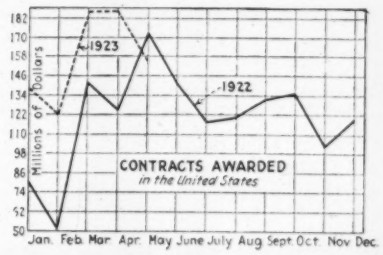
Week Ending	Public Work	Private Work	Total Contracts
May 31	$16,126,000	$13,565,000	$29,691,000
June 7	25,144,000	18,704,000	43,848,000
June 14	23,681,000	14,052,000	37,733,000
3 weeks	$64,951,000	$46,321,000	$111,272,000

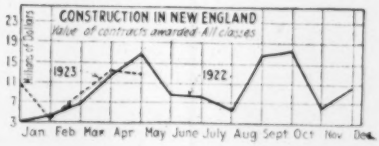
LARGE BUILDING CONTRACTS—NUMBER AND VALUE

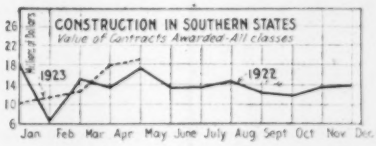
Week Ending	Public No.	Public Work	Private No.	Private Work
May 31	11	$2,555,000	33	8,528,000
June 7	13	2,558,000	37	11,303,000
June 14	11	7,593,000	36	9,742,000
3 weeks	35	$12,706,000	106	$29,573,000

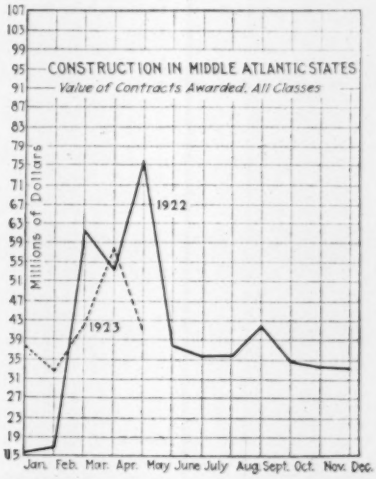
PINE LOWER—OTHER BASIC PRICES UNCHANGED IN THREE WEEKS

	Quoted on June 21, at	Price Was	On
Structurals, Pittsburgh, 100 lb.	$2.50 @2.60	$2.50 @2.65	May 17
Cement, Chi., net bbl.	2.20	2.05	Feb. 1
Pine, N. Y., M. ft.	59.00	60.00	June 14
Fir, San Fran., M. ft.	41.00	39.00	Apr. 5
Common labor, hr.	0.53	0.51	May 31









PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
June 25	Duluth, Minn.	June 7
June 25	Pennington, N. J.	June 14
June 25	Bismarck, N. D.	June 14
June 25	Lemmon, S. D.	June 21
June 26	Gridley, Ill.	June 14
June 27	Davenport, Wash.	May 31
June 27	Joliet, Ill.	June 21
June 27	Binghamton, N. Y.	June 21
June 27	Cleveland, O.	June 21
June 28	Du Bois, Pa.	June 14
June 29	Hutchinson, Minn.	June 21
June 30	Baird, Tex.	June 21
June 30	Esmond, S. D.	June 14
June 30	Columbus, O.	June 21
July 3	Ft. Worth, Tex.	June 14
July 3	Ft. Worth, Tex.	June 21
July 3	Madisonville, Tenn.	June 21
July 17	Deland, Fla. Adv. June 21.	June 21

SEWERS

Bids Close		See Eng. News-Record
June 25	Silverton, Ore.	June 14
June 25	Portland, Me.	June 14
June 25	Idlewood (Cleveland Heights P. O.), O.	June 14
June 26	Springwells, Mich.	June 21
June 26	Long Island City, N. Y.	June 21
June 26	University (St. Louis P. O.) Mo.	June 21
June 27	Brooklyn, N. Y.	June 21
June 27	Cleveland, O.	June 21
June 28	Bexley (Columbus P. O.) O.	June 21
June 29	Emmons, Minn.	June 14
June 29	Wash., D. C.	June 14
July 2	Akron, O.	June 21
July 2	Lewistown, Pa.	June 21
July 2	Los Angeles, Calif.	June 21
July 3	St. Louis, Mo.	June 14
July 3	Newton, N. J. Adv. June 21.	June 21
July 6	Grove City, Pa. Adv. June 21.	June 21
July 9	Los Angeles, Calif.	June 21
July 10	Springwells, Mich. Adv. June 21.	June 21

BRIDGES

Bids Close		See Eng. News-Record
June 25	Taunton, Mass.	June 21
June 26	Maryland Adv. June 14 and 21.	June 21
June 27	Lowell, Mass.	June 14
June 27	North Carolina	June 21
June 28	Chicago, Ill.	June 14
June 28	Sulphur Springs, Fla.	June 21
June 29	Reading, Pa. Adv. June 7 to 21.	June 7
June 29	Salem, Mass. Adv. June 14 and 21.	June 14
June 29	Haverhill, Mass.	June 21
July 2	California	June 14
July 3	Alabama	June 7
July 5	Englishtown, N. J. Adv. June 21.	June 21
July 6	Alabama	June 21
July 6	Waycross, Ga.	June 21
July 9	Akron, O. Adv. June 21.	June 21
July 31	La Center, Wash.	May 3
Nov. 30	Sydney, Australia	Apr. 19

DAMS

July 2	Beacon, N. Y. Adv. June 21.	June 21

Bids Close		See Eng. News-Record

EXCAVATION, DRAINAGE, IRRIGATION

June 26	Savanna, Ill.	June 7
June 26	New York, N. Y.	June 21
June 30	Ontario	June 14
July 10	Ottumwa, Ia. Adv. June 7 to 21.	June 14
July 17	Dunkirk, N. Y. Adv. June 21.	June 21

STREETS AND ROADS

June 22	Rhode Island Adv. June 14 and 21.	June 14
June 22	Trenton, N. J Adv. June 14 and 21.	June 14
June 22	Ohio	June 21
June 25	Thomasville, Ga.	June 14
June 25	Central Falls, R. I.	June 14
June 25	Augusta, Ga.	June 14
June 25	Valley, Neb.	June 14
June 25	Louisiana	June 21
June 25	Utah	June 21
June 26	Utah	June 21
June 26	Ottawa, Ont.	June 21
June 26	Milwaukee, Wis.	June 21
June 26	Colorado, Tex.	June 21
June 26	Eagle Grove, Ia.	June 21
June 26	South Dakota	June 21
June 26	St. Louis, Mo.	May 31
June 26	Alabama	June 7
June 26	Trenton, N. J.	June 7
June 26	Garfield Heights (Bedford P. O.), O.	June 14
June 26	Michigan	June 14
June 26	Westwood, N. J.	June 21
June 26	Columbus, O.	June 21
June 26	Crosby, N. D.	June 21
June 26	Indiana	June 21
June 26	Iowa City, Ia.	June 21
June 26	St. George, N. Y.	June 21
June 26	Wisconsin	June 21
June 27	Michigan	June 14
June 27	Delaware	June 14
June 27	North Carolina	June 14
June 27	Newton, N. J.	June 14
June 27	Nevada	June 21
June 27	Ebensburg, Pa.	June 21
June 27	Brooklyn, N. Y.	June 21
June 27	Bennettsville, S. C.	June 21
June 27	Long Island City, N. Y.	June 21
June 27	Coleman, Tex.	June 21
June 27	Wisconsin	June 21
June 28	Connecticut Adv. June 21.	June 21
June 28	Michigan	June 14
June 28	Ohio	June 21
June 28	Henderson, N. C. Adv. June 21.	June 21
June 29	Mount Holly, N. J.	June 14
June 29	Michigan	June 14
June 29	Henderson, Ky.	June 7
June 29	Emmons, Minn.	June 14
June 29	Mantorville, Minn.	June 21
June 29	Cincinnati, O.	June 21
June 29	Sanderson, Tex.	June 21
June 29	Eastland, Tex.	June 21
June 29	St. George, N. Y.	June 21
June 30	Kansas City, Kan.	June 14
June 30	Newport, Ark.	June 21
June 30	Paris, Tex.	June 21
June 30	Selma, Ala.	June 21
July 2	California	June 14
July 2	St. Paul, Minn.	June 14
July 2	North Tarrytown (Tarrytown P. O.), N. Y. Adv. June 21.	June 21
July 2	Martinez, Calif.	June 21
July 2	Ebensburg, Pa.	June 21
July 2	Utah	June 21
July 3	University (St. Louis P. O.), Mo.	June 21
July 3	Alabama	June 7
July 3	Akron, O.	June 14
July 3	Trenton, N. J.	June 21
July 5	Maplewood (St. Louis P. O.), Mo.	June 14
July 5	Abbeville, La.	June 21
July 5	Lincoln, Neb.	June 21
July 6	Mannington, W. Va.	June 21
July 6	Akron, O.	June 21
July 6	Virginia Adv. June 21.	June 21
July 6	Lancaster, S. C.	June 21
July 6	Greensburg, Pa.	June 14
July 6	Alabama	June 21
July 9	California	June 21
July 10	Fairmont, W. Va.	June 21
July 10	St. Albans, W. Va.	June 21
July 10	Nashville, Tenn. Adv. June 21.	June 21
July 12	Faribault, Minn.	June 21
July 17	St. Louis, Mo.	June 21

INDUSTRIAL WORK

June 27	Orient, O.	June 7
June 29	Jefferson City, Mo.	June 21

BUILDINGS

June 22	New York, N. Y.	June 14
June 25	Grand Rapids, Mich.	June 7
June 25	Houston, Tex.	June 14
June 26	Birmingham, Ala.	June 7
June 26	Asbury Park, N. J.	June 21
June 26	Nashville, Tenn.	June 21
June 27	Gallipolis, O.	June 7
June 27	Oelwein, Ia.	June 14
June 28	Grand Rapids, Mich.	June 7
June 29	Louisville, Ky.	June 14
June 29	Verona, Wis.	June 14
June 29	Flandreau, S. D.	June 21
June 30	Louisville, Ky.	June 7
June 30	Alexandria, La.	June 21
June 30	Beaverdale, Pa.	June 21
June 30	Saratoga Springs, N. Y. Adv. June 14 and 21.	June 21
July 1	Athens, O.	May 24
July 2	Columbus, O.	June 14
July 2	La Crosse, Wis.	June 21
July 3	Kitchener, Ont.	June 21
July 3	Bergenfield, N. J.	June 14
July 6	Virginia, Minn.	June 7
July 9	Maplewood, N. J.	June 21
July 9	Easton, Pa.	June 21
July 15	Astoria, Ore.	June 7
July 15	Knoxville, Tenn.	June 21
July 24	Conrad, Ia.	June 21
Aug. 1	Jackson, Miss.	June 21

FEDERAL GOVERNMENT WORK

June 25	Dredging—Detroit, Mich. Adv. May 31 to June 21.	May 31
June 25	Dredging, etc. — New York, N. Y. Adv. May 31 to June 21.	May 31
June 25	Refrigerating Machinery — Pearl Harbor, H. T.	May 31
June 25	Extension—Niagara Falls, N. Y.	June 7
June 25	Extension — Anniston, Ala.	June 7
June 25	Building—Perryville, Md.	June 14
June 25	Lighting System—New York, N. Y.	June 21
June 25	Engine Testing Laboratory — Phila., Pa.	June 21
June 27	Sewer Extension — Chicago, Ill.	June 7
June 27	Bridge—Alaska	June 21
June 27	Wire, etc.—New Orleans, La.	June 21
June 28	Road—Montana	June 14
July 3	Remodeling — Frankfort, Ky.	June 14
July 5	Pumps—New Orleans, La.	June 14
July 5	Extension — New York, N. Y. Adv. June 21.	June 21
July 9	Steps—Denver, Colo.	June 14
July 9	Dredging — Wilmington, Del. Adv. June 14 and 21.	June 14
July 10	Conveyor—Memphis, Tenn. Adv. June 21.	June 21
July 18	Extension—Pearl Harbor, H. T.	June 21
July 18	Fire Protection System — Pearl Harbor, H. T.	May 31
July 18	Storage Facilities — Pearl Harbor, H. T.	June 7
July 19	Tanks—Memphis, Tenn. Adv. June 21.	June 21
July 19	Dredging—New Orleans, La. Adv. June 21.	June 21
July 20	Dredging—Galveston, Tex. Adv. June 21.	June 21

MISCELLANEOUS

June 22	Asphalt Binder, etc.—New York, N. Y.	June 14
June 25	Dock Front, etc.—Conneaut Harbor (Conneaut P. O.), O.	June 7
June 25	Heating and Ventilating Apparatus—Cincinnati, O.	June 14
June 25	Subway—Ontario	June 14
June 25	Pig Lead—St. Paul, Minn.	June 21
June 26	Subway—Phila., Pa.	May 31
June 26	Tunnel—New York, N. Y. Adv. May 31 to June 21.	June 7
June 27	Power Equipment — Jamestown, N. D.	June 14
June 27	Fan Houses and Stack—Pittsburgh, Pa.	June 21
June 27	Completion of Pier, etc. — Phila., Pa. Adv. June 21.	June 21
June 28	Tower—Arlington (Boston P. O.), Mass.	June 21
June 29	Steam Heating Plant—Wautoma, Wis.	May 31
July 2	Sea Wall — Vicksburg, Miss. Adv. June 7 and 21.	June 7
July 3	Stone Crusher — Trenton, N. J. Adv. June 21.	June 21
July 5	Structural Steel Framing, etc. —New Orleans, La. Adv. June 21.	June 21
Aug. 31	Cable and Accessories — Melbourne, Australia Adv. June 7 and 21.	June 21
Feb. 28	Headworks — Wellington, New Zealand	May 24

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Ky., Owensboro — Plans extensions and improvements to water works system, to supply outlying dists. $100,000. Election in November to vote on bonds. J. H. Hickman, mayor.

O., Columbus—See "Streets and Roads."

O., Shaker Heights (Cleveland P. O.)—See "Streets and Roads."

Ill., Springfield — June 26 to vote on $350,000 bonds for waterworks, incl. high and low service pumps, softening and iron removal plants, basins, filters, etc. Burns & McDonnell, 402 Interstate Bldg., Kansas City, Mo., engrs. Noted May 18.

Wis., Cedarburg—Making plans laying 2,000 ft. 4 in. c.i. main and 2,500 ft. 4-8 in. vitr. sewers. $15,000. W. G. Kirchoffer, Dean Bldg., Madison, engr.

Wis., Janesville—Making plans 5-16 in. rein.-con. mains in Augusta, Cherry, Eastern, Sharon, Logan, Pleasant, Pearl, Chestnut, Forest Park Blvd. Sts. $20,000. C. V. Kerch, City Hall, engr.

Wis., Hustisford—Making plans waterworks system. $20,000. Druar & Milinowski, 500 Globe Bldg., St. Paul, Minn., engrs.

Wis., Osseo—Making plans waterworks system. $18,000. Druar & Milinowski, 500 Globe Bldg., St. Paul, Minn., engrs.

Wis., Watertown—Water Dept. making plans drilling and cleaning old well for increasing water supply, also installing new pumping equipment and air compressor. $25,000. W. G. Kirchoffer, Dean Bldg., Madison, engr.

Ia., Washington — City retained A. L. Mullergren, engr., 555 Gates Bldg., Kansas City, Mo., to prepare plans for complete water pumping plant, additional wells, elevated tank, etc. $75,000. J. J. Kellogg, clk.

Neb., Ft. Calhoun—Election June 29, to vote on $16,000 bonds for waterworks improvements. Prince & Nixon, Peters Trust Co. Bldg., Omaha, engrs.

S. D., Watertown—Utilities Comn. rejected bids May 29, for pumps and equipment for filtration plant. Noted May 17.

Mo., Kahoka—July 10, to vote on $15,000 bonds for waterworks system. Rollins & Co., 521 Railway Exch. Bldg., Kansas City, engrs.

Ark., Imboden—C. G. Buchanan and G. G. Dent soon let contract distribution system and pumping plant, 7,000 ft. 4 in. c.i. pipe, centrifugal pump and engine. $25,000. C. G. Buchanan, Morrilton, engr.

Ark., Paragould — Plans extensive improvements to waterworks system, new pumps, concrete reservoir and pipe work.

Tex., Sanger—July 7, to vote on $90,000 bonds complete waterworks and sewer systems. E. L. Dalton, 1915½ Main St., Dallas, engr.

Calif., Long Beach—City soon takes bids concrete mains to be ordered from time to time, first contract to incl. several miles of 6, 8, 10 and 30 in. pipe. C. H. Windham, city mgr.

Calif., Upland—City plans to vote on approximately $200,000 bonds to purchase and improve present water system.

Que., Three Rivers—Plans filtration plant. $200,000. C. Gelinas, city engr.

Que., Verdun—Plans 2,250 ft. main, 16 in., Rielle Ave. $25,000. C. Johnston, city engr.

Ont., Ailsa Craig—Plans waterworks system, incl. pumps, mains, hydrants, reservoir, etc. $30,000. Engineer not selected.

Ont., Thornbury—Having plans prepared waterworks system, incl. pumphouse, mains, hydrants, reservoir or tank. $30,000. James, Proctor & Redfern, 36 Toronto St., Toronto, engrs.

Ont., Port Colborne — Plans waterworks system incl. filtration and pumping plants. $80,000. I. H. White, clk. Engineer not selected.

BIDS DESIRED

N. Y., Binghamton — June 27, by Bd. Contr. & Supply, 3,000 lin.ft. 6 in. c.i. pipe, also mains in Leroy, Evans, Frederick, De Russey and Bond Sts., Howard, Highland and Woodland Aves. W. E. Weller, city engr. Noted Mar. 15.

Fla., Deland — July 17, by Bd. Bond Trustees, waterworks, sanitary and storm sewer, and street improvements. J. B. McCrary Eng. Corp., Atlanta, Ga., engrs.; adv. this issue.

Tenn., Madisonville—July 3, small concrete dam and embankment, concrete and

Waterworks (Continued)

brick coagulation basin combined with concrete and brick pump and filter house, complete filter equipment for single unit, 4 centrifugal pumps, 2 electric motors (automatic control), 2 gasoline engines, with all piping, wiring, etc., complete distribution system with 2, 4 and 6 in. mains with valves and hydrants, 75,000 gal. hemispherical bottom steel tank with tower, total height 120 ft. Ambler Eng. Co., 610 Travelers Bldg., Richmond, Va., engrs.

O., Cleveland—June 27, by Cuyahoga Co., 5,000 ft. 6-12 in. c.i. mains. To exceed $25,000. R. F. MacDowell, Court House, engr.

O., Columbus—June 30, by R. W. Smith, clk. Franklin Co. 12,003 ft. 6 in. c.i. mains in Sewer Dist. Marion 2, Contrs. 17 and 23.

O., Columbus—See "Streets and Roads."

Ill., Joliet—June 27, extension to mains. $26,000. A. S. Calkins, Joliet Natl. Bank Bldg., city engr. Noted May 10.

Minn., Hutchinson—June 29, by J. Mikulecky, city clk., 16 in. drilled well about 180 ft. deep, one 300 g.p.m. centrifugal service pump, two 500 g.p.m. centrifugal booster pumps, one 100,000 gal. steel tank on 100 ft. tower. $15,000. C. L. Pillsbury Co., 1200 2nd Ave. S., Minneapolis, engrs.

S. D., Lemmon—June 25, by R. M. Watson, city aud., 4,500 lin.ft. 4 and 8 in. mains, 24 x 35 ft. steel standpipe, deep well, pump and pumping equipment. $25,000. C. L. Pillsbury Co., 1200 2nd Ave. S, Minneapolis, Minn., engr.

Tex., Baird—June 30, by J. I. McWharter, mayor, 1,000 ft. tunnel, 3½ x 4 ft., 30 ft. underground with 6 in. dry well and 6 in. concrete cover, 10,000 ft. water pipe, fire hydrants, digging and walling large storage well, etc. C. E. Walker, city secy.

Tex., Ft. Worth—July 3, by City Com. waterworks system for Polytechnic Heights. $250,000. D. L. Lewis, city engr. John B. Hawley, Cotton Exch., consult. engr. Noted June 14.

BIDS RECEIVED

N. Y., Brooklyn — N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, June 15, mains in East New York Sect., here, from Beaver Eng. Co., 57 Chambers St., New York, $38,000. Noted June 7.

N. Y., New York—See "Sewers."

N. Y., New York—Park Dept., Municipal Bldg., completing pump house, sump pit and septic tank, in Pelham Bay Park, Bronx Boro, from Sloane-Dickinson Corp., $28,550.

Mich., Detroit—Pumping station Pleasant Ave., rein.-con. pump pit, 60 x 120 ft., 40 ft. deep, suction well with brick superstructure 53 x 131 ft., 39 ft. high, steel roof trusses and columns, from Natl. Constr. Co., 1031 Dime Bank Bldg., $177,700. Noted May 10.

CONTRACTS AWARDED

N. Y., Johnson City—Water Bd. will extend water system 7,000 lin.ft., by day labor under supervision of A. Merrill, supt. To exceed $25,000.

Ill., Dixon—Illinois Central R.R., 135 East 11th Pl., Chicago, water treating plant, here, to J. E. Nelson & Sons, 3240 South Michigan Ave., Chicago. Cost exceeds $25,000.

Wis., Milwaukee—Gate house and laying distribution system in front of Riverside Pumping station, from Newton Eng. Co., 185 Mason St., $69,300. Noted June 7.

Wis., Sharon — Drilling and cleaning wells, etc., to W. L. Thorne Co., Des Plaines, Ill.; 2 air lift pumps, to Wisconsin Fdry. & Machine Co., 623 East Main St., Madison. Engrs. est. $15,000.

Kan., Gaylord—Waterworks system, to E. K. Ladd, Kansas City, Mo., $19,710; steel tank and tower, to Chicago Bridge & Iron Co., 608 South Dearborn St., Chicago, $7,950.

Kan., Horton — Waterworks improvements, Sects. 1, 2, 3 and 4, to Ziegler & Dalton, Junction City; c.i. pipe, to U. S. Cast Iron Pipe & Fdry. Co., 604 Interstate Bldg., Kansas City, Mo., on basis of De Levaud pipe $6,412. Noted May 10.

Kan., Smith Center—Motor driven centrifugal pumps also engine driven centrifugal pump, (pump only), to Reeves & Skinner Mchy. Co., 1105 Waldheim Bldg., Kansas City, Mo., $1,095 and $1,260 respectively; deep well triplex pumps also gasoline engine driven centrifugal pump, (pump only), to Terry, Cowan & Smith, 1733 Walnut St., Kansas City, Mo.

S. D., Watertown—Utilities Comn., concrete and brick filtration plant, to Watertown Cement Products Co., Watertown, $36,214; sea wall, to F. W. Schreiber, Watertown, $8,000. Noted May 17.

Calif., Delano—Extensions to municipal water system, to E. W. Redman, Box 99-R. D., Fresno, $29,413. Noted May 31.

Sewers

PROPOSED WORK

N. Y., Glens Falls—Voted $75,000 bonds enlarging certain mains and feeders of sewerage system in Glen, Grove and Sherman Aves., etc. L. G. Boynton, city clk. Noted May 24.

Ala., Huntsville—Merrimack Mfg. Co. will construct sewers, etc., in all streets in Mill Village, a cotton mill suburb of Huntsville, by day labor. $50,000.

O., Columbus—See "Streets and Roads."

O., Shaker Heights (Cleveland P. O.)—See "Streets and Roads."

Wis., Athens—Making plans sewerage system and disposal plant. $80,000. W. G. Kirchoffer, Dean Blk., Madison, engr.

Wis., Birnamwood — Making surveys for sewerage system and sewage disposal plant. $30,000. W. G. Kirchoffer, Dean Blk., Madison, engr.

Wis., Cedarburg—See "Waterworks."

Wis., Hustisford—Making plans sanitary sewerage system and disposal plant, $30,000. Druar & Milinowski, 500 Globe Bldg., St. Paul, Minn., engrs.

Wis., Osseo—Making plans sanitary sewerage system and disposal plant. $30,000. Druar & Milinowski, 500 Globe Bldg., St. Paul, Minn., engrs.

Wis., Thorp—Engineer measuring flow of sewage and will prepare plans for concrete tank, sludge aeration and circulation type sewage disposal. $25,000. W. G. Kirchoffer, Dean Bldg., Madison, engr.

Ia., Ottumwa—Making plans 1.5 mi. 10-18 in vitr. clay sewers in Dist. 6. $30,000. J. T. Brady, city engr.

Minn., LeSueur Center — Having plans prepared sanitary sewerage system, settling tank, etc., $44,000; storm sewers, $12,772. L. P. Wolff, 100 Guardian Life Bldg., St. Paul, engr.

Minn., St. Paul—July 16, to vote on $3,000,000 bonds for sewers. G. M. Shepard, city engr.

Kan., Russell—Had plans prepared sanitary sewers and disposal plant. $75,000. Black & Veatch, 701 Mutual Bldg., Kansas City, Mo., engrs.

Wyo., Sheridan—See "Streets and Roads."

Mo., Edina—Making preliminary plans sanitary sewerage system. $45,000. Rollins & Co., 521 Railway Exch. Bldg., Kansas City, engrs.

Mo., Kahoka—July 10, to vote on $60,000 bonds for sewers and $18,000 bonds for paving. Rollins & Co., 521 Railway Exch. Bldg., Kansas City, engrs.

Mo., Salisbury—Making plans sanitary sewers. $50,000 bonds voted. Rollins & Co., 521 Railway Exch. Bldg., Kansas City, engrs.

Mo., St. Louis—See "Bridges."

Tex., Sanger—See" Waterworks."

Wash., Seattle—Bd. Pub. Wks. received no bids June 8, sewers in Brandon Ave., et al. $57,465. Will readvertise. J. D. Blackwell, city engr. Noted May 24.

Calif., San Francisco—See "Streets and Roads."

Calif., San Jose—Having preliminary surveys made sewer improvements and extensions. To exceed $25,000. W. Popp, city engr.

Ont., Ford—City Council plans sewerage system for Pillete Rd. Dist. $62,000. J. F. Foster, clk.

Que., Montreal—Plans 2,742 ft. of 2 x 3 brick sewer in Kelly St. $31,434. E. Fuser, supt. sewer dept.

BIDS DESIRED

N. Y., Brooklyn—June 27, by E. Riegelmann, boro pres., Boro Hall, sewer in Sedgwick Pl., Lake and 54th Sts.

N. Y., Long Island City — June 26, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., storm sewer in 32d Ave. (Myrtle Ave.) and 12th Ave.

N. J., Newton—July 3, by Water & Sewer Comrs., installing alternating air lock siphons in East Clinton St. sewage disposal plant. E. B. Harrison, clk.; adv. this issue.

Pa., Grove City—July 6 construction and incidental work on sewage treatment plant. F. P. Graham, boro. engr. Banks & Craig, Telegraph Bldg., Harrisburg, consult. engrs.; adv. this issue.

Pa., Lewistown—July 2, for 1,500 ft. 8 in. and 1,200 ft. 15 in. vitr. sewer in Wayne and South Grand Sts. $25,000. Banks & Craig, Telegraph Bldg., Harrisburg, engrs. Noted Mar. 1.

Fla., Deland—See "Waterworks."

O., Akron—July 2, by W. F. Peters, dir. Pub. Serv., 3,740 ft. 8-24 in. vitr. clay and 790 lin.ft. 30 and 39 in. brick or segmental block sewer in Aqueduct and Peckham Sts., $28,000; 2,115 ft. 12-24 in. vitr. clay and 1,595 ft. 30-54 in. segmental block or brick sewer in West Market St., $59,935; 3,415 ft. 8-20 in. vitr. clay and 1,425 ft. 30 and 48 in. segmental block or brick sewer in Palisades Dr., North Main and Rye Sts., $42,200. J. E. Root, Delaware Bldg., engr.

O., Bexley (Columbus P. O.)—June 28, by S. W. Roderick, village clk., 5,080 ft. 12-36 in. vitr. concrete or segmental block sewer in Astor Ave., Mound and Charles Sts. $31,000. Jennings-Lawrence Co., 505 Hartman Bldg., Columbus, engrs.

O., Cleveland—June 27, by Cuyahoga Co., 4,000 ft. 27 x 23 in. egg shape sewer in Ridge Rd. Impvt. 20, Sect. C of Co. Sewer Dist. 1. R. F. MacDowell, Court House, engr.

O., Columbus—See "Streets and Roads."

Mich., Springwells—June 26, by E. P. Esper, village clk., construction special assessment lateral sewers, Dists. 2 to 8 inclusive. A. Roth, village engr.

Mich., Springwells—July 10, by B. P. Esper, village clk., lateral sewers in special assessment Dists. 9 to 13 inclusive; adv. this issue.

Mo., University (St. Louis P. O.)—June 26, by E. B. Colby, city clk., 5,086 ft. 12-36 in. vitr. clay sewers in Ferguson Ave. Joint Sewer Dist., Sewer Dist. 19 and River Des Peres General Sewer. $34,000. W. A. Heimbucher, City Hall, engr.

Ark., Newport—See "Streets and Roads."

Calif., Los Angeles—July 2, by Bd. Pub. Wks., furnishing materials for ocean end of outfall sewer, alternate bids on rein.-con. and c.i. pipe, delivered f.o.b. cars Hyperion, 429 twelve ft. lengths, 7 ft. interior diameter, 44 twelve ft. lengths, 5 ft. interior diameter, 2 twelve ft. lengths 5 ft. interior diameter with double spigot ends, 1 double 84 x 60 x 60 in. opposite wye branch with 3 valves, 2 standard base 5 ft. diameter elbows with bell ends and horizontal arms.

Calif., Los Angeles—July 9, by Bd. Pub. Wks., sewerage system to connect West Los Angeles Dist. with city's main outfall sewer, using (1) Ferguson segmental block (2) brick-concrete (3) pre-cast concrete, vitr. lining, Sect. 10, involves 7,500 lin.ft pipe, Sect. 11, 3,322 lin.ft. 6 ft. 3 in. and 1,808 lin.ft. 7 ft. 6 in. pipe, Sect. 12, 2,995 lin.ft. 5 ft. 3 in. and 2,384 lin.ft. 6 ft. 3 in. pipe, etc., Sect. 13, 3,190 lin.ft. 4 ft. 9 in., 3,209 lin.ft. 5 ft. 3 in. and 3,402 lin.ft. 6 ft. 3 in. pipe, Sect. 14, 8,906 lin.ft. 6 ft. 3 in. pipe, etc. Noted June 14.

Calif., Los Angeles—July 9, by Bd. Pub. Wks., 26,000,000 common brick and 16,000,000 vitr. brick for outfall sewer to be constructed under $12,000,000 sewer bond issue.

BIDS RECEIVED

N. Y., New York—Dept. Parks, Municipal Bldg., completing sewerage drainage and water supply systems in connection with construction of Rice Memorial in Pelham Bay Park, Bronx Boro, from Melrose Constr. Co., 103 East 125th St., $84,000.

O., Cleveland Heights (Warrensville, P. O.)—For 10,700 ft. 8-30 in. vitr. tile sewer in Silsby Rd., from A. Marra, Ulmer Bldg., Cleveland, $31,589; 10,500 ft. 12-24 in. vitr. tile sewer in Washington Blvd., from Consolo & Palermo, Benham Ave., Cleveland, $28,592; 2,745 ft. 36, 42 and 48 ft. segmental block and 6,070 ft. 8-18 in. vitr. tile sewer in Taylor Rd., from N. Carroccio, $40,049. Noted May 31.

O., Maple Heights (Bedford P. O.)—For 3,120 ft. vitr. tile sewer in Dunham Rd., from B. J. Whittaker, 208 Columbia Bldg., Cleveland, $26,900; 3,138 ft. 16 in. vitr. tile sewer in Granger Rd. and Maple Ave., from W. McDowell & Son, 10319 Miles Ave., Cleveland, $37,700.

Calif., Whittier — Constructing outfall sewer, from P. Barnett, 630 East Washington St., Orange, $28,514; furnishing pipe from Bent Concrete Pipe Co., Security Bldg., Los Angeles, $16,618; furnishing, laying and trenching from H. A. Hanawalt, L. Verne, using vitr. pipe $45,849, concrete pipe $43,044. Noted May 24.

CONTRACTS AWARDED

Conn., Hartford—For 3,206 ft. 24-45 in. rein.-con. pipe for New Britain Ave. and Ward Pl., to Lock Joint Pipe Co., 165 Bway., New York City, $11,269; laying 2,000 ft. pipe in Ward Pl. and 2,000 ft. in New Britain Ave., to Oneil Bros., 983 Main St., $9,216 and $19,101 respectively. Noted June 7.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sewer in Foster Ave., to Seaside Contg. Co., 193 Beach 108th St., Rockaway Beach, $21,265. Noted June 14.

Sewers (Continued)

N. Y., New York Mills—Sanitary sewerage system, to D. Perritano, 1832 Rutger St., Utica, $86,500. Noted May 17.

N. J., East Orange — Mayor and City Council, 7,500 ft. 24 and 30 in. sewer in William St., to C. Ippolito, 252 Main St., $101,473. Engrs. est. $110,000. Noted June 7.

N. J., Hightstown—Alterations and additions to sewage disposal plant, to Hennessey & Sowell, Collingswood, $51,540. Noted June 14.

N. J., Long Branch — Sewerage system with sedementation tank in northwesterly section of city, to H. L. Harrison, 31 Clinton St., Newark, $47,000. Noted May 24.

O., Dayton — Montgomery Co. vitr. sewers in Belmont Sanitary Sewer Dist. 1, Sect. A, to M. J. Connelly, Cincinnati, $77,822, Sect. B, to J. Wroe, 54 Davies St., $117,432, Sect. C, to C. F. Smith, 54 Davies St., $115,914; in Overlook Sanitary Sewer Dist. 1, Sects. A and B, to C. J. Wetzel, Dayton, $51,814 and $65,650 respectively. Noted June 7.

O., Maple Heights (Bedford P. O.)—Sewer 1 Summit Ave., to B. J. Whittaker, 208 Columbus Bldg., Cleveland, $20,170; Sewer 1 Dunham Rd., to A. Lanese Co., Columbia Bldg., Cleveland, $15,696. Work involves 4,800 ft. 8 in. vitr. clay pipe.

Mich., Pontiac—Oakland Co., c/o County Drain Commissioner, first section of West End Drain, incl. 5,785 ft. 10-72 in. crock, to C. A. Handyside Constr. Co, 1758 Penobscot Bldg., Detroit, $132,900.

Wis., Cashton—For 20,213 ft. 6-10 in. pipe and sewage disposal plant, to Mankato Constr. Co., Mankato, Minn., $38,494. Noted May 24.

Wis., Marion—Vitr. sanitary sewers to R. J. Wilson Co., 807 College Ave., Appleton, $27,609. Noted Apr. 26.

Wis., Watertown — Storm and sanitary sewers, to E. L. Bartlett, 217 Washington St., $25,756. Noted June 7.

Mo., Maplewood (St. Louis P. O.)—For 15,640 ft. 8-36 in. vitr. clay and 500 ft. 42 in. segmental block sewer in Manchester Sewer Dist. 2, to Frazier-Davis Constr. Co., Arcade Bldg., St. Louis, $97,156. Noted June 14.

Tex., Leonard—Complete sanitary sewerage system, to R. J. Estep & Co., Deere Bldg., Dallas, $36,536. Noted Nov. 30.

Calif., Alhambra—To G. W. Kemper, P. O. Box 223, Venice, 30,054 lin.ft. 8 in. vitr. sewers, etc., in Birch, Main and Plum Sts., etc., Dist. 2, $72,500; 22,265 lin.ft. 8 in. vitr. sewers, etc., in Almanson, Valencia, Granada Sts., etc., Dist. 4, $57,234. Noted June 7.

Que., Montreal—For 1,837 ft. sewer in Hingston St., and 1,125 ft. in Augier St., 2 x 3 brick, to C. Perluzzi, 407 Labrecque St., $5,143 and $1,392 respectively; 973 ft. 6 ft. brick and 97 ft. 6 ft. steel pipe in Nicolet St., to C. Frascarelli & Cie., 654 Berri St., $38,423. Noted Jan. 25.

Waste Disposal

CONTRACTS AWARDED

Ark., Ft. Smith—For 2 unit, 30 ton capacity incinerator, to Nye Oderless Crematory Co., Georgia Life Bldg., Macon, Ga., $24,000.

Bridges

PROPOSED WORK

Pa., Johnstown—Rejected bids 278 ft. rein.-con., 3 span bridge, through plate girders each 92 ft. long, 36 ft. roadway, 2 track trolley line and 8 ft. clear sidewalk, over Conemaugh River, between Laurel and Cooper Aves. $175,000. Revising plans. J. E. Greiner & Co., 995 Union Arcade, Pittsburgh, engrs. Noted Apr. 26.

West Virginia—State Rd Comn., Charleston, rejected bids constructing Five Mile Bridge 857, concrete deck girder, 60 ft. span, and Three Mile Bridge 858, concrete deck girder, 35 ft. span, Project 3138, near Point Pleasant, Mason Co. $24,882. Will readvertise. L. L. Jemison, Charleston, engr. Noted May 24, under Streets and Roads.

Ky., Somerset—See "Streets and Roads."

Ohio—See "Streets and Roads."

O., Cincinnati—West End Terminal Ry. Co. making plans viaduct, 6th and State Aves. to near 3d and Walnut Sts. $750,000.

Mich., Grand Haven—State Hy. Dept., Lansing, rejected bids Bridge 701302, three 100 ft. deck trusses and 212½ ft. swing span, 24 ft. roadway, two 5 ft. walks, 1,259,000 lbs. steel and 255 cu.yd rein.-con., etc. Will readvertise soon. Noted May 10.

Wis., Peshtigo—State Hy. Comn., Madison, plans steel and concrete bridge on State Trunk Highway 15, here, Marinette Co. Cost $60,000, state and county to share cost. W. C. Buetow, bridge engr.

Wis., Stevens Point — State Hy. Comn., c/o M. W. Torkelson, secy., Madison, plans to rebuild 500 ft. steel and concrete bridge on Clarke St., here, recently destroyed by fire. $200,000. Engineer not selected.

Iowa—See "Streets and Roads."

Mo., Kansas City—Kansas City Terminal Ry. Co., Union Sta., had plans prepared 802 ft. steel and rein.-con. viaduct, 30 ft., to have one 5 ft. sidewalk. $375,000. J. V. Hanna, c/o owner, engr.

Mo., St. Louis—Plans 1,560 ft. rein.-con. viaduct 100 ft. wide, over tracks of Wabash R.R. on Delmar Blvd., also culvert for River Des Peres sewer. $538,000. L. E. Bowen, 301 City Hall, engr. Noted Apr. 19.

BIDS DESIRED

Mass., Haverhill—June 29, (change of date) by Haverhill Lower Bridge Rebuilding Comn., 14 Water St., Boston, rebuilding Haverhill Lower Bridge over Merrimack River, here. Former bids rejected. R. H. Mitchell, chn. Noted Apr. 19.

Mass., Taunton—June 25, by Com. on Streets and Bridges, at office of City Clerk, rein.-con. twin arch bridge with 50 ft. roadway, over Taunton River on County St. C. J. Carey, chn.

N. J., Englishtown—July 5, by Bd. Freeholders Monmouth Co. (Freehold) constructing Bridge Mn-30, Water St., here. G. K. Allen, Jr., 60 Broad St., Red Bank, co. engr.; adv. this issue.

Maryland—June 26, by State Roads Comn., Baltimore, rein.-con. arch bridges in Frederick, Montgomery and Hartford Counties. J. N. Mackall, chn.; adv. this issue.

Virginia—See "Streets and Roads."

W. Va., Mannington—July 6, by J. M. Barrack, mayor, constructing bridges over Buffalo Creek on Clarksburg St. and over Pyles Fork Creek on Buffalo St.; widening, filling and concrete paving Clarksburg, Water, Market and Buffalo Sts., also sidewalks leading from Clarksburg St. to Buffalo St. R. E. Mockler, clk.

North Carolina—June 27, by State Hy. Dept., Raleigh, constructing rein.-con. bridges and culverts on State Project 672, Rowan Co., $26,000; State Projects 189, 230 and 293, Wilson, Green and Pitt Counties, $47,000; State Project 141, Edgecombe Co., $67,000; State Project 836, Henderson Co., $52,600; Projects 851, 889 and extension, McDowell and Yancey Counties, $35,000; State Project 213, Craven Co., $55,000; State Project 702B, Allegheny Co., $29,000. C. M. Upham, state highway engr. Noted May 17.

Ga., Waycross — July 6, by State Hy. Dept., Atlanta, bridge over Satilla River, near here, 2,000 cu.yd. concrete, 260,000 lbs. reinforcing, 3,000 ft. wood piling, etc. S. B. Slack, Atlanta, bridge engr.

Fla., Sulphur Springs—June 28, by State Rd. Dept., Tallahassee, 210 ft. rein.-con. bridge, having 4 spans, across Hillsborough River, here, Project 583, Rd. 5, Hillsborough Co. W. F. Cocke, state highway engr.

Alabama—See "Streets and Roads."

Alabama—July 6, by W. S. Keller, state highway engr., Montgomery, bridges on Birmingham-Memphis Highway, from Jasper to Marion Co. line, Walker Co., two 120 ft. steel spans, 18 ft. clear roadway, remainder rein.-con., 1,792 cu.yd. concrete, 221,557 lb. reinforcing, 1,291 cu.yd. excav., 900 sq.yd. 1 in. concrete surfacing, 1:2:3½ mix, etc.

O., Akron—July 9, by W. F. Peters, dir. Pub. Serv., Delaware Bldg., rein.-con. viaduct on West State St. E. A. Kemmler, highway engr.; adv. this issue.

Ohio—See "Streets and Roads."

Wisconsin—See "Streets and Roads."

Minn., Mantorville — See "Streets and Roads."

South Dakota—See 'Streets and Roads."

Utah—See "Streets and Roads."

Alaska—Bridges—June 27, by Purchasing Agent, of Alaskan Eng. Comn., 422 Bell St. Terminal, Seattle, Wash., one 125 ft. and one 150 ft. span steel riveted truss.

BIDS RECEIVED

N. Y., Fine—F. H. Kelly, town clk., June 12, rein.-con. bridge over Little River, from Sullivan Constr. Co., Jersey City, N. J., $14,287. Noted June 7.

Virginia—See "Streets and Roads."

Alabama—State Hy. Dept., Montgomery, rein.-con. or timber bridges on Dublin-Orion Rd., Federal Aid Project 74, Montgomery Co., from J. R. and J. B. Miller, Baconton, Ga., timber $37,994; J. A. Peterson, Montgomery, rein.con. $84,597. Noted May 24, under "Streets and Roads."

Tex., Richmond—Ft. Bend Co. rein.-con. bridges and culverts on State Highway 3, 197,190 lb. steel in bridges, 73,416 lb. steel in culverts, 1,861 cu.yd. concrete in bridges, 836 cu.yd. concrete in culverts, from M. M. Craven, Missouri City, $84,664. Engrs. est. $96,000. Noted May 24 under Streets and Roads.

Colo., Dillon—State Hy. Dept., Denver, 100 ft. low truss bridge with graded approaches, over Blue River, Federal Aid Project 207, Summit Co., approximately 13 mi. north of here, from Rogers & Prichard, 1735 Stout St., Denver, $26,210.

Calif., San Leandro—Supervs. Alameda Co. (Oakland), widening bridge over San Leandro Creek on East 14th St., from W. B. Ellis, 2236 Grove St., Berkeley, $24,818. Noted June 7.

CONTRACT AWARDED

N. Y., Fine—F. H. Kelly, town clk., 140 ft. rein.-con. bridge, 20 ft., over Oswegatchie River, to G. W. Thompson, Gurney Bldg., Syracuse, $31,545. Noted June 7.

N. Y., Williamsville — Bridge over Tonawanda Creek on Transit Rd., concrete work to Meyer & Meyer, Lancaster, $22,123; steel work to Olean Steel & Iron Co., Olean, $23,500.

Pa., Sygan (Bridgeville P. O.)—Comrs. Allegheny Co., (Pittsburgh), one 30 ft. steel girder span, stone abutment, over Millers Run, here, to W. S. Rae, Oliver Bldg., Pittsburgh. Engrs. est. $25,000.

West Virginia—State Rd. Comn., Charleston, repairing Russell Creek Bridge 687, 470 ft., Project 2027, Cabell Co., incl. replacing concrete and brick floor with wood block, additional steel and repairing piers under truss bearings, to Capitol Constr. Co. Columbus, O., $13,251; constructing French Creek Bridge 870, 110 ft., Project 3078 A, Pleasants Co., concrete deck girder, two 25 ft. spans and one 60 ft. span, to Thomas Co., Inc., 1st Natl. Bank Bldg., Huntington, $17,506; Jennies Creek Bridge 872, Project 3188, Wayne Co., ashlar masonry on concrete substructure, to L. W. Cole, 1200 Jefferson Ave., Huntington, $11,278; Abrams Creek Bridge 883, Project 122 B, Grant Co., masonry substructure, to H. W. Kaylor, Hagerstown, Md., $5,359; Little Mill Creek Bridge 816, Project 3074, Jackson Co., concrete deck girder, four 50 ft. spans, Kenna Bridge 817, Project 3075, Jackson Co., concrete arch, 50 ft. span and Denver Bridge 885, across Marsh Fork, Project 3167 B, Marshall Co., concrete or masonry substructure, to Concrete Steel Bridge Co., Clarksburg, $28,766, $6,976 and $7,048 respectively. Noted May 24, under "Streets and Roads."

S. C., Sumter—See "Streets and Roads."

Wisconsin—See "Streets and Roads."

Wis., Milwaukee—Widening Folsom Pl. Bridge from 20 to 40 ft., substructure, to S. M. Siesel Co., 160 Ogden Ave., $56,639; superstructure, to Newton Eng. Corp., 185 Mason St., $77,900. Noted June 14.

Wis., South Milwaukee—See "Streets and Roads."

Ia., Marion—Linn Co., 5 box culverts, 1 pony truss and 4 I-beam bridges, to P. Jayne, 116 16th Ave., W., Cedar Rapids, $39,097.

South Dakota—State Hy. Comn., Pierre, concrete and steel bridge on Federal Aid Project 100, Pennington Co., to Concrete Eng. Co., Rapid City, $28,632; on Federal Aid Project 67 B, Clay Co., to Federal Bridge Co., 1002 Bankers Trust Bldg., Des Moines, Ia., $19,930; on Federal Aid Project 151, Ziebach Co., to Western Bridge & Constr. Co., 248 Peters Trust Bldg., Omaha, Neb., $18,477. Noted June 7 under "Streets and Roads."

Calif., Santa Rosa—Rejected bids rein.-con. slab and girder bridge over Santa Rosa Creek on A St. L. L. Mills, city engr. Noted June 7.

Ontario—Dept. Highways, Toronto, concrete abutments, extensions to 2 steel bridges, Goderich Shalford Rd., Contr. 954, to J. Gaffney, West Moncton, $15,000; concrete bridge abutments, at Walkerton and at Mildmay, Contr. 955, to J. Schwickler, Mildmay, $18,000; concrete bridge abutments, McKenzie Creek, on Caledonia Rd., Contr. 957, and concrete substructure, Aux Sable River, Contr. 936, to Canadian Des Moines Steel Co., Inches Ave., Chatham, $10,000 and $15,000 respectively; concrete bridge abutments, Boston Creek, Caledonia Rd., Contr. 958, to R. H. H. Blackwell, 57 Queen St. S., Toronto, $10,000; concrete bridge abutments, Bloomfield Bridge, Contr. 959, to W. P. R. Holdcroft, Kingston, $10,000; substructure Arthur Bridge, Contr. 933, to C. G. Callahan, Arthur, $15,000; superstructure over Credit River and 3 bridges at Norval, concrete, Contr. 934, to W. E. Tidy, 37 Metcalfe St., Toronto, $20,000.

Ont., Islington — Etobicoke Twp., rein.-con. bridge, 45 ft. wide, to Hyland Constr. Co., 72 St. Mary St., Toronto, $26,853. Engrs. est. $30,000.

Dams

PROPOSED WORK

Tenn., Laurenceburg — Having surveys made and plans prepared hydro electric dam over Shoal Creek, for municipal light plant. Freeland, Roberts Co., Independent Life Bldg., Nashville, consult. engrs.

Tex., Ft. Worth—See "Miscellaneous."

BIDS DESIRED

N. Y., Beacon—July 2, by City Council, 325 Main St., dam at Melzingah Reservoir. G. W. Krieger, Jr., Poughkeepsie, consult. engr.; adv. this issue. Noted May 3.

Tenn., Madisonville—See "Waterworks."

CONTRACTS AWARDED

Pa., Tyrone—Tipton Water Co., brick, rock and concrete dam, 700 ft. long, 78 ft. high, 60 ft. at base, 15 ft. at top, 50 m.g. capacity, to A. L. Anderson & Bros., Inc., Altoona Trust Bldg., Altoona. $600,000.

Tex., Texarkana—Texas & Pacific R.R. Co., Texas & Pacific Bldg., earth dam, concrete spillway, 90 acres clearing and sodding railway embankment, to Henderson & Co., Jefferson, $100,000.

Railways

PROPOSED WORK

Florida—Miami Beach Electric Co., Miami Beach, had plans prepared 1½ mi. street railway in Miami Beach along Pine Tree Dr. $150,000.

Ohio—Columbus Belt Ry. Co., Columbus, plans 12 mi. belt railway around city. $12,000,000 to $15,000,000. J. E. Bleekman, 149 Bway., New York City, pres.

Ohio—Northern Ohio Traction & Light Co., North Main St., Akron, plans double track on Navarre Rd. S. W., in Canton, also 6,000 ft. track between Canton and North Canton, and new tracks on Cleveland Ave. between Tuscarawas and 4th Sts. E. D. Eckroad, Terminal Bldg., Akron, engr.

California—Los Angeles Junction Ry. Co. (recently organized), plans 3 mi. railroad in vicinity of Vernon. O. C. Sattinger, 724 South Spring St., Los Angeles, dir.

CONTRACT AWARDED

Illinois—Illinois Central R.R. Co., 135 East 11th Pl., Chicago, 7 mi. second track from Springfield to Barclay and new double track bridge across Sangamon River, near Spaulding, to J. D. Lynch, Monmouth. Engrs. est. $410,000. This corrects report in May 24 issue.

Texas—Southern Pacific R.R., Southern Pacific Bldg., Houston, new ballast and trackage in yards at Corsicana, by day labor. $25,000. C. N. Black, ch. engr.

Excavation, Drainage Irrigation

PROPOSED WORK

Fla., Key West—Paul Boysen Development Co., had estimates made 150,000 cu. yd. hydraulic dredging and fill. $37,500. B. Curry, Moreno & P. Boysen, Key West, engrs.

Fla., Ft. Pierce—Ft. Pierce Farms Drainage Dist. plans draining 36 sq.mi., clearing out 37 mi. involving 934,490 cu.yd. excav., 44½ mi. new work, 903,640 cu.yd. excav. $421,200. E. Robb, ch. engr. G. B. Hills, Jacksonville, consult. engr.

Mich., Saginaw—Dredging—U. S. Engineer, 337 Federal Bldg., Detroit, plans dredging Saginaw River to restore 18.5 ft. channel in Saginaw Bay and 16.5 ft. channel in Saginaw River.

Wis., Appleton — Outagamie Co. Farm Drainage Bd. having plans prepared 11.25 mi. open ditch, 6.85 mi. 8-14 in. tile, 12 bulkheads, 329,000 cu.yd. excav., etc. $107,000. E. R. Jones, State Capitol, Madison, engr.

Wis., Friendship—Farm Drainage Bd. 4, having plans prepared 18 mi. open ditch, incl. 350,000 cu.yd. excav. $50,000. W. J. McDowell, secy. E. R. Jones, State Capitol, Madison, engr.

BIDS DESIRED

N. Y., Dunkirk—July 17, constructing inclosed channel and accessories for diversion of Hyde Creek. H. J. Henderson, city clk.; adv. this issue.

N. Y., New York—June 26, by J. H. Delaney, comr. Docks, Pier "A," North River, dredging at street cleaning dumps in Boros of Manhattan and Brooklyn, Items 1, 2, 3, 4 and 5.

BIDS RECEIVED

Md., Baltimore—Bd. Awards, dredging in Baltimore Harbor, from Arundel Corp., Pier 2, Pratt St., (1) $0.39 per cu.yd., (2) $0.24 (3) $0.39. Noted June 14.

Calif., Long Beach—City dredging 963,000 cu.yd. material between entrance jetties and outlet of flood control channel, to be deposited on outer shore of harbor, from Los Angeles Dredging Co., Seaside Park, $0.142 per cu.yd. Noted June 7.

CONTRACTS AWARDED

Wis., Sun Prairie—Dane Co. Drainage Bd., 132,000 cu.yd. excav., to Kremer & Hog, Minneapolis, Minn. Engrs. est. $25,000.

Ia., Sidney—Fremont Co., for work in Missouri Valley D.D. 1, Plum Creek Diversion Ditch 390,000 cu.yd. excav., Possum Creek Diversion Ditch 378,000 cu.yd., Main Ditch 515,000 cu.yd., Horse Creek Ditch 60,000 cu.yd., Cooper Creek Ditch 213,000 cu.yd., Knox Ditch 54,000 cu.yd., Melitia Hollow Ditch 38,000 cu.yd., Cresap Lateral 64,000 cu.yd., Mustard Lateral 145,000 cu. yd., five laterals combined 95,000 cu.yd., to Briggs, Drew & Crane, Omaha, Neb., $0.0695 per cu.yd. Noted June 14.

Ia., Webster City—Stensland D. D. 256, 58,924 ft. tile and 4,200 lin.ft. open ditch; to Natl. Sewer and Pipe Co., Webster City, material $29,973; Widman Bros., labor, $12,699.

Streets and Roads

PROPOSED WORK

N. Y., Batavia—Plans paving Manhattan Ave. and State St., various types material. $25,000. F. D. Emerson, city engr.

N. Y., Hudson Falls—Plans grading and paving ⅞ mi. Oak St., 40 ft. $40,000.

N. Y., Skaneateles—Voted $150,000 bonds for new highways.

N. J., Newark—Making plans grading and paving 1 mi. Two Bridge Rd., 20 ft., bituminous concrete or 8 in. rein.-con., to exceed $30,000; 3 mi. Overbrook and Isolation Hospital Rds., 16-25 ft., 8 in. penetration macadam, bituminous concrete and portland cement concrete, to exceed $50,000. W. A. Stickel, Court House, engr.

Pa., Carbondale — Plans brick paving Dundall and Fallbrook Sts. $25,000. W. L. Giles, city engr.

Pa., New Castle—Plans brick paving. $65,000. C. E. Brown, clk.

Pa., Washington — Comrs. Washington Co. plan concrete paving 6,340 ft. Denbo Rd., $59,000; 3,882 ft. Canonsburg-Venice Rd., $40,000 and 8,000 ft. Charleroi-Dover Rd., 2, $95,000, all 16 ft. Chaney Eng. Co., Court House, engrs.

Va., Graham—Soon takes bids paving 4,200 ft. East End St., 30 ft., concrete asphalt, plain concrete or asphalt top over present asphalt base. C. B. Davis, Bristol, engr.

West Virginia—State Rd. Comn., Charleston, received no bids concrete paving 1.2 mi. St. Marys-Ellenboro Rd., Project 3252 A, Pleasants Co., $35,000, 2 mi. Ripley-Kenna Rd., Project 3075 B, Jackson Co., $50,000; waterbound macadam paving 3 mi. Parsons-Thomas Rd., Projects 3029 and 3143, Tucker Co., $75,000; grading and paving with bituminous macadam 2 mi. Madison-Danville Rd., Project 3151 C, Boone Co., $59,000. Will readvertise. Noted May 24.

West Virginia—State Rd. Comn., Charleston, rejected bids concrete paving 1 mi. River Rd., Project 3114 B and D, Brooke Co., 18 ft., $103,960, 0.8 mi. River Rd., Project 3176, Brooke Co., 18 ft., $68,397; brick paving 1 mi. River Rd. Project 3089, Hancock Co., 18 ft., $51,259, 3 mi. road from Brooke Co. line to Kings Creek Bridge, Project 3253, Hancock Co., 18 ft., $131,843; grading 0.96 mi. Kimball-Northfork Rd., Project 2048 A, McDowell Co., 18 ft., $31,731, 6.23 mi. road from end of Project 81 to Preston Co. line, Project 3299, Taylor Co., 18 ft., $114,678, 5.96 mi. Northwestern Turnpike, Project 3203 D, Preston Co., 18 ft., $104,172, 5 mi. Northwestern Turnpike, Project 3203 E, Preston Co., 18 ft., $60,594; grading and paving with bituminous macadam 1.9 mi. Lower Two Mile Run Rd., Projects 3261 and 50, Clay Co., 18 ft., $84,348; completion of grading and paving with waterbound macadam 5.85 mi. Oldfields-Hampshire Co. line Rd., Project 3013, Hardy Co., 18 ft., $123,259; grading and concrete paving 4.81 mi. Thomas-Gnegy Rd., Project 3186, Preston Co., 18 ft., $225,790, 1.1 mi. Main St. of Grantsville, Project 3165, Calhoun Co., 32 ft., $93,877. Will readvertise. E. B. Carskadon, secy. Noted May 24.

Fla., Jacksonville — Plans improving Laura St., 45 ft., includes concrete curbing, brick guttering and paving with sheet asphalt on 6 in. concrete. $55,000. W. E. Sheddan, Jacksonville, engr.

Fla., Key West—Voted $25,000 bonds surfacing various streets, asphalt on rock. B. C. Moreno, Key West, engr.

Fla., Pensacola — Escambia Co. having plans prepared paving with asphalt on concrete 4 mi. road from Flomaton to Pensacola. $100,000. W. E. Wheat, Pensacola, engr.

Alabama—State Rd. Dept., Montgomery, having plans prepared grading, gravel surfacing and one concrete bridge, 90 ft. long, 18 ft. roadway, on 20 mi. Haleyville-Double Springs Rd. W. S. Keller, state highway engr.

Ala., Alabama City—Plans grading and asphalt paving 10 blocks Forrest Ave. and 7th St., 10 ft. $80,000.

Tennessee — State Hy. Dept., Nashville, soon takes bids grading, surfacing and bridging 11½ mi. road, Bedford Co., 16 ft., probably hand placed limestone base. J. G. Creveling, comr.

Ky., Henderson—Henderson Co. will sell $214,000 bonds, July 9, hardsurfacing 8 mi. Henderson Rd.

Ky., Somerset—Pulaski Co. plans election in November to vote on $200,000 bonds for roads and bridges. C. M. Langdon, co. clk.

Ky., Whitesburg—Letcher Co. plans election in July to vote on $300,000 bonds for new roads.

Ohio—Dept. Highways and Pub. Wks., Columbus, received no bids June 15, grading, bridging and paving 1.047 mi. Sect. "P" Ohio River Rd., Columbiana Co., brick. Noted June 7.

O., Akron—Summit Co. plans paving 11 mi. Cleveland-Massillon Rd., 18 ft., asphalt. $490,000. J. E. Root, City Hall, engr.

O., Alliance — City authorized $134,830 bonds resurfacing 10 blocks East Main St., brick, also South Arch St. Stark Co. (Canton) appropriated $42,500 and $44,000 toward respective projects.

O., Clarington — Plans paving main streets. $70,000. H. C. Althar, Bellaire, engr.

O., Cleveland—Cuyahoga Co. plans grading and paving Northfield Rd. and 2 sections of Miner Rd., vitr. brick, concrete or waterbound macadam. $200,000. F. Lander, Court House, engr.

O., Columbus—Making plans grading laying necessary water services and sewer connections and paving 1,640 ft. alley west of Harrison Ave., alley west of Pennsylvania Ave., alley west of Linwood Ave. and alley north of 14th St., 20 ft., brick or concrete; 1,421 ft. Isabel, Terrace and Parkwood Aves., 24 ft., brick or asphalt; 2,988 ft. Hosack St., 26 ft., brick or asphalt. R. H. Simpson, city engr.

O., Dayton — Plans curbing, guttering, laying 18 in. vitr. storm sewers and brick paving 8,700 sq.yd. Epworth Ave. $48,058. I. E. Houk, city engr.

O., Ironton—Plans paving Spruce, 9th, Maple, 11th, Vine and Adams St., asph. $112,435, brick $114,674, concrete $103,552. L. G. Howell, Ironton, engr.

O., Shaker Heights (Cleveland P. O.)—Rapid Transit Land Co. plans grading, laying sidewalks, sewers, water mains and paving Fairmount Blvd., Warrensville Center, Cedar and Green Rds. $500,000. F. A. Pease Eng. Co., Marshall Bldg., Cleveland, engrs.

Michigan—State Hy. Dept., Lansing, soon takes bids grading, concrete surfacing, etc., 1½ mi. State Trunk Line Rd. 37-5, Sects. A and B; Barry Co., 1 mi. State Trunk Line Rd. 11-48 and 1 mi. State Trunk Line Rd. 13-45, both Petoskey Co., 1½ mi. State Trunk Line Rd. 37-4, Kent Co., 1 mi. State Trunk Line Rd. 59-1, Sect. A, Utica Co., 1½ mi. State Trunk Line Rd. 53-2 A and 53-7, Romeo Co., 5½ mi. Federal Aid Project 93, Ingham Co., 5½ mi. Federal Aid Project 97, Oakland Co., all foregoing 20 ft.; 5½ mi. Federal Aid Project 74, Sect. A, Washtenaw Co., and 1 mi. State Trunk Line Rd. 17-6, Sects. A and B, in cities of Ann Arbor and Ypsilante, both 20 ft., asphalt, concrete or bituminous concrete; 1½ mi. State Trunk Line Rd. 11-9, Michigan Co., 18 ft. concrete; 1½ mi. of 16 ft. bituminous macadam; 5 mi. concrete road, Kent Co.; 14½ mi. road in Monroe Co.; 1½ mi. State Trunk Line Rd. 65-2, Washtenaw Co., 16 and 20 ft., concrete and gravel. F. F. Rogers, comr.

Mich., Detroit—Preparing plans paving following streets with 3 and 3½ in. sheet asphalt on 6 and 8 in. concrete, 9,000 sq.yd. Wilshire Ave., $54,340, 5,000 sq.yd. Fairfield Ave. $31,204, 17,000 sq.yd. American Ave. $98,040, 19,500 sq.yd. La Belle Ave. $115,400, 4,400 sq.yd. Webb Ave. $26,500, 580 sq.yd. Posen St. $2,980, 3,800 sq.yd. Ferdinand St. $19,200; paving 4 alleys with one course 6 in. concrete, $20,450. J. W. Reid, City Hall, engr.

Mich., Ferndale—Making plans grading and paving ½ mi. Nine Mile Rd., 5,500 lin. ft. concrete curbing, 11,000 sq.yd. concrete. $40,000. G. Jerome, 1331 Majestic Bldg., Detroit, engr.

Mich., Monroe — Making plans paving 1,950 sq.yd. West Vine St., 8,880 sq.yd. West 3rd St., 8 in. concrete. $32,000. F. M. Kressbeah, city clk.

Streets and Roads (Continued)

Ill., East St. Louis—Soon receives bids grading, curbing and 8 in. rein.-con. paving, 1,800 ft. 26th St., 6,000 sq.yd. concrete, 3,500 lin.ft. concrete curb and gutter, $27,500; 3,000 ft. 25th St., 10,000 sq.yd. concrete, 5,800 lin.ft. concrete curb and gutter, $41,000. W. McK. Brown, City Hall, engr.

Ill., Olney—Takes bids about July 18, 60,000 sq.yd. sheet asphalt, warrenite or brick paving. H. Grassman, comr. pub. wks.

Iowa — State Hy. Comn., Ames, plans grading and bridging 15 mi. Primary Rd. 21, O'Brien Co., Primary Rd. 5 and 17.5 mi. Primary Rd. 29, Plymouth Co., Primary Rd. 59, Poweshiek Co., 8 mi. Primary Rd. 2, Scott Co., Primary Rd. 58, Tama Co., 10 mi. Primary Rd. 16, Taylor Co., Primary Rd. 8, Union Co., Primary Rds. 3 and 11, Van Buren Co., 2.6 mi. Primary Rd. 1, Primary Rd. 15 and 6.9 mi. Primary Rd. 65, Warren Co., 11.65 mi. Primary Rd. 14, Wayne Co., Primary Rd. 38, Muscatine Co., Primary Rds. 18 and 84, Page Co.; grading and gravel surfacing 1.07 mi. Primary Rd. 1, Story Co.; gravel surfacing 13.986 mi. from Orange City west, 13.8 mi. Maurice to Perkins and 12.735 mi. from Hull east, Sioux Co., 2 mi. from Mallard south on Primary Rd. 17, Palo Alto Co., Primary Rd. 9, Osceola Co., 5 mi. roads in various towns, Primary Rd. 4 and Primary Rd. 23, Sac Co.; building bridge at Fonda, reshaping and gravel surfacing Primary Rd. 17, and road from Rolfe south to Primary Rd. 10, Pocahontas Co.; grading and grade separation 2.1 mi. in Albia on Primary Rd. 8, 0.8 mi. extension to Primary Rd. 8, and grading and bridging 9.5 mi. Primary Rd. 17, Monroe Co.; elimination 2 interurban railway grade crossings on Primary Rd. 7, Polk Co. Iowa Hy. Comn., Ames, engrs.

Minn., St. Paul—Plans about 30 mi. paving, various types. $2,000,000. G. M. Shepard, city engr.

Kan., Independence — Montgomery Co. soon takes bids bituminous macadam paving 41,286 sq.yd. Federal Aid Project 79, Sect. A, and 43,745 sq.yd. Sect. B. H. K. Hibbard, co. engr.

Kan., Larned—Pawnee Co. rejected bids sand clay surfacing 11.214 mi. Federal Aid Project 134, Sects. A and B. Will readvertise soon. V. Stuart, co. engr. Noted May 17.

Wyo., Sheridan—Plans grading, curbing, guttering and paving, also building sewers in 35 blocks. $180,000. E. C. Gwillim, city engr.

Mo., Kahoka—See "Sewers."

Tex., Abilene—City Com. takes bids in summer paving 80,000 sq.yd. Pine and Chestnut Sts., brick, bitulithic or similar pavement. $210,000. H. H. Batjer, city engr.

Tex., Dallas—Making plans macadamizing roads in Tenison Park. $35,000. E. A. Kingsley, city engr.

Tex., Dallas—Making plans removing wood block and repaving with bituminous or brick portions Elm St., McKinney and Parry Aves. $200,000. E. A. Kingsley, city engr.

Tex., Ft. Worth—City Com. soon takes bids repaving Jennings Ave. from Railroad to Terrell Sts., bituminous. $40,000. D. L. Lewis, city engr.

Okla., Barnsdall—Having plans prepared grading and concrete paving 5 blocks, Cedar St. from 1st to 5th Sts., 26 ft. $40,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Okla., Clinton — Having plans prepared grading and paving 7 blocks, 12,000 sq.yd. asphaltic concrete. $60,000. B. M. Hart, City Hall, engr.

Okla., El Reno—Having plans prepared grading and paving 14 blocks Ellison, Wade and Thomas Sts., 26 ft., 4,000 cu.yd. excav., 17,000 sq.yd. asphalt. $75,000. H. G. Powell, city engr.

Okla., Newkirk — Had plans prepared paving 50 blocks, various types of pavement. Richard Eng. Co., Ponca City, engrs.

Okla., Pauls Valley—Having plans prepared grading and vertical fibre brick paving 3 blocks Willow St. and Joy Ave., 50 ft. $45,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Okla., Ponca City—Had plans prepared paving 30 blocks, brick and asphalt. J. M. Richards, Ponca City, engr.

Calif., Los Angeles—Had plans prepared grading, curbing, guttering, sidewalks and paving Wilton Pl. between Santa Monica Blvd. and Clinton St., 104-481 sq.ft. asphalt, etc.

Calif., San Francisco — City and San Francisco Co. appropriated $25,000 to reconstruct 7th St. between Townsend and 3d Sts. M. M. O'Shaughnessy, city engr.

Calif., San Francisco — City and San Francisco Co. appropriated $50,000 to pave and lay sewers in 6th St. between Howard and Townsend Sts. M. M. O'Shaughnessy, city engr.

Calif., San Francisco—City appropriated $40,000 to repave Folsom St. from 3rd St. westerly. M. M. O'Shaughnessy, city engr.

Calif., San Francisco—Plans to repave Howard St. between 7th and 9th Sts. $28,000. M. M. O'Shaughnessy, city engr.

Calif., Taft—Had revised plans prepared concrete curbing, sidewalks and paving 4th St. from Kern to north city limits, 67,000 sq.ft. concrete, etc. E. M. Lynch, Central Bldg., Los Angeles, engr. Noted May 24.

Que., Verdun — Plans paving 2,250 ft. Wellington St., 63 ft., asphalt, $70,000; 1,600 ft. Hickson St., 50 ft., and 1,312 ft. Regina St., 55 ft., $45,000; 3,375 ft. Verdun Ave., 50 ft., concrete foundation, $10,000. C. Johnston, city engr.

Ont., Ottawa—Plans resurfacing with asphalt Sparks St. from Bank to Wellington Sts. $50,000. A. F. Macallum, city engr.

Ont., Tavistock—Oxford Co. plans paving 5 mi. Country Rd. east of Tavistock, 18 ft., probably macadam. $100,000. F. J. Ure & Sons, County Bldg., Woodstock, engrs.

Ont., Toronto—Plans grade reduction on Maclennan Ave., 500 ft. long, 66 ft. wide, earth excav. and concrete retaining walls. $61,000. R. C. Harris, city engr.

BIDS DESIRED

Connecticut—June 28, by State Hy. Dept., Hartford, concrete paving road in town of Danbury; waterbound macadamizing roads in towns of Sharon, Salisbury, Weston and Woodbury. C. J. Bennett, 12 Washington St., Hartford, state highway comr.; adv. this issue.

N. Y., Brooklyn—June 27, by E. Riegelmann, boro pres., Boro Hall, asphalt repaving North Elliott Pl., Rutland Rd., DeKalb and Gelston Aves., North Oxford, St. Edward and 60th Sts.; paving and repaving 15th Ave. and 84th St.

N. Y., Long Island City—June 27, by M. J. Connolly, pres. Queens Boro, Boro Hall, paving Woodhaven Ave., Rockhill Rd., Hillside Ave. from Lefferts Ave. to Queens Blvd. and Hillside Ave. from Queens Blvd. to Bergen Ave., sheet asphalt on macadam; Flushing and Jamaica Aves., sheet asphalt on concrete; 6 in. preliminary paving, etc., on Roosevelt Ave.

N. Y., North Tarrytown (Tarrytown, P. O.)—July 2, by Bd. Supervs. Westchester Co. (White Plains) rein.-con. paving Bedford Rd. and Webber Ave., here. F. L. Merritt, clk.; adv. this issue.

N. Y., St. George — June 26, by J. A. Lynch, pres. Richmond Boro, Boro Hall, repaving Richmond Rd. from Summit to Midland Aves., bituminous concrete and granite block.

N. Y., St. George — June 29, by J. A. Lynch, pres. Richmond Boro, Boro Hall, concrete curbing with steel guard, laying, relaying or renewing sidewalk on Ocean Ave.

N. J., Trenton—July 3 (change of date) by Mercer Co., asphalt paving 1.9 mi. Hamilton Ave., 30 ft. $100,000. H. F. Harris, Court House, engr. Noted June 7.

N. J., Westwood — June 26, by Clerk Bergen Co. (Hackensack) asphalt paving Fairview Ave., here. $25,000. W. G. Clark, 30 Church St., New York City, engr.

Pa., Ebensburg—June 27 by Comrs. Cambria Co., reconstructing 16,136 ft. Wilmore Plankroad, Cambria Twp., bituminous concrete, Spec. "D" on Telford base course, or one course rein.-con. H. T. Jones, controller. Noted June 7.

Pa., Ebensburg—July 2, by Comrs. Cambria Co. and Supervs. Croyle Twp. reconstruction 3 mi. Frankstown and Kneppers Mill Rd., vitr. brick on concrete, rein.-con. or Telford macadam (bituminous) $130,000. Separate bids on 1,045,000 No. 1 repressed brick. O. P. Thomas, Park Bldg., Johnstown, engr.

Pa., Pittsburgh—Comrs. Allegheny Co. receiving bids rein.-con. paving 4 mi. Universal Rd. between Plum and Penn Twps., 20 ft. $100,000. V. R. Covell, co. engr.

Virginia—July 6, at office State Hy. Dept., Richmond, constructing 5.19 mi. Project F 295, Henrico Co.; 3.95 mi. Project S 65 D, Rockbridge Co.; 1.67 mi. Project S 255, Tazewell Co., 0.65 mi. Project S 315, Orange Co.; 9.6 mi. Project F 282, Pittsylvania Co.; 7.49 mi. Project S 248, Nelson and Amherst Counties; 2.13 mi. Project F 301, Albemarle Co.; bridge over Grassy Creek, Project F 178, Mecklenburg Co.; bridge over Spoon Creek, Project F 227, Patrick Co.; 4 bridges over Little Cedar Creek, Project S 325, Russell Co. H. G. Shirley, chn.; adv. this issue.

W. Va., Fairmont—July 10, by Comrs. Marion Co. grading and surfacing with concrete or asphalt macadam 1 mi. Morgantown Rd., Project 1, 16 ft., 3 mi. Winfield Rd., Project 2, 14 ft., 1 mi. Hoult Rd., Project 3; grading and surfacing with waterbound macadam 1½ mi. Montana Rd., Project 4, for Winfield Dist. F. J. Wilfong, co. road engr. Noted Mar. 29.

W. Va., Mannington—See "Bridges."

W. Va., St. Albans—July 10, by H. O. Palmer, clk., 18,000 sq.yd. paving.

N. C., Henderson—June 28, by Comrs. Vance Co., hardsurfacing 3 mi. Dabney, Oxford and Cooper Rds., Dist. 1, 2 and 3. W. S. Corbitt, secy. M. E. Miller, Salisbury, engr.; adv. this issue.

S. C., Bennettsville—June 27, by Marlboro Co. Hy. Comn., improving 5.4 mi. State Route 9, Federal Aid Project 196 A, 66,800 cu.yd. common excav., 14,097 cu.yd. clay gravel, etc. J. M. Martin, Florence, engr.

S. C., Lancaster—July 6, by Comrs. Lancaster Co., improving 3.17 mi. sect. State Route 9, Federal Aid Projects 167 and 205, incl. construction of approaches to Cooks Mill bridge over Lynches River, 18,748 cu.yd. common and 7,359 cu. yd. rock excav., 9,927 cu.yd. topsoil.

Fla., Deland—See "Waterworks."

Alabama—July 6, by W. S. Keller, state highway engr., Montgomery, grading and gravel surfacing 22.79 mi. Birmingham-Memphis Highway, from Jasper to Marion Co. line, Walker Co., 103 acres clearing, 369,817 cu.yd. excav., 342,543 sta.yd. overhaul, 2,044 cu.yd. concrete, 191,569 lb. reinforcing, 70,000 cu.yd. imported gravel surfacing within 1 mi., 125,000 half mile-units overhaul, etc.; grading, bridging and surfacing with 2½ in. bituminous macadam 2.352 mi. Guntersville-Gadsden Rd., Marshall and Etowah Counties, 22,771 cu.yd. excav., 74,574 sta.yd. overhaul, 8,740 cu. yd. chert base, 24,840 sq.yd. 2½ in. bituminous macadam, penetration, etc., bridges on above road involves 307 cu.yd. concrete, 33,892 lb. reinforcing, etc.

Ala., Selma—June 30, 15,500 sq.yd. asphalt, concrete and brick paving. W. O. Crisman, Selma, engr.

Louisiana—June 25, by State Hy. Dept., Baton Rouge, grading and surfacing, etc. Sects. A, B, C and D New Orleans Point a La Highway, Project 367, Plaquemines Parish. J. M. Fourmy, state highway engr.

La., Abbeville—July 5, by R. P. Leblanc, secy. Police Jury, Vermillion Co., Court House, graveling approximately 14 mi. road in Road Dist. 2.

Tenn., Nashville—July 10, at office Bd. Pub. Wks., 17,000 sq.yd. granite block paving, 64,000 sq.yd. asphaltic resurfacing, 11,000 sq.yd. asphaltic paving (new grading and paving). H. E. Howse, mayor; adv. this issue.

Ohio—June 22, by Dept. Highway & Pub. Wks., Columbus, grading, bridging and paving 94.4694 mi. roads in Athens, Brown, Carroll, Clermont, Columbiana, Clark, Fulton, Greene, Hamilton, Hardin, Harrison, Lucas, Madison, Mahoning, Medina, Perry, Portage, Scioto, Trumbull, Wood, Erie, Fayette, Franklin, Jackson and Licking Counties, rein.-con., bituminous macadam asphalt or tar, waterbound macadam, concrete, Kentucky rock asphalt, bituminous concrete, bitoslag or sheet asphalt; concrete bridges in Columbiana, Darke and Delaware Counties. L. C. Herrick, dir. highways.

Ohio—June 28, by Dept. Highways & Pub. Wks., Columbus, grading, bridging and paving 6.366 mi. roads in Geauga and Williams Counties, bituminous macadam, asphalt or tar, $153,156; Sect. "I-2" Portsmouth-Columbus Rd., Scioto Co., brick, $33,048. L. C. Herrick, dir. highways.

O., Akron—July 6, by Bd. Control, paving Power St., less than 1 mi., 35 ft. wide, brick. $28,600.

O., Cincinnati—June 29, by Hamilton Co. grading and paving 60,000 sq.yd. Cleves-Warsaw Rd., concrete $402,749, bitoslag or bitulithic $498,834. E. A. Gast, Court House, co. surv. Noted June 7.

O., Columbus—June 26, by W. H. Duffy, dir. Pub. Serv., grading, laying necessary water services and sewer connections and paving with (a) brick (b) asphalt (c) concrete 1,314 ft. Bellows Ave., 26 ft., (a) $23,053 (b) $19,738; 1,753 ft. Rich St., 82.5 ft., (b) $43,013; 1,400 ft. Brevoort Rd., 60 ft., (a) $23,686 (b) $20,713; 2,044 ft. 3rd St., 50 ft., (a) $28,001 (b) $23,841; 4,476 ft. Oak St., 33 ft., (a) $54,060 (b) $51,125; 457 ft. alley north of Mithoof St., 20.68 ft., (a) $3,666 (c) $2,898; 590 ft. alley north of 7th Ave., 16 ft., (a) $3,630 (c) $2,850; 390 ft. alley west of Woodland Ave., 20 ft., (a) $2,356 (c) $1,886; 461 ft. alley north of Rich St., 16 ft., (a) $2,958 (c) $2,334.

Indiana—June 26, by State Hy. Comn. Indianapolis, paving 8.269 mi. St. Meinrad-Bristow-Birdseye Rd., Projects 34d and 42a, Spencer and Perry Counties; 7.292 mi. Sulphur-Leavenworth Rd., Project 42d.

Streets and Roads (Continued)

Crawford Co.; 5.002 mi. Scottsburgh-Blocher Rd., Project 59, Scott Co. C. Gray, state highway engr.

Wisconsin—June 27, by State Hy. Comn., at div. office 6, 213 South Barstow St., Eau Claire, grading and surfacing, Humbird-Neillsville Rd., Clark Co., 5,942 cu.yd. gravel, Wilson-Knapp Rd., Dunn Co., 8,217 cu.yd. featheredge gravel, etc. A. R. Hirst, Madison, highway engr.

Wisconsin—June 26, by State Hy. Comn., at div. office 1, 149 East Wilson St., Madison, grading and surfacing Clinton-Darien Rd., Rock Co., Sect. A, 41,395 sq.yd. concrete surfacing, etc., Sect. B, 4,090 sq.yd. concrete surfacing, etc.; Beaver-Dam-Columbus Rd., Dodge Co., 30,226 sq.yd. concrete surfacing, etc., bridge at sta. 291A. A. R. Hirst, Madison, highway engr.

Wisconsin—June 26, by State Hy. Comn. at div. office 5, Batavian Natl. Bank Bldg., Trempealeau grading and surfacing Blair-Ettrick Rd., Federal Aid Project 43, 5,582 cu.yd. gravel, Blair-Ettrick Rd., Federal Aid Project 343, 21,129 cu.yd. excav., 3,060 cu.yd. gravel, 4,414 cu.yd. shell, etc., both Trempealeau Co. A. R. Tirst, Madison, highway engr.

Wisconsin—June 26, by State Hy. Com. at div. 4, Citizens Natl. Bank Bldg., Wisconsin Rapids, grading and surfacing Sherry-Auburndale Rd., 50,660 sq.yd. concrete, etc., Milladore-Blenker Rd., 5,400 sq.yd. concrete, etc., both Wood Co.; Bear Creek-New London Rd., Waupaca Co., 10,600 sq.yd. concrete, etc. A. R. Hirst, Madison, highway engr.

Wis., Milwaukee—June 26, by Dept. Pub. Wks., paving various streets, 37,017 sq.yd. concrete, 825 sq.yd. asphaltic concrete, 4,500 sq.yd. sheet asphalt, 1,078 sq.yd. granite block.

Ia., Eagle Grove—June 26 for 30,000 yd. paving, various types. Currie Eng. Co., engrs.

Ia., Iowa City — June 26, by Auditor Johnson Co., grading 3.93 mi. Primary Rd. Project 310 and 11.28 mi. Primary Rd. Project 207, 248,291 cu.yd. excav., 2,112 ft. 15-30 in. culvert pipe, 3,850 ft. 6-12 in. tile, $75,000. A. F. Fischer, co. engr.

Minn., Faribault—July 12, by F. M. Kaisersalt, aud., Rice Co., 7 mi. Job 2313, State Rd. 22, 60,420 cu. yd. earth and 1,662 cu.yd. loose rock excav., 72,373 cu.yd. overhaul, etc.; 6 mi. Job 2316, State Rd. 28, 36,350 cu.yd. earth, 500 cu. yd. loose rock and 223 cu.yd. solid rock excav., 43,066 cu.yd. overhaul, one 75 ft. truss, No. 4068, concrete, etc.; 4 mi. Job 2309, State Rd. 48, 36,779 cu.yd. earth excav., 59,309 cu.yd. overhaul, etc.; Job 2312, State Rd. 30, 53,185 cu.yd. earth excav., 50,932 cu.yd. overhaul, two 35 ft. beam spans, 4082 and 4083, etc. $70,000. J. C. McElherne, Faribault, engr.

Minn., Mantorville—June 29, by Dodge Co., 7.5 mi. Job 2303, State Aid Rd. 1, 85,478 cu.yd. earth and 100 cu.yd. loose rock excav., 188,050 cu.yd. overhaul, one 18 ft. beam span and one 18 ft. concrete slab, etc. $25,000. D. P. Poboisk, Mantorville, engr.

Neb., Lincoln—July 5, by R. Cochrane, state engr., paving 11½ mi. Military Rd. and 2¼ mi. road, for State and Douglas Co. Noted June 14.

South Dakota—June 26, by State Hy. Comn., Pierre, grading 18.61 mi. roads in Bon Homme, Union and Custer Counties, 78,988 sta.yd. overhaul, 124,314 cu.yd. common and 30,124 cu.yd. rock excav., etc., also 67 ft. concrete viaduct in Tripp Co. F. D. Hudgins, state highway engr.

N. D., Crosby—June 26, by R. H. Lynch aud. Divide Co. gravel surfacing 10 mi. Federal Aid Project, 78, incl. sub-grading, preparing earth shoulders, loading and spreading, etc., 13,738 cu.yd., 43,739 cu.yd. 1 mi. haul, 13,738 cu.yd. screening. $28,000.

Mo., St. Louis — July 17, by Bd. Pub. Serv., 208 City Hall, paving 20 alleys, 27,446 sq.yd. concrete, $75,710. W. W. Horner, City Hall, engr.

Mo., University (St. Louis P. O.)—July 3, by E. B. Colby, city clk., repaving 10,560 sq.yd. Delmar Blvd., asphalt. Former bids rejected. Noted May 24.

Ark., Newport — June 30, paving and sewers in Laurel, Laura, and Newport Aves. in Dist. 8, 8,000 sq.yd. asphalt, concrete or bituminous concrete, 5,000 lin.ft. concrete curb and gutter, $35,000; 1st, Beech, Pridge, Laurel, Hazel, Walnut, Main, Vine, Pine and Elm Sts. in Dist. 7, 26,420 sq.yd. asphalt, concrete or bituminous concrete, 8,590 lin.ft. concrete curb and gutter, etc., $100,000. Morgan Eng. Co., Goodwyn Institute Bldg., Memphis, Tenn., engrs. Noted May 3.

Tex., Coleman—June 27, by S. J. Pieratt, judge Coleman Co., grading, gravel surfacing, etc., 5.87 mi. State Highway 7 A, 12,621 cu.yd. gravel, etc. $61,090. W. E. Dickerson, co. engr.

Tex., Colorado—June 26, by J. C. Hall, judge Mitchell Co., paving 0.52 mi. State Highway 1, 20 ft., (a) 2 in. Warrenite bitulithic, (b) 2 in. Uvalde rock asphalt, (c) 3 in. vitr. fibre brick on 5 in. concrete, (d) 7 in. one course concrete. $26,000. F. F. Du Bose, co. engr.

Tex., Colorado—June 26, by Mayor at office of L. A. Costin, city secy., paving 15,120 sq.yd. 2nd and Walnut Sts., (a) 2 in. warrenite bitulithic on 5 in. concrete (o) 2 in. Uvalde rock asphalt on 5 in. concrete (c) 3 in. vertical fibre brick on 5 in. concrete (d) 7 in. one course concrete. $50,000. F. F. Du Bose, Colorado, engr.

Tex., Eastland—June 29, by E. S. Pritchard, judge Eastland Co., bituminous macadam surfacing, etc., 18.67 mi. State Highway 18, 10.04 mi. State Highway 22, 19.14 mi. State Highway 23A, 16 ft. $300,000. C. S. Henning, engr. in charge.

Tex., Paris—June 30, by W. D. Lawrence, judge Lamar Co. concrete paving 2.41 mi. State Highway 5, 25,535 sq.yd. concrete pavement, etc. $78,200. W. M. Fooshee, co. engr.

Tex., Sanderson—June 29, by G. J. Henshaw, judge Terrell Co., grading, gravel surfacing, etc., 13.07 mi. State Highway 12, 27,747 cu.yd. gravel, etc. $101,200. J. Stovall, co. engr.

Utah — June 25, by State Rd. Comn., Salt Lake City, improving State Rd. between Castle Dale and Ferron, Emery Co., 50,000 cu.yd. common excav., 26,000 cu. yd. borrow, 23,240 cu.yd. gravel surfacing, one 25 ft. I-beam bridge, one 100 ft. 3 span concrete bridge with alternate 50 ft. plate girder for center span, and Rochester Flat Bridge, 75 ft. 3 span I-beam, all concrete substructures. H. C. Means, ch. road engr.

Utah—June 26, by State Rd. Comn., Salt Lake City, improving portion Salt Lake Rd., Summit Co., Federal Aid Project 49, 21,500 cu.yd. common and 2,400 cu.yd. rock excav., 13,800 cu.yd. borrow and 6,210 cu.yd. gravel surfacing. H. C. Means, ch. road engr.

Utah—July 2, by State Rd. Comn., Salt Lake City, grading and paving 1.5 mi. road from Richfield south, 1.5 mi. in Salina City and 3 mi. from Salina City to Redmond, Federal Aid Project 43, 44 and 52 respectively, 4,500 cu.yd. excav., 13,900 cu. yd. borrow, 63,470 sq.yd. hard surface. H. C. Means, ch. road engr.

Nevada—June 27, by State Hy. Dept., Carson City, grading, gravel surfacing, etc., Project 54-A, Deeth-Wells Rd., Elko, 1-D, Contr. 79. G. W. Borden, state highway engr.

California—July 9, by State Hy. Comn., Sacramento, surfacing with asphaltic seal coat 7.5 mi. highway between Auburn and north boundary; grading and gravel surfacing 0.2 mi. highway near Lytton, Placer and Sonoma Counties. R. M. Morton, state highway engr.

Calif., Los Angeles—Supervs. Los Angeles Co. receiving bids improving Los Angeles St., shaping 12,444 sq.yd. roadway, 3,958 sq.yd. 2 in. and 9,486 sq.yd. 2½ in. asphaltic concrete top, 3,958 sq.yd. 4 in. and 8,486 sq.yd. 4½ in. asphaltic concrete base, 12,444 sq.yd. flush coat, etc. $28,800.

Calif., Martinez—July 2, by Supervs. Contra Costa Co., straightening out 3,000 lin.ft. highway over Charles Hill on Tunnel Rd., 12,000 cu.yd. excav.; paving 4,279 lin. ft. road leading from Pittsburgh south to Old Mortonville Coal Mines, 18 ft., 1,800 cu.yd. excav., 5 in. concrete pavement with submerged curbs; oil macadam paving 1.47 mi. road from junction of Tassajara and Danville Rds. to Diablo Country Club. R. R. Arnold, co. surv.

Calif., San Mateo—City Trustees receiving bids grading, concrete curbing, sidewalks and paving 1st, 2d, 3d and 4th Aves., etc., 300,000 sq.ft. 1½ in. asphaltic concrete on 4½ in. concrete, 17,400 lin.ft. concrete curb, etc. To exceed $25,000. G. Whitehead, city engr.

Calif., San Rafael—City Clerk receiving bids grading, concrete curbing, guttering and paving 6th St. between B and C Sts., 23,100 sq.ft. asphaltic macadam, etc. H. K. Brainerd, city engr.

Ont., Ottawa—June 26, paving with asphalt Catherine St., $14,000; Bank St., $183,000. A. F. Macallum, city engr.

BIDS RECEIVED

R. I., Ashland—Water Supply Bd., City Hall, Providence, June 13, constructing Ashland Causeway, here, from T. F. McGovern, 95 Main St., Southbridge, Mass., $288,400.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., June 13, repaving (1) 70th St., (2) West 74th St., (3) East 73d St., (4) East 63d St., (5) West 71st St., (6) 114th St., curbing, recurbing, flagging, reflagging and paving (7) West 188th St., (8) West 189th St., all sheet asphalt, from Uvalde Asphalt Paving Co., 1 Bway., (1) $13,760 (4) $17,571 (5) $12,162; Asphalt Constr. Co., 208 Bway., (2) $32,911; Cleveland Trinidad Paving Co., Flushing, (3) $53,208 (6) $17,127; J. E. Gaffney, 438 East 91st St., (7) $7,149 (8) $7,149. Noted June 7.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., June 15, sheet asphalt repaving (1) 57th St. (2) 6th St. (3) 6th St. (4) 7th St. (5) 12th St. (6) 15th St., from W. J. Fitzgerald, 547 West 45th St., (1) $32,974 (5) $11,797 (6) $14,919; Sicilian Asphalt Paving Co., 41 Park Row, (2) $36,601 (3) $15,612 (4) $20,582. Noted June 7.

N. Y., St. George — J. A. Lynch, pres. Richmond Boro, Boro Hall, June 12, repaving Castleton Ave., etc., granite block, from J. Johnson Sons, 455 Bway., West New Brighton, $85,097. Noted June 7.

Pa., New Castle—Paving Croton Ave., from M. J. Scanlon, 215 Liberty St., brick on concrete $36,837, brick on gravel $24,033. Noted Jan. 18.

Delaware—State Hy. Dept., Dover, improving (1) 5.17 mi. Harbeson-Milton Rd., Contr. CS 21, (2) 8.9 mi. Harrington-Burrsville Rd., Contr. CK 10, (3) 0.833 mi. Houston-Milford-Harrington Rd., Contr. CK 13, (4) 3.09 mi. Frankford-Omar Rd., Contr. CS 22, (5) 2.24 mi. Dublin Hill-Bridgeville Rd., Contr. CS 24, (6) 0.765 mi. road through Frederica, Contr. 24 C, (a) stone concrete (b) slag concrete, from R. L. Bonham Co., Bridgeton, N. J., (1) $173,427; McNichol Paving & Constr. Co., 1923 Cherry St., Phila., (2) $315,418; Juniata Co., Empire Bldg., Phila., (3a) $26,646, (3b) $26,003, (6) $14,145; Highway Eng. & Constr. Co., Shelbyville, Del., (4a) $91,977, (4b) $91,497, (5) $65,023. Noted May 31.

Maryland—State Rds. Comn., Baltimore, June 12, concrete surfacing 9,350 sq.yd. Contr. F-64, Frederick Co., from L. R. Waesche, Thurmont, $33,232; 17,850 sq.yd. Contr. Ce-45, Cecil Co., from G. R. Abbott & Sons, 3307 Bateman Ave., Baltimore, $54,793; 9,000 sq.yd. Contr. D-30, Dorchester Co., from Smith & Renshaw, East New Market, $26,674; 3,520 sq.yd. concrete shoulders, Contr. 125-A, Montgomery Co., from Corson & Gruman, 33rd and K Sts., Wash., D. C., $11,757; 2.04 mi. Contr. A-3-A, Allegany Co., 3 ft. concrete shoulders each side, from T. D. Claiborne Co., Garrett Bldg., Baltimore, $27,088. Noted May 31.

Md., Baltimore—Improving streets as listed in Contr. 239-OANA, from Baltimore Asphalt Block & Tile Co., 1320 North Monroe St., $62,857; Contr. 237-OCOANA, from A. Apicella, 224 Albermarle St., $8,312; Contr. 238-OANA, from Ryan Constr. Co., Real Estate Trust Bldg., Phila., $30,393. Noted June 7.

Virginia—State Hy. Dept., Richmond, 6.6 mi. concrete road Project F 166, Hanover Co., 35,874 cu.yd. excav., etc., and 11.07 mi. Project F 157, Charles City Co., 112,779 cu.yd. excav., etc., from Baker & Royer & Co., P. O. Box 601, Richmond, $270,316 and $409,361 respectively; 4.4 mi. concrete road Project F 247, Hanover Co., 5,935 cu.yd. excav., etc., from C. S. Luck & Sons, 1212 Brooks Ave., Richmond, $186,771; 6 mi. gravel road Project S 283, Prince Edward Co., 49, 245 cu.yd. excav., from Perkins & Barnes, Blackstone $47,870; 2 steel and concrete bridges over Craigs Creek, Project S 196, Craig Co., one 85 ft. steel truss and 3 concrete spans other one 85 ft. steel truss and two 30 ft. concrete spans, from Roanoke Iron & Bridge Co., Roanoke, $25,190. Noted May 24.

Alabama—State Hy. Dept., Montgomery, grading and surfacing 11.32 mi. road from Dublin to Orion, Federal Aid Project 74, Montgomery Co., alternate bids on (1) gravel surface (2) 9 in. concrete with sand-clay shoulders (3) sand-clay surface, from J. R. and J. B. Miller, Baconton, Ga., (1) $113,802 (3) $84,622; J. A. Peterson, Montgomery, (1) $159,162 (2) $284,811 (3) $90,096; R. D. Chambers & Co., West Point, Ga., (1) $141,046 (3) $77,556. Noted May 24.

Louisiana — State Hy. Dept., Reymond Bldg., Baton Rouge, June 6, grading and gravel surfacing 11.5 mi. New Roads-Simmesport Highway, from Laiche & Miller, Plaquemine, $44,233. Noted May 24.

Ohio—Dept. Highways and Pub. Wks., Columbus, June 15, grading, bridging and paving with (1) brick (2) rein.-con. (3) Kentucky rock asphalt (4) waterbound macadam (5) bituminous macadam asphalt (6) bituminous macadam tar (a) 1.791 mi. Sect. "A-1" Bridgeport-Cadiz Rd., Belmont Co. (b) 3.827 mi. Sect. "A-2" Bridgeport-Cadiz Rd., Belmont Co. (c) 3.523 mi. Sect. "A-3" Bridgeport-Cadiz Rd., Belmont Co. (d) 0.443 mi. Sect. "Hillsboro" Milford-Hillsboro Rd., Highland Co. (e) 1.125 mi. Sect. "F" West Union-Bain-

Streets and Roads (Continued)

bridge Rd., Highland Co. **(f)** 0.761 mi. Sect. "Sinking" West Union-Bainbridge Rd., Highland Co. **(g)** 0.448 mi. Sect. "Hillsboro" Hillsboro-Washington C. H. Rd., Highland Co. **(h)** 7.155 mi. Sect. "O" Piketon-Hillsboro Rd., Highland Co. **(i)** 2.552 mi. Sect. "T" Mansfield-Norwalk Rd., Huron Co. **(j)** 2.923 mi. Sect. "N" Elyria-Twinsburg Rd., Lorain Co. **(k)** 0.576 mi. Sect. "P" Medina-Norwalk Rd., Medina Co., grading, etc. **(l)** 2.38 mi. Sect. "J" Mansfield-Millersburg Rd., Holmes Co. **(m)** 2.5 mi. Sect. "G" Ironton-Jackson Rd., Lawrence Co., from E. M. O'Neil Constr. Co., Youngstown, **(1a)** $130,906; Huntington Eng. Co., 1st Natl. Bank Bldg., Huntington, W. Va., **(2b)** $205,346; E. L. Reeb, Lima, **(3b)** $172,068 **(3c)** $149,405; W. E. Ringwold Co., Chillicothe, **(1d)** $22,585 **(1g)** $20,900; C. O. Baldwin, Hillsboro, **(4e)** $25,614 **(4f)** $12,154; Foy-Nixon Co., Columbus, **(4h)** $148,758; Gluss Bros., Hamler, **(2i)** $60,146; Wise Bros. and Burman, Elmore, **(5i)** $60,146 **(6i)** $60,146; H. J. Hart, Elyria, **(5j)** $65,265; Hill & Hill, Elyria, **(2k)** $20,823; D. G. Watson, Malinta, **(l)** $14,864; Weeks Constr. Co., Dayton, **(m)** $29,379. Noted June 7.

O., Cleveland Heights (Warrensville, P. O.)—Grading and paving with (1) asphalt, (2) brick, Woodridge and Oxford Rds., from Rieley Bros., The Arcade, Cleveland, (1) $37,929 (2) $44,989 and (1) $41,936 (2) $47,970 respectively; Quilliam Rd., from H. G. Herring, Pavers Exch., Society for Savings Bldg., Cleveland, (1) $48,543 (2) $56,394; Summit Park and Montford Rd., from Spence Bros., Pavers Exch., Society for Savings Bldg., Cleveland, (1) $15,366 (2) $18,938 and (1) $25,690 (2) $31,728 respectively.

O., East Liverpool—Concrete paving about 1.4 mi. River Rd., 18 and 20 ft., from Allison & Harris Constr. Co., East Liverpool, $48,000. Noted May 31.

Ill., Sandwich—Bd. Local Impvts., City Hall, rein.-con. paving Church St., (except center 18 ft.), from Trompeter & Sons, Yorkville, $37,849. Noted May 31.

South Dakota—State Hy. Comn., Pierre, June 12, grading 3.11 mi. Federal Aid Project 130 A, Custer Co., from Mattson & Olson, Rapid City, $51,805; 8.51 mi. Federal Aid Project 146 A, Corson Co., from W. Geddes, Ellendale, N. D., $35,329. Noted June 7.

Tex., Glen Rose—Somervell Co. grading and gravel surfacing 5.86 mi. State Highway 10 A, 12,360 cu.yd. gravel, 40,772 cu. yd. roadway and 14,852 cu.yd. earth excav., etc., from J. E. Harris Co., Alvarado, $30,-516. Engrs. est. $35,000. Noted May 24.

Tex., Greenville—Hunt Co. bituminous top on gravel sub base and waterbound macadam base 3.7 mi. State Highway 39, from D. H. Purvis, Ft. Worth, $20,689, 7,240 cu.yd. crushed stone base, 5,430 cu. yd. gravel, 1,560 cu.yd. crushed stone for cover material and 22,800 gal. liquid asphalt to be furnished by county, $47,500, engrs. est. $75,000; 3.3 mi. State Highway 11, from Hunt Co., c/o O. P. McWhirter, co. judge, Greenville, $19,745, 7,000 cu.yd. crushed stone for base, 5,280 cu.yd. gravel, 1,000 cu.yd. crushed stone, for cover material, 22,000 gal. liquid asphalt, to be furnished by county, $40,000, engrs. est. $65,-000. Noted May 17.

Tex., Paris—Lamar Co. grading and concrete paving 4.05 mi. State Highway 19, 5,399 cu.yd. roadway and 7,728 cu.yd. borrow excav., 36,856 sq.yd. concrete, from J. C. Field Co., Denison, $96,914, engrs. est. $110,000; grading and gravel surfacing 7.58 mi. State Highway 19, 16,359 cu.yd. roadway and 7,324 cu.yd. borrow excav., from McGuire & Cavender, Sherman, $12,166; 11,863 cu.yd. shipped gravel furnished by county, engrs. est. $54,205. Noted May 24.

Tex., Richmond—Ft. Bend Co. grading, etc., 15.14 mi. State Highway 3, 54,440 cu.yd. roadway, 127,220 cu.yd. borrow and 56,828 cu.yd. channel excav., from Gale Bros., Edna, $59,310. Engrs. est. $70,000. Noted May 24.

Tex., San Antonio—Bexar Co. grading, gravel surfacing and bituminous topping etc. 3.4 mi. State Highway 3, 32,328 sq.yd. bituminous macadam, 559 cu.yd. concrete, 22,973 cu.yd. roadway and 13,766 cu.yd. borrow excav., 48,662 lb. reinforcing 10,009 cu.yd. gravel, from Uvalde Rock Asphalt Co., City Natl. Bank Bldg., $59,947. Noted June 14.

Colorado—Bureau Pub. Roads, Denver, grading 4.764 mi. Ironton Sect. Red Mountain Natl. Forest Rd. Project, Ouray Co., from Rogers & Pickard, 1735 Stout St., Denver, $99,649; 5.51 mi. Cumbres Pass Natl. Forest Rd. Project, Conejos Co., from Harvey & Peabody, Sante Fe, N. M., $48,701. Noted June 7.

SUBWAY—NEW YORK

Bids were opened by Transit Comn., 49 Lafayette St., May 22, for Sect. 2 of Route 45, part of Bway.-4th Ave. Rapid Transit Ry., (A) P. McGovern, Inc., 50 East 43rd St., New York City (awarded contract); (B) F. L. Cranford, Inc., 149 Remsen St., Brooklyn; (C) Spencer, White & Prentis, 100 West 41st St., New York. The unit bids were as follows:

	A	B	C
70,000 cu.yd. earth excavation above mean high water	$14.00	$15.10	$17.00
96,400 cu.yd. earth excavation below mean high water	14.00	15.10	17.00
1,600 cu.yd. earth excavation for sewers, ducts and pipes	15.00	15.10	17.00
10,400 cu.yd. rock excavation	18.00	15.10	22.00
Maintaining, protecting and underpinning Syndicate Building No. 35-37 Nassau St (lump sum)	75,000.00	26,250.00	80,000.00
Maintaining, protecting and underpinning National Bank of Commerce Building, No. 31 Nassau St. (lump sum)	98,000.00	36,380.00	102,000.00
Maintaining, protecting and underpinning Western Union Building, No. 40 Broad St. (lump sum)	18,000.00	13,860.00	12,000.00
Maintaining, protecting and underpinning Wall St. Journal Building, No. 42-44 Broad St. (lump sum)	15,000.00	13,940.00	15,000.00
Maintaining, protecting and underpinning building, No. 54-56 Broad St. (lump sum)	5,500.00	7,600.00	14,000.00
Maintaining, protecting and underpinning building, No. 58-60 Broad St. (lump sum)	5,200.00	8,930.00	15,000.00
Maintaining, protecting and underpinning building, No. 62 Broad St. (lump sum)	3,000.00	4,600.00	8,000.00
Maintaining, protecting and underpinning Morris Building, No. 64-68 Broad St. (lump sum)	25,000.00	33,000.00	30,000.00
Maintaining, protecting and underpinning building, No. 74 Broad St. (lump sum)	6,200.00	7,480.00	12,000.00
Maintaining, protecting and underpinning building, No. 76 Broad St. (lump sum)	5,000.00	8,190.00	15,000.00
Maintaining, protecting and underpinning Maritime Exchange Building, No. 78-80 Broad St. (lump sum)	6,500.00	13,520.00	12,000.00
Maintaining, protecting and underpinning building, No. 82 Broad St. (lump sum)	3,100.00	5,250.00	8,000.00
Maintaining, protecting and underpinning building, No. 84 Broad St. (lump sum)	3,000.00	5,670.00	10,000.00
Maintaining, protecting and underpinning building, No. 86 Broad St. (lump sum)	3,500.00	5,670.00	12,000.00
Maintaining, protecting and underpinning building, No. 88 Broad St. (lump sum)	3,700.00	3,360.00	8,000.00
Maintaining, protecting and underpinning building, No. 90 Broad St. (lump sum)	7,500.00	6,300.00	15,000.00
Maintaining, protecting and underpinning building, No. 92-94 Broad St. (lump sum)	7,500.00	10,080.00	25,000.00
Maintaining, protecting and underpinning building, No. 96-98 Broad St. (lump sum)	6,500.00	9,680.00	22,000.00
Maintaining, protecting and underpinning Bush Terminal Building, No. 100 Broad St. (lump sum)	1,200.00	15,000.00	7,500.00
Maintaining, protecting and underpinning Centennial Building, No. 110-122 Broad St. (lump sum)	4,200.00	46,400.00	45,000.00
Maintaining, protecting and underpinning Mutual Life Building, No. 28-38 Nassau St. (lump sum)	110,500.00	57,600.00	200,000.00
Maintaining, protecting and underpinning Mechanics and Metals Bank Building, No. 20 Nassau St. (lump sum)	50,000.00	44,950.00	100,000.00
Maintaining, protecting and underpinning U. S. Sub-Treasury Building (lump sum)	85,000.00	76,000.00	160,000.00
Maintaining, protecting and underpinning Mills Building, No. 15 Broad St. (lump sum)	64,000.00	54,450.00	150,000.00
Maintaining, protecting and underpinning building, No. 35-37 Broad St. (lump sum)	8,800.00	8,740.00	12,000.00
Maintaining, protecting and underpinning building, No. 39 Broad St. (lump sum)	5,500.00	5,700.00	8,000.00
Maintaining, protecting and underpinning International Telephone & Telegraph Building, No. 41 Broad St. (lump sum)	5,500.00	5,700.00	9,000.00
Maintaining, protecting and underpinning Combustion Engineering Building, No. 43-47 Broad St. (lump sum)	12,500.00	11,590.00	28,000.00
Maintaining, protecting and underpinning Post & Flagg Building, No. 49-51 Broad St. (lump sum)	8,000.00	14,000.00	25,000.00
Maintaining, protecting and underpinning Consolidated Stock Exchange Building, No. 63-69 Broad St. (lump sum)	17,000.00	33,000.00	35,000.00
Maintaining, protecting and underpinning building, No. 71 Broad St. (lump sum)	2,500.00	4,000.00	9,000.00
Maintaining, protecting and underpinning building, No. 73 Broad St. (lump sum)	2,300.00	4,400.00	9,000.00
Maintaining, protecting and underpinning building, No. 75 Broad St. (lump sum)	1,800.00	3,600.00	9,000.00
Maintaining, protecting and underpinning building, No. 77-79 Broad St. (lump sum)	3,900.00	8,000.00	18,000.00
Maintaining, protecting and underpinning building, No. 81 Broad St. (lump sum)	4,500.00	6,000.00	12,000.00
Maintaining, protecting and underpinning building, No. 91 Broad St. (lump sum)	3,300.00	3,500.00	5,000.00
Maintaining, protecting and underpinning building, No. 93-97 Broad St. (lump sum)	15,000.00	24,700.00	45,000.00
Maintaining, protecting and underpinning Fraunces' Tavern Building, No. 54 Pearl St. (lump sum)	5,000.00	9,660.00	25,000.00
Maintaining, protecting and underpinning building, No. 101-103 Broad St. (lump sum)	3,000.00	7,000.00	20,000.00
Maintaining, protecting and underpinning building, No. 105 Broad St. (lump sum)	4,200.00	7,400.00	20,000.00
Maintaining, protecting and underpinning building, No. 105½ Broad St. (lump sum)	5,800.00	11,200.00	30,000.00
Maintaining, protecting and underpinning building, No. 107 Broad St. (lump sum)	2,200.00	5,000.00	4,000.00
9,500 cu.yd. tunnel excavation	24.00	20.80	25.00
33,850 cu.yd. concrete masonry	19.00	24.75	35.00
70,000 sq.ft. rubbing to smooth finish the surface of concrete	.10	.15	.17
6,100 cu.yd. protective concrete masonry	19.00	24.75	25.00
200 cu.yd. rubble stone masonry	10.00	12.00	24.00
150 cu.yd. brick masonry	34.00	40.00	60.00
630 cu.yd. removal and disposal of old masonry	30.00	60.00	100.00
60 cu.yd. hollow terra cotta brick or tile	34.00	35.00	42.00
60 lin.ft. 4½x13-in. terra cotta flue lining	2.00	2.00	2.00
1,000 bbl. grout of portland cement	6.00	8.00	9.00
25 M.ft.B.M. tunnel timbering	125.00	300.00	125.00
40,500 sq.yd. waterproofing one ply	.90	1.25	2.00
8,500 sq.yd. waterproofing three ply	2.10	2.50	3.00
2,600 sq.yd. waterproofing six ply	3.70	3.50	5.00
2,500 sq.yd. waterproofing dry ply	.45	1.00	.90
6,800 cu.yd. waterproofing brick in asphalt mastic	43.00	45.00	85.00
2,000 lin.ft. 3-in. cast iron pipe and fittings	1.50	1.50	3.25
420 lin.ft. 6-in. cast iron pipe and fittings	2.50	2.00	4.25
2,800 lin.ft. 8-in. cast iron pipe and fittings	3.50	2.50	6.00
100 lin.ft. 10-in. cast iron pipe and fittings	4.10	3.50	8.00
100 lin.ft. 3-in. standard galvanized wrought-steel pipe	1.50	1.75	7.00
230 lin.ft. 4-in. standard galvanized wrought-steel pipe	2.00	2.00	13.00
150 lin.ft. 6-in. standard galvanized wrought-steel pipe	2.80	2.50	17.00
42,500 duct. ft. tunnel ducts	.30	.25	.35
2,000 duct. ft. 3½-in. fibre conduits	.50	.40	1.25

	A	B	C
170 sq. ft. asbestos lumber panels—wall bench duct manholes	1.00	.50	14.00
3,200 ton riveted steel	170.00	135.00	195.00
10 ton architectural iron and steel (stairs, ladders, checkered plates, pipe railing, etc.)			600.00
100 sq. ft. sliding doors with asbestos panels	350.00	300.00	12.00
4 counterbalanced emergency exit covers	6.00	2.00	1,000.00
2,070 ton steel beams and shapes	400.00	300.00	195.00
180 ton steel rods and bars	170.00	135.00	120.00
4 ton miscellaneous iron castings	90.00	100.00	250.00
2 ton miscellaneous iron furnishings	200.00	250.00	350.00
1,000 lb. special wire forms	150.00	300.00	.50
2,000 lin. ft. 1¼ in. oak hand rail	.20	.30	.90
2,800 sq. ft. steel grating for ventilation	.45	.75	3.50
1,800 sq. ft. vault lights	2.50	4.00	2.00
5,100 sq. yd. sidewalk restored	2.00	4.00	3.50
10,700 sq. yd. roadways restored—asphalt	3.00	4.50	6.00
110 sq. yd. roadways restored—granite block	6.00	6.50	12.00
50 lin. ft. new 6-in. bluestone curb	8.00	6.50	13.00
350 sq. yd. roadways restored—wood block	2.00	2.50	3.00
500 lin. ft. new 8-in. granite curb	8.00	7.00	14.00
160 sq. yd. new sidewalk finish 3-in. thick	3.50	5.50	5.00
12,800 lin. ft. ½-in. W.S. electric conduits	1.50	4.50	7.00
3,000 lin. ft. in. W.S. electric conduits	.30	.60	.60
1,050 cast iron outlet boxes	.50	.60	1.00
7 cast iron pull boxes	1.50	2.50	4.00
120 lin. ft. 6-in. cast iron pipes and fittings "extra heavy"	10.00	8.00	20.00
100 lin. ft. 3-in. cast iron pipes and fittings "extra heavy"	2.50	3.00	6.25
120 lin. ft. 4-in. cast iron pipes and fittings "extra heavy"	1.50	2.00	5.00
100 lin. ft. 8-in. cast iron pipes and fittings "extra heavy"	1.75	2.50	5.50
630 lin. ft. 15-in. vitrified pipe sewer	3.50	4.00	10.00
350 lin. ft. 18-in. vitrified pipe sewer	6.50	7.00	10.00
20 ton cast iron sewer pipe (straight pipe)	7.50	8.00	12.00
10 ton cast iron sewer pipe (special casting)	105.00	200.00	210.00
1,100 lin. ft. 3 ft. 6 in. x 2 ft. 4 in. reinforced concrete sewer	200.00	250.00	300.00
175 lin. ft. 3 ft. x 3 ft. reinforced concrete sewer	11.70	22.00	35.00
1,150 lin. ft. 4 ft. x 2 ft. 6 in. reinforced concrete sewer	14.80	23.00	42.00
100 lin. ft. 3 ft. 6 in. x 3 ft. 9 in. reinforced concrete sewer	15.60	25.00	42.00
400 lin. ft. 4 ft. x 4 ft. 3 in. reinforced concrete sewer	14.80	30.00	50.00
120 lin. ft. 4 ft. 3 in. x 5 ft. reinforced concrete sewer	16.65	30.00	59.00
210 lin. ft. 4 ft. 9 in. x 5 ft. reinforced concrete sewer	18.30	40.00	68.00
520 lin. ft. 4 ft. 6 in. x 2 ft. 10 in. reinforced concrete sewer	20.40	42.00	75.00
340 lin. ft. 5 ft. x 6 ft. reinforced concrete sewer	16.30	30.00	45.00
4 providing and maintaining temporary supports for electric railroad columns	24.70	45.00	80.00
150 lin. ft. water pipe 6 in.	1,900.00	2,500.00	3,000.00
100 lin. ft. water pipe 8 in.	1.00	2.00	3.25
900 lin. ft. water pipe 12 in.	1.50	3.00	4.00
100 lin. ft. water pipe 16 in.	2.00	3.00	5.00
100 lin. ft. water pipe 20 in.	2.50	5.00	10.00
20 service connections for water pipe	3.00	10.00	17.00
100 lin. ft. gas pipe 4 in.	50.00	30.00	150.00
1,300 lin. ft. gas pipe 6 in.	1.00	2.50	3.00
460 lin. ft. gas pipe 8 in.	1.20	3.00	5.00
100 lin. ft. gas pipe 10 in.	1.80	3.00	6.00
200 lin. ft. gas pipe 12 in.	2.15	3.00	8.00
100 lin. ft. gas pipe 24 in.	2.50	3.50	10.00
6,150 lin. ft. by-passing pipe 8 in. W. S.	5.00	5.00	25.00
100 lin. ft. by-passing pipe 12 in. W. S.	8.00	5.00	13.00
100 lin. ft. by-passing pipe 20 in. W. S.	10.00	6.00	20.00
150 lin. ft. by-passing pipe 12 in. W. S. on trestle or cable	15.00	10.00	30.00
175 lin. ft. by-passing pipe 20 in. W. S. on trestle or cable	10.00	10.00	25.00
430 lin. ft. cable suspension to support by-passing pipe over 16 in. in diameter	17.00	15.00	28.00
110 lin. ft. cable suspension to support by-passing pipe 16 in. or under in diameter	25.00	10.00	20.00
20 service connections for gas pipes	25.00	10.00	18.00
25 ton new cast iron hub & spigot pipe, straight	50.00	50.00	100.00
20 ton new cast iron hub & spigot pipe, special castings	110.00	150.00	100.00
120 lin. ft. high pressure fire system water pipe 8 in.	215.00	200.00	250.00
880 lin. ft. high pressure fire system water pipe 12 in.	2.00	3.00	11.00
220 lin. ft. high pressure fire system water pipe 16 in.	3.00	3.50	14.00
100 lin. ft. high pressure fire system water pipe 20 in.	4.00	5.00	15.50
25 ton new H.P. fire system C.I. spigot & groove pipe	5.00	10.00	24.00
20 ton new H.P. fire system C. I. spigot & groove pipe, "special casting"	150.00	150.00	150.00
120 lin. ft. steam pipe 6 in.	270.00	200.00	250.00
200 lin. ft. steam pipe 8 in.	9.00	4.00	60.00
120 lin. ft. steam pipe 15 in.	10.00	6.00	70.00
120 lin. ft. steam pipe 16 in.	18.00	10.00	80.00
2 service connections for steam pipes	19.00	10.00	90.00
100 lin. ft. new steel welded flanged steam pipe 6 in.	150.00	200.00	425.00
100 lin. ft. new steel welded flanged steam pipe 8 in.	12.00	4.00	4.25
100 lin. ft. new steel welded flanged steam pipe 15 in.	15.00	5.00	6.00
100 lin. ft. new steel welded flanged steam pipe 16 in.	21.00	10.00	14.00
100 lin. ft. air pipe 6 in.	23.00	12.00	15.50
100 lin. ft. new air pipe 6 in.	1.50	4.00	10.00
200 lin. ft. pneumatic mail tube 8 in.	2.00	6.00	1.75
1,350 lin. ft. pneumatic postal telegraph tube 2½ in.	6.00	4.00	6.00
250 lin. ft. pneumatic Western Union tube 2½ in.	2.50	1.00	8.00
350 lin. ft. new pneumatic Postal Telegraph tubes 2½ in.	2.50	1.00	10.00
100 lin. ft. new pneumatic mail tubes, straight pipe, 8 in.	1.00	1.00	6.00
100 lin. ft. new pneumatic mail tubes, curved pipe, 8 in.	6.00	4.00	5.00
100 lin. ft. new pneumatic Western Union straight and curved pipe, 2½ in.	11.00	8.00	15.00
71,000 duct. ft. electric ducts and conduits	1.00	1.00	6.00
8,450 lin. ft. wrought steel pipe electric ducts and conduits 2½ in.	.50	.40	1.00
5,350 lin. ft. wrought steel pipe electric ducts and conduits 3 in.	.70	1.00	2.00
6,250 lin. ft. wrought steel pipe electric ducts and conduits 3½ in.	.90	1.50	2.25
100 lin. ft. wrought steel pipe Edison conduit 2 in.	1.20	2.00	3.00
100 lin. ft. wrought steel pipe Edison conduit 2½ in.	1.50	1.00	3.00
950 lin. ft. wrought steel pipe Edison conduit 3 in.	2.00	1.25	3.75
500 lin. ft. wrought steel pipe Edison conduit 3½ in.	3.25	1.50	4.00
20 service connections for electric ducts	4.25	1.75	4.50
100 lin. ft. commercial cable duct 2 in.	60.00	60.00	150.00
230 lin. ft. commercial cable duct 3 in.	.80	1.00	4.00
100 lin. ft. commercial cable duct 4 in.	1.20	2.00	5.00
120 lin. ft. commercial cable duct 6 in.	2.00	2.50	8.00
20 service boxes on relocated duct lines	3.00	3.00	10.00
10 junction boxes on relocated duct lines	100.00	150.00	250.00
10 additional junction boxes on relocated duct lines	500.00	250.00	350.00
	500.00	300.00	400.00
Extended totals	$5,976,086	$6,221,544	$8,844,025

Streets and Roads (Continued)

Colo., Denver—Grading, concrete curbing and surfacing 5 mi. North Denver Impvt. Dist. 31, 30 ft. roadway, from Western Constr. Corp., 33rd and Blake Sts., $86,436. Engrs. est. $107,346.

Nevada—State Hy. Dept., Carson City, grading surfacing, etc. Halleck-Deeth Rd., Elko 1-C, from W. Hoops, Hollister, Idaho, $72,750.

Wash., Seattle—Paving Ave. N., et al., from D. H. Traphagen, Walker Bldg., 6,250 sq.yd. 7 in. rein.-con. $1.85, 850 lin.ft. curb $0.65, 6,400 lin.ft. concrete curb $0.35, 8,800 cu.yd. excav. $0.60 and 7,500 cu.yd. subgrade $0.70, total $66,035.

Calif., Long Beach—Paving streets in Belmont Heights Addition, 5 in. concrete from California Constr. Co. 58 2nd St., San Francisco, $572,586. Noted June 14.

Calif., Los Angeles—Los Angeles Co., improving Slauson Ave. between Central and Compton Sts., shaping 10,983 sq.yd. roadway, removing 1,150 cu.yd. old macadam, replacing 10,983 sq.yd. old macadam, 1,400 cu.yd. disintegrated granite base, 9,086 sq.yd. 3 in. willite top, etc., from G. R. Curtis, 2440 East 26th St., $32,165.

Calif., Oakland—Supervs. Alameda Co. grading, concrete curbing, guttering, sidewalks and paving roads in vicinity of county hospital grounds, 65,000 sq.ft. 5 in. concrete, etc., from J. H. Fitzmaurice, 698 Walla Vista Ave., $22,352. Noted June 7.

Calif., Turlock—Improving West Main St., from A. Teichert & Sons, Ochsner Bldg., Sacramento, 90,000 sq.ft. grading at $0.03, 83,000 sq.ft. 1½ in. warrenite on 3 in. asphaltic base $0.206, 6,900 sq.ft. concrete gutter $0.24. Noted May 31.

CONTRACTS AWARDED

Massachusetts—State Hy. Dept., Boston, paving 1.399 mi. Project 103, and 16,910 sq.yd. rein.-con., to C. B. Lindholm, Pittsfield, $96,712. Noted May 24.

Mass., Boston—Paving 0.5 mi. East Concord St. from Albany to Washington Sts., 30 ft. wide, sheet asphalt, to Central Constr. Co., 228 Southampton St., $34,645; 0.5 mi. Massachusetts Ave. from Albany to Southampton St., 40 ft., granite block, to M. F. Gaddis, 5 Paulding St., $24,984.

Rhode Island—State Bd. Pub. Roads, State House, Providence, 3.13 mi. rein.-con. paving Federal Aid Project 17, Div. A, in North Providence and Lincoln, Highway Contr. 2304, to Lane Constr. Corp., 37 Colony St., Meriden, Conn., $153,986. Noted May 24.

N. Y., Cohoes—Paving 17,000 sq.yd. Vliet St., recut granite block, to T. F. Gratton, Remsen St., $29,710.

N. Y., Elmira—Chemung Co. will construct ½ mi. highway in town of Ashland, 12 ft., bituminous top, limestone asphalt or tarvia binder, $3,000, 2 mi. in Baldwin, 12 ft. bituminous top local stone, tarvia binder, $12,000, ¾ mi. in Big Flats, 16 ft., bituminous macadam local stone base, limestone top, tarvia binder, $10,000 ¾ mi. in Catlin, 12 ft., bituminous macadam, local stone base and top, tarvia binder, $9,000, ¾ mi. in Chemung, 14 ft., bituminous macadam local stone base and top, tarvia binder, $14,000, 1 mi. in Elmira, 16 ft., bituminous top, limestone, tarvia binder, $10,000, 1 mi. in Erin, 12 ft., bituminous macadam, local stone base, limestone top, tarvia binder, $12,000, 1 mi. in Horseheads, 16 ft., bituminous macadam, local stone base, limestone top, asphalt binder, $18,000, 1 mi. in Van Etten, 12 ft., bituminous macadam, local stone base, limestone top, tarvia binder, $14,000, 1 mi. in Veteran, 16 ft., bituminous top, local stone base, tarvia binder, $10,000; grading 2 mi. in Southport, 12 ft., $15,000, by day labor under supervision of H. T. Gage, co. supt. highways.

N. Y., Fulton—Improving and asphaltic concrete paving several streets, to Lane Constr. Corp., 37 Colony St., Meriden, Conn., $110,675. Noted May 31.

N. J., East Orange — Mayor and Boro Council, to Franklin Contg. Co., 20 Washington Pl., Newark, furnishing and applying 60,000 gal. bituminous road binder on streets, $0.11 per gal., national paving on concrete Greenwood Ave. $12,164, Oak St. $11,492, Tremont Ave. $3,878, Freeman Ave. $10,241, North 19th St. $29,787; to Standard Bitulithic Co., 50 Church St., New York City, warrenite bitulithic paving on concrete Grand Ave. $10,994, Eaton Pl. $14,676. Noted May 24.

N. J., Newark—T. L. Raymond, dir. Dept. Streets & Pub. Impvts., to Newark Paving Co., 398 Adams St., sheet asphalt paving 18,000 sq.yd. Lafayette St. $66,607, 2,100 sq.yd. 4th St. $7,606, 2,870 sq.yd. Peck Ave. between 2nd and 3rd Aves., $11,485, 3,433 sq.yd. Richlieu Pl. $17,940, 5,500 sq.yd. South 15th St. $22,233; to J. W. Costello, City Hall, (representing city) sheet asphalt (Burner method) paving 1,200 sq.yd. Belmont Ave. $1,097, 500 sq.yd. Madison St. $460, 2,800 sq.yd. Park St. $2,782, 3,200 sq.yd. Pennington St. $3,044, 8,800 sq.yd. Somerset St. $8,450; to Standard Bitulithic Co., 50 Church St., New York City, 1,900 sq.yd. Clinton St. $1,901, 13,000 sq.yd. North 7th St. $13,263, 1,900 sq.yd. Nursery St. $1,929, 22,000 sq.yd. Summer Ave. $22,438, 1,050 sq.yd. Isabella Ave. $5,216, 1,060 sq.yd. Fessenden Pl. $6,066, 390 sq.yd. Ridgewood Ave $3,480; to J. B. Gilligan Casey Co., 919 Broad St., sheet asphalt paving 4,100 sq.yd. Cedar Ave. $16,206, 4,700

Streets and Roads (Continued)

sq.yd. Speedway Ave. $20,980; to Jannerone Contg. Co., Belleville, curbing, grading and flagging 460 lin.ft. 2nd Ave. $3,174, 1,500 lin.ft. Peck Ave. between 1st and 2nd Aves., $7,135. Noted May 24.

N. J., New Brunswick—Middlesex Co. asphalt paving 1 mi. River Rd. and ¾ mi. New Market-Stelton Rd., to A. Keyes, Woodbridge, $34,289 and $27,019 respectively.

West Virginia — State Rd. Comn., Charleston, cold road oil surface application incl. furnishing and applying cover coat on 17.1 mi. Projects 2099, 2101, 33, 24 and 2102, Preston Co., 2 mi. Grafton Pike, Project 81, Taylor Co., and 12.7 mi. Projects 91, 27, 16, 2107 and 2108, Barbour Co., all 18 ft., to Atlantic Refining Co., 291 Bway., New York City, $9,573, $2,396 and $9,027 respectively; grading 2.5 mi. Glovers Gap-Wetzel Co. line Rd., Project 3275, Marion Co., and 1.2 mi. Wheeling-Fairmont Turnpike, Project 3263, Wetzel Co., both 18 ft., to Wetzel Constr. Co., New Martinsville, $60,798 and $27,215 respectively, 4.5 mi. Northwestern Turnpike, Project 3203 C, Preston Co. and 5 mi. Northwestern Turnpike, Project 3203 F, Preston Co., both 18 ft., to W. J. and J. T. Gephart, Elkins, $119,898 and $112,215 respectively, 9.4 mi. Ranger-Harts Rd., Project 3169, Lincoln Co., 18 ft., to P. C. Minotti, Logan, $241,-703, 2 mi. road from end of Project 92 to Wellsburg, Project 3077, Brooke Co., 18 ft., to F. Robinson, New Cumberland, $31,908, 12 mi. Racine-Whitesville Rd., Projects 3104 and 3205 B, Boone Co., 18 ft., to J. M. Cain & Co. and McArthur & Hood, Huntington, $119,580, 8 mi. Melissa-Salt Rock Rd., Project 3155, Cabell Co., 18 ft., to Gillespie & Werninger, Huntington, $113,-763, 6 mi. Pocatalico-Jackson Co. line Rd., Project 3259, Kanawha Co., 18 ft., to Harley & Caldwell, Tell City, Ind., $118,255, 2 mi. River Rd., Project 3086 B, Marshall Co., 18 ft., to Berry & Sons, Moundsville, $21,-801, 5 mi. Parsons-Mackeysville Rd., Project 3143 B, Tucker Co., 18 ft., to Keeley Constr. Co., Clarksburg, $175,397, grading and concrete paving 1.92 mi. Jane Lew-Harrison Co. line Rd., Project 3255, Lewis Co., 18 ft., to Seiple-Wolfe Constr. Co., Youngstown, O., $89,188, 1.43 mi. Upshur-Clarksburg Rd., Project 3238, Upshur Co., 18 ft., to Marshall & Gillooley, Elkins, $62,-913; concrete paving 2.6 mi. Cairo-Nutter Farm Rd., Project 3115 B, Ritchie Co., 18 ft., to W. A. Wilson & Son, St. Marys, $96,-446, 3.5 mi. Monitor Junction-Rossmore Rd., Projects 89 and 3228, Logan Co., 18 ft., to Coda-Nash Co., Huntington, $167,961, 2 mi. Ripley-Cottageville Rd., Project 3074 A, Jackson Co., 18 ft., to Karr & Karr, Ripley, $58,290; grading and paving with bituminous macadam 3.13 mi. Webster-Barbour Co. line Rd., Project 3224, Taylor Co., 18 ft., to R. T. Gray & Co., 817 Salt Springs Rd., Youngstown, O., $128,415, 1.84 mi. Lewis-Putnam Co. line Rd., Project 3286, Kanawha Co., 18 ft., to Abbott Bros., 316 Dickinson St., Charleston, $61,428, 6.313 mi. Crab Orchard-Amigo Rd., Project 3239, Raleigh Co., 18 ft., to O. C. Young, Beckley, $253,310, 4.46 mi. Good Hope-Lewis Co. line Rd., Project 3225 C, Harrison Co., 18 ft., to Kester Constr. Co., Nutter Fort, $206,494; rock asphalt paving 1.3 mi. Northwestern Turnpike, Project 3116 B, Wood Co., 18 ft., and 2.58 mi. Gandeeville Walton Rd., Project 3168 A, Roane Co., 18 ft., to C. V. Rector, Lima, O., $53,440 and $94,022 respectively; bituminous macadam paving 4.77 mi. Kingwood-Reedsville Rd., Project 1127 S, Preston Co., 18 ft., to Jones Constr. Co., Lisbon Rd., Salem, O., $87,306, 5.3 mi. Ansted-Falls Dist. Line Rd., Project 3038, Fayette Co., 18 ft., to Gilbert Constr. Co., Ansted, $175,834; grading and gravel surfacing 3 mi. River Rd., Project 3082 B, Wetzel Co., 18 ft., to Morris & Riggs, Sistersville, $100,630. Noted May 24.

S. C., Sumter—Sumter Co. asphaltic concrete paving 4 mi. Sumter-Camden Rd., to Harles-Thrash Constr. Co., Florence, $96,054; constructing 1.85 mi. Mayesville Rd. to Powell Paving Co., Palmetto Bank Bldg., Columbia, $65,110, 4 creosoted bridges on foregoing to South Carolina Constr. Co., Columbia, $8,912. Noted June 7.

Ala., Florence—Paving various streets, 75,000 sq.yd. rock asphalt, to Kirkpatrick & Hitchcock, Florence, $89,173. Noted May 31.

Kentucky — State Hy. Dept., Frankfort, plans paving 1 mi. Georgetown-Lexington Rd., State Project 5, Fayette Co. This is an experimental section and will be built by force account. J. S. Boggs, state highway engr.

Kentucky—State Rd. Dept., Frankfort, surfacing with bank gravel 13.1 mi. Earlington-Dawson Springs Rd., State Project 55, Sect. A, Hopkins Co., to N. E. Stone, Madisonville, using concrete pipe $255,095, 9.358 mi. Hopkinsville-Gracey Rd., State Project 1, Sect. C, Christian Co., to McQuarry Bros., Hopkinsville, using concrete pipe $192,684; rein.-con. surfacing 9.352 mi. Lexington-Covington Rd., State Project 5, Sects. A and B, Kenton and Boone Counties, to J. Wrol Co., Dayton, O., using concrete pipe $316,789; grading 6.763 mi. Pikeville-Williamson Rd., State Project 36, Sect. C, Pipe Co., to N. K. Snead Co., Camp 201 near Cincinnati & Ohio R.R., Huntington, W. Va., using concrete pipe $123,093; reconstructing 7 mi. Maysville-Lexington Rd., Mason Co., to Bates-Paynter Co., Danville, $47,511. Noted June 7.

Ky., Paducah—Bd. Pub. Wks., 67,000 sq. yd. concrete paving, 9,000 lin.ft. curbing, etc., to Yancey & Johnson, Paducah, $170,-000. Noted June 14.

O., Bellaire—G. T. Kreglow, dir. Pub. Serv., paving Belmont St., 4 in. brick on 6 in. concrete, to Tatgenhorst & McLaughlin, East Liverpool, $46,406. Noted May 17.

O., Cleveland — Cuyahoga Co. grading, guttering and vitr. brick paving 18,440 sq. yd. Snow Rd., to Freshwater Constr. Co., Natl. Bldg., $116,727. Noted June 14.

O., Cleveland—Grading, curbing and paving 12,400 sq.yd. West Blvd. extension, vitr. brick on concrete, to Baldwin Bros., 4500 Euclid Ave., $64,084. Noted June 14.

O., Cleveland — Grading, curbing and paving Maryland Ave., brick, to Enterprise Paving & Constr. Co., 8444 Bway., $7,865; West 24th St. and Behrwald Ave., to Roehl Bros. Paving & Constr. Co., West 25th St. and Clark Ave., $19,444; Curtis Ave. and repaving Windsor Ave., asphalt, to Cleveland Trinidad Paving Co., The Arcade, $6,596 and $20,746 respectively. Work involves 1,100 lin.ft. stone curb and 4 in. tile drain gutter, 7,100 sq.yd. asphalt, 3,745 sq.yd. vitr. brick on concrete, etc.

O., Cleveland Heights (Warrensville P. O.)—Grading and paving Sects. 3 and 4 Lee Rd., asphalt on concrete, to Bentley Bros., Union Bldg., Cleveland, $27,850.

O., Shaker Heights (Cleveland, P. O.)—Grading, curbing and asphalt paving Norwood and Normandy Rds., to Bentley Bros., Union Bldg., Cleveland, $114,386; Daleford Ave., East 157th and East 159th Sts., to Cleveland Trinidad Paving Co., The Arcade, $50,242, $18,164 and $39,620 respectively. Noted May 17 and June 7.

O., Warren—Brick paving 1.4 mi. Highland Ave., 40 ft., to Smith Eng. Co., Warren, $50,411, engrs. est. $62,000; Forest St., to F. Geiger, Warren, $48,476, engrs. est. $73,000.

Ind., Jeffersonville—Clark Co., 8.81 mi. Wm. D. Taylor Rd., Owen and Washington Twps., to J. Smith, 616 Illinois Ave., $71,-488. Engrs. est. $85,187. Noted June 14.

Michigan — State Hy. Dept., Lansing, grading and surfacing, etc., 1.342 mi. State Trunk Line Rd. 11-32, Sect. B, 14,303 sq.yd. concrete, 8,024 cu.yd. earth excav., to New Era Road Building Co., New Era, $28,399; state to furnish cement.

Michigan — State Hy. Dept., Lansing, grading, surfacing, etc., 1.407 mi. State Trunk Line Rd. 34-2, Sect. A, 16,527 sq.yd. concrete, 5,291 cu.yd. earth excav., and 1.345 mi. State Trunk Line Rd. 34-6 and 64-1, 11,858 sq.yd. concrete, 6,355 cu.yd. earth excav., to W. S. Johnson Constr. Co., Hicksville, O., $27,422 and $26,189 respectively. Cement furnished by State. Noted June 7.

Michigan — State Hy. Dept., Lansing, grading and surfacing 3.487 mi. State Trunk Line Rd., 27-16, Sect. A., to J. Porath, 35 McGraw Bldg., Detroit, 11,542 cu.yd. earth excav. $0.60, 270.3 cu.yd. concrete $16, 40,988 sq.yd. rein.-con. pavement $1.65, etc., total $81,081; cement furnished by state.

Mich., Coldwater—Branch Co. Rd. Com., grading and gravel surfacing Assessment Dist. Rd. 35, 9 ft., 4 mi., to E. B. Gifford, Coldwater, $17,893, 3 mi., to H. A. Drake & Son, Battle Creek, $10,938; Assessment Dist. Rd. 36, 9 ft., 3 mi., to M. I. Coffman, Coldwater, $11,766, 3 mi., to E. B. Gifford, Coldwater $13,712.

Wisconsin—State Hy. Comn., Madison, grading, surfacing, etc., to Chernus Constr. Co., Minneapolis, Minn., Bruce-Radisson Rd., State Project 1005, Rusk Co., 12,500 cu.yd. earth excav. $0.35, gravel surfacing, lump sum, $2,459, etc., total $24,086; to A. F. Lehrer Constr. Co., Bayport, Minn., Wilson-Knapp Rd., Project 328, St. Croix Co., 7,238 cu.yd. earth excav. $0.46, gravel surfacing, lump sum, $3,540, etc., total $15,-966, Baldwin-Knapp Rd., Project 330, St. Croix Co., 12,544 cu.yd. excav. $0.38, gravel surfacing, lump sum $2,936, etc., total $17,-998; to W. E. Johnson & Son, Augusta, Chelsea-Westboro Rd., Project 331, Taylor Co., 17,008 cu.yd. earth excav. $0.49, gravel surfacing, lump sum, $9,480, etc., total $27,009; to Fitch & Becka, 85 Western Ave., Minneapolis, Minn., graveling and topsoiling Couderay-Hayward Rd., Project 263, Sawyer Co., $26,365; to J. E. Hinman, Glenwood City, 45 ft. span concrete deck girder, on Project 328, St. Croix Co., $4,296.

Wisconsin—State Hy. Comn., Madison, grading, gravel surfacing, etc., to W. E. Johnson & Son, Augusta, Nielsville-Humbird Rd., Project 467, Clark Co., $4,159; Nielsville-Humbird Rd., State Project 1036, Clark Co., $16,104; Hayward-Minog Rd., State Project 1034, Washburn Co., by day labor.

Wisconsin — State Hy. Comn., Madison, improving New Lisbon-Mauston-Kilbourn Rd., Project 280, Juneau Co., to W. E. Ule, Stevens Point, 8,933 sq.yd. concrete surfacing $1.54, etc., total $40,229. Noted May 31.

Wis., Fond du Lac—Fond du Lac Co., grading, etc., to M. Fisch, Kilbourn, Rogersville-Eldorado Rd., 15,274 cu.yd. excav. $0.58, etc., total $17,177; to Mutl & Knechtel, Manitowoc, Seven Mile Creek-Woodholl Rd., 8,442 cu.yd. earth excav. $0.71, etc., total $15,210; Eden-Armstrong-County Line Rd., 17,766 cu.yd. earth excav. $0.54, etc., total $14,860; Fairwater-Waupun Rd., 30,-320 cu.yd. earth excav. $0.53, etc., total $34,428.

Wis., South Milwaukee — Paving, etc., Rawson Ave., to Dean Constr. Co., 383 East North Ave., Milwaukee, 4,500 cu.yd. earth excav. $1.40, 19,800 sq.yd. vibrolithic concrete $2.84, 530 cu.yd. concrete in bridge $26. Noted June 7.

Ia., Clarinda—Page Co., grading 12.31 mi. Federal Aid Project 137, 320,194 cu.yd. excav., and Federal Aid Project 178, 309,630 cu.yd., to G. W. Condon, Farnam Bldg., Omaha, Neb., $0.18 per cu.yd., totals $57,633 and $55,733 respectively. Noted May 31.

Ia., Waterloo—To Bryant Paving Co., Waterloo, 12,200 sq.yd. concrete, 2,300 sq. yd. brick between street car tracks, 15,400 sq.yd. asphalt resurfacing, 8,300 lin.ft. concrete curb and gutter, $84,000. Noted May 24.

Minn., Fairmount—W. M. Canfield, aud., Martin Co. gravel surfacing 30,034 cu.yd. Jobs 2305 to 2310 inclusive, to W. Wetkamp, Welcome, $28,949. Noted May 31.

Minn., Minneapolis—A. P. Erickson, aud., Hennepin Co., grading, etc. Project 2317, Rd. 6, to J. J. and M. S. Mergens, 400 Temple Court, $58,949. Noted May 31.

Kan., Liberal—Seward Co. 4.499 mi. earth and sandclay road on Great Plain Highway, 26 ft., Federal Aid Project 153, to Bangs & Le Mommer, Liberal, $25,741.

Kan., Russell—Street improvements, 6,050 sq.yd. 3 in. vertical fibre brick on 5 in. base, to Cook & Ranson, Ottawa, $3.28 per sq.yd., etc., total $23,534. Noted May 17.

South Dakota—State Hy. Comn., Pierre, grading 5.58 mi. Federal Aid Project 100, Pennington Co., to H. Pickus Constr. Co., Sioux City, Ia., $38,831; graveling 5.99 mi. Federal Aid Project 54, Grant Co., to H. R. Phillips, Watertown, $10,835. Noted June 7.

Montana — State Hy. Comn., Helena, gravel surfacing 13.92 mi. Federal Aid Project 188-B, Big Horn Co., to Wickham Bros., Lovell, Wyo., 100,595 cu.yd. excav. $0.26, 329 cu.yd. concrete $32.50, 20,716 sq.yd. crushed gravel $2.20, etc., total $92,-266; 3.04 mi. Federal Aid Project 201, Gallatin Co., to Pioneer Constr. Co., Bozeman, 5,407 sq.yd. crushed gravel $2.24, 33 cu.yd. concrete $28, etc., total $22,778.

Missouri—State Hy. Dept., Jefferson City, gravel surfacing 3.163 mi. State Project Route 16, Sect. 37, 16 ft., Wright Co., to Summerfield Jones Co., Springfield, $43,955.

Tex., Ft. Worth—Tarrant Co. grading and gravel surfacing 9.51 mi. Forest Hill-Redon Rd., 14 ft., to Tarrant Co., Court House, Ft. Worth, $35,000. Noted May 24.

Wash., Chehalis—Lewis Co., grading and clearing right of way on 2 mi. National Park Highway, Salkum east, to G. Banderet, Bryn Mawr, $39,299.

Wash., Seattle—Paving Latona Ave., et al, to Fiorito Bros., 3950 6th St., N.W., 2,125 sq.yd. 5 in. asphalt $2.80, 5,000 sq.yd. 6 in. concrete $1.70, 4,400 sq.yd. 7 in. concrete $1.85, 1,575 cu.yd. asphaltic concrete curb $0.65, 3,600 lin.ft. concrete curb, $0.40, 4,000 cu.yd. subgrade $0.70, etc., total $83,504 3rd Ave. W., et al, to Olympic Constr. Co., 1326 Northlake Ave., 28,420 sq.yd. 6 in. concrete $1.65, 23,640 sq.yd. 7 in. concrete $1.90, 2,850 lin.ft. asphaltic concrete curb $0.70, 15,200 lin.ft. concrete curb $0.40, 5,000 cu.yd. excav. $0.50, 7,000 cu.yd. subgrade $0.60, total, $92,645.

Ore., Portland—To C. G. Randles, Portland, paving Longoy St. from 9th to 12th Sts., 1,703 cu.yd. earth excav. $2, 6,300 sq.ft. concrete or asphalt sidewalk, $0.25, 1,100 ft. 4 x 18 curb $0.80, 600 ft. 6 x 18 curb $1.75, 2,100 sq.yd. oiled macadam 10 in. thick $2.75, 7,000 sq.yd. 4 in. concrete pavement $2.70, etc., total $47,210. Engrs. est. $52,957.

California—State Hy. Comn., Sacramento, grading and concrete paving highway between Fish Canyon and Azusa, Los Angeles Co., to W. D. McCray, American Bank Bldg., Los Angeles, $42,348. Noted May 24.

Streets and Roads (Continued)

Calif., Los Angeles — Grading, curbing, guttering, walks, house sewers and paving Francis St. between Hoover and Vermont Sts., 103,121 sq.ft. warrenite bitulithic, etc., to Los Angeles Paving Co., 2900 Santa Fe Ave., $33,503.

Calif., Los Angeles — Los Angeles Co. paving with 8 in. concrete Alameda St. between south city limits of Compton and north city limits of Wilmington, to G. R. Curtis, 2440 East 26th St., $148,965. Noted May 17.

Calif., Merced—Improving portions K, M and 26th Sts., etc., 220,925 sq.ft. grading, 197,630 sq.ft. paving, 17,054 sq.ft. concrete gutter, etc., to Valley Paving & Constr. Co., P. O. Box 563, Visalia, $58,000. Noted June 7.

Calif., Oroville — Butte Co. improving Humboldt Rd., Sect. B, 28,000 cu.yd. excav., 1,690 cu.yd. dry rubble retaining walls, to Cole & Simpson, Kerman, $40,000. Noted May 10.

Calif., San Diego—Common Council paving 30th St., 281,941 sq.ft. 1½ in. asphaltic concrete on 4 in. concrete, etc., to California Constr. Co., Union Bldg., $30,049. Noted June 14.

Calif., San Rafael—Supervs. Marin Co., grading and constructing corrugated iron culverts on Manzanita and Bolinas Rds., to S. P. Brownlee, San Rafael, $25,597. Noted May 24.

Que., Montreal—City will build 12,300 ft. St. Denis St., 56 ft., 809 ft. Soulanges St., 33 ft., and 1,524 ft. Rozel St., 33 ft., asphalt, by day labor. $220,395, $7,811 and $14,625 respectively. J. E. Gauthier, asst. city clk.

Que., Montreal — Paving 20,000 sq.yd. Rouen St., asphalt, to Bernard Brault Ltd., 2855 Rosemount Blvd., $104,470; 24,280 s.yd. Papineau Ave., asphalt, to Sicily Asphaltum Paving Co., 60 St. Viateur St., $108,089; 1,340 ft. Northcliffe Ave., 30 ft., block and asphalt, to Quinlan Robertson & Janin Ltd., 52 Duluth Bldg., $28,055; 2,250 ft. sidewalks, 1st Ave., and 3,200 ft. Letourneaux St., both 5 ft. wide, to St. George & Gauvreau Ltd., 127 Stanley St., $5,370 and $7,777 respectively; 8,248 ft. sidewalk on Cadillac St., to F. Lapan, 601 Lacordaire St., $21,179. Noted May 31.

Ont., Cornwall—Counties of Stormont, Dundas and Glengarry, May 8, for 14 mi. waterbound, 1.75 mi. bituminous, 1 mi. waterbound or bituminous macadam, 2 mi. gravel, 4.5 mi. earth road, 6.5 mi. grading, culverts, etc., to McLean & Stidwell, Cornwall, Contrs. 37, 39, 42, 44 and 47, $9,668 (asphalt), $6,865, $8,300, $8,491 and $15,913 respectively; to F. M. Eagleson, Winchester, Contrs. 32, 35 and 36, $18,783, $7,000 and $6,392 respectively; to J. B. Wilkinson, Port Hope, Contrs. 34, 40, 41 and 43, $5,433, $4,081, $7,348 and $4,910 respectively; to McIntosh & McDougall, Cornwall, Contrs. 33 and 38, $27,069 and $25,098 respectively, to Nephew & McMillan, Finch, Contr. 45, $1,053; Contr. 46, south end to McLean & Stidwell, Cornwall, $12,528, north end to W. J. McCallum, Apple Hill, $24,911.

Ont., Hamilton—Wentworth Co. will expend $130,000 on improving County Rds. 2, 3, 4, 5, 7, 14, 15, 22, 24, 26, 27, 31, 33, 34 and 37. Work involves 3.25 mi. macadam, gravel, maintenance and repairs, grading and ditching, culverts, concrete bridges, etc. Work will be done by day labor. H. A. Lumsden, co. engr.

Ont., Sandwich — Essex Co., rein.-con. paving 2 mi. road in Sandwich Twp., to Pettypieces, Ltd., Windsor, $2.63 per sq. yd., 0.75 mi. in Mersea Twp., to Check Contg. Co., 981 McDougal St., Windsor, $2.79 per sq.yd. Both 18 ft. wide. Engrs. est. $85,000. Noted May 24.

Ont., Toronto—Paving with asphalt on 8 in. concrete, brick block gutters and concrete curbs, 4,800 ft. Kingston Rd. from Queens St. to Dixon Ave. and from Main St. to Victoria Park Ave., 46 ft., to Kilmer & Barber, 24 Adelaide St. W., $18,085 and $66,114 respectively; from Dixon Ave. to Main St. will be done by day labor, $88,850. R. C. Harris, city engr.

Industrial Works

PROPOSED WORK

Mass., Boston—Chamberlain Garage, Inc., c/o L. Joselyn, archt., 339 Newbury St., had plans prepared and takes bids in summer, 5 story, 90 x 180 ft. garage, rein.-con., steel frame, wood pile foundation, Stonehole St. To exceed $250,000. Noted May 31.

Mass., Cambridge (Boston P. O.)—Essex Brass Fdry. Co., plans 2 story foundry, rein.-con. and brick, plain foundation, 1st St. To exceed $100,000. Engineer and architect not selected.

Conn., Hartford—R. G. Miller, Bloomfield, having plans prepared by W. D. Johnson Co., 174 Bond St., Hartford, 2 story, 50 x 80 ft. creamery, brick, plain foundation, Barbour and Earl Sts., here. $60,000.

Conn., Waterbury—H. S. Coe, Inc., 18 Freight St., having plans prepared by T. M. Freney, 51 Leavenworth St., 2 story, 40 x 200 ft. warehouse, brick and steel, plain foundation, Freight St. $70,000.

N. Y., Brooklyn—B. A. James, c/o B. Driesler, archt., 153 Remsen St., soon takes bids 100 x 200 ft., brick and concrete garage, plain foundation, Empire Blvd. $75,000.

N. Y., Endicott—Chamber of Commerce Com. and Citizens Gas Com. plan modern gas manufacturing plant. $450,000. Address J. H. Kelly, c/o Chamber of Commerce Com.

N. Y., Fonda—Standard Oil Co. of New York, 26 Bway., New York City, plans garage, warehouse and office building, etc., West Main St., here. $250,000.

N. Y., New York—Gottfried Baking Co., 534 East 72nd St., soon takes bids 5 story, 50 x 100 ft. bakery, brick, steel and concrete, plain foundation, East 71st St. W. H. Gompert, 171 Madison Ave., archt. L. S. Beardsley, 116 West 39th St., engr.

N. Y., Rochester—New York Canners Inc., 75 State St., plans rebuilding plant, destroyed by fire. $90,000. Engineer and architect not selected.

N. Y., Schenectady—General Electric Co., River Rd., plans 3 story, brick, concrete and steel factory, west end of present plant. $125,000.

Pa., Altoona—Altoona Factories Co., Chamber of Commerce, plans 3 story and basement, 90 x 120 ft. factory, steel and concrete, Industrial Ave. $150,000. W. A. Hoyt, Hutchinson Bldg., archt. Dixon Motor Truck Co., 2501 Beale Ave., lessee.

Pa., Ferndale—Trabold Motor Co., Railroad St., Johnstown, plans 2 story, 90 x 220 ft. steel and concrete plant, Clay and Ferndale Sts., here. $100,000. A. Trabold, pres.

Pa., Marcus Hook — Sun Co., Finance Bldg., Phila., plans to rebuild refinery here, recently destroyed by fire. $50,000. Architect not announced.

W. Va., Wheeling—West Virginia Match Co., plans factory. $300,000. Engineer and architect not selected.

S. C., Greenville—Southern Worsted Corp. having plans prepared by Lockwood, Greene & Co., Piedmont Bldg., Charlotte, N. C., 1 story, 40 x 80 ft. power house. $40,000.

Fla., Tampa—Swann Terminal Co., 314 Madison St., having plans prepared 5 story warehouse and office, 300,000 ft. floor space, rein.-con. and steel, at Swann Terminals on Estuary. $500,000. J. T. Swann, mgr.

Ala., Birmingham—Birmingham Warehouse Co. plans 100 x 100 ft. warehouse, about 10 story. $2,340,000. Engineer and architect not announced.

Miss., Meridian — Meridian Fiber Co. plans addition to plant. $50,000. Engineer and architect not announced.

O., Cleveland—Amer. Can Co., 1677 East 40th St., had plans prepared by C. G. Preis, 120 Bway., New York City, altering and building 1 story, 42 x 55 x 127 ft., brick and steel factory addition, 1588 East 40th St. $40,000.

O., Cleveland—J. De Kaiser and H. Revitz, Guardian Bldg., plan 4 story, brick, steel and concrete warehouse, on lot 216 x 405 ft., Carnegie Ave. along tracks of Pennsylvania R.R. Engineer and architect not selected.

O., Cleveland—Lees—Bradner Co., 6210 Carnegie Ave., having plans prepared by W. J. Wefel, 225 Union Bldg., 1 story, 55 x 100 ft. machine shop, and 1 story, 30 x 100 ft. storage plant, both brick and steel, 6210 Carnegie Ave. $60,000. Noted Oct. 26.

O., Cleveland—Master Builders Co., Union Bldg., having plans prepared by Christian, Schwarzenberg & Gaeda, archts. and engrs., 1900 Euclid Ave., 2 story, brick, steel and concrete factory, 6511 Morgan Ave. $50,000.

O., Cleveland — Neal Fireproof Storage Co., 7208 Euclid Ave., having plans prepared by Christian, Schwarzenberg & Gaeda, 1900 Euclid Ave., 7 story, 70 x 100 ft., brick and rein.-con. storage plant, Detroit Ave. opposite West 99th St. $150,000.

O., Coventry (near Akron)—Whitman-Barnes Co., East Buchtel Ave., Akron, having plans prepared by Lockwood, Green & Co., Hanna Bldg., Cleveland, 2 story, brick and steel warehouse, 125,000 sq.ft. floor space, here. $150,000.

Mich., River Rouge (Detroit P. O.) — Ford Motor Co., Highland Park, had plans prepared by A. Kahn, 1000 Marquette Bldg., Detroit, 1 story, 94 x 1,320 ft. steel mill with two 100 x 420 ft. and one 100 x 620 ft. wings, brick, steel and concrete, also 1 story, 56 x 775 ft. monitor on crane way, steel.

Wis., Madison—Madison Nash Co., 155 East Wilson St., having plans prepared by Claude & Starck, Badger Annex, 2 story, 66 x 122 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation. $40,000. Noted May 17.

Wis., Madison—University of Wisconsin having plans prepared by J. C. White, engr., c/o State Heating Plant, 1 story heating plant, brick, rein.-con. and steel, plain foundation. $88,000. Noted Mar. 22.

Wis., Milwaukee — Modern Auto Repair Co., 2431 State St., having plans prepared by H. T. Schramek, 221 Grand Ave., 1 story, 112 x 125 ft., brick and concrete, garage addition, plain foundation. $50,000.

Wis., Wisconsin Rapids — Prentiss-Wabers Mfg. Co., Spring St., soon takes bids 1 story, 45 x 142 ft. and 47 x 60 ft., brick and timber factory, plain foundation. $45,000. Wisconsin Eng. & Constr. Co., 315 Jefferson St., Wausau, engrs. Noted Jan. 4.

Minn., Litchfield—Plans enlarging electric light and power plant. $75,000. L. P. Wolff, 1000 Guardian Life Bldg., St. Paul, and E. D. Jackson, 403 Endicott Bldg., St. Paul, engrs.

Mo., Kansas City—W. Jewell Realty Co., 227 Rialto Bldg., plans 2 story and basement, 110 x 132 ft., rein.-con. and brick garage, 912-922 Cherry St. $65,000. Private plans.

Mo., St. Louis—Tate Motor Co., Inc., 3111 Locust St., plans 3 story, 125 x 165 ft., rein.-con. and brick garage and salesrooms, etc., plain foundation, Washington St. $300,000. Engineer and architect not named.

Ark., Little Rock — Arkansas Central Power Co. plans additions to local light and power plant. $75,000. C. J. Griffith, genl. mgr.

Tex., Dallas—Waples Platter Grocer Co., Lamar and Broom Sts., making plans 4 story and basement, factory, $75,000. Engineer and architect not announced.

Tex., Ft. Worth—Dunn Locke Mfg. Co., Daget and Lake Sts., takes bids in summer, vinegar factory and warehouse. $50,000. Engineer and architect not announced.

Tex., Garland — W. H. Prather, 4012 Worth St., Dallas, plans cotton compress, concrete, plain foundation. $50,000. Engineer and architect not announced.

Tex., Lufkin—Lufkin Machine & Fdry. Co. soon takes bids 46 x 200 ft. machine shop. $40,000. Private plans.

Tex., San Angelo—R. P. Amacker, South Chadbourne St., soon takes bids 2 story, brick, garage. $40,000. A. R. Swartz, Trust Bldg., archt.

Oregon—Pacific Power & Light Co., Gasco Bldg., Portland, having surveys made from mouth of Des Schutes River to point 20 mi. above at Ketchun (Grass Valley P. O.), having in view construction of 40,000 hp. hydro-electric power plant. $2,000,000-$3,000,000. L. A. McArthur, mgr. H. H. Schoolfield, ch. engr.

Ore., Portland—See "Miscellaneous."

Calif., Los Angeles—Ironall Cloth Co., represented by O. A. Berman, 822 South Los Angeles St., plans factory, probably rein.-con. To exceed $250,000.

Calif., Los Angeles—Ray Productions, 1425 Fleming St., having plans prepared by H. Cross, Merchants' Natl. Bank Bldg., moving picture plant, incl. group studio buildings, mostly rein.-con., Beverly Blvd. and 1st St. To exceed $2,000,000.

Calif., Los Angeles—Theim Bros. Co., Ft. Wayne, Ind., having plans prepared by Lockwood-Green Co., 38 South Dearborn St., Chicago, constructing and equipping knitting mills. $6,000,000. First unit will exceed $500,000.

Calif., Los Angeles—Wayne Knitting Mills, c/o Austin Co., archts., Pacific Finance Bldg., having plans prepared knitting mill, rein.-con., probably 4 story, San Fernando Rd. To exceed $150,000.

Calif., Petaluma — W. H. Curtis, et al., (Sausalito-Petaluma & Santa Rosa Stage Co.), 339 College Ave., Santa Rosa, plans 1 story, auto stage depot, rein.-con., A and 4th Sts., here. $40,000. Engineer and architect not selected.

Calif., San Bernardino—Company represented by C. H. Arns, 327 F St., had plans prepared 2 story (ultimately 4 story), rein.-con. warehouse, Rialto St. $150,000 or more. Private plans.

Calif., San Francisco — Grinnell Co. of Pacific, 453 Mission St., plans warehouse, fireproof, 5th and Brannan Sts. To exceed $75,000. Engineer and architect not selected.

Calif., San Francisco — H. Shermund, archt., Hearst Bldg., preparing preliminary plans 3 story, 70 x 160 ft. warehouse and loft building, brick and timber, vicinity Bryant and 7th Sts. $85,000. Owner's name withheld.

Ont., Oakville—Dominion Wire Bound Box Co. plans 2 or 3 story and basement factory, rein.-con. and brick, plain foundation. $150,000. Engineer and architect not selected.

Industrial Works (Continued)

Ont., Toronto—Toronto Electrical Comn., 225 Yonge St., soon takes bids addition to hydro-electric substation, brick and concrete, plain foundation, Carlan Ave. and Gerrard St. $300,000. Private plans.

BIDS DESIRED

Wis., Green Bay—Foeller, Schober & Stephenson, archts., Nicollet Bldg., taking bids 1 and 2 story, 62 x 159 ft., brick and concrete garage, plain foundation, Main St., for Beaumont Hotel, Main and Washington Sts. $45,000.

Wis., La Crosse—See "Buildings."

Wis., Milwaukee — Kirchoff & Rose, archts., 221 Grand Ave., taking bids 5 story and basement, 90 x 140 ft., brick and concrete, plain and wood pile foundation, for Pittsburgh Plate Glass Co., 205 Lake St. Noted May 24.

Mo., Jefferson City—June 29, by Executive Com. of Curators, 100 New York Life Bldg., Kansas City, boiler house and equipment, etc., for Lincoln University, here. E. C. Janssen, 1301 Chemical Bldg., St. Louis, engr.

Calif., Los Angeles—W. C. Pennell, archt., Pacific Finance Bldg., receiving bids 1 and 2 story, laundry, brick, Slauson Ave., for Wolfstein & Goldschmidt, 617 Merritt Bldg. To exceed $75,000. De Luxe Laundry Co., Los Angeles, lessee.

BIDS RECEIVED

Minn., St. Paul—State Bd. Control, Capitol, June 12, general contract 3 story and basement dairy, rein.-con., brick, tile and stone, for College of Agriculture, University of Minnesota, from L. Fleisher Co., 504 Plymouth Bldg., Minneapolis, $156,000. Noted June 7.

CONTRACTS AWARDED

Mass., Worcester—Rice, Barton & Fales Machine & Iron Co., Taintor St., 1 story, 40 x 140 ft. foundry, rein.-con. and brick, plain foundation, Taintor St., to E. J. Cross & Co., 82 Foster St., $40,000.

N. Y., Long Island City—Superior Piece Dye Wks., 37 Moultrie St., brick, steel and rein.-con. factory, plain foundation, to Groce Lewin, 345 Madison St., New York. Archts. est. $100,000. Noted May 17.

N. Y., New York—B. P. Cerussi, c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 5 story, brick, steel and concrete warehouse, plain foundation, Belmont Ave., by day labor. $175,000.

N. Y., New York—W. C. P. Realty Co., c/o W. Shary, archt. and engr., 41 Union Sq., will build 2 story, 100 x 125 ft., brick, steel and concrete garage, plain foundation, 418 East 48th St., by day labor. $50,000.

N. J., Trenton—Combination Rubber Co., Boonton, 4 story, 77 x 275 ft. factory, Mead St., here, to Karno-Smith Co., Broad St. Bank.

Pa., Canonsburg—J. Hoxworth, general contract 1 story, 65 x 138 ft., brick, stone and concrete garage, Greenside and Pike Sts., to Taylor & Crawford, Canonsburg. Archts. est. $40,000.

O., Cleveland — Brodhead-Garrett Co., 2835 East 51st St., 300 x 360 ft., brick, steel and concrete warehouse, 40 x 40 ft. dry kiln, 40 x 50 ft. planing mill also boiler house, office and garage, East 71st St. along Belt Line R.R. tracks, to A. A. Lane Constr. Co., 1869 East 55th St. Archts. est. $150,000. Noted May 3.

O., Cincinnati—Hauser Stander Tank Co., Ammen St. and along tracks of Baltimore & Ohio R.R., 1 story, 90 x 120 ft., brick and steel factory addition, to Austin Co., 16112 Euclid Ave., Cleveland. Archts. est. $50,000.

O., Cleveland—J. Miller, 2701 East 55th St., 1 story, 85 x 140 ft., brick and steel garage, 2966 East 55th St., to Dresser-Minton Co., The Arcade. Archts. est. $45,000. Noted May 31.

O., Cleveland — Surety Investment Co., 16112 Euclid Ave., 1 story and basement, 75 x 120 ft., brick and steel garage, East 105th St. and Hampden Ave., to Austin Co., 16112 Euclid Ave. Archts. est. $50,000. Rosen Garage Co., 5618 Woodland Ave., lessees.

Ill., Chicago—C. Luckow, 222 South Morgan St., 2 story, 139 x 169 ft., fireproof laundry, 1228-44 West Monroe St., to H. Menke Co., 2130 West Lake St. Archts. est. $75,000.

Ill., Chicago—C. Mothan, 1316 South Troy St., 1 story, 100 x 125 ft. garage, fireproof, 48th and Cottage Grove Ave., to Barrett Constr. Co., 155 North Clark St. Archts. est. $400,000.

Ill., Chicago—Olson Cartage Co., 525 West Chicago Ave., 1 story, 95 x 125 ft. garage, fireproof, 417-21 West Chicago Ave., to Rutledge-Bone Constr Co., 64 West Randolph St. Archts. est. $40,000.

Wis., Burlington — Burlington Sanitary Milk Co. 2 story, 40 x 60 ft., brick and timber addition, plain foundation, to F. Rewald, Burlington. Archts. est. $40,000.

Wis., Madison—Capitol City Garage, South Pinckney St., 2 story, 66 x 165 ft., brick, rein.-con. and steel garage and repair shop, Washington St., to W. H. Deason, 357 Washington Bldg. Archts. est. $75,000 Noted Apr. 12.

Wis., Stetsonville—Ripon Produce Co., Ripon, 2 story, 40 x 60 ft. creamery, brick, plain foundation, here, to C. Fahrenbach, Stetsonville. Archts. est. $40,000.

Mo., St. Louis—Endicott-Johnson Corp., 105 Clinton St., Binghamton, N. Y., 5 story, 150 x 150 ft. warehouse and distribution center, rein.-con. and brick, concrete pile foundation with rail connections to 26 railroads, 12th St. from Spruce to Poplar Sts., here, to Morrison Constr. Co., International Life Bldg. Archts. est. $500,000. Noted June 14.

Mo., St. Louis — Missouri Pacific R.R., Ry. Exch. Bldg., 1 story, 27 x 82 x 152 ft. track shed, and 1 story, 27 x 34 x 60 ft. boiler room, both concrete, Van Buren St., to Folwell-Ahlskog Co., 323 North Michigan Ave., Chicago. Archts. est. $100,000.

Mo., St. Louis—Missouri Pacific R.R., Ry. Exch. Bldg., will build 1 story, 54 x 92 ft. power plant, rein.-con. and brick, 3045 Chouteau Ave., by day labor. $50,000. Private plans.

Tex., Dallas — Sutoon, Steele & Steele, Forney Ave., 1 story, 40 x 80 ft., 30 x 100 ft. and 60 x 150 ft., steel and concrete foundry, plain foundations, to Mosher Steel & Mchy. Co., 900 South Austin St., $125,000.

Tex., Dallas — Terminal Bldg. Corp., Southwestern Life Bldg., will build 20 story, basement and subways, warehouse and office, Commerce and Jackston Sts., etc., by day labor. $5,000,000.

Tex., Greenville—F. Wolfe, 2 story, rein.-con., warehouse, plain foundation, Henry and Wright Sts., to J. T. Glover, Greenville, $40,000.

Calif., Long Beach — City Transfer & Storage Co., 140 Pacific St., 6 story and basement, rein.-con. warehouse, Anaheim Rd., to E. E. English, Citizens' Natl. Bank Bldg., Los Angeles, to exceed $150,000.

Calif., Los Angeles—Home Service Laundry Co., 779 Towne St., 1 story brick addition and new 3 story, rein.-con. annex, Crocker St., to F. W. Sharp, c/o Builders' Exch., Stimson Bldg., $81,500. Noted May 31.

Calif., Oakland — Montgomery Ward & Co., Chicago Ave. and Larr St., Chicago, 8 story, 145 x 184 ft., rein.-con. warehouse and mail order plant, to Wells Bros., 53 West Jackson Blvd., Chicago. P. A. Wells, Hotel Oakland, Oakland (representing contractor) taking sub-bids. $200,000. Noted June 14.

Calif., Sacramento—Western Pacific R.R. Co., Mills Bldg., San Francisco, 1 story, rein.-con. and steel additions to Jeffery shops, here, to W. Murcell, Ochsner Bldg., $100,000. Noted May 31.

Calif., San Francisco—Pacific Gas & Electric Co., 445 Sutter St., constructing 2 story rein.-con. power house and installing pumps, etc., at Potrero Gas Plant, to Tibbetts-Pacific Co., 16 California St. Est. cost $110,000. Pumps and machinery will be furnished by owner. Noted June 14.

Que., Montreal—Drummond McCall Ltd., 28 Victoria Sq., 5 story, 203 x 213 ft. warehouse, rein.-con., brick and steel, Wellington St., to A. F. Byers, 340 University St., $160,000. Noted May 31.

Buildings

PROPOSED WORK

Mass., Boston — Hospital — City plans 10 story hospital and nurses' home, probably brick and stone, Harrison and Massachusetts Ave. $1,500,000. J. A. Rourke, chn. Bd. Pub. Wks. Engineer and architect not announced.

Mass., Ware—High School—Town had plans prepared by J. D. Leland & Co., 41 Mt. Vernon St., Boston, and takes bids about July 7, 2 story and basement, 60 x 100 ft. and 40 x 70 ft., rein.-con. and brick, plain foundation. To exceed $150,000. Noted May 31.

Conn., Hartford—Apartment—Gordon & Wagman, 321 Garden St., had plans prepared by G. Zunner, 182 High St., 3 story, 90 x 160 ft., brick, plain foundation, Garden St. $200,000.

Conn., Waterbury — Business — J. H. Cassidy, 144 Bank St., having plans prepared by W. E. Hunt, 197 Water St., Torrington, 3 story and basement, 70 x 110 ft., brick, plain foundation, Leavenworth St. $150,000.

N. Y., Brooklyn—Apartment—P. Freshman, archt. and engr., 350 Fulton St., preparing plans 4 story, brick, steel and stone, plain foundation, Sullivan St. $175,000. Owner's name withheld.

N. Y., Brooklyn—Bank—Peoples Trust Co., 885 Flatbush Ave., soon takes bids 5 story, brick, steel and stone, plain foundation, Flatbush and Church Aves. $250,000. Former bids rejected. Ludlow & Peabody, 101 Park Ave., New York, archts. H. G. Balcom, 10 East 47th St., New York, engr. Noted May 10.

N. Y., Brooklyn—Memorial—Odd Fellows Memorial Building Assn., 303 Schermerhorn St., soon takes bids 100 x 100 ft., brick, steel and stone, plain foundation. $250,000. Schneider & Werther, 70 East 45th St., New York City, archts. and engrs.

N. Y., Brooklyn—School—Roman Catholic Church of St. Catherine of Genoa, c/o Collins, Murphy & Lehman, archts. and engrs., 159 Remsen St., soon takes bids 2 story, 110 x 130 ft., brick and stone, plain foundation, Albany Ave. $150,000.

N. Y., Hornell—School—Bd. Educ. will readvertise for bids for Lincoln School. L. Dennison, contractor, 162 North Main St., refused contract. Noted May 24.

N. Y., Mount Morris—School—Bd. Educ. received no bids June 5, 2 story and basement, 200 x 200 ft., rein.-con., brick and stone, Chapel St. $190,000. Will readvertise. C. A. Foote & Son, Mount Morris, archt. Noted May 17.

N. Y., New York—Apartment—H. Lucas, archt. and engr., 117 East 60th St., prepared plans 5 story, brick, steel, and stone, plain foundation, 360 East 50th St. $250,000. Owners name withheld.

N. Y., New York—School—Allen-Stevenson School, 50 East 57th St., plans 5 story, 35 x 102 ft., brick, steel and stone, plain foundation, 132-134 East 57th St. $200,000. Engineer and architect not selected.

N. Y., Phelps—School—J. F. Helmer, clk. Bd. Educ., rejected bids June 12 school in Dist. 8. $175,000. Will readvertise. Noted May 31.

N. Y., Rochester—Nurses' Home—Rochester General Hospital, 471 Main St. W., take bids about July 15, 6 story, 37 x 127 ft., rein.-con. and steel, concrete pile foundation, Troup St. $250,000. Gordon & Kaelber, Sibley Bldg., archts. and engrs.

N. J., Bloomfield — High School — Bd. Educ., received no bids May 21, 4 story, 25 x 140 ft., brick and stone addition, Broad St. $225,000. J. F. Caren, 207 Market St., Newark, archt. J. O. C. Gibbons, 207 Market St., Newark, engr. Noted May 17.

N. J., Trenton—Home—Masonic Home Assn. having plans prepared by H. A. Hill, Broad St. Bank, rein.-con., brick and steel, West Front St. $800,000.

Pa., Nanty-Glo — Business — T. Burns, Nanty-Glo, takes bids about Aug. 18, 3 story and basement, 100 x 120 ft., brick, steel and concrete, Main St. $150,000. Hersh & Shollar, Commerce Bldg., Altoona, archts.

Pa., Somerset—Business—W. E. Beachy, Center Ave. and Patriot St., takes bids about Aug. 1, 3 story and basement, 83 x 101 ft., steel, concrete and stone. $150,000. Architect not selected.

Pa., Williamsport—Bank—First Natl. Bank, having plans prepared by P. Davis, 3rd, 1713 Sansom St., Phila., 8 story and basement, 52 x 104 ft., limestone, brick, steel and concrete addition, West 3rd St. $150,000.

Pa., Williamsport — Gymnasium — Bd. Dirs. Williamsport Dickinson Seminary, opens bids about July 13, 2 story and basement, 88 x 110 ft., brick, concrete and steel, North St. $150,000. J. W. Long, pres. C. W. Feil Co., 320 Locust St., archts.

Md., Baltimore—School—St. Anns Roman Catholic Church, 528 East 22nd St., having plans prepared by H. I. Kavanagh, 913 North Charles St., 3 story, 55 x 165 ft., brick, plain foundation, 22nd St. and Greenmount Ave. $150,000. J. C. Mallon, pastor.

W. Va., Clarksburg — Church — Church of Immaculate Conception having plans prepared by E. J. Weber, 308 K. of C. Bldg., Pittsburgh, Pa., 1 story, basement and balcony, 75 x 125 ft., stone. $250,000.

N. C., Wilson—Courthouse and Jail—Bd. Comrs. Wilson Co. receiving competitive sketches until July 30, for courthouse and jail. H. B. Lane, chn.

Fla., Tampa — Office — See "Industrial Works."

La., Baton Rouge — Hospital — General Hospital having plans prepared by R. S. Soule, 429 Carondelet St., New Orleans, 2 story, brick. $150,000.

Tenn., Nashville—Dormitory—Vanderbilt University, and Alumni Assn. raising fund for girls dormitory, on campus. J. H. Kirkland, chancellor. Architect not announced.

Buildings (Continued)

Ky., Louisville — Hospital — Methodist Episcopal Deaconess Hospital, 8th St., plans addition. $300,000. Engineer and architect not selected.

Ky., Louisville—School—Bd. Educ., plans 3 story addition to Male High School, Brook and Breckinridge Sts. $300,000. Engineer and architect not selected.

Ky., Princeton—High School—Bd. Educ. plans 3 story high school. $150,000. Engineer and architect not selected.

O., Cleveland—Store and Office—Seidman Mortgage Co., Discount Bldg., having plans prepared by W. S. Ferguson Co., 1900 Euclid Ave., 6 story (ultimately 10 story), 43 x 132 ft., brick, steel and concrete, East 9th St. and Vincent Ave. $300,000.

Ind., Anderson—Orphanage—Bd. Comrs. Madison Co. having plans prepared by E. R. Watkins, Anderson, 2 story and basement, 120 x 120 ft., brick. $150,000. H. P. Bardie, aud.

Ind., Gary—Lodge—B. P. O. E. Lodge 1753 having plans prepared by G. W. Maher, 156 East Erie St., Chicago, 4 story and basement, 75 x 125 ft., rein.-con., steel and brick, Bway. $250,000.

Mich., Birmingham — High School — Bd. Educ. having plans prepared by Van Leyen, Schilling, Keough & Reynolds, 3440 Cass Ave., Detroit, 2 story and basement, 16 room addition to Baldwin High School, brick, steel and concrete, plain foundation, Martin St. $200,000.

Mich., Detroit—Mercantile—Kline Garment Co., 1223 Woodward Ave., having plans prepared 4 story, 60 x 100 ft., rein.-con., brick and steel addition. $150,000. Engineer and architect not announced.

Ill., DeKalb—Industrial Arts and Science, etc.—State Bd. Educ. plans industrial arts and science building also addition to men's dormitory, at Northern Illinois State Normal School, here, $200,000 and $250,000 respectively. E. D. Martin, 306 South Wabash Ave., Chicago, archt.

Ill., Elgin—Hotel—Owner, c/o C. Ackermann, 17 Rugby Pl., plans fireproof hotel. $300,000. S. N. Crowen, 10 South La Salle St., Chicago, archt.

Ill., Pana—Church—St. Patricks Parish soon takes bids 2 story, concrete, brick and steel. $150,000. J. P. Moroney, pastor. Private plans.

Wis., Beaver Dam—Auditorium, etc.—Amer. Legion Post plans 2 story, auditorium incl. gymnasium and swimming tank, brick, rein.-con. and steel, plain foundation. $150,000. Engineer and architect not selected.

Wis., Milwaukee—School and Auditorium—St. Catherines Congregation, c/o A. Reichard, secy., 86 Mason St., having revised plans prepared by Backes & Pfaller, 216 West Water St., 1 story, 78 x 142 ft. and 56 x 90 ft., brick, tile and concrete, plain foundation, Center St. $150,000. Former bids rejected; will readvertise.

Wis., Richland Center — Hospital — Wisconsin Methodist Hospital Assn., c/o J. W. Irish, 111 South Hamilton St., Madison, having plans prepared 3 story and basement, 164 x 186 ft., brick, rein.-con. and stone, plain foundation, here. $150,000. Private plans.

Wis., Union Grove — Employees — State Bd. Control, Madison, having plans prepared by A. Peabody, Capitol Bldg., Madison, 1 story, 50 x 115 ft., brick, rein.-con. and stone, plain foundation, at Southern Home for Feeble Minded. $150,000.

S. D., Sioux Falls—Church—First Lutheran Church, c/o H. J. Glenn, pastor, 310 West 12th St., plans brick and stone, 12th St. and Dakota Ave. $200,000.

N. D., Fargo—Hospital—St. Johns Hospital, 365 6th Ave. S., soon takes bids superstructure 5 story, 46 x 130 ft., rein.-con., brick and stone. J. H. Wheeler, 508 Exch. Bank Bldg., St. Paul, Minn., archt. Noted May 24.

Mo., Kansas City — High School — Bd. Educ. having preliminary plans prepared by C. A. Smith, 601 Finance Bldg., Junior High School, Linwood Blvd. $900,000.

Mo., St. Louis—Apartment Hotel—F. L. Cornwell, La Salle Bldg., having plans prepared by W. S. Frank, Century Bldg., 164 x 219 ft., rein.-con., brick and steel, concrete pile foundation, Kingshighway. $1,000,000.

Mo., St. Louis—Home—Jewish Orthodox Old Folks Home, Blair and East Grand Aves., plans rein.-con. and brick addition, plain foundation, probably 6 story, $250,000. Engineer and architect not announced.

Mo., St. Louis — Office — Amalgamated Assn. of Street & Electric Employes No. 788, 4036 Chauteau Ave., plans 10 or more story, 148 x 158 ft., rein.-con. and brick, plain foundation, Grand Blvd. $1,000,000. Engineer and architect not announced.

Mo., St. Louis—Office—Local syndicate had tentative plans prepared by L. B. Pendleton, 119 North 7th St., 10 story, 77 x 100 ft., rein.-con., brick and steel, concrete pile foundation, Grand Blvd. To exceed $500,000.

Mo., St. Louis—Temple—Negro Masonic Temple Assn., c/o G. W. Lewis, Far West Lodge 2, 3619 Easton Ave., plans 5 story, rein.-con., brick and steel, Finney Ave. $250,000. Engineer and architect not named.

Ark., Helena—Y.M.C.A. and Y.W.C.A.—A. S. Ackley, chn. building com., raising funds for additions. $150,000.

Tex., Austin—Biology—Bd. Regents, University of Texas, takes bids about July 20, 2 story and basement, 69 x 192 ft., brick and rein.-con., concrete pile foundation, Campus. H. M. Greene Co., North Texas Bldg., Dallas, engrs. and archts. Noted Nov. 16.

Tex., Dallas—School—Bd. Educ. having planas prepared by C. D. Hill & Co., Sumpter Bldg., school Vickery Pl. $150,000.

Tex., Houston—City Hall—Defeated $1,700,000 bonds for 19 story, Travis St. W. A. Dowdy, city archt. and engr. Noted May 24.

Tex., Houston — Medical Arts — F. A. Shaffer, c/o Guardian Trust Co., Main and Franklin Sts., having plans prepared by Crane & Franzhelm, Chronicle Bldg., 20 story and basement, brick, steel and concrete, Main St. $1,500,000.

Tex., Wichita Falls — Church — First Methodist Church having plans prepared by Sanguinet, Staats & Hedrick, First Natl. Bank Bldg., Ft. Worth, brick and stone, plain foundation. $250,000.

Okla., McAlester — Court House — Pittsburgh Co. plans election to vote on $300,000 bonds for court house. Engineer and architect not selected.

Colo., Denver—Bank and Office—Denver Natl. Bank, 17th and Curtis Sts., having plans prepared by H. W. J. Edbrooke, Colorado Theatre Bldg., 12 story, 100 x 125 ft., steel or rein.-con., 17th and Curtis Sts. $1,000,000.

Nev., Reno—Hotel—Riverside Hotel Co., (H. L. Stevens & Co., 433 California St., San Francisco, promoters), plans 6 story and basement, 210 room, here. $700,000.

Calif., Anaheim—Hotel—Building Association, headed by J. Siegel, 921 North Los Angeles St., plans hotel probably 5 story, Bway. To exceed $250,000.

Calif., Fresno — Theatre—West Coast Theatres, Inc., Knickerbocker Bldg., Los Angeles, plans theatre, here. $150,000 or more. Engineer and architect not selected.

Calif., Inglewood—High School—Inglewood High School Dist. plans to vote on $450,000 bonds for group of high school buildings.

Calif., Long Beach — Apartment — I. Butterfield, 800 Pacific Ave., having plans prepared by Davies & Baume, Marine Bank Bldg., 12 story and basement, rein.-con., Linden Ave. To exceed $500,000.

Calif., Long Beach—Apartment—R. C. Robertson, c/o L. P. Wikoff and H. E. Burkett, engrs. and archts., Commercial Bldg., having plans prepared 6 story, rein.-con., West 6th St. To exceed $150,000.

Calif., Long Beach—Apartment—F. Stillwell, c/o Russell & Alpaugh, archts., Story Bldg., Los Angeles, having plans prepared 12 story, probably rein.-con., Cedar and 3rd Sts. $750,000 or more. Noted June 7.

Calif., Los Angeles — Apartment — F. Stillwell, c/o Russell & Alpaugh, archts., Story Bldg., having plans prepared 4 story, brick, Grand Ave. and 33rd St. $150,000.

Calif., Los Angeles—Hotel and Store—H. K. Elder, et al., Story Bldg., had plans prepared by Curlett & Beelman, Union Bank Bldg., 14 story, rein.-con., Francisco and 7th Sts. To exceed $850,000.

Calif., Los Angeles—Hotel and Store—Prado Hotel Co., c/o J. J. Frauenfelder, archt., Story Bldg., having plans prepared 6 story and basement, rein.-con., Vermont Ave. $200,000.

Calif., Los Angeles—Store and Loft—S. Thorpe, Merchants Natl. Bank Bldg., having plans prepared by Morgan, Walls & Morgan, Van Nuys Bldg., 2 and 4 story, brick, 7th and Parkview Sts. To exceed $150,000.

Calif., Los Angeles—Theatre—Music Box Theatre Corp. had preliminary plans prepared by Monaco & Bordeaux, International Bank Bldg., theatre, fireproof, Cahuenga St. To exceed $200,000. G. W. Craig, 460 West Colorado St., Eagle Rock, interested.

Calif., Marysville — Hotel — Marysville Hotel Co., c/o E. Glass, archt., Underwood Bldg., San Francisco, having plans prepared 6 story and basement, rein.-con., 5th and E Sts. $300,000.

Calif., Oakland—Club and Store—Athens Athletic Club, Henshaw Bldg., having plans prepared by W. Knowles, Central Bank Bldg., 6 story and basement, probably rein.-con. and steel, Clay St. between 12th and 13th St. To exceed $250,000.

Calif., Oakland—Hospital—Merritt Hospital, Hawthorne and Webster Sts., having plans prepared by Reed & Corlett, Bank of Savings Bldg., 2 story and basement, rein.-con., Hawthorne and Webster Sts. $200,000.

Calif., Oakland—Hotel and Store— M. F. Smith, 1001 Excelsior Ave., having plans prepared by J. J. Donovan, 1916 Bway., 6 story and basement, 100 x 190 ft., rein.-con., brick, steel and terra cotta, 12th and Oak Sts. $250,000.

Calif., Pasadena—Library, City Hall, etc. —See "Miscellaneous."

Calif., San Francisco—Apartment—Kincannon & Perego, 159 Sutter St., had plans prepared by C. W. Mahoney, 892 Union St., 5 story and basement, brick, Washington and Franklin Sts. $500,000.

Calif., San Francisco—Apartment—Two Thousand and Six Washington St., Inc., c/o C. A. Meussdorffer, archt., Humboldt Bank Bldg., having plans prepared 7 story and basement, rein.-con., Washington St. near Gough St. $1,500,000. Grading contract let to H. N. McClure, 608 Octavia St.

Calif., San Francisco—Hotel and Store—A. J. Fabre and E. Hildebrand, archts., 110 Sutter St., making sketches 6 story and basement, 175 rooms, steel frame, downtown section. $300,000. Owner's name withheld.

Calif., San Francisco—Station and Firehouse—City and San Francisco Co. appropriated $150,000 for police station and firehouse, south of Market St. J. Reid, Jr., City Hall, city archt.

Calif., Stockton — Apartment — C. W. Iverson and A. L. Lissner, Hotel Turpin, San Francisco, plans 4 story, rein.-con. or brick, here. $200,000.

Calif., Whittier—Apartment and Store—Building Association, headed by C. C. Boatright, 571 East Bailey St., having preliminary plans prepared by E. M. Hinshaw, Whittier Savings Bank Bldg., 4 story and basement, rein.-con., North Greenleaf Ave. $150,000.

Ont., Hamilton—Theatre—G. Swanick, 108 James St. N., having plans prepared by Hall & Duerr, Lumsden Bldg., Toronto, 2 and 3 story and basement, rein.-con., steel and brick, plain foundation. $200,000. Noted May 17.

Ont., Toronto—Church—Central Baptist Church, Cassell Memorial Hall, Bloor St. W., plans 1 story and basement, brick, plain foundation, Bloor St. W. $150,000. Q. B. Henderson, 578 King St. W., chn. building com. Engineer and architect not selected.

Ont., Toronto — Clubhouse — Parkdale Canoe Club, Sunnyside, having plans prepared by Molesworth, West & Secord, 43 Victoria St., 2 story, 80 x 140 ft. main building with two 1 story, 60 x 100 ft. wings, rein.-con., brick and steel, plain foundation, Sunnyside. $150,000. Noted May 10.

BIDS DESIRED

Conn., Hartford—Church—J. V. E. Belanger, pastor of Church of St. Ann, 820 Park St., taking bids and opens same about June 30, 2 towers, 50 x 130 ft., brick and terra cotta, plain foundation, Park and Putnam Sts. $165,000. H. F. Ludorif, 122 Main St., New Britain, archt. Noted May 17.

N. Y., New York—Loft—Eighty-Fifth St. and 3rd Ave. Corp., c/o Schwartz & Gross, archts. and engrs., 347 5th Ave., will build 4 story, 35 x 100 ft., brick, steel and stone, plain foundation, 3rd Ave. and 85th St. $150,000. Work will be done by separate contracts under supervision of architects.

N. Y., New York — Office — G. Backer Constr. Co., 295 5th Ave., will build 14 story, brick, steel and stone, plain foundation, East 47th St. $1,000,000. Work will be done by separate contracts. Sommerfeld & Steckler, 31 Union Sq., archts. and engrs.

N. J., Asbury Park—High School—June 26 (change of date), by Bd. Educ., brick, steel and stone, plain foundation. $600,000. E. A. Arend, 105 West 40th St., New York City, archt. and eng. Noted June 7.

N. J., Maplewood (branch of South Orange)—School—July 9, by Bd. Educ., South Orange Twp., Academy St., South Orange, 2 story and basement, 127 x 164 ft., semi-fireproof, Harvard Ave. between Prospect St. and Valley Rd., here. $200,000. Guilbert & Betelle, Chamber of Commerce Bldg., Newark, archts.

N. Y., Saratoga Springs—Kitchen, Pantry and Diningroom—June 30, by G. W. Ainsworth, comr. Pub. Wks., City Hall, altering

Buildings (Continued)

and repairing kitchen, pantry and dining-room of Casino in Congress Park; adv. this issue.

Pa., Beaverdale—School—June 30, by Summerhill Twp. School Bd., 3 story and basement, 68 x 100 ft., brick addition. $150,000. C. S. Burtnett, secy. Hersh & Shollar, Commerce Bldg., Altoona, archts.

Pa., Easton—High School—July 9, by School Dist. at office R. E. Piefer, secy., 30 North 2nd St., junior High school, Seitz Ave. and Berwick St. Michler & Snyder, Drake Bldg., archts.

Pa., Yukon—School—South Huntington Bd. Educ., c/o D. H. Keller, pres., R. D. 1, Ruffsdale, receiving bids 2 story and basement, brick, here. $150,000. W. B. Sloan, Odd Fellows Bldg., Greensburg, engr.

Miss., Jackson—Office—Aug. 1, by Lamar Life Insurance Co., 10 story and basement, 82 x 148 ft. and 50 x 120 ft., brick, stone and concrete, plain foundation. $500,000. Sanguinette, Staats & Hedrick, First Natl. Bank Bldg., Ft. Worth, Tex., engrs. and archts. Noted Dec. 28.

La., Alexandria—Orphans Home—June 30 by Jones, Roessle & Olschner, archts., Ardis Bldg., three 2 story buildings, brick and concrete, for Masonic Home for Orphans, here. $150,000.

Tenn., Knoxville—Institute—July 15, by L. S. Pope, state comr. of institutions, Nashville, 5 brick buildings for deaf and dumb institute, $250,000. Marr & Holman, Stahlman Bldg., Nashville, archts.

Tenn., Nashville — Temple — June 26, (change of date) by Asmus & Clark, archts., Stahlman Bldg., brick, concrete and stone, 7th and Broad Sts., for Masonic Lodge. $500,000. Noted May 31.

O., Cleveland—Apartment—M. Morris, 1829 Grasmere Ave., taking bids and opens same about June 24, 4 story, 39 x 145 ft., brick and steel, 2043 East 77th St. $175,000. A. F. Janowitz, Permanent Bldg., archt.

Ill., Chicago—Apartment—J. Riley, 111 West Washington St., receiving bids 3 story and basement, fireproof, 104th and Rhodes Sts. $200,000. Fridstein & Co., 111 West Washington St., archts.

Ill., Evanston—Bank and Office—W. G. Uffendell, archt., 38 South State St., Chicago, receiving bids 2 story, fireproof, Chicago Ave. and Main St., here, for Evanston Trust Co., 915 Chicago Ave., here. $200,000.

Wis., La Crosse—Nurses Home, etc.—July 2, by La Crosse Lutheran Hospital Assn., 1910 South Front St., and O. A. Merman, archt., Linker Bldg., 3 story and basement, 42 x 100 ft., nurses home and remodeling power house, brick, tile and concrete, plain foundation. $150,000. Noted Feb. 8.

Wis., Waupun—Clubhouse—W. F. Bossman, archt., 419 32nd St., Beaver Dam, taking bids 4 story, 75 x 150 ft., brick, rein.-con. and steel, plain foundation on Lake Emily, here, for Schaumburg Country Club, 1801 West 35th St., Chicago, $150,00.

Ia., Conrad—School—July 24, by Bd. Educ., 3 story and basement rein.-con., brick, tile and stone. $150,000. E. L. Guild, secy. E. F. Gier, Conrad, archt. Noted May 31.

S. D., Flandreau — School — June 29 (change of date), by Bd. Educ., 2 story and basement, rein.-con., brick, tile and stone. $150,000. Schuemacher & Finkelhor, 315 Paulton Blk., Sioux Falls, archts. Noted June 14.

Calif., San Francisco—Apartment—G. L. Fish, c/o F. W. Quandt, archt., Monadnock Bldg., receiving bids 6 story and basement, rein.-con., Pine St. between Jones and Taylor Sts. $150,000.

Ont., Kitchener—Hospital—July 3, by Watt & Blackwell, archts., Bank of Toronto Bldg., London, 3 story and basement, 50 x 180 ft., with two 42 x 105 ft. wings, brick and hollow tile, here, for Sisters of St. Joseph, Hamilton. $500,000. Noted May 10.

BIDS RECEIVED

N. Y., Brooklyn—Police Station—R. E. Enright, police comr., at Bookkeepers Office, 240 Centre St., New York, new 105th Precinct Police Station and garage, Meserole Ave. and Lorimer St., here, from W. W. Constr. Co., 15 East 40th St., New York, $154,000 and $164,000. Noted June 14.

O., Mansfield—City Hall—For 3 story, brick, steel and concrete, from A. E. Hancock, Mansfield. $184,000. Archts. est. $175,000. Noted Mar. 22.

Mich., Detroit—School—Bd. Educ., 1354 Bway. Ave., 2 story and part basement, 83 x 245 ft. and 80 x 102 ft., brick, steel and rein.-con., plain foundation, Joy Rd., from F. H. Goddard, 2130 Franklin St., $349,891. Noted May 24.

Tex., San Antonio—Church—P. G. Silber & Co., archts. and engrs., 319 Bedell Bldg., 2 story, 60 x 80 ft., rein.-con., brick and stone addition, concrete pile foundation, 402 Avenue D, for Presbyterian Church, from McKenzie Constr. Co., 616 Bedell Bldg., $154,678.

Tex., San Antonio—Office—Travis-St. Marys Investment Co., 407 Navarro St., 10 story, 90 x 110 ft., rein.-con. and stone, concrete pile foundation, from McKenzie Constr. Co., 605 Bedell Bldg., $321,000. Noted June 7.

Wash., Olympia—Capitol—State Capitol Comn., constructing main portion Legislative Building of Capitol, (exclusive of dome) from Western Constr. Co., Seaboard Bldg., Seattle, $875,862. Noted May 24.

Ore., Portland—High School—Bd. Educ., Washington High School, 4 story, 169 x 181 ft., rein.-con. and brick, general contract, from W. Frieberg, Portland, $546,640 less up to $30,000 for various eliminations; heating and ventilating apparatus from Kendal Heating Co., 24 Front St., $33,436.

Calif., San Francisco—School—City and San Francisco Co., rein.-con. school, Powell St., general contract from I. M. Sommer, Balboa Bldg., $192,687. Noted June 14.

CONTRACTS AWARDED

N. H., Hanover—Dormitory—Dartmouth College, 4 story, 42 x 100 ft. with 40 x 90 ft., ell, fireproof, to Rowe Constr. Co. Woodsville, $225,000.

Mass., Boston—Mercantile—E. V. Earle & Sons, 200 Devonshire St., 8 story, 88 x 155 ft., fireproof, Columbus Ave., by day labor. $700,000. G. N. Meserve, 200 Devonshire St., archt.

Mass., Somerville—City Hall—Pub. Wks. Dept., 2 story, 59 x 69 ft. addition, Highland Ave., to J. M. Hartwell, 46 Cornhill St., Boston, $198,000. Noted Apr. 19.

Conn., West Hartford (branch of Hartford)—Temple—Wyllis Lodge 90, Masonic Hall Assn., 2 story and basement, 40 x 70 ft., brick and stone, plain foundation, South Main St., to Industrial Constr. Co., 721 Main St., Hartford. Archts. est. $150,000.

N. Y., Brooklyn—School—W. H. Gompert, archt., Flatbush Ave. extension and Concord St., P. S. 177, 5 story, brick, steel and stone, Dahill Rd., to T. A. Clarke Co., 122 Livingston St., $883,000. Noted June 7.

N. Y., New York — Apartment — F. B. Constr. Co., c/o G. E. Miller, archt. and engr., 1482 Bway., will build 6 story, 100 x 115 ft., brick, steel and stone, plain foundation, Webb Ave., by day labor. $225,000.

N. Y., New York—Apartment—S. and L. Building Co., c/o Margon & Glaser, archts. and engrs., 2804 3rd Ave., will build 6 story, brick, steel and stone, plain foundation, Grand Concourse, by day labor. $350,000.

N. Y., New York—Apartment—Owners Impvt. Corp., c/o Shape, Bready & Peterkin, Inc., archts. and engrs., 50 East 42nd St., 10 story, brick, steel and stone, plain foundation, 2-10 East 86th St., to I. W. Stemmler, Jr., Inc., 52 Vanderbilt Ave. Archts. est. $1,500,000.

N. Y., New York—Schools—Bd. Educ., 500 Park Ave., P. S. 47, East 23rd St. near 2nd Ave., to P. J. Brennan & Sons, 624 Madison Ave., $758,700; P. S. 71, Roberts Ave. between Jarvis and Hobart Aves., to Blenton Building Corp., 342 Madison Ave., $382,000, both brick, steel and stone,, plain foundation. Noted June 7.

Pa., Pittsburgh—Community—Kingsley Assn., Inc., 43 Fernando St., 2 story and basement, 98 x 110 ft. addition, Larimer and Auburn Sts., to D. T. Riffle, 1006 Forbes St. Archts. est. $200,000. Noted Apr. 26.

Fla., Rockledge—Hotel—New Notel Indian River Co., 4 story, 220 ft. front, metal lath, on site of old Indian River Hotel, general contract to Marshall-Jackson Co., Lakeland, $140,714. Noted May 10.

La., Baton Rouge—Hall—Louisiana State University, constructing Peabody Hall, Greater Agricultural College, to Algernon Blair, 11 South Lawrence St., Montgomery, Ala., $255,700.

La., Shreveport — Hotel — Washington Hotel Co., 8 story, 150 x 150 ft., brick, stone and terra cotta, Edwards and Travis Sts., to Ault & Burden, Little Rock, Ark. Archts. est. $1,000,000.

O., Cleveland—Commercial—H. T. Spencer Co., c/o H. T. Spencer, 1450 West 3rd St., 2 story and basement (ultimately 4 story) 66 x 90 ft., brick and rein.-con., 217 St. Clair Ave., to H. K. Ferguson Co., 4900 Euclid Ave. Archts. est. $150,000.

O., Cleveland Heights (Warrensville, P. O.) — Apartments — Kletzkin & Forehouse, 810 Ulmer Bldg., Cleveland, two 3 story and basement, 55 x 133 ft., brick and timber, Mayfield Rd. near Coventry Rd., to H. Weltman, 10317 Columbus Ave., Cleveland. Archts. est. $175,000.

Ill., Chicago—Apartment—Fullerton Plaza Syndicate, 420 Fullerton Ave., 4 story and basement, 105 x 170 ft., fireproof, 1324 Arlington Pl., to B-W Constr. Co., 720 Cass St. Archts. est. $400,000.

Ill., Chicago—Apartment—R. Gallagher, 5501 Prairie Ave., 3 story, 96 x 128 ft., fireproof, 5450-58 South Michigan Ave., to R. S. Wood, 305 East 55th St. Archts. est. $200,000.

Ill., Chicago — Apartment — Johnston Bros., 109 North Dearborn St., 3 story and basement, 100 x 125 ft., fireproof, 70th Pl. and Crandon St., to Turnquist Bros. Constr. Co., 227 East 69th Pl. Archts. est. $175,000.

Ill., Chicago—Apartment—Rettig Building Corp., 6707 Stony Island Ave., 10 story, 124 x 269 ft., fireproof, Stony Island Ave. and 67th St., to B-W Constr. Co., 720 Cass St. Archts. est. $3,500,000. Noted May 18.

Ill., Chicago—Apartment and Store—Rosen & Coine, c/o A. S. Alschuler, archt., 28 East Jackson Blvd., 3 story, 120 x 150 ft., fireproof, 6971-81 Sheridan Rd., to Johnson-Anderson Co., 7120 Evans Ave. Archts. est. $300,000.

Ill., Chicago—Apartment, Store and Office—B. H. Aarens, archt., 109 North Dearborn St., 3 story, 99 x 264 ft., fireproof, Racine and Grace Sts., to H. Sjoblom, 4220 North Western Ave. Archts. est. $500,000. Owner's name withheld.

Ill., Chicago—Hotel and Store—S. Dulkin, 6134 Vernon Ave., 3 story and basement, 106 x 150 ft., fireproof, 4823-33 West 22nd St., to J. Kappell, 2114 West North Ave. Archts. est. $200,000. Noted May 18.

Wis., Madison — School — Dominican Fathers of Blessed Sacrament, 2121 Jefferson St., 2 story, 64 x 100 ft., brick, rein.-con. and steel, plain foundation, Hollister St., to J. H. Kelly, 2013 Madison St. Archts. est. $150,000. Noted Mar. 1.

Wis., Pulaski—Church—Church of Blessed Virgin Mary, c/o L. Konieczka, 12 story, 60 x 150 ft. brick, rein.-con. and stone, plain foundation, to B. Beauregard, De Pere. Archts. est. $150,000.

Wis., Whitefish Bay—Apartment—E. R. Tompkins, 445 Milwaukee St., 3 story, 50 x 72 ft. and 26 x 115 ft., brick, tile and concrete, plain foundation, to Cutter Constr. Co., 886 46th St., Milwaukee. Archts. est. $150,000. Noted Mar. 8.

Minn., Duluth—High School—Bd. Educ., general contract 4 story and basement, 208 x 240 ft., rein.-con., brick and steel, 1st St. E, to G. H. Lounsberry, 322½ East Superior St., $168,298; heating and ventilating work, to H. Gazett, 323 East Superior St. $49,580.

Kan., Wichita—Business—H. Kaufman, Wheeler Kelly & Hagny Bldg., general contract 4 story and basement, 100 x 140 ft., to G. H. Siedhoff Constr. Co., 4th Natl. Bank Bldg., Wichita. Archts. est. $150,000.

Mo., Kansas City — Memorial — Liberty Memorial Assn., R. A. Long Bldg., rein.-con., brick and steel, Station Rd., to Westlake Constr. Co., Railway Exch. Bldg., St. Louis, $1,142,250. Noted May 10.

Mo., St. Louis—School—St. Anthony Parish, Meramec St. and Michigan Ave., 2 story, brick and concrete, plain foundation, Meramec St., to Cornet-Casey Constr. Co., Chemical Bldg. Archts. est. $200,000. Noted Apr. 12.

Tex., Dallas—Hospital—Methodist Conference, c/o J. H. Grosclose, 807 Mercantile Bank Bldg., will build 6 story and basement, 114 x 171 ft., brick and stone, plain foundation, Ballad and Grove Sts., by day labor. $400,000. C. W. Ives, supt. De Witt & Lemmon, Southwestern Life Bldg., archts. Noted Apr. 26.

Tex., Dallas — Office — See "Industrial Work."

Calif., El Centro—Court House—Imperial Co., rein.-con. court house, general contract to Jarboe & Murray, El Centro, $123,000. Noted May 10.

Calif., Los Angeles—Apartment—A. B. Weber, 206 Wilshire Bldg., will build 4 story and basement, brick, 8th St. and Westlake Ave., by day labor. $150,000.

Calif., Los Angeles—Apartment and Store—A. Kaylor, 3 story, brick, Washington Blvd., to W. Riley, 3706 Whittier Blvd., to exceed $150,000.

Calif., Los Angeles—Store and Office—Sun Realty Exch., 5508 South Vermont St., 12 story and basement, rein.-con., Hill St., to J. V. McNell & Co., I. W. Hellman Bldg., $500,000.

Calif., Sacramento — Hospital — Sisters Hospital, c/o R. A. Herold, archt., Forum Buildg., 5 story, rein.-con. and terra cotta, 40th and J Sts., general contract to W. C. Keating, Capitol Natl. Bank Bldg., $398,800 Noted May 10.

Buildings (Continued)

Calif., San Diego — Theatre, Office and Store—R. Hicks, et al., c/o W. H. Wheeler, archt., Spreckels Bldg., 5 story, rein.-con., E and 4th Sts., to Wurster Constr. Co., 746 Central Ave., Los Angeles, $500,000.

Ont., Hamilton—College—Bd. Educ., 2 story and basement, rein.-con. and steel, Main St. E., to W. H. Yates Constr. Co., Main St. E., $447,000.

Federal Government Work

PROPOSED WORK

Wis., Green Bay—Dredging—U. S. Engineer, Federal Bldg., Milwaukee, rejected bids dredging approximately 450,000 cu.yd., here. Noted June 7.

Mo., St. Louis—Dike—U. S. War Dept., Federal Bldg., Kansas City plans concrete and rubble dike at mouth of Missouri River, near here.

Calif., Presidio (San Francisco P. O.)—Water Softening Plant—Constructing Quartermaster, Ft. Mason, San Francisco, soon takes bids water softening plant, here.

BIDS DESIRED

N. Y., New York—Extension—July 5 by Treas. Dept., Wash., D. C., extension to delivery platform at U. S. Appraisers warehouse, here. J. A. Wetmore, acting superv. archt.; adv. this issue.

N. Y., New York—Lighting System—Spec. 4862—June 25, by Bureau Yards & Docks, Navy Dept., Wash., D. C., street lighting system at Naval Hospital, here.

Pa., Phila.—Engine Testing Laboratory—Spec. 4845—June 25 by Bureau Yards & Docks, Navy Dept., Wash., D. C., engine testing laboratory, here.

La., New Orleans—Dredging—July 19 at office U. S. Engineer, 329 Custom House, dredging Calcasieu-Sabine Sect. Intracostal Waterway; adv. this issue.

La., New Orleans—Wire, etc.—June 27 at U. S. Engineer Office, 12 tons black iron wire, 87,000 ft. galvanized wire, 5,000 lb. white zinc, 2,200 ft. round moulding, several hundred pounds bolts, nuts, etc.

Tenn., Memphis—Conveyor—July 10, at office Mississippi River Comn., 1st and 2nd Dists., 1006 McCall Bldg., belt conveyor; adv. this issue.

Tenn., Memphis—Tanks—July 19, at office District Engineer, Mississippi River Dredging Dist., P. O. Box 1017, 2 steel fuel oil storage tanks at U. S. Dredge Depot, here; adv. this issue. Noted Mar. 8.

Tex., Galveston—Dredging—July 20, at office U. S. Engineer, Galveston, dredging Houston Ship Channel; adv. this issue. Noted May 3.

H. T., Pearl Harbor—Extension—Spec. 4761—July 18, by Bureau Yards & Docks, Navy Dept., Wash., D. C., extension for battery storage and overhaul, here.

BIDS RECEIVED

Va., Norfolk—Heating Mains—Spec. 4840—Bureau Yards & Docks, Navy Dept., Wash., D. C., heating mains at Navy Yard, here, from Newport Contg. & Eng. Co., Law Bldg., Newport News, (1) work complete $23,817 (2) alternate $17,857. Noted May 24.

Miss., Vicksburg—Levee Work—Third Mississippi River Dist., P. O. Box 404, Chicora enlargement in Arkansas, 100,000 cu. yd. excav., from Roach, Stansell, Lawrence Bros. Co., North Memphis Savings Bank Bldg., Memphis, Tenn., $0.847; Hagaman enlargement in Louisiana, 300,000 cu.yd., from Clark & Aderbolt, P. O. Box 287, Natchez, $0.287. Noted May 24.

Minn., St. Cloud—Hospital—Spec. 4828—Bureau Yards & Docks, Navy Dept., Wash., D. C., hospital group for U. S. Veterans' Hospital, here, from J. A. McDonald Constr. Co., 750 Builders Exch. Bldg., Minneapolis, Minn., $647,122. Noted May 31.

CONTRACTS AWARDED

Tenn., Nashville—Lumber—U. S. Engineer, Custom House, 365,000 ft. yellow pine timber for Lock and Dam 8 Cumberland River, to Great Southern Lumber Co., Bogalusa, La., $16,000.

Miscellaneous

PROPOSED WORK

Transmission Line—New York—Adirondack Power & Light Corp., 511 State St., Schenectady, plans 3 phase high tension transmission line through towns of North Greenbush, Stephantown, Nassau, Sand Lake, to link with New England Power Co. To exceed $50,000.

Bath House Improvements—Albany, N. Y.—Common Council plans improvements and repairs incl. filtration and circulation water systems for 3 bath houses. $50,000. J. G. Brennan, city engr.

Parks—Ithaca, N. Y.—R. W. Kellogg, 109 North Tioga St., representing owner, plans extensive improvements to Finger Lakes region parks, etc. $75,000.

Freight Shed—New York, N. Y.—J. H. Delaney, comr. Docks, Pier "A" foot of Battery Pl., rejected bids May 31, new freight shed on pier at foot of Roosevelt St., East River, Brooklyn Bridge Impvt., Manhattan Boro, Contr. 1809. Will readvertise. Noted June 7.

Rerouting Light and Power Lines, etc.—Oil City, Pa.—Citizens Light & Power Co., Chambers Bldg., plans rerouting light and power lines, and altering distribution system. $50,000. Day & Zimmermann, Inc., 611 Chestnut St., Phila., engrs.

Transmission Line—Kentucky—Kentucky Utilities Co., M. E. T. Bldg., Louisville, plans 20 mi. 33,000 volt transmission line from Richmond to Winchester. $60,000. G. T. Bogard, c/o owner, ch. engr.

Subway—Canton, O.—Stark Co. plans election in August to vote on $200,000 bonds subway at Stallcup Rd. and Pennsylvania R.R. City's share of cost $100,000.

Elimination of Grade Crossing—Cincinnati, O.—City and Baltimore & Ohio R.R., Central Union Depot, plan elimination of grade crossing on Paddock Rd. $500,000. City to pay one-third and railroad two-thirds of cost. F. Krug, city engr. S. A. Jordan, c/o railroad, engr. maintenance of way.

Grade Separation—Milwaukee, Wis.—Having preliminary plans prepared grade separation, excavation, concrete work, etc., on Forest Home, 15th and 11th Aves. J. Schwada, City Hall, engr.

Golf Links, etc.—Nakoma (Madison P. O.), **Wis.**—Nakoma Country Club making plans 18 hole golf course, tennis courts and clubhouse and locker rooms. $50,000. Private plans. C. A. Sakrison, pres.

Steam Heating Plant, etc.—Green Bay, Wis.—Christ Episcopal Congregation, c/o G. McMurray, pastor, Bellin Bldg., making plans steam heating plant, incl. boilers for parish hall and community building. $25,000. Oppenhamer & Obel, Green Bay, engrs.

Cattle Barn—Indianapolis, Ind.—Indiana Bd. of Agriculture having plans prepared by Kopf & Woolling, Pythian Bldg., 1 and 2 story, 210 x 670 ft. cattle barn, brick and steel, fair grounds. $300,000. Noted Jan. 19, 1922.

Elimination Grade Crossing—Iowa—See "Streets and Roads."

Grain Elevator, etc. — Pelican Rapids, Minn.—H. E. Frazee, having plans prepared grain elevator and feed mill, brick and concrete. $40,000. Druar & Milinowski, 500 Globe Bldg., St. Paul, archts.

White Way—Corsicana, Tex.—Chamber of Commerce soon takes bids 102 standards for lights, cable, etc., for white way. $50,000. Southwest Eng. Co., Slaughter Bldg., Dallas, engrs. Noted Nov. 30.

Spillway, etc. — Ft. Worth, Tex. — City plans to raise spillway 5-6 ft. at Lake Worth Dam, also raise earth dam. $75,000. D. L. Lewis, city engr. J. B. Hawley, Cotton Exch., consult. engr.

Wharf and Grain Elevator—Portland, Ore.—Oregon, Washington Ry. and Navigation Co., Montgomery Ward Bldg., had plans prepared 137 x 360 ft. wharf at Albina Dock, covered shed 24 ft. high, 180 ft. double track trestle, 80 x 120 ft. open wharf, wheat elevator, 104 ft. high, capacity 310,000 bu., and 119 x 350 ft. warehouse. $220,000. S. Murray, Montgomery Ward Bldg., asst. ch. engr.

Park and Playground Improvements — Long Beach, Calif.—Plans to vote on $900,000 bonds for park and playground improvements.

Gas Distributing System, etc.—Los Angeles, Calif.—Los Angeles Gas & Electric Co., 645 South Hill St., plans additions and betterments to existing gas works $3,000,000; new gas distributing system $3,000,000; new generator plants $1,700,000; extensions to present electrical distributing system $1,100,000; miscellaneous improvements $700,000. W. Baurhyte, genl. mgr.

Playgrounds—Los Angeles, Calif.—Voted $1,500,000 bonds to acquire land and equipment for public playgrounds. Noted June 7.

Civic Center Improvements, etc.—Pasadena, Calif.—Voted $3,500,000 bonds for civic center improvements incl. parks and buildings, (library, city hall, and auditorium) considerable landscape work.

Transmission Line — Quebec — Northern Canada Power Co., Timmins, Ont., having surveys made 90 mi transmission line to Porcupine gold camp, Sutcliffe & Neekands, and Gordon Summers, New Liskeard, Ont., engrs. Noted May 17.

Power Development—Montreal, Que.—Southern Canada Power Co., 20 St. Nicholas St., plans developments, construction and equipment of Hemming Falls on St. Francis River, to develop 50,000 hp. I. C. Smith, c/o owner, engr.

Swimming Pool — Brentford, Ont. — City plans 150 x 300 ft. swimming pool, probably concrete. $35,000. F. P. Adams, city engr.

Power Development—Eugenia, Ont.—Ontario Hydro Comn., c/o A. Beck, chn., 169 Albert St., London, plans connecting Niagara with Eugenia plant, work involves increasing capacity of plant at Eugenia, constructing new pipe line, installing frequency changer and other equipment. $75,000.

Transmission Line—St. Thomas, Ont.—Hydro Electric Power Comn. of Ontario, 190 University Ave., Toronto, plans 15 mi. power transmission line in district adjoining St. Thomas. $50,000. F. A. Gaby, c/o owner, ch. engr. Work will probably be done by day labor.

Gold Mine — South Porcupine, Ont. — Davidson Gold Mines, Ltd., King Edward Hotel Bldg., Toronto, plans extensive alterations and additions to gold mining mill, incl. new equipment, sinking shaft for depth of 1,000 ft., etc., here. $900,000. J. C. Platt, c/o owner, secy.

Retaining Wall — Toronto, Ont. — See "Streets and Roads."

BIDS DESIRED

Tower—Arlington (Boston P. O.), Mass.—June 28, by W. E. Foss, engr. and supt. Water Div., 1 Ashburton Pl., Boston, tower, 80 ft. high, 93 ft. diam. base, gray granite or Indiana limestone, rein.-con. and terra cotta, here. To exceed $50,000.

TUNNEL—NEW YORK

Bids were opened by Bd. of Estimate & Apportionment, Municipal Bldg., Richmond Boro., May 18, for constructing The Narrows Tunnel, Contr. No. 3, South Street Shaft, (A) P. McGovern, Inc., 50 East 42nd St., (awarded contract); (B) Booth & Flinn, Ltd., 17 Battery Pl. The unit bids were as follows:

	A	B
1200 cu.yd. earth excavation above mean sea level	40.00	20.35
2,600 cu.yd. earth excavation below mean sea level	40.00	26.25
8,530 cu.yd. rock excavation	39.00	42.45
9,000 cu.yd. dredging	0.60	1.50
3,600 cu.yd. concrete in caisson shaft, walls and floor, normal air	12.00	31.20
650 cu.yd. concrete in caisson shaft, floor, under compressed air	18.50	34.00
300 bbl. mortar batches used in placing concrete	8.00	7.00
70 cu.yd. brick masonry (except protective layer of brick in shaft invert)	40.00	50.00
700 bbl. 1:1 portland cement grout—normal air	6.00	5.00
10 bbl. 1:0 portland cement grout—normal air	5.65	6.00
10 bbl. 1:1 portland cement grout—under compressed air	7.35	8.00
10 bbl. 1:0 portland cement grou.—under compressed air	6.65	8.00
2,300 lin.ft. furnishing and driving timber piles for wharf	1.00	2.00
90 M.b.ft. timber wharf (except furnishing and driving piles)	135.00	175.00
380 sq.yd. waterproofing, treated woven fabric, normal air, four-ply	3.00	7.35
400 sq.yd. waterproofing, treated woven fabric, including brick, under compressed air, four-ply	6.20	16.50
10 sq.yd. waterproofing, treated woven fabric, including brick, under compressed air, six-ply	8.00	20.00
5 cu.yd. brick in asphalt mastic, with one-ply fabric, under compressed air	50.00	52.00
1,260 ton steelwork for shaft, except rods and bars	145.00	175.00
2 ton steel rods and bars	100.00	120.00
5,200 lb. furnishing and placing w. i. or steel pipe (threads, couplings and caps incl.)	0.20	0.10
5 ton furnishing and placing 12 in. c. i. pipe in bottom of shaft	180.00	150.00
Engineer's Field Office—building, equipping and maintaining (lump sum)	50,000.00	25,000.00
20 M.b.ft. temporary timber covering over shaft (incl. placing steel roof girders)	150.00	130.00
275 lin.ft. building a tight board fence around shaft, if required	3.00	2.75
50,000 cu.yd. disposal of ashes from municipal ferry boats	0.60	0.35
Extended totals	$841,957	$910,078

Miscellaneous (Continued)

Stone Crusher—Trenton, N. J.—July 3, by Bd. Freeholders, Mercer Co., Court House, stone crusher plant at Moore Sta. Former bids rejected. H. E. Breed, 507 5th Ave., New York City, consult. engr.; adv. this issue. Noted May 31.

Paving Brick — Ebensburg, Pa. — See "Streets and Roads."

Completion of Pier, etc.—Phila., Pa.—June 27, by G. F. Sproule, dir. Dept. Wharves, Docks and Ferries, Municipal Pier 4, South Wharves, completion, with appurtenant work for Porter St. Pier 84, South Wharves, Moyamensing Group, Delaware River; adv. this issue.

Fan Houses and Stacks—Pittsburgh, Pa.—June 27, by Comrs. Allegheny Co., 1 story, 110 x 190 ft. brick and rein.-con., fan houses and stacks for Liberty Tunnel. $183,000. A. D. Neeld, 708 Bakewell Bldg., engr.

Structural Steel Framing, etc.—New Orleans, La.—July 5, by Bd. Comrs. of Port of New Orleans, Suite 200 New Court Bldg., furnishing and erecting at Poland St. Landing (a) structural steel framing, (b) steel rolling doors. J. H. Walsh, genl. mgr.; adv. this issue.

Switchboard, etc.—Ellis Junction, Wis.—Wisconsin Pub. Serv. Co., 559 Marshall St., Milwaukee, and Mead & Seastone, engrs., Journal Bldg., Madison, taking bids switchboard, outdoor sub-station, structural steel, two 200 ft. penstocks, six 12 x 14 tainter gates, two 4 x 4 sluice gates.

Pig Lead—St. Paul, Minn.—June 25, by H. W. Austin, city purch. agt., 80 tons pig lead in 100 lb. pigs. C. M. Shepard, city engr.

Tunnel—Baird, Tex.—See "Waterworks."

Cable and Accessories—Melbourne, Australia—Aug. 31, by R. Liddelow, secy. State Electricity Comn. of Victoria, 22-32 William St., aluminum steel cored cable and accessories, Spec. 23/77, for Morwell Power Scheme; adv. this issue.

BIDS RECEIVED

Green Houses—New York, N. Y.—Dept. Parks, Municipal Bldg., completing range of greenhouses and workhouses in Van Cortlandt Park nurseries, Bronx Boro, from Hitchings & Co., 101 Park Ave., $39,500.

Paving Blocks—New York, N. Y.—Bd. Purch., Municipal Bldg., June 11, furnishing and delivering creosoted wood paving blocks, from W. J. Fitzgerald, 547 West 45th St., $22,565. Noted June 7.

CONTRACT AWARDED

Coal Trestle—East Hartford, Conn.—J. Hoffman & Son, 85 Connecticut Blvd., coal trestle, concrete, to South Contg. Co., G. Cudemo, 703 Main St., Hartford. Engrs. est. $30,000.

Heating and Ventilating Apparatus, etc. —Brooklyn, N. Y.—Bd. Educ., 500 Park Ave., New York, heating, ventilating and temperature regulation apparatus, in P. S. 16, Wilson St., here, to Federal Heating Co., 300 Madison Ave., New York, $26,700. Noted June 7.

Traffic Control System—Buffalo, N. Y.—Common Council and Bd. Pub. Wks., new traffic control system in Main St., to McCarthy Bros. & Ford, 75 West Mohawk St., $25,000.

Modification of Railroad Structure—New York—Transit Comn., 49 Lafayette St., New York City, modification of railroad structure east of Boulevard to allow raising street grade, Route 61, Boro of Queens, Agreement "CM," to Haume & Jackson, Inc., 1014 East 14th St., Brooklyn, $37,735. Noted June 14.

Car Barn—Louisville, Ky.—Louisville Ry. Co., 314 West Jefferson St., rebuilding 150 x 300 ft. street car barn, brick and concrete, and addition to car barn on 4th and Avery Sts., to L. W. Hancock, 14th and Walnut Sts. Engrs. est. $160,000. Noted Feb. 1.

Flour Mill Elevator—Hopkinsville, Ky.—Acme Mills, 38 x 96 ft. flour mill elevator, rein.-con., 125 ft. to top of pent house, 160,000 bu. capacity, Main St., to R. C. Stone Eng. Co., Merchants Exch., St. Louis, Mo. Est. cost $75,000.

Subways—Princeton, Ky.—Illinois Central R.R. Co., 135 East 11th Pl., Chicago, 2 subways, here, to Ellington-Miller Co., 608 South Dearborn St., Chicago.

Foundation—Rochester, N. Y.—Bd. Dirs. and Building Com., University of Rochester, University Ave., foundation for school and hospital, 37 ft. concrete piles, to Raymond Concrete Pile Co., 140 Cedar St., New York City, $100,000. Noted Dec. 7 under "Buildings."

Asphalt Cement Emulsion — Trenton, N. J.—State Hy. Dept., supplying 131,300 gal. asphalt cement emulsion, to Barber Asphalt Co., 1900 Land Title Bldg., Phila., $21,150.

Basement—Milwaukee, Wis.—St. Catherines Congregation, c/o A. Reichard, secy., 82 Mason St., basement for 76 x 112 ft. and 58 x 88 ft., school and auditorium, brick and concrete, plain foundation, Center St., to E. Steigerwald & Sons, 2303 Galena St.

Lighting and Distribution System — Maquoketa, Ia.—Electric lighting and distribution system, to D. Chapin, Jr., Wichita, Kan., $27,840. Noted Apr. 5.

Foundation—Fargo, N. D.—St. John's Hospital, 365 6th Ave. S., foundation for 5 story and basement, 46 x 130 ft., rein.-con., brick, tile and stone hospital, to T. F. Power & Co., 419 8th St. N., on percentage basis. Total cost $225,000. Noted May 24 under "Buildings."

Dikes, etc.—Missouri—Bd. Pub. Wks., City Hall, St. Louis, eight 3 row hurdle dikes on St. Charles Co. side of river, one between Catfish Island and Meiers Bend and 6 on St. Louis Co. side of river, or as many as needed, also 2 story, frame office building at Howards Bend, on Missouri River, to Kansas City Bridge Co., 510 Orear-Leslie Bldg., Kansas City, $570,007. Noted May 24.

Electric Transmission Line—Seneca, Mo.—N. S. Freeman, city clk., electric transmission line from here to Grand Falls, to Neben Bros. Electric Co., Muskogee, Okla., $22,000. Noted May 17.

Power Development—Quebec—Northern Canada Power Co., Timmins, Ont., power development on Quinze River at Ka-ka-ke Rapids, near Lake Teminskaming, general contract on unit basis for dam, power house, excavation, concrete work, etc., to Morrow & Beatty, Peterboro, Ont. Engrs. est. $3,000,000. Noted May 17.

Road Oil—Montreal, Que.—City, to Sun Oil Co., 1112 St. Patrick St., 40,000 gal. road oil at $0.099 per gal. plus 2½% tax, to Imperial Oil Co., St. Patrick St., 20,000 gal. road oil $0.09 per gal. plus 2½% tax, 120,000 gal. road oil applied, $0.1485 per gal. plus 2½% tax.

Stone Dust—Montreal, Que.—For 6,000 tons stone dust, to Deschambault Quarry Corp., 591 Amherst St., $52,300.

Oil Storage Plant—Owen Sound, Ont.—Imperial Oil Co., Ltd., Imperial Oil Bldg., Toronto, oil storage plant, incl. concrete and steel tanks, pumphouse, office, etc., here, to Schultz Bros., Brantford, $70,000. Noted Mar. 29.

OFFICIAL PROPOSALS

OFFICIAL PROPOSALS

Bids: July 10.

Street Paving

Nashville, Tenn.

Office of the Board of Public Works, Nashville, Tenn., June 15th, 1923.

Notice is hereby given that sealed proposals will be received at the office of the City Clerk until 10 o'clock a.m., Tuesday, July 10th, 1923, for constructing street paving on the following streets, to wit:

GRANITE BLOCK PAVEMENT
(RESURFACE)

Jefferson St., from 12th Ave. to 18th Ave.
Cedar St., from 4th Ave. to 10th Ave.

ASPHALTIC PAVEMENT
(RESURFACE)

Second Ave. South, from Hills Alley to Chestnut St.
Seventeenth Ave. South, from Division St. to Belcourt St.
Belcourt St., from 18th Ave. to 21st Ave.
Main St., from 1st St. to 11th St.
Forrest Ave., from Main St. to 11th St.
Gartland Ave., from 11th St. to 14th St.

ASPHALTIC PAVEMENT
(NEW GRADING AND PAVING)

Capers Ave., from 21st Ave. to 24th Ave.
Fifteenth Ave. North, from Buchanan St. to North Clay St.
North 15th St., from Ordway Place to Eastland Ave.

Approximately 17,000 square yards of Granite Block Paving, and 64,000 square yards of Asphaltic Paving (Resurface) and 11,000 square yards of Asphaltic Paving (New Grading and Paving) will be required. Separate proposals must be submitted for each street on blank forms accompanying specifications, which will be furnished by William W. Southgate, City Engineer, upon application. A charge of one dollar ($1.00) per copy will be made for each specification and proposal furnished. Proposals must be accompanied by a certified check payable to the order of the City of Nashville in an amount equivalent to ten per cent of the aggregate bid, or an approved bond in a penal sum of like amount with a solvent surety indemnity insurance company authorized to do business in the State of Tennessee. The said checks and bonds will be returned to unsuccessful bidders upon award of contract, and to successful bidders when they shall have entered into contract and made approved bond for the faithful performance of said contract as required by law. The right is reserved to reject any and all bids. By order of the Board of Public Works.

Attest: HILARY E. HOWSE, Mayor.
S. H. McKAY, City Clerk.

OFFICIAL PROPOSALS

Bids: June 30.

Building Alterations

Saratoga Springs, N. Y

Sealed proposals for the furnishing of all materials and performing the necessary labor for the proposed alterations and repairs to the kitchen, pantry and dining-room of the Casino in Congress Park at Saratoga Springs, N. Y., will be received by the Commissioner of Public Works of the City of Saratoga Springs, N. Y., at his office in the City Hall, on or before noon of the 30th day of June, 1923.

All proposals must be on forms annexed to the specifications to which they must be attached. All proposals must be accompanied by a certified check for 5% of the contract price.

The major portion of the work consists of the removal of a brick stack from the north side of the kitchen and the removal and rebuilding of a portion of the north wall of the kitchen; removal and rebuilding of the east wall of the dining-room and a portion of the north wall; the construction of a reinforced concrete foundation under the east, west and north walls of the dining-room; the construction of reinforced concrete foundations under the main bearing piers carrying the roof of the dining-room and the construction of a reinforced concrete foundation under the piers carrying the floor of the dining-room; repairing the outer and inner walls of the building where necessary, painting and kalsomining the interior of the dining-room and painting the exterior wood work; detaching and leveling and replacing the six circular windows; leveling and repairing the floor of the dining-room. Placing a Barrett Specification felt, pitch and slag roof on the three buildings together with the proper flashings, etc. Removing a switchboard panel from the basement to the pantry, rebuilding transformer house, etc.

Plans, Specifications and forms of contract and proposals can be obtained at the office of the Commissioner of Public Works between the hours of 9 a.m. and 5 p.m. except on Saturdays on which days the office will be open from 9 a.m. to 12 m.

Contractors must visit the site of the work and ascertain for themselves the exact character of the work required.

The City Council reserves the right to reject any and all bids if they deem it to the interest of the City so to do.

GEORGE W. AINSWORTH,
Commissioner of Public Works.

OFFICIAL PROPOSALS

Bids: July 17 (date extended).

Paving

Pottsville, Pa.

Sealed proposals will be received by the City Council of Pottsville, Pa., up to 7:30 o'clock p.m. Standard Time of Tuesday, July 17, 1923, for paving and improving portions of several streets of the City.

The work proposed consists of laying approximately thirty-five thousand (35,000) square yards of street paving on a concrete base with necessary grading, adjustment of curbs, etc.

Bidders may examine the plans and obtain a printed copy of the Specifications on application to the City Engineer and depositing five dollars ($5.00). The deposit will be returned on the return of the specifications in good condition with a bona fide proposal for the work contemplated.

The City Council reserves the right to reject any or all bids or parts of bids or to accept any bid considered the best for the City interests.

JOHN H. STRAUCH,
City Engineer.

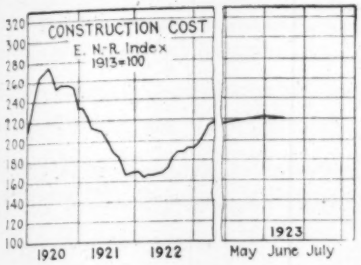
CONSTRUCTION NEWS

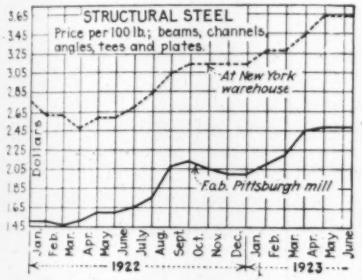
The Construction Barometer

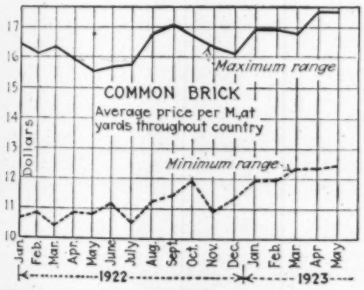
Decline In Price of Pig Iron — Little Change In Other Materials During Week

COST remains flat, the only important price development being the disappearance of the premium on steel. Shapes sell for $2.50 per 100 lb. at the mill. Indicative of lessening demand is the drop of nearly 308,000 tons of unfilled orders on the books of the U. S. Steel Corporation. Price of pig iron continues to decline.

Production is going forward at full speed to fill orders already placed. The volume of June contracts is 13 per cent lower than May. Next week special attention will be given to demand as in icated by tne latest figures of production and contracts awarded.







E. N.-R. Statistics

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ending	Public Work	Private Work	Total Contracts
June 7	$25,144,000	$18,704,000	$43,848,000
June 14	23,681,000	14,052,000	37,733,000
June 21	15,417,000	20,308,000	35,725,000
3 weeks	$64,242,000	$53,064,000	$117,306,000

LARGE BUILDING CONTRACTS—NUMBER AND VALUE

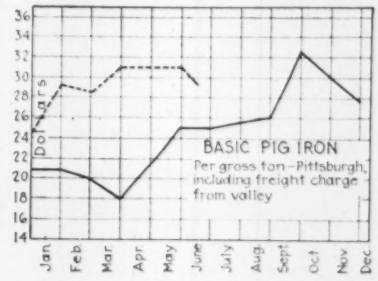
Week Ending	No.	Public Work	No.	Private Work
June 7	13	$2,558,000	37	$11,303,000
June 14	11	7,593,000	36	9,742,000
June 21	9	4,636,000	28	10,941,000
3 weeks	33	$14,787,000	101	$31,986,000

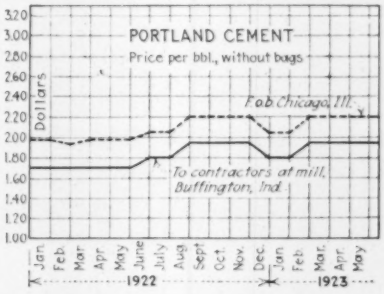
NUMBER OF LARGE JOBS NOW OUT FOR BIDS

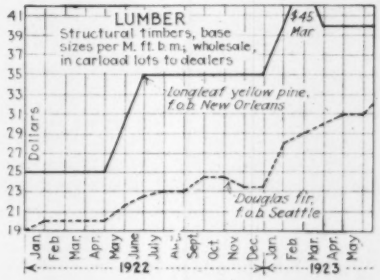
	Public			
Week Ending	Private	All	Streets and Roads	Waterworks and Sewers	All Buildings
June 7	35	202	75	29	46
June 14	26	211	80	41	35
June 21	23	205	84	37	37

BASE PRICES FIRM—NO PREMIUMS ON STEEL

	Quoted on June 28, at	Price Was	On
Structurals, Pittsburgh, 100 lb.	$2.50	$2.50 @ 2.60	June 21
Cement, Chi., net bbl.	2.20	2.05	Feb. 1
Pine, N. Y., M.ft.	59.00	60.00	June 14
Fir, San Fran., M.ft.	41.00	39.00	Apr. 5
Common labor, hr.	0.53	0.51	May 31







PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
July 2	Lathrop, Mo.	June 28
July 3	Ft. Worth, Tex.	June 14
July 3	Ft. Worth, Tex.	June 21
July 3	Madisonville, Tenn.	June 21
July 3	Niles, Ill.	June 28
July 5	Baltimore, Md.	June 28
July 5	Ft. Atkinson, Wis.	June 28
July 7	Tonawanda, N. Y.	June 28
July 7	Grandview Heights (Columbus P. O.), O.	June 28
July 9	Point Grey, B. C.	June 28
July 16	Lemmon, S. D.	June 28
July 17	Deland, Fla.	June 21
	Adv. June 21 and 28.	

SEWERS

Bids Close		See Eng. News-Record
July 2	Akron, O.	June 21
July 2	Lewistown, Pa.	June 21
July 2	Lathrop, Mo.	June 28
July 2	New York, N. Y.	June 28
July 2	Bloomfield, N. J.	June 28
July 3	St. Louis, Mo.	June 14
July 3	Newton, N. J.	June 21
	Adv. June 21 and 28.	
July 6	Grove City, Pa.	June 21
	Adv. June 21 and 28.	
July 7	Grandview Heights (Columbus P. O.), O.	June 28
July 9	Los Angeles, Calif.	June 21
July 9	Shermerville, Ill.	June 28
July 10	Springwells, Mich.	June 21
July 10	Essex Junction, Vt.	June 28
	Adv. June 28.	
July 11	Vero, Fla.	June 28
July 12	Anaheim, Calif.	June 28
July 17	Louisville, Ky.	June 28
	Adv. June 28.	
July 30	Los Angeles, Calif.	June 28

BRIDGES

Bids Close		See Eng. News-Record
July 3	Alabama	June 7
July 3	Ableman, Wis.	June 28
July 5	Englishtown, N. J.	June 21
	Adv. June 21 and 28.	
July 5	Florida	June 28
July 6	Alabama	June 21
July 6	Waycross, Ga.	June 21
July 6	Albany, Wis.	June 28
July 6	Georgia	June 28
July 6	Stoughton, Wis.	June 28
July 9	Akron, O.	June 21
July 9	New Jersey	June 28
	Adv. June 28.	
July 10	Washington	June 28
July 12	Indianapolis, Ind.	June 28
July 12	Ft. Wayne, Ind.	June 28
	Adv. June 28.	
July 18	Phila., Pa.	June 28
	Adv. June 28.	
July 25	Bridgeport, Conn.	June 28
	Adv. June 28.	
July 31	La Center, Wash.	May 3
Nov. 30	Sydney, Australia	Apr. 19
Aug. 1	Binghamton, N. Y.	June 28
	Adv. June 28.	

DAMS

Bids Close		See Eng. News-Record
July 2	Beacon, N. Y.	June 21
	Adv. June 21 and 28.	

Bids Close — See Eng. News-Record

RAILWAYS

July 5 New Jersey .....June 28

EXCAVATION, DRAINAGE, IRRIGATION

July 5 Sisseton, S. D. .....June 28
July 6 Corinth, Miss. .....June 28
July 10 Ottumwa, Ia. .....June 14
Adv. June 21 and 28.
July 10 Merced, Calif. .....June 28
July 11 Trenton, Mo. .....June 28
July 17 Dunkirk, N. Y. .....June 21
Adv. June 21 and 28.
July 26 New Orleans, La. .....June 28
Adv. June 28.

STREETS AND ROADS

June 29 Medford, Mass. .....June 28
July 2 North Tarrytown (Tarrytown P. O.), N. Y. .....June 21
July 2 Ebensburg, Pa. .....June 21
July 2 Wynnewood, Okla. .....June 28
July 2 Gardner, Mass. .....June 28
Adv. June 28.
July 2 Mayersville, Miss. .....June 28
July 2 New York, N. Y. .....June 28
July 2 Michigan .....June 28
July 2 Dayton, O. .....June 28
July 2 Chicago, Ill. .....June 28
July 3 University (St. Louis P. O.), Mo. .....June 21
July 3 Alabama .....June 7
July 3 Akron, O. .....June 14
July 3 Trenton, N. J. .....June 21
July 3 Michigan .....June 28
July 3 Belleville, N. J. .....June 28
July 3 Nutley, N. J. .....June 28
July 3 Denver, Colo. .....June 28
July 3 Louisville, Ky. .....June 28
July 3 Marysville, Calif. .....June 28
July 5 Maplewood (St. Louis P. O.), Mo. .....June 14
July 5 Abbeville, La. .....June 21
July 5 Lincoln, Neb. .....June 21
July 5 Steelton, Pa. .....June 28
Adv. June 14 and 28.
July 5 Brooklyn, N. Y. .....June 28
July 5 Baltimore, Md. .....June 28
July 5 Sayre, Okla. .....June 28
July 5 Lincoln, Neb. .....June 28
July 5 Weleetka, Okla. .....June 28
July 6 Mannington, W. Va. .....June 21
July 6 Akron, O. .....June 21
July 6 Virginia .....June 21
July 6 Lancaster, S. C. .....June 21
July 6 Greensburg, Pa. .....June 14
July 6 Alabama .....June 21
July 6 Quebec .....June 28
July 6 Michigan .....June 28
July 6 Scottsville, Mich. .....June 28
July 6 Missouri .....June 28
July 6 Fergus Falls, Minn. .....June 28
July 6 Albany, Ga. .....June 28
July 6 Nashville, Tenn. .....June 28
July 6 Emporia, Kan. .....June 28
July 6 Alabama .....June 28
July 7 Grandview Heights (Columbus P. O.), O. .....June 28
July 9 California .....June 21
July 9 Laurel, Miss. .....June 28
Adv. June 28.
July 9 New Jersey .....June 28
Adv. June 28.
July 9 Michigan .....June 28
July 9 Keyport, N. J. .....June 28
Adv. June 28.
July 9 East Grand Forks, Minn. .....June 28
July 9 Kansas City, Mo. .....June 28
July 9 St. Paul, Minn. .....June 28
July 9 Ft. Davis, Tex. .....June 28
July 9 Richmond, Va. .....June 28
Adv. June 28.
July 9 Edgerton, Wis. .....June 28
July 10 Fairmont, W. Va. .....June 21
July 10 St. Albans, W. Va. .....June 21
July 10 Nashville, Tenn. .....June 21
July 10 Circleville, O. .....June 28
July 10 Michigan .....June 28
July 10 Washington .....June 28
July 10 Florida .....June 28
July 11 Louisiana .....June 28
July 11 Michigan .....June 28
July 11 Vero, Fla. .....June 28
July 12 Faribault, Minn. .....June 21
July 12 Michigan .....June 28
July 14 Bolivar, Pa. .....June 28
July 15 Western Springs, Ill. .....June 28
July 15 La Grange, Ill. .....June 28
July 15 South Bend, Wash. .....June 28
July 16 Plainfield, N. J. .....June 28
Adv. June 28.
July 17 St. Louis, Mo. .....June 21
July 17 Pottsville, Pa. .....June 28
Adv. June 21 and 28.
July 18 New Mexico .....June 28
July 24 West Virginia .....June 28
Adv. June 28.

INDUSTRIAL WORK

July 6 Verona, N. J. .....June 28

Bids Close — See Eng. News-Record

BUILDINGS

July 1 Coffeyville, Kan. .....June 28
July 2 Columbus, O. .....June 14
July 2 Leavenworth, Kan. .....June 28
July 2 Syracuse, N. Y. .....June 28
July 2 Milwaukee, Wis. .....June 28
July 2 Louisville, Ky. .....June 28
July 3 Kitchener, Ont. .....June 21
July 3 Bergenfield, N. J. .....June 14
July 5 Bloomfield, N. J. .....June 28
July 5 Pittsburgh, Pa. .....June 28
July 6 Virginia, Minn. .....June 7
July 6 Athens, O. .....June 28
July 7 Athens, O. .....June 28
July 9 Maplewood, N. J. .....June 21
July 9 Easton, Pa. .....June 21
July 10 Holdenville, Okla. .....June 28
July 15 Astoria, Ore. .....June 7
July 15 Knoxville, Tenn. .....June 21
July 16 Dover, O. .....June 28
July 16 Pawhuska, Okla. .....June 28
July 16 Nashville, Tenn. .....June 28
July 20 Logan, O. .....June 28
July 21 Pittsburgh, Pa. .....June 28
July 24 Conrad, Pa. .....June 21
Aug. 1 Jackson, Miss. .....June 21

FEDERAL GOVERNMENT WORK

July 2 Bridge—Washington .....June 28
July 3 Remodeling — Frankfort, Ky. .....June 14
July 3 Bridges—California .....June 28
July 3 Removing Superstructure, etc. —Duluth, Minn. .....June 28
Adv. June 28.
July 5 Pumps—New Orleans, La. .June 14
July 5 Extension — New York, N. Y. .....June 21
July 9 Steps—Denver, Colo. .....June 14
July 9 Dredging — Wilmington, Del. .....June 14
Adv. June 14 to 28.
July 10 Conveyor—Memphis, Tenn. June 21
Adv. June 21 and 28.
July 18 Extension—Pearl Harbor, H. T. .....June 21
July 18 Fire Protection System — Pearl Harbor, H. T. .....May 31
July 18 Storage Facilities — Pearl Harbor, H. T. .....June 7
July 19 Tanks—Memphis, Tenn. .June 21
Adv. June 21 and 28.
July 19 Dredging—New Orleans, La. .....June 21
Adv. June 21 and 28.
July 20 Dredging—Galveston, Tex. .June 21
Adv. June 21 and 28.
July 20 Intake Chamber, etc.—Wash., D. C. .....June 28
Adv. June 21 and 28.
July 21 Dredging—Galveston, Tex. June 28
July 31 Dredging—Baltimore, Md. .June 28

MISCELLANEOUS

July 2 Sea Wall — Vicksburg, Miss. .....June 7
July 2 Asphaltic Cement—New York, N. Y. .....June 28
July 2 Underground Return Lines—New York, N. Y. .....June 28
July 3 Stone Crusher — Trenton, N. J. .....June 21
July 5 Structural Steel Framing, etc. —New Orleans, La. .....June 21
July 5 Landing — New Orleans, La. .....June 28
July 11 Pier—San Diego, Calif. ...June 28
July 16 Power Equipment—Taylorville, Ill. .....June 28
Adv. June 28.
July 20 Timber—Webb, N. Y. .....June 28
Adv. June 28.
Aug. 31 Cable and Accessories — Melbourne, Australia .....June 21
Feb. 28 Headworks — Wellington, New Zealand .....May 24

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Pa., Allentown—Plans new mains in 15th Ward. $31,000. H. F. Bascom, city engr.

Md., Hagerstown—Having surveys made new water supply system from Potomac River, incl. filters, pumps, 7 mi. supply line, etc. $1,450,000. G. L. Bean, 806 Abbott Bldg., Phila., Pa., engr.

Miss., Greenwood—Plans extension to water system to incl. North Greenwood. W. S. Hawkins, engr.

Miss., Vicksburg—City having plans prepared 3 or more pumping plants in connection with drainage project and land reclamation along river front. Miller-Butterworth Co., 624 Southern Trust Co. Bldg., Little Rock, Ark., engrs.

Tenn., Covington — Voted $71,000 bonds for repairs to water and light plant. Oil burning engine and miscellaneous equipment, to Fairbanks Morse Co., 900 South Wabash Ave., Chicago.

O., Conneaut—Making plans 2 story, 125 x 150 ft. brick and concrete filtration plant. $150,000. Burgess & Nipel, 223 East Broad St., Columbus, engrs.

Ill., Mt. Prospect—Plans extensions to mains. $25,000. Consoer Eng. Co., 2007 Ogden Ave., Chicago, engrs.

Ill., Niles Center—See "Sewers."

Ia., Dubuque—See "Contract Awarded."

Minn., St. Paul—July 16, to vote on $870,898 bonds for Vadnais Lake conduit, $90,000 for Pleasant and Sucker Lake conduit and canal, $61,000 for Centerville conduit, $598,300 large feeder mains, $850,000 distribution mains, meters and other accounts for 5 years. G. M. Shepard, city engr.

Neb., Crawford—Voted $45,000 bonds for waterworks and extensions, incl. new settling basis, new filtration, raising dam, etc. J. J. Rasmussen, Crawford, engr. Noted June 14.

S. D., Castlewood—Making plans waterworks system. $18,000. Chenoweth, Kennedy & Rettinghouse, Boyce-Greeley Bldg., Sioux Falls, engrs.

Mo., Holden—Election soon to vote on $75,000 bonds for waterworks. Benham Eng. Co., 512 Gumble Bldg., Kansas City, engrs.

Tex., Hubbard—July 3, to vote on $55,000 bonds for new mains, pumps, etc. J. C. Mecklin, mayor. Engineer not announced.

Tex., Throckmorton—Making surveys reservoir, earth dam, concrete spillway, elevated tank and tower. Plans election to vote on $40,000 bonds. Baker & Von Zuben, Ellison Bldg., Ft. Worth, engrs.

Calif., Visalia—Plans to vote on $150,000 bonds to purchase and improve privately owned water works system, and construct extensions, latter to cost in excess of $25,000. L. H. Gadsby, city engr.

Ont., Kirkland Lake—Plans waterworks system, incl. c.i. mains, pumps, hydrants, valves, pump house, reservoir or tank. $150,000. M. Campbell, clk. Engineer not selected.

Ont., Toronto—Plans 9,000 ft. 6 in. c.i. mains in Beachwood and Rose Aves., Benson, McKinstry and Cline Sts., Dalewood, Dromore and Haddon Crescents, North Oval and Whitton Rd. $25,000. R. C. Harris, city engr.

Ont., York—York Twp. plans 18,000 6 in. c.i. mains in Queensdale, Poulton, Burgess, Knight, Lesmount, Edison, Cardona, Carlow, Sprule, Gordon, Carrington, Glenhaven, Hillsdale, Larratt, Orla and Syndicate Aves., Dilworth Crescent, Don Mills Rd. and 6th St. $45,000. F. B. Goedike, 40 Jarvis St., Toronto, engr.

BIDS DESIRED

N. Y., Tonawanda—July 7, by Town Bd., Village Hall, mains in Water Dist. 4. To exceed $25,000. G. C. Diehl, Ellicott Sq. Bldg., Buffalo, engr.

Md., Baltimore—July 5, by Bd. Awards, 100,000 ft. (more or less) single vitr. clay conduit. C. F. Goob, ch. engr.

O., Grandview Heights (Columbus P. O.) —July 7, by E. Gross, village clk., 16,580 ft. 6 in. mains in Parkway N., Parkway Dr., Timberman and Copeland Rds., Goodale and Northwest Blvds., Thomas, Mulford, Dover, Norton, Holly and 2nd Aves. $50,000. Burgess & Nipel, 223 East Broad St., Columbus, engrs. Noted May 24.

Ill., Niles—July 3, waterwork incl. pumping station. $56,000. Consoer Eng. Co., 140 South Dearborn St., Chicago, engrs.

Wis., Ft. Atkinson—July 5, by W. D. Leonard, city clk., brick, rein.-con. and steel pumping station, and rein.-con. reservoir, 60 ft. diameter, 15 ft. deep, 300,000 gal. capacity. $15,000. W. G. Kirchoffer, Dean Bldg., Madison, engr.

Mo., Lathrop—July 2, at A. T. Archer & Co., engrs., 609 New England Bank Bldg., Kansas City, new water supply system here. $40,000. Former bids rejected. Noted June 14.

S. D., Lemmon—July 16 (change of date) by R. M. Watson, city aud., 2,200 lin.ft. 8 in. iron or wood mains, 2,100 lin.ft. 4 in. c.i. pipe, 24 x 35 ft. steel standpipe, pump and deep well, etc. $25,000. C. L. Pillsbury, Co., 1200 2nd Ave. S., Minneapolis, Minn., engrs. Noted June 21.

B. C., Point Grey—July 9, by H. Fl[illegible] clk., 17,000 ft. 4-8 in. lapwelded sheet [illegible]

Waterworks (Continued)

c.i. pipe, f.o.b. Vancouver. W. B. Greig, 5851 West Blvd., Vancouver, engr.

BIDS RECEIVED

Md., Baltimore — Bd. Awards, furnishing and delivering valves, Contr. 69, from Kennedy Valve Mfg. Co., East Water St., Elmira, N. Y., $56,362. Noted June 14.

CONTRACTS AWARDED

Md., Baltimore — Furnishing filter rate controllers and venturi meters for Montebello Filtration Plant, to Simplex Valve Co., 5722 Race St., Phila., Pa., $40,626.

La., Lecompte—W. H. Jones, mayor and Bd. Alderman, furnishing and erecting one 100 hp. and one 50 hp. oil engines directly connected to alternator, panel switchboard, motor driven domestic service pump, motor air compressor, to Fairbanks, Morse & Co., 608-14 Magazine St., New Orleans, $23,475; concrete reservoir, concrete foundation and new building, to Hayden Constr. Co., Pass Christian, Miss., $12,750; water well, to Gray Artesian Well Co., Amer. Natl. Bank Bldg., Pensacola, Fla., $4,000. Noted May 24 under "Industrial Works."

O., Columbus—See "Streets and Roads."

O., Dayton—Montgomery Co. mains in Oakwood Heights Sewer Dist., southern section to C. F. Smith & Son, 54 Davies Bldg., $121,609; northern section to Connelly Bros., Cincinnati, $41,470.

O., Upper Arlington (Columbus P. O.)—See "Streets and Roads."

Mich., Detroit—For 52 x 130 ft. pumping station, with 40 ft. well rein.-con., 5 electrically operated centrifugal pumps, two 24 in., two 15 in. and one 12 in., provision made for additional pumping units as needed, to Natl. Constr. Co., 1031 Dime Bank Bldg., $177,700. Noted June 21.

Mich., Detroit—Furnishing 250 tons centrifugal pipe in various sizes, to U. S. Cast Iron Pipe & Fdry. Co., East Burlington St., Burlington, N. J., 6 in. $0.94 per ft., 8 in. $1.34, 10 in. $1.81, 12 in. $2.60.

Wis., Oshkosh—New pumping machinery for waterworks plant, to Langstadt-Meyer Electric Co., 14 Waugoo St., $31,738. Noted May 31.

Minn., New Ulm—For 11,000 lin.ft. 4 and 6 in. c.i. mains and 20 hydrants, to Mankato Constr. Co., Mankato, $16,609, and Feyen Constr. Co., 277 Burgess St., St. Paul.

Ia., Dubuque—To J. A. Gregory, 1120 Iowa St., 2 pumping stations, $29,477 and $11,187 respectively; C. W. Varner, 1695 Washington St., drilling artesian well, $9,417. Mead & Seastone, engrs., Journal Bldg., Madison, Wis., soon take bids on equipment. Noted May 10.

Tex., Austin—Making plans 8 m.g. filtration plant. $25,000. C. E. Leonard, city engr. John B. Hawley, Cotton Exch. Bldg., Ft. Worth, consult. engr.

Tex., Edgewood—Waterworks and street lighting systems, to Municipal Eng. Co., Praetorian Bldg., Dallas, $40,000 and $15,000 respectively.

Tex., Ft. Worth—Pumphouse, to West & Womack, Dan Waggoner Bldg., $17,592; pumps, etc., to Conner-Hudson Co., Southwest Life Bldg., Dallas, $14,996; 500,000 gal. tank on 130 tower, to Pittsburgh-Des Moines Steel Co., Praetorian Bldg., Dallas, $30,000. Noted May 24.

Mo., Kansas City — Fire & Water Bd., 1,200 tons 8 in. pipe, to U. S. Cast Iron Pipe & Fdry. Co., 604 Interstate Bldg., $70,980.

Sewers

PROPOSED WORK

Conn., East Hartford (branch of Hartford)—Plans 4,850 ft. 10-20 in. vitr. clay sewers in Governor and Main Sts. $40,000. C. H. Olmsted, Comstock Blk., engr.

Pa., Erie—Rejected bids Sewer Projects 1, 2, 3 and 5. $300,000. Will readvertise. F. G. Lynch, city engr. Noted June 7.

Pa., Pittston—See "Streets and Roads."

Fla., Bartow—July 17 to vote on $90,900 bonds for sanitary sewerage system. Burns & McDonnell, 402 Interstate Bldg., Kansas City, Mo., engrs. Noted Apr. 12.

Miss., Greenwood—Plans sanitary sewer extension $20,000 and storm sewer $18,500. W. S. Hawkins, engr.

O., Delaware—City of Columbus had plans prepared and soon takes bids sewage disposal plant at Girls' Industrial Home, here. R. H. Simpson, Columbus, engr.

O., Kenmore—Plans sewage disposal plant. $300,000. E. A. Schlegal, dir. Pub. Serv.

Ill., Bensonville—Plans sewerage system and sewage disposal plant. $100,000-$150,000. E. Hancock, 2007 Ogden Ave., Chicago, engr.

Ill., Elmwood Park (Chicago P. O.)—Soon takes bids 4-12 in. mains. $330,000. E. Hancock, 2007 Ogden Ave., Chicago, engr.

Ill., Niles Center — Plans extensions to sewers and watermains. $25,000. Consoer Eng. Co., 140 South Dearborn St., Chicago, engrs.

Ill., Palatine—Plans sewerage system. $160,000. Consoer Eng. Co., 140 South Dearborn St., Chicago, engrs. Marr, Green & Co., 400 North Michigan Ave., Chicago, consult. engrs.

Ill., West Chicago—Soon takes bids storm sewerage system. $40,000. E. Hancock, 2007 Ogden Ave., Chicago, engr.

Neb., Fairbury—July 3, to vote on $40,000 bonds for sewerage system and drainage work. H. W. Fouts, clk.

S. D., Castlewood—Making plans sanitary sewerage system. $25,000. Chenoweth, Kennedy & Rattinghouse, Boyce-Greeley Bldg., Sioux Falls, engrs.

Mo., Sikeston—Soon takes bids 27,000 ft. 8 in. vitr. and 25,600 ft. 10-48 in. segmental block sewers. $158,000. W. A. Fuller, 1917 Ry. Exch. Bldg., St. Louis, engr. Noted May 17.

Tex., Stamford—Making plans Imhoff tanks, sanitary sewers, etc., $30,000 bonds voted. John B. Hawley, 403 Cotton Exch. Bldg., engr. Noted May 31.

Ore., Albany—Takes bids about July 10, storm sewers, $65,000. Stevens & Koon, Spalding Bldg., Portland, engrs.

Calif., San Francisco—Plans constructing unit of Army St. sewer. $70,000. M. M. O'Shaughnessy, city engr.

Ont., Galt—Soon takes bids 9,000 ft. sanitary sewers along river. $35,681. D. T. Black, City Hall, engr. Noted Feb. 8.

Ont., Weston—Having estimates and plans prepared sewerage system, probably 10,000-12,000 ft. 8-12 in. vitr. tile. $30,000. James, Proctor & Redfern, 36 Toronto St., Toronto, engrs.

BIDS DESIRED

Vt., Essex Junction—July 10, by Bd. Village Trustees at office of A. Martin, village clk., sewerage system. L. A. Evans, pres.; adv. this issue.

N. Y., New York—July 2, by J. Miller, pres. Manhattan Boro, Municipal Bldg., sewers in west side of Amsterdam Ave., etc.

N. J., Bloomfield—July 2, by J. C. Johnson, town clk., 8,175 lin.ft. 8-12 in. sanitary sewers in Parkway W, Mill St., Myrtle, Weaver and Franklin Aves., $28,521; paving 3,000 sq.yd. Vesper and Orchard Places, Fontaine and Farrandale Aves., asphalt penetration telford, $6,300; curbing and paving 4,200 sq.yd. Race and Fulton Sts., asphalt penetration telford, $11,975. E. Baechlin, Natl. Bank Bldg., town engr. Noted Apr. 12.

Pa., Neville Island (McKees Rocks P. O.) Dravo Contg. Co., Diamond Bank Bldg., Pittsburgh, will build 1 story, 75 x 273 ft., structural shop, steel and concrete, here, by separate contracts. $75,000. L. Vincent, Jenkins Arcade, Pittsburgh, engr.

Fla., Vero—July 11, by F. E. King, mayor, 12,000 ft. 6-30 in. vitr. clay storm sewers, etc. $25,000. Carter & Damerow, Vero, engr.

Ky., Louisville—July 17, by Comrs. Sewerage, for Napolean Blvd. sewer and drain and Speed Ave. laterals "South." J. B. F. Breed, ch. engr.; adv. this issue.

O., Grandview Heights (Columbus, P. O.)—July 7, by E. Gross, village clk. 14,166 ft. 6-18 in. vitr. sewers in alleys in plats 4 and 5 in Northwest Blvd., and in addition to Grandview Heights. $25,000. Burgess & Nipel, 223 East Broad St., Columbus, engrs.

Ill., Shermerville—July 9, sewerage system. $130,000. Consoer Eng. Co., 140 South Dearborn St., Chicago, engrs.

Mo., Lathrop—July 2, by A. T. Archer & Co., engrs., 609 New England Bank Bldg., Kansas City, sanitary sewers and disposal plant, here, for city. $60,000. Former bids rejected. Noted June 14.

Calif., Anaheim—July 12, by City Trustees, joint outfall sewer, Sect. 2, involves 12,278 ft. 27 in. and 17,300 ft. 30 in. pipe, 1,000 ft. pile trestle, etc.; Sect. 3, 5,062 ft. 24 in. and 13,201 ft. 27 in. pipe, etc.; Sect. 4, 9,249 ft. 24 in. pipe, etc.; segment block, vitr. or concrete pipe.

Calif., Los Angeles—July 30, by Bd. Pub. Wks., constructing ocean outlet, Sect. 1 of North Outfall sewer. W. T. Knowlton, city sewer engr. Noted May 10.

BIDS RECEIVED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, June 20, constructing Sect. 2C, modification and extension of Biological Plant, 26th Ward Disposal Works, from Filtration & Disposal Corp., 132 Nassau St., New York, $458,000. Noted June 14.

N. Y., Brooklyn — E. Riegelmann, boro pres., Boro Hall, June 20, timber supports Sect. 1, Fort Hamilton Parkway, from Necaro Co., Inc., 97 Court St., $153,300. Noted June 14.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, June 20, sewers in (1) Church St. (2) 64th St. (3) 84th St. (4) East 31st St. (5) East 8th St., from Necaro Co., Inc., 97 Court St., (1) 100.97% engrs. est. ($269,436); M. Tozzi, 1362 63rd St., (2) 88.25% ($7,145); Nazzaro & Querriero, (3) 88% $6,586); Tomasetti & Co., Inc., 1133 60th St., (3) 88% (4) 86% ($4,834); J. McBride, (5) 89.99% ($1,600). Noted June 14.

N. Y., New York—H. Bruckner, pres Bronx Boro, 3rd and Tremont Aves., June 21, sewer in Jarvis Ave., from McDonald & Wilson, $5,669; Pelham Parkway, from Anita Constr. Co., 2975 Marion Ave., $40,042; Tryon Ave., from Spadaro & Turiano, 3185 East Tremont Ave., $5,417.

O., Euclid—Inlet trunk sewer in Lake Shore Blvd. and Bliss Rd., 110 ft. No. 6 circular brick, 275 ft. 4-24 in. concrete and 700 ft. 24 in. tile pipe, from C. W. Jackson, 1318 East 84th St., Cleveland, $35,247.

O., Toledo—Storm water regulators and connections, brick manholes, Contr. 8, from Harris & Tansey, Toledo, $173,658.

Wis., Marshfield — Sanitary sewerage system, incl. 14,973 ft. 8-12 in. vitr. pipe, 45 manholes, etc., storm sewers incl. 4,765 ft. 10-30 in. pipe, 20 manholes, 3 catchbasins, 1 concrete outlet, 2,105 lin.ft. trunk sewer, from Pastoret Constr. Co., 308 Sellwood Bldg., Duluth, Minn., $77,192. Noted March 29.

CONTRACTS AWARDED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, to S. Ambrosio, 1016 60th St., sewer in Ave. I 93% of engrs. est. ($1,400), Ave. I 90% ($1,050); to C. F. Vacharas, 643 40th St., Benker St. 105% ($700) 72nd St., 95% ($400), Ave. J 94% ($400) 12th Ave. 99% ($1,680) 48th St. 109% ($1,539), East 10th St. 90% ($800); to B. Peconi & Sons, 76th St. 87% ($11,265); to Nazarro & Querriero, Bay 28th St. 91% ($6,834); to Tomassetti & Co., 1133 6th St., East 32nd St. 86.86% ($4,905). Noted June 14.

N. Y., Mamaroneck—E. L. Howe, village clk., completing sewage disposal works, to Mapes & Erway, Little Britain Rd., Newburgh. Engrs. est. $100,000. Noted May 10.

N. Y., Waterloo — Sanitary and storm sewer in Cox St., to R. J. Logan, 107 West Main St., $10.35 per lin.ft. Noted May 24.

Pa., Erie — For 11 sewers in Frontier Place Sub-division, 5 to F. G. and H. G. Diefendorf, Erie, $16,285; 6 to Doyle Contg. Co., Erie, $16,661. Noted June 7.

Pa., Erie—Mill Creek Valley monolithic sewer drain to F. G. Diefendorf, Erie, $43,006. Noted June 7.

Fla., Plant City—City will construct sanitary sewerage system, by day labor. Materials incl. 16,760 ft. 8 in., 1,300 ft. 10 in., 2,450 ft. 15 in. and 1,760 ft. 6 in. vitr. clay pipe, etc., to Macon Sewer Pipe Wks., Georgia Casualty Bldg., Macon Ga. Total cost $30,500.

O., Cleveland Heights (Warrensville, P. O.)—For 10,700 ft. 8-30 in. tile sewer in Silsby Rd., to Hadded-Mall Co., Schofield Bldg., Cleveland, $34,250. Noted June 21.

O., Columbus—See "Streets and Roads."

O., Upper Arlington (Columbus P. O.)—See "Streets and Roads."

Ind., Hammond — Sewerage system to Shea & Co., Hammond, $87,000.

Mich., Detroit—Connors Creek Sewer, Sect. 3, 5 centered concrete arch, to Lennane & Mc Ilvenna, 1121 Book Bldg., $663,285.

Wis., Milwaukee—For 2,900 wood piles in connection with sewage disposal plant, to Wheeler, Arnold Co., Wittenberg, $33,365; superstructure of screen house, 72 x 104 ft., brick and concrete, to P. Riesens Sons, 1018 Humboldt Ave., $58,973. Noted May 31.

Minn., Cloquet—See "Streets and Roads."

S. D., Yankton—State Bd. Charities & Correction, Pierre, 20,650 lin.ft. 12 and 15 in. sewers at State Hospital, here, to J. Jensen, 2407 Wirst St., Omaha, Neb., $31,544. Noted May 31.

Tex., Cisco—Additions to sewage disposal plant, by day labor. $25,000. Elrod Eng. Co., 3206 Elm St., Dallas, Engrs.

Calif., Long Beach — See "Streets and Roads."

Waste Disposal

PROPOSED WORK

Minn., Duluth—Submitted proposed ordinance authorizing $58,000 bonds for garbage incinerator. O. S. Olson, comr. This corrects report in May 31 issue.

Waste Disposal (Continued)

CONTRACTS AWARDED

Pa., Harrisburg — Superintendent Pub. Safety, 408 Dauphin Bldg., 50 ton incinerator plant, to Superior Incinerator Co., Dallas, Tex., $39,850.

Bridges

PROPOSED WORK

Mass., Springfield—City, Administration Bldg., and Boston & Albany R.R., South Station, Boston, plan reconstructing 40 ft. rein.-con. and steel bridge, 30 ft. wide, over railroad tracks on Berkshire Ave., here. $130,000. R. S. Marsh, city engr. Noted Nov. 16.

Alabama—State Hy. Dept., Montgomery, having plans prepared treated timber bridges, 18 ft. roadways, on Linden-Thomaston Rd., Marengo Co., 1½ in. cold mix bituminous concrete surfacing, $40,000; concrete bridges on Russellville-Phil Campbell Rd., Franklin Co., incl. one 80 ft. steel span, $50,000; 983 ft. concrete bridges, Clay Co., incl. one 120 ft. steel span, 18 ft. roadway, $90,000; 228 lin.ft. rein.-con. bridges, 18 ft. roadway, on Center-Etowah Co. line Rd., Cherokee Co., $25,000. W. S. Keller, state highway engr.

Kentucky — State Rd. Dept., Frankfort, having plans prepared 380 ft. concrete and steel bridge, 1 mi. south of Hazard, Federal Aid Project 104, Perry Co., three 100 ft. steel and two 40 ft. concrete spans; 200 ft. concrete and steel bridge 1 mi. north of Hazard, Federal Aid Project 103, Perry Co., two 100 ft. spans, trestle approaches; 200 ft. concrete and steel bridge over North Fork of Kentucky River, 3 mi. north of Hazard, Federal Aid Project 103, Perry Co., two 100 ft. spans; 280 ft. concrete and steel bridge, over Kentucky River, near Jeff Station, Perry Co., two 100 ft. steel and two 40 ft. concrete spans. J. S. Boggs, state highway engr.

Ohio—See "Streets and Road."

Ia., Cedar Rapids—Making plans Municipal Island improvement incl. one 90 ft. bridge span and 300 lin.ft. retaining wall, etc., along Cedar River. $75,000. Marsh Eng. Co., 206 Masonic Temple Bldg., Des Moines, engrs.

Calif., San Francisco—City and San Francisco Co. appropriated $30,000 to repair bridges on 4th, 6th and 7th Sts. and Islais Creek Bridge. M. M. O'Shaughnessy, city engr.

BIDS DESIRED

Conn., Bridgeport—July 25, by East Washington Ave. Bridge Comn., City Hall, constructing East Washington Ave. bridge. J. A. McElroy, city engr.; adv. this issue.

N. Y., Binghamton—Aug. 1, by Bd. Contr. & Supply, Municipal Bldg., 5 span rein.-con. arch bridge. W. E. Weller, city engr.; adv. this issue. Noted Feb. 22.

New Jersey—July 9, by State Hy. Comn., Trenton, 2 span steel and concrete bridge, State Highway Route 4, municipalities of Berkley and Lacey Twps., Ocean Co., also 1 span rein.-con. slab bridge, State Highway Route 16, Harding Twp., Morris Co. J. L. Vogel, 772 Broad St., Newark, bridge engr.; adv. this issue.

Pa., Phila.—July 18, by Delaware River Bridge Joint Comn., 806 Widener Bldg., anchorage cable bents for bridge over Delaware River, between here and Camden, N. J., adv. this issue.

Georgia—July 6, by State Hy. Dept., East Point, 371 ft. bridge on Elberton-Royston Rd., Elbert Co., 384.5 cu.yd. concrete, 52,010 lb. reinforcing, etc.; 214 ft. bridge on Columbus-Talbottom Rd., Muskogee Co., 1,520 lin.ft. wood piling, 373.9 cu.yd. concrete, 43,086 lb. reinforcing, etc.; 1,241 ft. bridge over Satilla River, Ware Co., Contr. 1, 16,379 cu.yd. earth embankment, 700 sq. yd. stone rip rap, 1,620 sq.yd. sand clay surfacing, etc., Contr. 2, 741 cu.yd. excav., 620 cu.yd. concrete in piers, 1,410 cu.yd. concrete, alternate with concrete bents supported by wood piling, 620 cu.yd. concrete in piers, 1,900 cu.yd. concrete, 2,482 sq.yd. 4 in. concrete paving, etc.

Florida—July 5, by State Rd. Dept., Tallahassee, constructing approaches to Safety Harbor Bridge, Project 527, Road 17, (130) Pinellas Co., both north and south approaches incl. timber protection work, being 1,555 ft. long. W. F. Cooke, state highway engr.

Louisiana—See "Streets and Roads."

Ohio—See "Streets and Roads."

Ind., Ft. Wayne—July 12 by Comrs. Allen Co., bridge over Maumee River on Columbia St., O. M. Darling, co. engr.; adv. this issue.

Ind., Indianapolis—July 12 by Comrs. Marion Co., 23 bridges, $1,000-$5,000 each. J. J. Griffith, co. engr.

Wis., Albany—July 6, by Green Co., State Rd. Road and Bridge Com. at Village Hall, here, Sugar River Bridge, two 65 ft. span concrete deck girders. C. J. Smith, Monroe, comr.

Wis., Albeman—July 3, by Sauk Co. State Road and Bridge Com. at Village Hall, here, constructing Ableman Bridge, three 50 ft. concrete deck girder spans. W. Halbersleben, Baraboo, comr.

Wis., Stoughton—July 6, by city, 2 span rein.-con. bridge over Yahara River on Forton St., earth approach and fill. T. Pankow, Washington Bldg., Madison, engr.

Missouri—July 6, by State Hy. Dept., Jefferson City, eleven 20 ft. rein.-con. slab spans, etc., over overflow of Grand River, two 10 ft. rein.-con. slab spans over stream, two 10 rein. slab spans, etc., over Indian Creek, one 40 ft. and four 20 ft. I-beam spans over Little Muddy Creek, one 40 ft. and four 20 ft. I-beam spans over Muddy Creek, one 40 ft. and four 20 ft. I-beam spans over Muddy Creek Drainage Ditch, two 150 ft. steel truss, four 40 ft. and two 20 ft. rein.-con. slab spans over Grand River, all foregoing in Davies Co.; one 60 ft., one 80 ft. and one 140 ft. steel truss spans, etc., over Salt River, one 80 ft. steel truss and six 20 ft. rein.-con. slab spans, etc., over Otter Creek, Monroe Co.; one 40 ft. rein.-con. deck girder span, etc., Mercer Co.; one 20 ft. rein.-con. slab span, etc., over Kaolin Branch, Iron Co.; one 40 ft. rein.-con. deck girder span, etc., Mercer Co.; one 40 ft. and two 25 ft. rein.-con. deck girder spans, etc., over Yellow Creek, Sullivan Co.; four 80 ft. steel truss spans, etc., over Salt River, Shelby Co.; one 120 ft. steel truss span, etc., over River Des Peres, St. Louis Co.; one 75 ft. steel truss, and four 20 ft. rein.-con. slab spans, etc., over Muddy Creek, Barton Co.; one 40 ft. rein.-con. deck girder span, over Mill Race, Jasper Co.; one 120 ft. steel truss span over Railey Creek, and three 20 ft. rein.-con. slab spans, etc., over Pine Run Creek, Stone Co.; three 10 ft. rein.-con. slab spans over Spring Creek, Douglas Co.; one 100 ft. steel truss span over Gladden Creek, and one 50 ft. steel truss span over Spring Creek, Dent Co.; one 12 ft. rein.-con. slab and one 60 ft. steel truss spans over Minnow Branch, Marion Co.; cleaning and repainting steel work on two 200 ft. and two 120 ft. steel truss spans over Merramec River, St. Louis Co. B. H. Piepmeier, state highway engr. Noted June 7 and 14.

Washington—July 10, by State Hy. Comn., Olympia, 2 rein.-con. bridges over Hama Hama River on Olympic Highway, Mason Co. J. Allen, state highway engr.

BIDS RECEIVED

Alabama—State Hy. Dept., Montgomery, 1,388 ft. bridges on Demopolis-Linden-Millers Rd., Marengo Co., one 102 ft. steel span, from Bosworth-Smith Co., 1st Natl. Bank Bldg., Montgomery, treated timber, $74,438; The Smith Co., 30 3rd Ave. W., Birmingham, concrete $125,210; grading, gravel surfacing and bridging 6.19 mi. road from Wilcox Co. line to Thomasville, Clarke Co., from Stanley & Singer Constr. Co., Lafayette, with timber bridges $74,907, concrete bridges $80,205. Noted June 7.

Ky., Irvine—Estill Co., steel truss highway bridge over Kentucky River in South Irvine, from International Steel & Iron Co., 243 Edgar St., Evansville, Ind., $49,975, Vincennes Bridge Co., Vincennes, Ind., without end approach, $47,500. Noted May 24.

Ohio—See "Streets and Roads."

Ia., Davenport—Scott Co., 50 box culverts, 2 slab bridges, 3 pony truss and 6 I-beam spans, erection of 1 old truss on new abutments, from Miller-Fifield Constr. Co., L. & J. Bank Bldg., Waterloo, $116,301; W. D. Phelen Constr. Co., Davenport, $116,900.

Ia., Des Moines—Polk Co., one 40 x 24 ft., one 38 x 18 ft., two 36 x 18 ft. and one 40 x 18 ft. concrete girder bridges, one 100 x 18 ft. pony truss and one 10 x 10 ft. box culvert, from N. M. Stark & Co., 1213 Mulberry St., $37,212.

CONTRACT AWARD

Ohio—See "Streets and Roads."

O., Columbus—See "Streets and Roads."

O., East Sparta — Stark Co. (Canton), concrete arch bridge, here, to Roberts Supply Co., 419-21 Opera Blk., Lima, $47,810. Engrs. est. $56,000.

O., Navarre—Stark Co. (Canton) steel bridge, here, to Standard Eng. Co., Toledo, $38,787. Engrs. est. $40,000. S. K. Hilton, Genl. Del., Canton, local representative for contractor.

Ill., Algonquin—Concrete bridge to R. Fitzsimmons, Dundee. Engrs. est. $25,000.

Wis., Kewaskum—Washington Co. (West Bend), overhead bridge crossing highway north of here, to Newton Eng. Co., 185 Mason St., Milwaukee, 15,000 cu.yd. earth excav. $0.80, 3,500 sq.yd. concrete pavement $1.60, 475.4 cu.yd. concrete $23, 8,500 lb. reinforcing steel $0.05, etc., total $31,111.

Ia., Clinton—Clinton Co., one 3 span pony truss bridge over Wapsipinicon River, to A. Olson Constr. Co., 401 Black Hawk Bank Bldg., Waterloo, concrete figures $28,531 structural steel erected $0.0725, total $27,300.

Ia., Iowa City—Johnson Co., to A. P. Munsen, Marion, 7 circular and 9 box culverts, and 1 I-beam bridge, $13,778; to J. C. Watkins & Co., Marion, 15 box and 26 circular culverts, $18,690.

Mo., St. Louis—Dept. Pub. Serv., rein.-con. viaduct, 80 ft., with 550 ft. southern and 200 ft. northern approaches, on 14th St., to F. A. Stiers, 4500 Enright Ave., $468,943. Noted June 14.

Ont., Guelph—Wellington Co., concrete bridges, incl. Mount Forest Bridge, to J. Tilker, Harriston, $12,000; Augers and Creekbank Bridges to C. Martin, Fergus, $5,500; Hagarty Jordan and Schmidt Bridges, to E. Symmons, Drayton, $6,200; Erin Bridge, 35 ft. concrete truss, to W. Vallery Bellwood, $2,000; grading at Augers and Mount Forest Bridges, to W. Davies, Stratford, $12,415. Noted Apr. 19.

Dams

PROPOSED WORK

Wis., Peshtigo—See "Miscellaneous."

N. D., Grand Forks—Plans 10 ft. rock dam across Red River of the North. J. H. Solstad, city engr.

Calif., Merced—Merced Irrigation Dist. had plans prepared for Exchequer Dam, 278,000 cu.yd. concrete. Starr, Thebo & Anderson, Sharon Bldg., San Francisco, engrs. R. C. Starrett, resident engr.

Calif., Ravendale — See "Excavation, Drainage, Irrigation."

CONTRACTS AWARDED

O., Troy—For 300 ft. low concrete dam in Miami River, to Price Bros., 54 Davies Bldg., Dayton, $59,000. Engrs. est. $65,000. Noted Jan. 18.

Railways

PROPOSED WORK

Kentucky—Louisville & Nashville R.R. Co., 10th St. and Bway., Louisville, plans 16.63 mi. second track from Baileys to Walls End, on Cumberland Valley Div. $1,799,579. W. H. Courtenay, ch. engr.

Texas—Texas & Pacific Ry., Texas & Pacific Bldg., Dallas, takes bids this summer, ballast, alterations, new steel, etc., in Paris yards. $25,000. E. F. Mitchell, ch. engr.

Canada—Canadian National R.R., 230 St. James St., Montreal, Que., soon takes bids following railways, from Sunny Brae to Guysboro, N. S., $3,500,000; Meductia, N. B., to United States boundary, $1,260,000; Long Lac to Nakima, Ont., $1,944,000; Thunder Hill Branch to Prince Albert Branch, Sask., $1,656,000; Bengough Branch past Fife Lake, Sask., $1,404,000; Turtleford Branch to near Hafford $2,313,000; Bunblane Branch to Mawrer, $2,767,000; Alliance Branch, Alberta, $1,034,000; Hanna Branch to Warden, Alberta, $1,445,000; Loverna Branch to Westerly, Alta., $1,362,000; Okanagan Branch to Kelowna and Lumly, $2,307,000; about $40,000 per mile. C. B. Brown, Montreal, ch. engr.

Ontario—Michigan Central Ry., 15th St., Detroit, Mich., plans to lay about 75 mi. new rails in Ontario this year and will reballast about 50 mi. between Villa Nova and United States border. $1,000,000. J. F. Diemling, ch. engr.

BIDS DESIRED

New Jersey—July 5, by S. Blum, Nutley, town clk. of Nutley, reconstructing 6,000 lin.ft. double track electric railway tracks, furnishing new rails, ties and ballast also laying 11,750 sq.yd. reclipped granite block on concrete, between tracks, on Franklin Ave. between Centre St. and Kingsland Rd. $135,000.

BIDS RECEIVED

New York—Transit Comn., 49 Lafayette St., New York City, June 20, switchback track and other miscellaneous work east of Queensboro Plaza Station, Corona Branch, Queensboro Rapid Transit R.R., Queensboro, Routes 36 and 37, Sect. 1, from B. T. and J. J. Mack, Inc., 200 Bway., New York City, $28,562. Noted June 14.

CONTRACT AWARDED

Florida—Florida East Coast Ry. Co., St. Augustine, constructing 1st section of Okeechobee-Miami extension, beginning at Okeechobee and running 20 mi. southward through Okeechobee and Palm Beach

Railways (Continued)

Counties, 25,000 cu.yd. earth excav., 125,000 cu.yd. earth fill, to J. N. Cole, Graham Bldg., Jacksonville. Noted June 7.

Michigan — Dept. Street Rys. St. Jean Ave., Detroit, special track work for street car lines, extensions and replacements, to W. Wharton, Jr. & Co., Easton, Pa., $41,360.

Wisconsin — Madison Street Rys., 2302 Fair Oaks Ave., Madison, will lay double track on East Johnson St. and extend track on Monroe St., by day labor. Private plans. Noted June 14.

Excavation, Drainage Irrigation

PROPOSED WORK

Fla., Bartow—Election July 17, to vote on $25,000 bonds opening up McKinney Creek to Peace River. C. V. Turner, city mgr.

Ia., Sioux City—Making plans changing channel of Perry Creek, 50,000 cu.yd. excav., also laying 14 x 39 ft. conduit. $335,000. L. N. Hintgen, Sioux City, engr.

Minn., Blue Earth—Faribault Co. making plans Judicial Ditch 6, 21,588 lin.ft. 6-12 in. new tile and reconstructing 55,491 lin.ft. 6-24 in. tile, etc. $25,000. Jones & Curtis, Fairmont, engrs.

Tex., Waxahachie—See "Miscellaneous."

Calif., Ravendale—Red Rock Irrigation Dist. having surveys made canals, dams, etc., for irrigation district, comprising 22,500 acres. About $40 per acre. Will vote on bonds for above. T. H. Means, 369 Pine St., San Francisco, consult. engr.

BIDS DESIRED

New York—Thomas Crimmins Contg. Co., Tuckahoe Rd. and Aqueduct, Yonkers, will sublet approximately 20,000 cu.yd. backfill and excavation, suitable for 40 ft. boom dragline machine, in Fort Hill and Yonkers.

Miss., Corinth — July 6, by Bd. Comrs. White Oak and Hatchie D. D. of Tippah and Alcorn Counties, at office T. H. Johnston, atty., Corinth, 246,327 cu.yd. drainage channels, etc. A. Livingston, Louisville, engr.

La., New Orleans—July 26, by Bd. Port Comrs., Court House, hydraulic dredging in Inner Harbor Navigation Canal between Lock and Louisville & Nashville R.R. bridge. J. H. Walsh, genl. mgr.; adv. this issue.

Mo., Trenton—July 11, by Bd. Supervs. Brimson D.D. of Grundy and Harrison Counties, at office of R. E. Kavanaugh, W. B. Hazen, 409 Empire Trust Bldg., St. Joseph, engr. Noted Nov. 30.

S. D., Sisseton — July 5, by Auditor Roberts Co. D. D. 1, 13,610 cu.yd. shallow ditch excav. and 11,750 ft. 6-24 in. tile. Dakota Eng. Co., 309-13 Western Natl. Bank Bldg., Mitchell, engrs.

Calif., Merced—July 10, by A. L. Cowell, secy. Merced Irrigation Dist., constructing Lateral Canal 9, Le Grand system, 47,434 ft. long, involving 50,000 cu.yd. earthwork, etc.; Lingard Lateral Canals, Le Grand system, 55,191 ft. long, 50,000 cu.yd. earthwork, etc. R. C. Starrett, ch. engr.

B. C., Vancouver—Dominion Government, Ottawa, Ont., will widen channel of first narrows by 500 ft. at entrance to Vancouver Harbor, 35 ft. deep, by day labor. $179,778 bonds voted.

CONTRACTS AWARDED

Wis., Biron (Wisconsin Rapids P. O.)—See "Miscellaneous."

Wis., Milwaukee—J. Hunholz, 2310 Vliet St., excavating for 6 story and basement 53 x 104 ft., brick and concrete apartment, plain foundation, to Cutter Constr. Co., 886 46th St. Noted May 24.

Minn., Albert Lea—C. Holway, aud. Freeborn Co., Judicial Ditch 9, 101,862 cu.yd. excav., leveling 25,428 lin.ft. spoil banks, 41,119 lin.ft. 6-40 in. drain tile, rein.-con. bulkhead and retaining wall, etc., to Rofdal & Curtis, Medford, $61,992. Noted May 24.

Minn., Alexandria — V. Thomas, aud. Douglas Co., Co. Ditch 23, 62,100 lin.ft. 6-30 in. drain tile, etc., to W. Bower, Long Prairie, $51,375. Noted May 31.

Minn., Fergus Falls—Otter Tail Co., May 25, Co. Ditch 70, furnishing 60,400 lin.ft. 6-24 in. drain tile, to Fergus Falls Tile Wks., Fergus Falls, $14,700; labor, to C. Jensen, Waseca, $9,469.

Tex., Houston—Harris Co. D. D. 12, c/o H. L. Washburn aud., 2,700,000 yd. excav. in Brays Bayou, to Howard Kenyon Dredging Co., 3603 McKinney Ave., Houston, $0.135.

Streets and Roads

PROPOSED WORK

N. Y., Dansville—Plans macadamizing 1.03 mi. Ossian St. $30,000. Engineer not announced.

N. Y., Jamestown—Plans paving 10th St. Livingston Ave., brick on concrete. $25,000. L. O. Bergman, city engr.

N. J., New Brunswick—Plans sheet asphalt paving on several streets. $151,450. A. Atkinson, Mine St., engr.

Pa., Pittston—Voted $275,000 bonds for street and sewer improvements. Engineer not announced.

Fla., Bartow—Election July 17, to vote on $75,000 bonds paving various streets. C. V. Turner, city mgr.

Fla., Bradentown—Comrs. Manatee Co. rejected bids grading, filling, bridging, creosoted piling and paving various streets. $50,000. McElroy Eng. Co., 32-34 Giddens Bldg., Tampa, engrs. Noted June 7.

Fla., Bushnell—Flagler Co. election July 10, to vote on $225,000 bonds paving "B" road Ocean Shore Impvt. Dist., rock, asphalt, macadam or concrete. J. C. Geiger, clk.

Fla., De Land—Volusia Co. election July 10, to vote on $225,000 bonds paving "A" road, Ocean Shore Impvt. Dist., 18 ft., rock, asphalt, macadam or concrete. S. D. Jordon, clk.

Fla., Tavares—Lake Co. election July 10, to vote on $100,000 bonds constructing roads and bridges in Yalaha, Okahunipka, Moscott and Graveland Dists. G. E. Heller, Tavares, engr.

Alabama—State Hy. Dept., Montgomery, having plans prepared grading and topsoiling 14.29 mi. Lineville-Delta Rd., Clay Co., $190,000; grading and gravel surfacing 11 mi. Linden-Thomaston Rd., Marengo Co., 12.128 mi. Jackson Highway, Franklin Co.; grading and surfacing with gravel and chert, 10.15 mi. CenterGadsden Rd., Cherokee Co., $95,000; grading, gravel surfacing and treated timber bridges on 10 mi. road from end of Federal Aid Project 73 to Mississippi State Line, Choctaw Co., $110,000. W. S. Keller, state highway engr.

Miss., Greenwood—Plans repaving 38,700 sq.yd. in business district and 120,000 sq.yd. new paving. W. S. Hawkins, engr.

Miss., Lexington—Plans paving 15,000 sq.yd. Court Sq. and Depot St. W. S. Hawkins, Greenwood, engr.

Kentucky—State Rd. Dept., Frankfort, having plans prepared surfacing Cumberland Ave., 16 ft. each side of boulevard, and Fitzpatrick Ave., 18 ft., total length 4,400 ft., State Project 38, Sect A., in city of Middlesboro, Bell Co. J. S. Boggs, state highway engr.

Kentucky—State Rd. Dept., Frankfort, having plans prepared grading 4 mi. Christopher-Jefferson Rd. (Hazard-Whitesburg Highway), State Project 4, Sect. A, Perry Co.; surfacing 3.56 mi. La Grange-New Castle Rd., State Project 19, Sect. A, Oldham Co. J. S. Boggs, state highway engr.

Ohio—Dept. Highways and Pub. Wks., Columbus, cancelled bids which were to be opened June 22, grading, bridging and paving 9.052 mi. roads in Brown Co., waterbound macadam; 3.435 mi. roads in Clermont and Perry Counties, bituminous macadam; 2.367 mi. road in Harrison Co., rolled sandstone base; 1.38 mi. road in Trumbull Co., bituminous macadam or rein.-con. Noted June 21.

Ohio—Dept. Highways and Pub. Wks., Columbus, cancelled bids which were to be opened June 19, grading, bridging and paving 14.331 mi. roads in Lawrence, Stark, Trumbull and Hardin Counties, also bridge in Lawrence Co. Noted June 7.

Ohio—Dept. Highways and Pub. Wks., Columbus, received no bids June 19, grading, bridging and paving 1.356 mi. Sect. "K" McConnelsville-Athens Rd., Morgan Co., bituminous macadam asphalt or tar, $39,084. Noted June 7.

Ohio — City of Columbus making plans filling, grading and waterbound macadamizing ½ mi. Eversole Rd., 16 ft., also 40 ft. concrete bridge, 18 ft. wide, on above road, Delaware Co. $60,000. C. B. Hoover, City Hall, Columbus, engr.

O., Canton—Stark Co. making plans paving 5 mi. Canton-Richville-Navarre Rd., 18 ft., probably brick, $175,000, state to appropriate $43,000 toward cost; 2 mi. Louisville-Ravenna Rd., 18 ft., brick $90,000, macadam $60,000, state to appropriate $26,000 toward cost. G. A. Sickafoose, Court House, engr.

Ind., New Albany—Bd. Pub. Wks. making plans hard surfacing, curbing and guttering Florence Ave., Vincennes and East 9th Sts., concrete or brick. $25,000. S. T. Mann, city engr.

Ill., Elizabeth—Making plans 11,000 sq.yd. concrete paving. $40,000. Consoer Eng. Co., 140 South Dearborn St., Chicago, engrs.

Ill., Elmhurst—Receives bids July 15, 2 mi. concrete paving. $112,000. E. Hancock, 2007 Ogden Ave., Chicago, engr.

Ill., Harvard—Plans bituminous macadam paving. $200,000. E. Hancock, 2007 Ogden Ave., Chicago, engr.

Ill., Palatine—Plans concrete paving Colfax St. $50,000. Consoer Eng. Co., 140 South Dearborn St., Chicago, engrs. Marr, Green & Co., 400 North Michigan Ave., Chicago, consult. engrs.

Ia., Marshalltown—Marshall Co. election soon to vote on $800,000 bonds to improve Lincoln Highway and various roads. G. Enderly, co. aud.

Kan., Ft. Scott—Bourbon Co. making preliminary surveys paving 4½ mi. Ft. Scott-Kansas City Rd., Sect. 1, 16 ft., vitr. brick or macadam. B. Boyle, Co. engr.

Kan., Independence—Montgomery Co. had plans prepared paving 6 mi. Independence-Elk City Rd., 16 ft., bituminous macadam. H. K. Hibbard, co. engr.

Neb., Hastings—Soon takes bids 40,000 yd. paving, various types. P. T. Naylor, Hastings, engr.

Mo., St. Louis—Soon takes bids resurfacing with asphalt 9,055 sq.yd. Hamilton St., 7,500 lin.ft. granite curb, $27,500; 2,850 sq. yd. Kingsbury St., asphalt or bitulithic, 1,900 lin.ft. concrete curb, $10,000. W. W. Horner, City Hall, engr.

Tex., Cisco—Making plans paving 68 blocks, incl. West 4th, 5th, 6th, 9th, Bway. East 5th, Ave. A. and South Ave. D, probably brick. $250,000. Elrod Eng. Co., 3206 Elm St., Dallas, engrs.

Tex., Corsicana—Navarro Co. plans election to vote on $4,500,000 bonds improving various roads. McClendon & Purnell, Corsicana, engrs.

Tex., Franklin—Robertson Co. making plans grading and gravel surfacing 15 m. State Highway 43 A, 16 ft. $120,032. L. A. Peterman, resident engr.

Tex., Rock Springs—Edwards and Kerr Counties making plans grading and topping 18 mi. road from here toward Kerrville, 18 ft., waterbound macadam. $168,000. W. E. Simpson Co., N. B. C. Bldg., San Antonio, engrs.

Okla., Barnsdall—Takes bids after July 3, for 7,000 sq.yd. concrete paving. $30,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Okla., Bartlesville—E. D. Kirkpatrick, engr., Bartlesville, takes bids about July 1, 20,000 sq.yd. concrete paving for city. Noted Apr. 26.

Okla., Paul Valley—Soon takes bids paving Dist. 18, various types. $30,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Okla., Sayre — Soon takes bids paving Dist. 8, 15,000 sq.yd. concrete. $56,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs. Noted June 14.

Okla., Tulsa—Tulsa Co. voted $2,000,000 bonds hard surfacing various roads. Noted Jan. 11.

Okla., Vinita—Craig Co. plans election soon to vote on $100,000 bonds for road work. Noted May 24.

Wash., Seattle — Bd. Pub. Wks. opens bids about Sept. 1, grading and paving 3 mi. 16th Ave. S. W. $100,000. J. D. Blackwell, city engr.

Calif., Oroville—Having plans prepared curbing, guttering and paving 22 blocks. To exceed $25,000. S. J. Norris, city engr.

Calif., San Diego—Common Council had plans prepared improving Ash St. between 5th and Atlantic Sts., 145,042 sq.ft. 2 in. asphaltic concrete on 3 in. bituminous, etc.; Beech St. between 5th and Atlantic Sts., 141,234 sq.ft. 2 in. asphaltic concrete on 3 in. concrete, etc. F. A. Rhodes, city engr.

Calif., San Francisco—City appropriated $15,000 to pave 2nd St. and $12,500 paving Main St. M. M. O'Shaughnessy, city engr.

Calif., San Francisco—City Supervs. appropriated $71,000 for repairs to Liberty, Sanchez and Collingwood Sts. M. M. O'Shaughnessy, city engr.

Calif., San Francisco—City and San Francisco Co., had plans prepared improving Jamestown St. between 3rd St. and Ingalls Ave., 18,548 sq.ft. artificial stone walks, 39,776 sq.ft. asphaltic concrete, etc. $25,000. M. M. O'Shaughnessy, city engr.

Que., Montreal—Plans asphalt surfacing 960 ft. Mousseau St., 30 ft., $13,720, 2,884 ft. Girouard Ave., 52 ft., $62,300; 5 ft. concrete sidewalks on 490 ft. Mousseau St., 1,070 ft. Clarke St., $5,108, 9 ft. concrete sidewalks on 122 ft. Victoria St., $810; concrete slab on 6,200 ft. Frontenac St., both sides, $4,744, 1,020 ft. Desjardins St., $808, 600 ft. Larivierie St., $485. E. Gauthier, city clk.

Que., Montreal—City soon takes bids surfacing 7 mi. Gouin Blvd., 18 ft., asphalt on concrete. $300,000. H. A. Terreault, Dept. Pub. Wks., engr.

Ont., Ft. William — City Council plans 9,000 sq.yd. concrete, asphalt or waterbound macadam paving, $50,000. C. B. Symes, city engr.

Ont., Newmarket — Plans to lay 12,000 sq.yd. concrete, asphalt or bitulithic pavement, $30,000-$50,000. James, Proctor & Redfern, 36 Toronto St., Toronto, engrs.

Streets and Roads (Continued)

BIDS DESIRED

Mass., Gardiner—July 2 by F. W. Proctor, supt. of streets, approximately 4,000 sq.yd. paving; adv. this issue.

Mass., Medford—June 29, by E. E. Gaffey, street comr., concrete and bituminous macadam paving. To exceed $100,000. Noted June 14.

N. Y., Brooklyn—July 5, by E. Riegelmann, boro pres., Boro Hall, asphalt paving Delaware Pl., Gelston and Tompkins Ave., Bay 31st, East 40th, 66th, 70th, 72nd, and 90th Sts.; recurbing 6th Ave.; grading, curbing and flagging Delaware Pl.

N. Y., New York—July 2, by J Miller, pres. Manhattan Boro, Municipal Bldg., repaving Spruce and Dey Sts., granite blocks, 78th and 112th Sts., sheet asphalt.

New Jersey—July 9, by State Hy. Comn., Trenton, sheet asphalt paving Rahway Ave. in Elizabeth, Union Co.; rein.-con. paving Bluff Rd.—Anderson Ave., and Broad Ave. —Glenn Rd., both in Bergen County. A. L. Grover, ch. clk.; adv. this issue.

N. J., Belleville—July 3, by Purchasing Agent Essex Co., Court House, Newark, storm drain in Rutger St. at Washington Ave.; also paving 25 mi. Rutgers St., 30-80 ft., 10 in. rein.-con. and granite block on 6 in. concrete, here. $36,000. W. A. Stickel, Court House, Newark, engr.

N. J., Bloomfield—See "Sewers."

N. J., Keyport—July 9, by T. L. Smith, mayor, and Boro Council, concrete paving Maple Pl. J. T. Hopkins, special boro engr.; adv. this issue.

N. J. Nutley—July 3, by G. C. Bergen, purch. agt. Essex Co. (Newark) improving 1.14 mi. Franklin Ave., here, 3 in. sheet asphalt or 2½ in. asphalt block on 6 in. concrete, also storm drain on above street. $130,000. W. A. Stickel, Court House, Newark, engr. Noted May 3, under Newark.

N. J., Nutley—See "Railways under New Jersey."

N. J., Plainfield—July 16, by Common Council, curbs, gutters, laying sewers and bituminous macadam pavement. J. J. Carroll, city clk.; adv. this issue.

Pa., Bolivar—July 14, by Boro. Council, rein.-con. paving 3,000 ft. 2nd and Market Sts., 24 ft. $25,000. W. M. Wynn and B. R. Hebrank, boro. engrs.

Pa., Pottsville—July 17 (change of date) grading, curbing and paving portions of several streets. J. H. Strauch, city engr.; adv. this issue. Noted May 24.

Pa., Steelton—July 5, grading, curbing and paving South 4th and Highland Sts. H. R. Rupp, 114 Walnut St., boro. secy.; adv. this issue.

Md., Baltimore—July 5 by Bd. Awards, Contr. 240-NA, 11,330 sq.yd. old granite block redressed and relaid. R. K. Compton, 214 East Lexington St., chn. paving comn.

Va., Richmond—July 9, at office A. J. Saville, dir. Pub. Wks., paving Broad St.; adv. this issue.

West Virginia — July 24, by State Rd. Comn., Charleston, grading and bituminous macadam paving Projects 3151 C and 48, Boone Co., Projects 3162 and 50, Clay Co.; concrete paving Projects 3176 and 3114 B and D, Brooke Co.; grading and concrete paving Project 3252 A, Pleasants Co., Project 3186, Preston Co.; brick paving Projects 3252 and 3089 Hancock Co., grading and waterbound macadam paving Project 3197 B, Tyler Co. and Project 3013, Hardy Co.; grading Project 3237, Mason Co.; constructing Five Mile Bridge 857, Project 3138, Mason Co.; concrete arch, Project 2064, Ohio Co. E. B. Carskadon, secy.; adv. this issue. Noted June 21.

Georgia—July 6, by State Hy. Dept., East Point, paving 74,544 sq.yd. Albany-Thomasville Rd., 1½ in. asphalt on 1½ in. binder course, Albany Co.; topsoiling 1,963 cu.yd. Elberton-Royston Rd., Federal Aid Project 330, Elbert Co.; surfacing 66,307 sq.yd. Waycross-Folkston Rd., 3 in. penetration macadam, Ware Co.

Florida—July 10, by State Rd. Dept., Tallahassee, constructing and improving 7 mi. Rd. 5, Project 564, Charlotte Co. W. F. Cocke, state highway engr.

Fla., Vero—July 11, by F. E. King, mayor, improving various streets, 19,700 cu.yd. sub-grading, 101,000 sq.yd. waterbound macadam paving, asphalt surface treatment, 65,000 lin.ft. concrete curbing, etc. $200,000. Carter & Damerow, Vero, engr.

Alabama—July 6, by W. S. Hardin, connected with State Highway Dept., Montgomery, grading and paving 11 mi. Marion and Browns Station Rd., 20 ft., Marion and Dallas Counties. W. S. Keller, state highway engr.

Miss., Laurel—July 9, by Mayor and Bd. Comrs., paving, etc., various streets. J. H. Pace, street comr.; adv. this issue.

Miss., Mayersville—July 2, by Hy. Comrs. 5th Supervs. Dist., Issaquena Co., gravel surfacing 13 mi. road, 30,000 ton gravel f.o.b. Grace and Glen Allen. W. L. Thompson, 324 Weinberg Bldg., Greenville, engr.

Louisiana—July 11, by State Hy. Dept., Baton Rouge, grading, constructing bridges and gravel surfacing 9.237 mi. Burnside-Hope Villa Highway, State Project 130, Ascension Parish; 4.64 mi. Monroe-Rayville Highway, Federal Aid Project 118, Ouachita Parish; 2.44 mi. Rayville-Monroe Highway, Federal Aid Project 119, Richland Parish. J. M. Fourmy, state highway engr.

Tennessee—July 6, by State Hy. Dept., Nashville, surfacing, etc., 10.7 mi. road, bituminous macadam on limestone, 16 ft., Robertson Co. Former bids rejected. J. G. Creveling, comr. Noted June 14.

Ky., Louisville—July 3, by Bd. Pub. Wks., waterbound macadam or brick paving various streets and alleys, mainly on Walnut, 35th and 37th Sts. To exceed $25,000.

O., Circleville—July 10, by N. R. Huston, dir. Pub. Serv., sandstone curbing and vitr. brick paving 5,338 sq.yd. Ringgold Pike. $26,000.

O., Dayton—July 2, by Dept. Pub. Serv. paving 4,500 sq.yd. Grafton Ave., vitr. brick $21,201; 1,500 sq.yd. concrete on 2 alleys, $6,000. I. E. Houk, city engr.

O., Grandview Heights (Columbus P. O.) —July 7, by E. Gross, village clk., grading and asphaltic concrete paving 11,876 ft. Parkway N, Parkway Dr., Timberman Rd., Ridgeway Pl., Mulford, Thomas, Holly, Norton, Dover, Glenn and 2nd Aves., $170,637; two driveways with park between on Northwest Blvd., 1,900 ft., single and 2,975 ft. double driveways, each 22 ft., $99,796. Burgess & Nipel, 223 East Broad St., Columbus, engrs. Noted Apr. 12.

Michigan—July 3, by State Hy. Dept., Lansing, grading 14.654 mi. Federal Aid Project 73, Sects. A, B, D and E. 115,384 cu.yd. earth excav., etc. F. F. Rogers, Monroe Co., state comr.

Michigan—July 6, by State Hy. Dept., Lansing, grading and surfacing 5.227 mi. Federal Aid Project 104, Mason Co., 55,199 sq.yd. concrete, 22,748 cu.yd. earth excav. F. F. Rogers, state comr.

Michigan—July 9, by State Hy. Dept., Lansing, fine grading and surfacing 0.568 mi. Federal Aid Project 35, Sect. F, Jackson Co., 4,380 sq.yd. asphalt, 837 sq.yd. concrete, 2,850 lin. ft. concrete curb and gutter, etc. F. F. Rogers, state comr.

Michigan — July 9, by State Hy. Dept., Lansing, grading and surfacing 1.131 mi. State Trunk Line Rd. 55-4, Sect. A, 13,295 sq.yd. concrete, 5,016 cu.yd. earth excav. F. F. Rogers, comr.

Michigan—July 10, by State Hy. Dept., Lansing, grading and surfacing 1.94 mi. State Trunk Line Rds. 11-48 and 13-45, Petoskey Co., 20,510 sq.yd. asphalt, concrete or bituminous concrete, 7,686 cu.yd. earth excav.

Michigan—July 11, by State Hy. Dept., Lansing, grading and surfacing 5.977 mi. Federal Aid Project 102, Sect. A, Antrim Co., 56,571 sq.yd. gravel, 51,188 cu.yd. earth excav.

Michigan—July 12, by State Hy. Dept., Lansing, grading and surfacing 53,676 sq. yd. Federal Aid Project 121, Macomb Co.; 14,819 sq.yd. State Trunk Line Rds. 53-2 and 53-7 Sect. A, Romeo Co., asphalt, concrete or bituminous concrete. F. F. Rogers, state comr.

Mich, Scottsville—July 6, by State Hy. Dept., Lansing, grading and surfacing 0.512 mi. State Trunk Line Rd. 11-37, 5,055 sq.yd. asphalt, concrete or bituminous concrete, etc.

Ill., Chicago — July 2, at office H. A. Zender, supt. Pub. Serv. Cook Co., paving with (a) bituminous concrete with binder course (b) without binder course (c) cement concrete 1,798 ft. Sect. 99A-15 D, Route 1-C, New Trier Twp. (a) $15,230 (b) $14,409 (c) $12,069; 2,095 ft. Sect. 91-B-15D, Route 34, Proviso Twp. (c) $13,720; 700 ft. Sect. 73B-15D, Route 23, Orland Twp. (c) $5,239; 2,639 ft. Sect. 166-15D, Route 29, Worth Twp., (a) $34,-258 (b) $32,454 (c) $27,314; 3,952 ft. Sect. 156-15D, Route 51, Thornton Twp. (a) $41,324 (b) $39,455 (c) $34,124; 7,975 ft. Sect. 165-15D, Route 20, Worth Twp. (a) $107,471 (b) $102,017 (c) $86,467; 9,379 ft. Sect. 29A-15D, Route 20, Worth Twp. (a) $76,793 (b) $72,572 (c) $60,539.

Ill., La Grange—July 15 for 14,000 sq.yd. concrete paving. $60,000. E. Hancock, 2007 Ogden Ave., Chicago, engr.

Ill., Mascoutah—Receiving bids concrete paving Railway Ave. and Market St., $30,-000. Consoer Eng. Co., 140 South Dearborn St., Chicago, engrs.

Ill., Western Springs—July 15, for 160,-000 sq.yd. concrete sidewalks. $50,000. E. Hancock, 2007 Ogden Ave., Chicago, engr.

Michigan—July 2, by State Hy. Dept., Lansing, grading and surfacing 13,724 sq.yd. State Trunk Line Road 17-6, Sect. A, Ypsilanti Co., 6,056 sq.yd. State Trunk Line Road 17-N, Sect. B, Ann Arbor Co., 46,330 sq.yd. Federal Aid Project 74, Sect. D, and 17,447 sq.yd. State Trunk Line Road 55-2, both Washtenaw Co., all with asphalt, concrete or bituminous concrete. F. F. Rogers, state comr. Noted June 21.

Wis., Edgerton—July 9, by G. Blanchard, clk., concrete paving 16,055 sq.yd. Victoria and North 3rd Rds., Randolph, Blaine, West and High Sts., $50,000-$60,000. A. W. Ely, 29 West Milwaukee St., Janesville, engr.

Minn., Fergus Falls—July 6, by H. J. Collins, city clk., improving various streets, 17,000 sq.yd. rein.-con., vibrolithic concrete, bitulithic, asphaltic concrete, vitr. brick or wood block pavement, resetting 3,100 lin.ft. old curb, 1,043 lin.ft. straight curb, 420 lin.ft. circular curb, etc. $50,000. S. A. Siverts, Jr., 600 Jewelers Exch. Bldg., Minneapolis, engr.

Minn., East Grand Forks—July 9 (change of date), by A. N. Briggs, village clk., improving various streets, about 42,000 sq.yd. rein.-con., bitulithic and 4 grades of asphaltic concrete, $110,000. Bids on an additional 8,000 sq.yd. for 5th and 6th Sts., will probably be asked later. L. P. Wolff, 1000 Guardian Life Bldg., St. Paul, engr. Noted May 31.

Minn., St. Paul—July 9, by G. J. Ries, aud. Ramsey Co., Project 23-54, 16,110 cu.yd. earth excav., 16,588 cu.yd. overhaul, 38,240 sq.yd. 1 course 7½ in. rein.-con. pavement, alternate on 37,000 sq.yd. asphaltic concrete Class B wearing surface, 37,000 sq.yd. concrete base, and 4,740 lin.ft. curb and gutter, etc., $100,000; Project 23-62, Larpenteur Ave., 1,460 cu.yd. excav., 2,754 cu.yd. overhaul, 5,946 sq.yd. 1 course rein.-con. pavement, $15,000.

Kan., Emporia—July 6, by Lyons Co., paving 21,148 sq.yd. roads, brick or concrete.

Neb., Lincoln—July 5, by J. P. Morgan, clk., Lancaster Co., surfacing 9.68 mi. Havelock Co. line Rd., 136,294 yd. gravel.

Missouri — July 6, by State Hy. Dept., Jefferson City, grading 30.473 mi. roads in Stone, Clinton, Dent, Marion and Shelby Counties; grading and paving 2.925 mi. in Ralls and Lafayette Counties; grading and graveling 7.38 mi. highways in Warren, Perry, St. Francois and Pike Counties; grading and concrete paving 25.422 mi. roads in St. Louis, Mercer, Daviess, De Kalb, Franklin, Gasconade, Osage and Iron Counties; graveling 2.358 mi. road in St. Charles Co.; concrete block paving State Project Route 2, Sect. 34 A, Howard Co. B. H. Piepmeier, state highway engr.

Mo., Kansas City—July 9, by L. Koehler, engr., Court House, resurfacing 124,616 sq. yd. Spring Branch Rd., new tar cushion top, for Jackson Co.

New Mexico — July 18, by State Hy. Comn., Santa Fe, grading and surfacing 5.871 mi. Federal Aid Project 36, Sandoval Co., 10,907 cu.yd. concrete, etc.; 0.721 mi. Federal Aid Project 118, Bernalillo Co., 1,859 cu.yd. concrete 13:5 mix, 7,589 lin.ft. concrete curb and gutter, 12:4 mix, 13,388 cu.yd. on course crushed stone, etc.; 3.099 ous concrete wearing surface, or 2 in. warrenite bitulithic, etc.; 15.981 mi. Federal Aid Project 43, Torrance Co., 7,520 cu.yd. gravel; 12,321 mi. Federal Aid Project 77, Torrance Co, 57,564 cu.yd. Class 1 and 2 excav., 14,759 cu.yd. one course gravel, etc.; 10.523 mi. Federal Aid Project 94, Union Co., 18,282 cu.yd. Class 1 excav., 16,793 cu.yd. one course crushed stone, etc.; 3.099 mi. Federal Aid Project 91-B, Colfax Co., 4,943 cu.yd. one course gravel, etc., also small bridges. J A. French, state highway engr.

Tex., Ft. Davis—July 9, by R. Barnet, judge Jeff Davis Co., grading, etc., 6.07 mi. State Highway 12, 795.9 cu.yd. concrete, 18,165 cu.yd. roadway, 24,179 cu.yd. borrow, 1,250 cu.yd. loose and 1,000 cu.yd. solid rock excav., 72,143 lb. reinforcing. $38,250. P. B. Probst, co. engr.

Okla., Sayre—July 5, by J. T. Means, city clk., grading and paving 7 blocks Bway., Walnut and Main Sts., 13,200 sq.yd. concrete, 3,825 lin.ft. curbing, etc. $56,331. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs. Noted May 24.

Okla., Weleetka—July 5, by W. W. Griffin, clk., grading and paving 3 blocks Main St., 3,700 sq.yd. vertical fibre brick, 3,000 lin.ft. concrete curbing, etc., $29,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Okla., Wynnewood—July 2, by J. H. Boozer, city clk., grading and paving 5 blocks Commercial Ave., 6,500 sq.yd. vitr. brick. $32,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs. Noted May 17.

Colo., Denver—July 3, by Dept. Impvts. & Parks, grading and gravel surfacing 107,-000 sq.yd. in North Side Impvt. Dist. 32. $146,084. A. K. Vickery, City Hall, city engr.

Streets and Roads (Continued)

Washington — July 10, by State Hy. Comn., Olympia, grading and surfacing with crushed gravel 6.9 mi. Chelan-Okanogan Highway, Riverside to Omak, Okanogan Co., and 6.3 mi. Inland Empire Highway, Pomona to Selah, Yakima Co. J. Allen, state highway engr.

Wash., South Bend—July 15 by City Comrs., paving Main St. et al., 13,240 sq.yd. 6 in. concrete, $58,516. H. A. Gibbs, South Bend, engr.

Calif., Marysville — July 3, by Supervs. Yuba Co., grading 12,000 lin.ft. Bullards Bar Rd., mostly hard packed earth with some loose rock. J. R. Meek, co. surv.

Quebec—July 6, by J. L. Boulanger, minister Dept. of Roads, Quebec, gravel surfacing 45,904 ft. Richmond-Tamasha Highway, in Richmond. G. Henry, Dept. of Roads, Quebec, engr.

BIDS RECEIVED

Rhode Island — State Bd. Pub. Rds., Providence, June 22, rein.-con. paving 11,340 cu.yd. Federal Aid Project 18, Contr. 2305, from A. D. Bridges Sons, Hazzardville, Conn., $8.15 per cu.yd., total $232,605. Noted June 14.

N. Y., Binghamton—Paving with (1) concrete (2) rein.-con. (3) bitulithic (a) Newton Ave. (b) Charles St. (c) Mygatt St., from Clark Constr. Co., Binghamton, (1a) $6,655 (2a) $7,180; Municipal Constr. Co., Binghamton, (3a) $7,321 (3b) $6,551 (3c) $21,469.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, June 20, grading, curbing and flagging (1) Coney Island Ave. (2) Kingshighway (3) 76th St. (4) 77th St. (5) 81st St., curbing and flagging where necessary on (6) Lefferts Ave., sheet asphalt paving (7) Newport St. (8) Osborn St. (9) Tehama St., from E. J. Galway, (1) $6,536; H. and B. Contg. Co., (2) $85,764; F. Persicano, 350 Fulton St., (3) $5,919; L. Mangeri, 190 31st St., (4) $5,080 (5) $3,342; Galco Contg. Co., (6) $5,071; Borough Asphalt Co., 1301 Metropolitan Ave., (7) $3,392 (8) $13,735 (9) $10,327. Noted June 14.

N. Y., Brooklyn—Park Bd., Municipal Bldg., New York, June 21, grading, curbing and sheet asphalt paving Fort Hamilton Parkway, here, from Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., $107,281. Noted June 14.

N. Y., Lockport—F. Krull, clk., Niagara Co. June 19, macadamizing 4.6 mi. Coomer Rd. in Newfane, from Staple, Mumm & Beals, Buffalo, $90,439, engrs. est. $85,669; paving 5 mi. Military Rd. in Niagara, from Read Coddington Eng. Co., Niagara Falls, gravel and concrete, $25,537, stone and concrete $24,257. Noted May 17.

N. Y., New York—Park Bd., Municipal Bldg., June 21, repaving Mosholu Ave., Van Cortland Park, from B'way to Golf Links Rd., from Interboro Asphalt Co., 2306 Creston Ave., $69,954. Noted June 14.

N. Y., New York—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., June 21, repaving (1) White Plains Rd. (2) Jerome Ave. (3) Jerome Ave. (East 176th St.) (4) Melrose Ave. (5) Boston Rd., paving (6) Tiebout Ave. all foregoing granite blocks, (7) East 172nd St. (8) West 238th St., both bituminous concrete, (9) Charlotte St., sheet asphalt, grading, building inlets and receiving basins in (10) Godwin Terrace, grading, laying sidewalks, crosswalks and curbing (11) Cruger Ave. (12) East 157th St., grading, regrading, etc. (13) Bryant Ave., from Casper Helbock, Inc., Harlem River and 150th St., (1) $209,790; Leonard Paving Co., 233 Bway., (2) $153,764; Asphalt Constr. Co., 208 Bway., (3) $290,491 (4) $137,499; Regan Towers Co., 124 West 121st St., (5) $26,394; C. D. Beckwith, Inc., 2875 Bway., (6) $66,524; Brusstar Constr. Co., Harlem River and 150th St., (7) $9,264 (8) $19,519 (9) $5,984; Spedeo Contg. Co. (10) $4,557; Spadaro & Turiano, 3185 East Tremont Ave., (11) $5,863; M. Del Balso, 660 East 221st St., (12) $20,749; P. J. Kearns Contg. Co., 2306 Creston Ave., (13) $44,437. Noted June 14.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., June 21, changing park strips on Park Ave. from 34th to 39th Sts., from P. T. Cox Contg. Co., 154 Nassau St., $68,596. Noted June 14.

N. Y., Salamanca—From C. N. Carli, Olean, paving with (a) brick (b) concrete Kent Ave. (a) $19,308 (b) $14,837, East Clinton St. (a) $18,921 (b) $14,659, Nelson St. (a) $4,814 (b) $3,681.

N. Y., Syracuse—Bd. Contr. & Supply, June 18, paving ½ mi. West Brighton Ave., from J. H. Gallup, Union Bldg. asphalt $65,879, bituminous concrete, $63,768.

N. J., Trenton—Mercer Co., June 19, concrete paving 1.7 mi. Scotch Rd., from D. Klockner, 1601 Nottingham Way, $112,906. Noted June 7.

BRIDGE—ASTORIA, ORE.

Bids were opened by State Highway Comn., Salem, Apr. 17, for constructing bridge over Lewis and Clark Rivers on Roosevelt Highway, (A) Pacific Bridge Co., foot of East Salmon St., (awarded contract); (B) M. Trieweller; (C) Parker & Banfield. Contractors all of Portland. The unit bids were as follows:

	A	B	C
2,000 cu.yd. excavation	$9.90	$12.56	$16.00
14,900 lin.ft. piling	.52	.716	.58
12,500 lin.ft. approach piling	.43	.41	.47
6,500 lin.ft. protection piling	.43	.43	.40
840 cu.yd. sealing concrete	23.30	17.25	16.00
830 cu.yd. class A concrete	23.70	26.00	26.00
100 cu.yd. class B concrete	20.00	24.00	30.00
180 cu.yd. concrete counterweight	17.80	16.50	20.00
88,000 lb. reinforcing bars	.0575	.052	.055
280,000 lb. structural steel	.095	.11	.125
70,000 lb. machinery	.39	.375	.37
710 lin.ft. trestle superstructure, cap and girder 20 ft. wide, 1-8 ft. sidewalk on brackets	16.00	16.40	17.00
75,000 ft. b.m. lumber	58.00	70.00	75.00
*Electric control, full magnetic, 440-220-110 volts	8,240.00	8,339.00	8,200.00
Electric control, full magnetic, 220-110 volts	6,884.00	7,951.00	7,450.00
Electric control, semi-magnetic, 440-220-110 volts	7,215.00	7,371.00	7,250.00
Electric control, semi-magnetic, 220-110 volts	6,455.00	7,158.00	7,010.00
200 lin.ft. submarine cable	3.25	3.60	2.65
2 pier houses	625.00	650.00	1,050.00
Machinery room (lump sum)	225.00	1,083.00	800.00
Plumbing (lump sum)	400.00	404.00	500.00
2 gates	740.00	766.00	750.00
Fog bell (lump sum)	125.00	175.00	150.00
150 balance blocks, 1 cu.ft. concrete	1.00	1.50	1.00
550 sq.ft gunnite protection	1.25	1.30	2.00
Extended totals	$170,837	$177,973	$184,573

*Accepted.

Pa., Ebensburg—Supervs. Susquehanna Twp., c/o H. T. Jones, controller Cambria Co., paving 3.25 mi. road from Emeigh Run to Plattsville, 16 ft., one course rein.-con. and hillside brick on concrete, from J. L. Elder, Ebensburg, $208,634. Noted June 14.

Alabama—See "Bridges."

Alamaba—State Hy. Dept., Montgomery, grading and gravel surfacing 23.655 mi. road from Demopolis to Linden and Millers, Marengo Co., from W. K. Saulsbury & Co., 1322 South 19th St., Birmingham, $368,031. Noted June 7.

Kentucky—State Hy. Dept., Frankfort, grading 7.767 mi. Stanton-Campton Rd., State Project 4, Sect. C, Powell Co., using cement rubble and concrete pipe, from Costello Bros., Henson Bldg., Knoxville, Tenn., $77,184, concrete masonry and concrete pipe from Codell Byars & Co., Winchester, $86,185; grading 6.088 mi. Pikesville-Shelby Creek Rd., State Project 6, Sect. C, Pike Co., from Sutton Constr. Co., Ashland, using concrete pipe $106,239, vitr. pipe $109,497; surfacing with waterbound macadam 4.995 mi. Lexington-Harrodsburg Rd., State Project 47, Sect. A, Jessamine Co., from W. Lutes & Co., Lexington, $117,477, surface treating above road from R. B. Tyler & Co., 114 South 4th St, Louisville, $5,909.

Ohio—Dept. Highways and Pub. Wks., Columbus, June 19, grading, bridging and paving roads with (1) brick (2) plain concrete (3) bituminous macadam asphalt (4) bituminous macadam tar (5) rein.-con. (6) brick, macadam foundation (7) brick, concrete foundation (8) sheet asphalt (9) Kentucky rock asphalt (a) 0.514 mi. Sect. "D" **Piqua St. Marys Rd.**, Auglaize Co. (b) 3.523 mi. Sect. "D" **Dayton-Greenville Rd.**, Darke Co. (c) 0.474 mi. Sect. "Aracaman East" **Dayton-Greenville Rd.**, Darke Co. (d) 0. 707 mi. Sect. "K" **Washington-London Rd.**, Fayette Co. (e) 4.393 mi. Sect. "G" **Portsmouth-Columbus Rd.**, Franklin Co. (f) 2.148 mi. Sect. "R" **Portsmouth-Columbus Rd.**, Franklin Co. (g) 0.606 mi. Sect. "D-1" **Woodsfield-Clarington Rd.**, Monroe Co. (h) 5.785 mi. Sects. "G and L" **Mt. Gilead-Galion Rd.**, Morrow Co., (i) 3.925 mi. Sect. "D" **Eaton-Hamilton Rd.**, Preble Co. (j) 4.05 mi. Sect. "E" **Eaton-Greenville Rd.**, Preble Co. (k) 1.596 mi. Sect. "P" **Cleveland-Massilon Rd.**, Stark Co., (l) 3.374 mi. Sect. "C" **Bowling Green-Waterville Rd.**, Wood Co., from Wapakoneta Cement Block Co., Wapakoneta, (1a) $19,239 (1b) $139,470 (1c) $24,504; J. E. Karsch & Sons, Celina, (2a) $15,636 (3a) $13,603 (4a) $13,603 (6d) $29,838; E. and G. Alexander, North Star, (5b) $82,580; R. Doaust, Defiance, (5c) $18,422 (5h) $158,752 (2i) $132,366; W. H. Wingwold, Chillicothe, (7d) $27,212; L. L. Aller, Worthington, (3e) $112,033 (6e) $181,660 (7e) $183,665 (6f) $107,660 (7f) $102,366; Burns-Williams Co., Columbus, (4e) $113,700; D. Aller, Findlay, (8e) $157,158; J. C. McCann, 191 Belvidere Ave., Columbus, (3f) $69,071 (4f) $69,071 (3h) $127,536 (4h) $127,536; W. W. Patton, Woodsfield, (3g) $36,489; H. F. Ault & Son, Mt. Gilead (1h) $205,699 (9h) $170,093; Eldorado Paving Co., Eldorado (1i) $162,086 (9i) $128,163 (2j) $124,462; H. E. Pratt Co., Mt. Blanchard, (9j) $122,374; Holmes Constr. Co., Wooster, (1k) $78,170; J. H. Blausey, Woodville, (3l) $48,978 (4l) $50,023. Noted June 7.

Ohio—Dept. Highways and Pub. Wks., Columbus, June 22, grading, bridging and paving (1) 5.736 mi. Sect. "M-1" **Athens-Pomery Rd.**, Athens Co. (2) 3.241 mi. Sect. "G-1" **Springfield-Xenia Rd.**, Clark Co. (3) 2.548 mi. Sect. "G 2" **Springfield-Xenia Rd.**, Clark Co. (4) 1.532 mi. Sect. "S" **Wellsville-Salineville Rd.**, Columbiana Co. (5) 3.001 mi. Sect. "M" **Toledo-Angola Rd.**, Fulton Co. (6) 4.33 mi. Sect. "F" **Springfield-Xenia Rd.**, Greene Co. (7) 2.5 mi. Sect. "H" **Springfield-Xenia Rd.**, Green Co. (8) 0.975 mi. Sect. "I" **Roundhead-McGuffey Rd.**, Hardin Co. (9) 3.402 mi. Sect. "A" **Urbana-West Jefferson Rd.**, Madison Co. (10) 2.79 mi. Sect. "C" **Youngstown-Lisbon Rd.**, Mahoning Co. (11) 4.109 mi. Sect. "O" **Medina-Norwalk Rd.**, Medina Co. (12) 2.351 mi. Sect. "T-1" **Akron-Youngstown Rd.**, Portage Co. (13) 3.066 mi. Sect. "T-2" **Akron-Youngstown Rd.**, Portage Co. (14) 5.084 mi. Sects. "S-1" and "U-1" **Ohio River Rd.**, Scioto Co. (15) 0.557 mi. Sect. "E" **Cleveland-Sandusky Rd.**, Erie Co. (16) 1.954 mi. Sect. "A" **Washington-Bloomington Rd.**, Fayette Co. (17) 4.5 mi. Sect. "H-2" **Columbus-Washington C. H. Rd.**, Franklin Co. (18) 1.761 mi. Sect. "H" **Ohio River Rd.**, Hamilton Co. (19) 5.791 mi. Sect. "C" **Newark-New Lexington Rd.**, Licking Co. (20) 2.615 mi. Sect. "B" **Minerva-Sandyville Rd.**, Carroll Co. (21) 1.002 mi. Sect. "E" **Archbold-Fayette Rd.**, Fulton Co., with (a) brick (b) rein.-con. (c) bituminous macadam, asphalt (d) bituminous macadam, tar (e) concrete (f) bituminous concrete (g) waterbound macadam (h) bitoslag (i) warrenite bitulithic; grading (22) 0.695 mi. Sects. "F" and "J" **Jackson-Pomeroy Rd.**, Jackson Co., concrete bridge on (23) Sect. "Lisbon" **Lisbon-Salineville Rd.**, Columbiana Co., (24) Sect. "B" **Delaware-Marysville Rd.**, Delaware Co., steel superstructures and concrete substructures on (25) Sect. "D" **Celina-Greenville Rd.**, Darke Co., from H. E. Pratt Constr. Co., Mt. Blanchard, (1a) $303,866 (1c) $251,283 (1d) $251,283; Eberbach Constr. Co., Pomeroy, (1b) $297,617; D. M. Roach, Defiance, (2b) $93,136 (3b) $70,462; C. V. Rector, Lima, (2d) $74,350 (3d) $60,893; E. A. Freshwater & Sons, Painesville, (4e) $60,619; LaBoiteaux & Hayes, Toledo, (5b) $94,118 (21b) $28,405; E. L. Reeb, Lima, (5c) $92,347; Putnam & Shindeldecker, Van Wert, (5d) $77,902; Weeks Constr. Co., Dayton, (6c) $102,938 (6d) $103,792 (7e) $58,287 (7d) $58,980; Lewis & Copeland, Lima, (6b) $134,484 (7b) $70,980 (9b) $103,694; Wapakoneta Cement Block Co., Wapakoneta, (8b) $30,249 (11a) $160,274; W. D. Winchell Co., 337 Siebert St., Columbus, (9a) $130,672; A. Collucci, Youngstown, (10a) $72,200; G. S. Mellert-Weidner Co., Medina, (11b) $135,449; P. T. McCourt, Akron, (12f) $78,436 (13f) $115,823; Turner Contg. Co., Park Theatre Bldg., Youngstown, (12b) $71,930 (13b) $105,536; S. Monroe & Son, Portsmouth, (14a) $240,702; Highway Constr. Co., 903 Lorain Co. Bank Bldg., Elyria, (15f) $29,885; R. Stone Co., Lima, (16c) $25,679 (15d) $25,679; W. M. Gray, Columbus, (17g) $48,818; Gaddison Constr. Co., Cincinnati, (18e) $56,865; Pub. Works Constr. Co., Cincinnati, (18h) $97,594; Scully Bros., Cincinnati, (18h) $97,594; Hinkle & Sullivan, Cincinnati, (18h) $97,594 (18i) $97,294; F. E. Francis, Columbus, (19c) $69,065; E. N. and G. N. Purdum, Columbus, (19d) $73,489; G. Had-

Streets and Roads (Continued)

ley, 204 Goldberg Bldg., Canton, **(20a)** $131,526; W. McKinnis, Jackson, **(22)** $10,-036; Cox & Heslep, Kensington, **(23)** $10,-004; Independent Constr. Co., Lorain, **(24)** $8,350; Hinton & Smalley, Celina, **(25)** $14,533. Noted June 21.

O., Euclid—Grading and laying (1) concrete or (2) stone sidewalks on Bliss Rd., from F. B. Stein, Euclid, (1) $43,084; Ohio Quarries Co., Citizens Bldg., Cleveland, (2) $53,929.

Tex., Gonzales—Gonzales Co., grading and gravel surfacing 3.66 mi. State Highway 29, 19,255 cu.yd. roadway and 17,491 cu.yd. borrow excav., 668.3 cu.yd. concrete, 70,277 lb. reinforcing, from D. H. Buchanan, Temple, $35,570; 11,657 cu.yd. gravel furnished by county. Engrs. est. $48,120. Noted June 7.

Calif., Hanford—Paving portions 5th, Irwin and Phillips Sts., etc., 1½ in. warrenite bitulithic or 4 in. bituminous, from California Constr. Co., 58 2nd St., San Francisco, $74,703.

Calif., Los Angeles—Grading and paving road between Coast Blvd. and Hyperion Sewage Plant, 63,766 sq.ft. concrete, 32,132 yd. excav., from W. D. McCray, Amer. Bank Bldg., $34,400. Noted May 24.

Calif., Madera—From Thompson Bros., G and Divisadero Sts., grading, concrete curbing, guttering and bituminous paving Yosemite Ave., $38,146; 6th and B Sts., $35,223. Noted June 14.

Calif., San Diego—Common Council improving Julian and Marcy Aves., from California Constr. Co., Union Bldg., 215,171 sq.ft. 1½ in. asphaltic concrete on 2½ in. bituminous at $0.163, etc., total $35,152. Noted Apr. 12.

Que., Montreal—Asphalt surfacing, 2 in. thick, **(1)** 4,200 sq.yd. Lebrin St. **(2)** 4,400 sq.yd. Mercier St. **(3)** 1,858 sq.yd. St. Hubert St. **(4)** 8,050 sq.yd. Esplanade Ave. **(5)** 3,400 sq.yd. Chomedy St.; asphalt surfacing, 3 in. thick **(6)** 4,005 sq.yd. Jeanne Mance St. **(7)** 5,738 sq.yd. Ryde St. **(8)** 6,700 sq.yd. St. Charles St. **(9)** 6,500 sq.yd. Knox St. **(10)** 11,214 sq.yd. Eadie St., from B. Brault, Ltd., 2855 Rosemont Blvd., **(1)** $20,460 **(2)** $21,980 **(6)** $15,050; Quinlan, Robertson & Janin, Ltd., 52 Duluth Bldg., **(5)** $19,815 **(7)** $23,360 **(8)** $25,590 **(9)** $24,222 **(10)** $51,124; Sicily Asphaltum Paving Co., 60 St. Viateur St., **(3)** $8,964 **(4)** $29,570.

CONTRACTS AWARDED

Massachusetts—State Hy. Comn, Boston, sand and asphalt surfacing 8 mi. highway through Edgartown and Tisbury, to M. F. Roach, East Bridgewater, $142,484. Noted June 7.

R. I., Ashland—Water Supply Bd., City Hall, Providence, relocating Plainfield Pike by means of 65 ft. causeway across Scituate Reservoir, here, 5,000 sq.yd. dry earth and 2,000 cu.yd. dry rock excav., 230,000 cu.yd. borrow, 10,000 cu.yd. broken stone, 28,000 cu.yd. rip rap, 4,000 bbl. cement, 120,000 lb. steel and 3,000 cu.yd. rein.-con. for culvert, to T. F. McGovern, 95 Main St., Southbridge, Mass., $288,400. Engrs. est. $250,-000. Noted June 21.

N. Y., Batavia—Bitulithic macadamizing Hutchins and South Liberty Sts., to O. Costich Co., Rochester, $18,043 and $22,962 respectively.

N. Y., Brooklyn — E. Riegelmann, boro pres., Boro Hall, to Brooklyn Alcatraz Asplant Co., 407 Hamilton Ave., curbing and asphalt paving Bay 22nd St. $3,557, 16th Ave. $25,628, East 10th St. $18,763, Highlawn Ave. $17,384; to Uvalde Asphalt Paving Co., 1 Bway., New York, Farragut Rd. $9,722, Stoddart Pl. $2,693, 7th Ave. $4,278, Delemere Pl. $12,570, 54th St. $18,414; to Cranford Co., 52 9th St., Ave. L $4,399, 56th St. $9,316, 58th St. $9,419, 78th St. from 15th to 16th Aves., $8,512, 78th St. from 17th to 18th Aves. $9,179, 83rd St. $10,768, Bay 35th St. $19,224, East 15th St. $10,332, 61st St. $10,006, 75th St. $12,348; to Borough Asphalt Co., 1301 Metropolitan Ave., Louis St. $12,303, Ovington Ave. $16,694; to Hale Contg. Co., 1250 Jefferson St., Bergen Pl. $4,817, Ave. L $6,540, 17th Ave. $2,756, 54th St. $3,175, 73rd St. $6,590; to Cleveland Trinidad Paving Co., Flushing, East 8th St. $26,609, East 9th St. $10,701. Noted June 14.

N., Y, Lockport—F. Krull, clk. Niagara Co., paving 3.744 mi. Creek Rd. in Youngstown, concrete, to W. C. Rich, Youngstown, $82,324; 2.86 mi. Sect. 3 Lockport Rd., in Pendleton and Cambria, stone, 4.107 mi. Town Line Rd., concrete, 4.162 mi. Sect. 2 Creek Rd., in Pendleton, concrete, and resurfacing 1.47 mi. Saunders Settlement Rd., in Cambria, to L. H. Gipp Constr. Co., Buffalo, $95,788, $80,973, $139,944 and $40,-583 respectively; 601 mi. Main St. in Middleport, to J. D. Meahl, Cambria, $23,230. Noted May 17.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., to Uvalde Asphalt Paving Co., 1 Bway., New York, sheet asphalt paving Havemeyer St. $17,905, 107th St. $19,085, curbing, laying sidewalks and sheet asphalt paving Roosevelt Ave. $11,315, Beach 117th St. $22,050, Beach 122nd St. $45,535; to Kennedy & Smith, 15 Amity St., Flushing, 107th St. $9,470. Noted June 14.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., sheet asphalt repaving 57th, 12th and 15th Sts., to W. J. Fitzgerald, 547 West 45th St., $32,974, $11,-797 and $14,913 respectively; 6th and 7th Sts., to Sicilian Asphalt Paving Co., 41 Park Row, $52,213 and $20,582 respectively. Noted June 21.

N. Y., Perry—Concrete paving 3 streets, to Oatka Eng. Co., Warsaw, $46,459. Engrs. est. $50,000.

N. J., New Brunswick — Middlesex Co. concrete paving ½ mi. road from Jamesburg to Englishtown, to H. N. Scott, Cranbury, $49,757; 1.8 mi. road in Plainsboro, to Hill Constr. Co., 132 Hulme St., Mt. Holly, $38,-723; 1 mi. Main St. in Milltown, to Utility Constr. Co., 5 Spring St., $59,692.

Maryland—State Rds. Comn., Baltimore, 9,000 sq.yd. concrete, 3,400 cu.yd. excav., Contr. D-30, Dorchester Co., to Smith & Renshaw, East New Market, $26,674; 9,350 sq.yd. concrete, 5,300 cu.yd. excav., Contr. F-64, Frederick Co., to L. R. Waesche, Thurmont, $33,232; 17,850 sq.yd. concrete, 4,000 cu.yd. excav., Contr. Ce-45, Cecil Co., to G. R. Abbott & Sons, 3307 Bateman Ave., Baltimore, $54,793; 3,520 sq.yd. concrete, Contr. 125-A, Montgomeary Co., to Corson & Gruman, 33rd and K Sts., Wash., D. C., $11,757; 2.04 mi. of 3 ft. concrete shoulders, Contr. A-3-A, Allegany Co., to T. D. Claiborne Co., Garrett Bldg., Baltimore, $27,088. Noted June 21.

W. Va., Moundsville—Marshall Co. grading 3 mi. Moundsville Rd, to Wetzel Constr. Co., New Martinsville, $37,062.

Florida — State Rd. Dept., Tallahassee, constructing road between Florida East Coast R.R. and Deer Park, Project 584, Oceola Co., repressed brick laid on edge, to Noll & Noll, Crescent City, $40,691. Noted June 7.

Fla., Bradentown—Comrs. Manatee Co., paving with 9 in. compacted shell 15 mi. road on Terra Ceia Island, to C. A. Rowlett, Palmetto, $37,000; grading and paving with 8 in. compacted rock 27 mi. Road C, Miakka Special Road and Bridge Dist., to H. R. Curry, Bradentown, $56,618. Noted June 7.

Fla., Sarasota—Surfacing 9th St. and East Ave., asphalt block flat on sand and grouted with asphalt, to J. W. Crawford, Sarasota, $1.70 per sq.yd., total about $25,000.

La., Cedar Grove—To Jones Constr. Co., Slaughter Bldg., Dallas, Tex., improving various streets, 54,345 sq.yd. plain concrete $2.40 per sq.yd., excav. $0.63, single gutter $0.62, standard curb and gutter $0.90, etc., total $176,484. Noted May 10.

Tennessee—Concrete paving 14.7 mi. Federal Aid Project 69, Madison Co., 18 ft., to H. D. Hays Constr. Co., Worthington, Ind., $484,000, bridges over 20 span $105,000; grading and burnt slate surfacing 21.2 mi. State Project 114, Grundy Co., 16 ft., to Brown Contg. Co., Chattanooga, $199,000; grading, surfacing, etc., 2.2 mi. bituminous macadam on hand placed course stone base, Montgomery Co., to Moore Constr. Co., Capital Blvd., Nashville, $130,000; treating surface with oil on 13.24 mi. road, and macadam surfacing on hand placed base course on 12.06 mi., both Overton Co., 16 ft., to B. Williams, Murfreesboro, $35,000 and $157,000 respectively. Noted June 14.

Tenn., Jacksboro—Campbell Co. surfacing 8 mi. various roads, bituminous macadam, to J. F. Marcum Constr. Co., Knoxville, $150,000.

Ohio—Dept. Highway and Pub. Wks., Columbus, grading and paving 3.827 mi. Sect. "A-2" Bridgeport-Cadix Rd. and 3.523 mi. Sect. "A-3" Bridgeport-Cadix Rd., both Belmont Co., Kentucky rock asphalt, to E. L. Reeb, Lima, $172,068 and $149,405 respectively; 0.448 mi. Sect. "Hillsboro" Milford-Hillsboro Rd., and 0.448 mi. Sect. "Hillsboro" Hillsboro-Washington C. H. Rd., both Highland Co., brick, to W. E. Ringwald, Chillicothe, $22,585 and $20,900 respectively; 1.125 mi. Sect. "F" West-Union-Bainbridge Rd. and 0.761 mi. Sect. "Sinking" West Union-Bainbridge Rd. and Sect. "Springs" Hillsboro-Piketon Rd., both Highland Co., waterbound macadam, to C. O. Baldwin, Hillsboro, $25,614 and $12,154 respectively; 2.552 mi. Sect. "T" Mansfield-Norwalk Rd., Huron Co., rein.-con., to N. B. Putnam, Van Wert, $68,595; 2,923 mi. Sect. "N" Elyria-Twinsburg Rd., Lorain Co., rein.-con., to Patterson Constr. Co., Lorain, $85,632; 0.576 mi. Sect. "P" Medina-Norwalk Rd., Medina Co., rein.-con., to Hill & Hill, Elyria, $20,823; grading, etc., 2.38 mi. Sect. "J" Mansfield-Millersburg Rd., Holmes Co., to D. G. Watson, Malinta, $14,-864. Noted June 21.

Ohio—Dept. Highways and Pub. Wks., Columbus, constructing 5 mi. highway in Jackson Co., concrete, to O. M. Junk, Chillicothe, $137,974.

Ohio — Comrs. Franklin and Delaware Counties, at Columbus, grading and bituminous waterbound macadamizing 4.65 mi. Franklin-Delaware Co. Line Rd., 16 ft., to R. K. McNamara, Delaware, $71,226. Noted June 7.

O., Cleveland — Improving 2 sections of East 116th St., 4,740 lin.ft. stone curb and 4 in. tile drain gutter, 6,400 cu.yd. earth excav. and 9,200 sq.yd. vitr. brick on concrete, to A. M. Pejsa Paving Co., Euclid Heights Blvd., $62,819.

O., Columbus—W. H. Duffy, dir. Pub. Serv., grading, laying water services and sewer connections and concrete paving 517 ft. alley north of Gates St., 16 ft., and 636 ft. alley north of Reinhard Ave., 20 ft., to R. J. Dienst, 480 South 5th St., $2,759 and $6,257 respectively; 351 ft. alley west of Summit St., 20 ft., 347 ft. alley north of King Ave., 18 ft., and 400 ft. alley north of 8th Ave., 20 ft., to Columbus Contg. Co., 1481 West Broad St., $2,321, $1,987 and $2,387 respectively; 807 ft. Broderick St., 28 ft., to Yale Constr. Co., 146 Yale Ave., $3,178; 6,941 ft. 12-30 in. vitr. sewer extending over several streets and alleys from alley west of Chase Ave. to Crescent Dr., to H. E. Miller, 938 South High St., $22,976. Noted June 14.

O., Columbus — Franklin Co., grading, bridging and paving 2.78 mi. Harbord Rd., 18 ft., Sharon and Blendon Twps., oil, to D. W. Botkins & Son, 767 South 22nd St., $78,664; 1.46 mi. Borror Rd., 18 ft., Jackson Twp., waterbound macadam, to Kinnear & Baricklow, 606 Central Natl. Bank Bldg., $30,358. Noted May 24.

O., Columbus—R. W. Smith, clk. Franklin Co., waterbound macadamizing 3.13 mi. Poth Rd., 16 ft., Jefferson, Mifflin and Truro Twps., to J. C. McIntyre Co., 332 West Broad St., $51,807. Noted June 7.

O., Dayton—Montgomery Co. paving 4,300 ft. Gettysburg Ave., 20 ft., to Hoolihan & Wampler, 1406 Riverview Ave., $38,213, engrs. est. $45,000; 2,400 ft. Gettysburg Ave., 20 ft., to A. J. Kramer, Main St., $19,-450, engrs. est. $26,000. Work involves 14,900 sq.yd. Kentucky rock asphalt.

O., East Liverpool—Concrete paving about 1 mi. River Rd., 18 ft., to Allison & Harris Constr. Co., East Liverpool, $48,-000. Engrs. est. $50,000. Noted June 21.

O., Marion—Marion Co., sheet asphalt paving Vernon Heights Blvd., to H. P. Streicher Co., Inc., 319 Terminal Bldg., Toledo, $26,896. Engrs. est. $28,600.

O., Upper Arlington (Columbus P. O.)—E. D. Howard, village clk., to Radebaugh & Graham, 2015 Tremont Rd., Columbus, grading, laying necessary water services and sewer connections and asphalt paving 5,600 ft. Arlington Ave., 26 and 37 ft., 1,300 ft. Guilford Rd., 26 ft., 6,500 ft. Club Rd., North and South Parkways, 18 ft., 12,550 ft. Kensington and Southway Drives, Andover, Waltham, Wickford, Oxford and Westover Rds., 20 ft., $203,808. Engrs. est. $282,000. Noted June 7.

Ind., Jeffersonville—Clark Co. surfacing 4.78 mi. George Lindemeyer Rd., Oregon Twp., to Denny & Horton, c/o K. P. Barnes, co. surv., Jeffersonville, $44,808. Engrs. est. $46,776. Noted June 21.

Michigan—State Hy. Dept., Lansing, grading and surfacing 4.853 mi. Federal Aid Project 76, to T. E. Currie, 20 McGraw Bldg., Detroit, Mich., 9,506 cu.yd. earth excav. $0.55, 51,491 sq.yd. rein.-con. pavement $1.40, etc., total $88,536. State to furnish cement.

Michigan — State Hy. Dept., Lansing, grading and surfacing 3.861 mi. Assessment Dist. Rd. 408, 20,335 sq.yd. gravel, 14,065 cu.yd. earth excav., to Wade & Massey, Montrose, $37,192.

Mich., Grosse Pointe Farms—For 19,850 sq.yd. 9 in. pavement, 8,000 cu.yd. excav., 14,360 lin.ft. curbing, etc., to R. R. Moran, Grosse Pointe Farms, $90,244.

Ill., Elmhurst—Concrete sidewalks to F. Vertovec, Elmhurst. Engrs. est. $25,000. Noted Dec. 28.

Ill., Elmhurst—For 30,000 sq.yd. asphalt paving to Standard Paving Co., 326 West Madison St., Chicago. Engrs. est. $90,000.

Ill., Posen (Harvey P. O.)—Concrete sidewalks to H. Gottshalk, Homewood. Engrs. est. $70,000. Noted Apr. 12.

Ill., Rockford—Bd. Local Impvts., to Hart & Page, 110 North Court St., paving Rural St., macadam, $31,217, Alley Blk. 3, Harlem Park Subdivision, concrete, $1,423.

Wisconsin—State Hy. Comn., Madison, to Campbell Constr. Co., Minneapolis, Minn., Askeaton-Greenleaf Rd., Brown Co, 12,236 cu.yd. earth excav. $0.78, 23,308 sq.yd. concrete surfacing $1.18, etc., total $45,842, De Pere-Greenleaf Rd., Brown Co., 14,544 cu. yd. earth excav. $0.78, 23,325 sq.yd. concrete surfacing $1.48, etc., total $57,426; to

Streets and Roads (Continued)

W. E. Ule, Stevens Point, New Lisbon-Mauston-Milbourn Rd., Juneau Co., $34,273.

Wis., Elkhorn—Walworth Co., surfacing 1 mi. Sharon-Darien Rd., concrete, to Whitewater Bridge Co., Whitewater, $27,490; 4 mi. Delavan-Walworth Rd., gravel, to F. C. Wiswell, Elkhorn, $16,560. Noted June 7.

Ia., Manchester—To P. P. Smith, 1600 Washington Ave., Cedar Rapids, 2,480 cu. yd. excav. $1, 20,660 sq.yd. concrete paving $2.56.

Ia., Albia—Monroe Co., grading 10 mi. road northwest of here, 26 ft., to McAndrews & Hannah, Keokuk, 50,038 cu.yd. excav., $13,247; Elarton & Elliott, Bussey, 20,193 cu.yd., $5,299; C. O. Mitchell, 2414 Southwest 10th St., Des Moines, 43,660 cu.yd., $11,352. Noted May 24.

Ia., Eldora—Hardin Co., grading and gravel surfacing 22 mi. roads, 26 ft., to W. W. McCullough, Graettinger, 71,100 cu. yd. excav., $17,277; L. O. Kimball, Clear Lake, hauling 6,126 cu.yd. gravel $4,734; J. R. Perkins, Steam Boat Rock, hauling 3,444 cu.yd. gravel, $1,818; Christianson Constr. Co., Iowa Falls, tile labor, $894; Eldora Pipe & Tile Co., Eldora, 10,350 lin.ft. 6 in. tile, $507. Noted May 24.

Ia., Hampton—Franklin Co., gravel surfacing 12.02 mi. Federal Aid Project 171, 26 ft., to E. Davis, Hampton, 7,000 cu.yd. gravel, $1,400; W. Burman, Hampton, 5,000 cu.yd. stripping work, $1,200; H. L. Bone & Son, Royal, hauling 6,964 cu.yd. gravel, $8,675; Nelson & Melohr, Nevada, hauling, 11,789 cu.yd. gravel, $19,483. Noted May 31.

Ia., Lake City—Grading, curbing and paving Main, Center, Illinois and Washington Sts., 4,200 cu.yd. excav., 8,000 lin.ft. curb and gutter, and 19,000 sq.yd. 8 in. granite concrete, to Anderson & Empie, Tremont Blk., Marshalltown, $68,140. Noted May 24.

Ia., Osage—Mitchell Co., gravel surfacing 13.175 mi. roads west and northeast of here, 26 ft., 9,413 cu.yd. gravel, to Harrison Constr. Co., 413 Kraft Bldg., Des Moines, $27,691. Noted May 24.

Ia., Rock Rapids — Lyon Co., grading Doon-Big Sioux River Rd., 230,104 cu.yd. excav., to C. W. McNamara, Bristol, S. D., $60,012. Noted May 17.

Minn., Cloquet—For 6,246 sq.yd. paving, etc., to Nelson & Hafner, Duluth, $18,899; storm sewers, to Pastoret Constr. Co., 304 Sellwood Bldg., Duluth, $4,993. Noted June 7.

Minn., Minneapolis — Bd. Park Comrs., colored cement sidewalks on 6,500 sq.yd. Lake of Isles Blvd., south and west shores of Cedar Lake, to Andrews Paving Co., 3100 15th Ave. S, $1.42 per sq.yd.; 9,000 sq.yd. St. Anthony Blvd., to Engblom Constr. Co., 917 Plymouth Bldg., $1.42; 8,000 sq.yd. Minnehaha Parkway, to Simonson & Emstad, Albert Lea, $1.43. Noted June 14.

Minn., St. James — A. G. Countryman, aud. Watonwan Co., to J. Sampson, Faribault, Job 2301, State Rd. 12, 67,488 cu.yd. excav., 914 lin.ft. 12-36 in. corrugated metal culverts, etc., $32,061, Job 2303, State Rd. 4, 29,536 cu.yd. excav., 50,818 cu.yd. overhaul, etc., $9,416. Noted Mar. 8.

Minn., St. Paul—G. J. Ries, aud. Ramsey Co. improving Project 23-65, 2,620 sq.yd. 1 course concrete and 1,674 sq.yd. bituminous filled brick, etc., also Project 23-05, 3,523 sq.yd. 1 course concrete, etc., to Bitulithic & Contg. Ltd., 722 Globe Bldg., $17,753 and $12,151 respectively. Noted June 14.

Kan., Hiawatha—Paving 17,087 sq.yd. road, 2 in. asphaltic concrete on 5 in. concrete, etc., to J. B. Watts, Concordia, $2.36 per sq.yd., total $56,525. Noted June 7.

Neb., Norfolk—Paving 26 blocks, asphaltic concrete, to Abel Constr. Co., 318-19 Terminal Bldg., Lincoln, $2.22 per sq.yd. Noted May 10.

Ark., Camden — Paving 1½ mi. Spring, Bradley and Clifton Sts., etc., Paving Dist. 3, asphalt and concrete, to L. H. Bessler, Camden. Engrs. est. $53,000.

Tex., Amarillo—Paving 200 blocks, brick and bituminous, to Plains Paving Co., Amarillo, $4.04 per sq.yd.

Tex., Ft. Worth—To General Constr. Co., Cotton Exch., paving with 1½ in. Uvalde rock asphalt on 5 in. concrete, Oleander St. from Jennings to Grainger Sts. and Bessie St. from Vickery to Cromwell Sts., $23,690, East Rosedale St. from Main to Evans Sts., $28,120.

Tex., Orange—Orange Co. grading and rein.-con. paving 5.24 mi. Orange-Beaumont Rd., to F. P. McElwrath, Corsicana, $253,694. Noted Mar. 23.

Tex., Wichita Falls—Paving 3 blocks Polk St., brick, to Plains Paving Co., Wichita Falls, $20,589; 5 blocks Pearl St., concrete, to L. E. Whitham, Wichita Falls, $26,219.

Okla., Oklahoma City—Paving various streets, 22,600 sq.yd. sheet asphalt, to Western Paving Co., Tradesman Natl. Bank Bldg. $128,084.

Washington—State Hy. Comn., Olympia, to K. L. Goulter & Co., Ilwaco, surfacing 10.86 mi. Ocean Beach Highway, Nasel River to Sand Beach, Pacific Co., 8,395 cu.yd. gravel $3.45, total $28,963 and 15.94 mi. Ocean Beach Highway, Palix River to Nasel River, Pacific Co., 9,770 cu.yd. gravel $3.50, 2,880 cu.yd. crushed gravel base course $5, 1,700 cu.yd. crushed gravel top course $3.50, etc., total $56,577; Grays Harbor Constr. Co., Aberdeen, 0.54 mi. Olympic Highway, Montesano to Aberdeen, Grays Harbor Co., 5,530 sq.yd. cement $3.15, etc., total $28,370; Pentello & Palemo, Nasel, grading and surfacing 5.36 mi. Ocean Beach Highway, Nasel to Johnson's Landing, Pacific Co., 6,900 cu.yd. crushed rock surface course $3.60, 5,520 cu.yd. crushed rock top course $3.95, 6,500 cu.yd. excav. $0.95, total $54,069; J. Otteson Co., 2523 32nd St. S., Seattle, 8.28 mi. Navy Yard Highway, Union City to Holyoke Creek, Mason Co., 13,210 cu.yd. gravel surfacing $1.50, 62,010 cu.yd. earth excav., $0.42, 6,000 cu.yd. loose rock excav. $0.50, 400 cu.yd. solid rock $1.50, etc., total $77,900; H. Pederson Constr. Co., Alaska Bldg., Seattle, 2.01 mi. Sunset Highway, King Co., 1,310,300 cu.yd. overhaul $0.314, 1,790 cu.yd. gravel surfacing $1.75, 55,740 cu.yd. excav. $0.45, incl. small concrete bridge, total $53,857. Noted May 24.

Wash., Everett—Snohomish Co., concrete paving 3 mi. Everett-Mukilteo Highway, 27,000 sq.yd. concrete, 10,000 cu.yd. excav., etc., to E. J. Templeton, Everett, $64,876.

Ore., Portland—Grading and 6 in. concrete paving (1) 1,285 sq.yd. East Clay St. (2) 2,770 sq.yd. Wygant St.; 2 in. asphaltic concrete on 4 in. concrete (3) 670 sq.yd. East 27th St. (4) 2,678 sq.yd. East 65th St. (5) 3,020 sq.yd. East 66th St.; 2 in. bitulithic concrete on 4 in. concrete, (6) 1,100 sq.yd. East 56th St.; laying 4 in. concrete sidewalks, (7) 4,050 lin.ft. East 33rd St. (8) 2,000 lin.ft. East Mason St., to Hahn & Rebman, 726 North Syracuse St., (1) $1.85 (7) $0.15; A. D. Kern, 519 Lumber Exch. Bldg., (2) $1.58 (4) $1.58 (5) $1.58; Municipal Paving Plant, City Hall, (3) $1.60 (6) $1.55; J. Greeder & Co., Portland, (8) $0.16.

Calif., Eureka—Humboldt Co., constructing 5½ mi. wagon road along Redwood Creek from Briceland to State Highway, to E. Linser, Briceland, $22,000. Noted June 7.

Calif., Long Beach—Paving with 5 in. concrete and laying sewers in Belmont Heights Addition, to California Constr. Co., 58 2nd St., San Francisco, $572,460. Noted June 21.

Calif., Santa Monica—Improving Kensington Rd. between 8th St. and Beverly Ave. and portions of 7th St., to Southern Constr. Co., Kerchkoff Bldg., Los Angeles, 157,541 sq.ft. grading at $0.069, 109,467 sq. ft. oil and rock pavement $0.064, 33,282 sq. ft. walks $0.21, curbing $0.65, etc., total $33,225. Noted June 14.

Calif., Stockton — To Clark & Henery Constr. Co., 38 South Sutter St., improving Harrison St. between Washington and Main Sts., 1,305 ft. concrete curb and gutter at $1, 6,638 sq.ft. concrete sidewalks $0.20, 32,042 sq.ft. 2 in. asphaltic concrete on 2½ in. cementing gravel $0.25, etc.; Castle St., 2,581 lin.ft. concrete curb and gutter $1, 11,691 sq.ft. walks $0.20, 1,950 sq.ft. 5 in. pavement $0.17, 10,987 sq.ft. 7 in. pavement $0.23, etc.; East Weber Ave. and C St., 2,285 lin.ft. concrete curb and gutter $1, 6,608 sq.ft. cement walks $0.20, 30,122 sq.ft. 2 in. asphaltic concrete on 2½ in. asphaltic concrete $0.17, 8,469 sq.ft. 2 in. asphaltic concrete on 3 in. crushed rock $0.24, etc.; Channel St., 2,495 sq.ft. cement walks $0.20, 17,901 sq.ft. 2 in. asphaltic concrete on 3 in. cementing gravel and 3 in. asphaltic concrete $0.26, etc. Noted June 14.

Ontario—Provincial Highways Dept., Toronto, concrete paving 2¾ mi. road from Crumlin east, Middlesex Co., to Boss & Brazier, 703 Waterloo St., London. Engrs. est. $165,000.

Ont., Guelph—City will construct 36,000 sq.yd. concrete pavement, concrete curbs and gutters on various streets, by day labor. H. S. Nicklin, city engr.

Ont., Hamilton—City will pave Cumberland Ave. from Sherman Ave. to Prospect St., 6,500 sq.yd. concrete or asphalt on concrete, by day labor, under supervision of W. L. McFaul, city engr. $25,000. Noted Jan 11.

B. C., Point Grey — Provincial Government, Victoria, 96 acres grubbing and 66 acres clearing and grubbing on University site, here, to Nickson Constr. Co., 410 Seymour St., Vancouver, $80,000.

Industrial Works

PROPOSED WORK

Mass., Boston—Merrimac Clay Products Co., 53 State St., having plans prepared by H. and J. R. Raeder, 53 State St., 40x304 ft. tunnel kiln, two 30 ft. diam. circular kilns, one 68x172 ft. and one 90x170 ft. waste heat dryers, all brick. $250,000.

Mass., Somerville—Fresh Pond Ice Co., 321 Washington St., plans ice house and manufacturing plant, will install conveyors, ice manufacturing and handling equipment. $50,000-$60,000.

Conn., East Hartford (branch of Hartford) McKinley Bros., 809 Main St., had plans prepared by W. F. Brooks, Lewis and Gold Sts., Hartford, 1 story, 100 x 200 ft. garage and show rooms, rein.-brick and steel, plain foundation, Main and Garvan Sts. $50,000.

Conn., Middletown — Connecticut Power Co., 335 Main St., plans 2 story power station, rein.-con., plain foundation, Water St. To exceed $40,000. Hartford Electric Light Co., 266 Pearl St., Hartford, and Stone & Webster, 147 Milk St., Boston, Mass., engrs.

Conn., West Hartford (Hartford P. O.) —Prospect Garage, Prospect Ave., having plans prepared by B. A. Sellew, 721 Main St., Hartford, 1 story, 100 x 100 ft., brick and steel garage, plain foundation. $40,000.

N. Y., Brooklyn—M. Catalbiano, c/o T. Goldstone, archt. and engr., 50 Graham Ave., having plans prepared 1 story, 100 x 100 ft., brick, steel and concrete garage, plain foundation, DeKalb Ave. $60,000.

N. Y., Brooklyn—P. Cleary, c/o L. A. Sheinert, archt. and engr., 194 Bowery, New York, having plans prepared 1 story, 100 x 125 ft., brick, steel and concrete garage, plain foundation, Coney Island Ave. $70,000.

N. Y., Brooklyn—S. Holland, c/o E. M. Adelsohn, archt. and engr., 1778 Pitkin Ave., had plans prepared 1 story, 100 x 200 ft., brick, steel and concrete garage, plain foundation, Liberty Ave. and Wyona St. $50,000.

N. Y., Cohoes — Little Falls Fibre Co., State Dam, Waterford, plans 2 story, 60 x 140 ft. brick factory, wood pile foundation, Kings Canal, here. $185,000. Engineer and architect not selected.

N. Y., New York—J. E. Eustis, c/o S. Rosenblum, archt. and engr., 51 Chambers St., soon takes bids 2 story, 125 x 165 ft., brick, steel and concrete garage, plain foundation, Fordham Rd. $85,000.

N. Y., New York — D. Salvato, c/o D. Clark, archt. and engr., 441 East Tremont Ave., had plans prepared 1 story, 110 x 115 ft., brick, steel and concrete garage, plain foundation, Morris Ave. $50,000.

N. Y., Rochester — Genesee Bridge Co., 666 Plymouth Ave., plans plant, W. Ave. $55,000. D. Hershey, mgr. Engineer and architect not announced.

Pa., Altoona—See "Buildings."

Pa., Grantville—Grantville Electric Co. plans electric light and power plant. $500,000. H. C. Stambaugh, mgr.

Pa., Pittsburgh—D. L. Clark Co., Martindale St., N. S., plans 6 story and basement, 108 x 129 ft. factory, brick, tile and rein.-con., Reedsdale St. Engineer or architect not selected.

Pa., Rouseville—Penn-American Refinery plans to rebuild portion of plant destroyed by fire. $100,000. Architect not announced.

Pa., Warren—Conewango Refining Co., North Warren Ave., plans to rebuild 1 story filter and tool house, brick and steel, recently destroyed by fire. $100,000. Private plans. Noted May 17.

D. C., Wash.—T. Medford, archt., 1631 3rd St., N.W., preparing plans show room and garage, 14th near Q St., N.W. $200,000. Owner's name withheld.

N. C., Rocky Mount—Rocky Mount Mfg. Co., having plans prepared by Lockwood, Greene & Co., Piedmont Bldg., Charlotte, 3 story 76 x 81 ft. yarn mill, mill construction, steel beams. $50,000.

Ala., Flint—Southern Rock Asphalt Co. plans development and erection of plant for mining rock asphalt, 150 tons daily capacity, near here. $150,000.

O., Canton—Canton Metal Products Co., Renkert Bldg., plans 1 story plant. $60,000. Address F. A. Zink, Renkert Bldg.

O., Dayton—Duro Pump & Mfg. Co., 537 East Monument St., having plans prepared by Schenk & Williams, Mutual Home Bldg., 5 story, 100 x 100 ft., rein.-con. and steel factory, plain foundation. $175,000. Noted Jan. 18.

O., East Liverpool—Amer. Vitrified Products Co. having plans prepared 4 story, brick, concrete and steel factory. $125,000. Private plans.

O., Massillon—Central Steel Corp. plans blast furnaces and several auxiliary steel plant units, on 185 acre site, Columbia Heights. $7,000,000-$10,000,000. Address C. G. Herbruck, G. D. Harter Bank Bldg., Canton, atty.

O., Toledo—Libby Owens Sheet Glass Co. takes bids about Sept. 21, 1st unit industrial plant, rein.-con., brick and steel buildings, along tracks of New York Central & Hocking Valley R.R., to produce 15,000,000 ft. glass per year. $1,500,000. Devore Co., 508 Nicholas Bldg., archts. and engrs.

Industrial Works (Continued)

Ind., Kendallville—McCray Refrigerating Co. having plans prepared by A. M. Strauss, 701 Schoaff Bldg., Ft. Wayne, 1 story, 75 x 220 ft. addition, brick and steel. $50,000.

Mich., Menominee—Marinette & Menominee Paper Co., 2311 Riverside Ave., Marinette, Wis., plans 2 story paper mill, brick and concrete, plain foundation, here. Engineer and architect not selected.

Ill., National City (Venice P. O.)—Armour & Co., National Stock Yards, will rebuild 6 story smoke-house, rein.-con. and brick, recently destroyed by fire. $500,000. Private plans.

Wis., Appleton—Valley Automobile Co., 726 College Ave., plans 4 story and basement, brick and concrete garage, plain foundation, Morrison St. $60,000.

Wis., Madison—University of Wisconsin, Administration Bldg., plans 1 story, 50 x 90 ft., coal storage plant, brick, rein.-con. and steel, plain foundation. $40,000. M. E. McCaffery, secy. Engineer and architect not selected.

Wis., Milwaukee—Milwaukee Lumber Co., 1271 Midland Ave., having plans prepared by Gurda & Gurda, 448 Mitchell St., 2 story, 30 x 100 ft., brick and timber garage, plain foundation, Midland Ave. $40,000.

Wis., New London—M. J. Heinz plans 2 story, 30 x 80 ft. vulcanizing shop, brick, concrete and steel, plain foundation. $40,000. Engineer and architect not selected.

Wis., Oshkosh—J. Danke, c/o Winnebago Dairy Products Co., 332 Main St., having plans prepared by Auler & Jensen, F. R. A. Bldg., 2 story, 48 x 84 ft., creamery and 1 story, 30 x 58 ft., stable, brick and concrete, plain foundations, Main St. $40,000.

Wis., Racine—F. Applegate, 1043 Washington Ave., having plans prepared 1 story, 60 x 105 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation, Washington St. $55,000. Private plans.

Ia., Shenandoah—Election soon to vote on $175,000 bonds for electric light and power plant. R. L. Keltner, Shenandoah, engr.

Kan., Kansas City—Darley Boiler Wks. Co., 923 North 3rd St., had plans prepared 1 story and part basement, 400 x 600 ft. factory. $100,000. Private plans.

Kan., Kansas City—Kansas City Refining Co., 2nd St. and Troup Ave., plans to improve present plant, build larger storage tank and miscellaneous improvements. $100,000. Private plans.

N. D., Minot—K. Kulaas, rejected bids June 4, 2 story and basement, 80 x 150 ft., brick and rein.-con. garage, $45,000. I. L. Rush, Minot, archt. Noted June 7.

Mo., St. Louis—Famous Barr Co., 6th and Olive Sts., plans 2 story and basement, 300 x 500 ft., rein.-con. warehouse and garage, plain foundation, Spring Ave. $200,000. Engineer and architect not announced.

Mo., Stockton—G. B. Steward, Stockton, soon takes bids hydro-electric plant southeast of here, on Sac River, 130 ft. spillway, 10 ft. high, 2 turbines, 18 mi. transmission line from here to Fairfax, etc. $50,000. Russell & Axon, 404 McDaniels Bldg., Springfield, engrs.

Tex., Dallas—C. E. Barglebaugh & Co., archts. and engrs., Medical Art Bldg., soon takes bids 7 story and basement, 140 x 150 ft. factory and 2 story warehouse, brick, stone and concrete, plain foundations, Jefferson, McKinney and Caruth Sts., for Brown Cracker & Candy Co., Jefferson and McKinney Sts. $1,000,000. Noted Apr. 19.

Tex., Ft. Worth—South West Portland Cement Co., Two Republics Bldg., El Paso, takes bids about Sept. 14, cement mill, rein.-con., along tracks Houston & Texas Central R.R., here. $1,500,000. O. J. Binford, Two Republics Bldg., El Paso, engr. Noted May 24.

Tex., Ft. Worth—Texas Steel Co., South Hemphill St., making plans converting old plant into modern steel rolling mill. $100,000-$200,000. R. J. F. Foster, mgr. and engr.

Tex., Gordon—Lone Star Gas Co., Amer. Exch. Bank Bldg., Dallas, having plans prepared and soon takes bids casinghead gasoline plant. $150,000. J. C. Brokaw, c/o owner, ch. engr.

Wash., Seattle—Rainier Corp., headed by G. I. C. Barton, 5648 Alke St., recently organized with $3,000,000 capital stock will lease old plant of Seattle Brewing and Malting Co., Georgetown, here, and convert same into packing plant and cannery, will expend $300,000 for remodeling.

Calif., Los Angeles—Los Angeles Herald, 136 South Bway., having plans prepared by Morgan, Walls & Morgan, Van Nuys Bldg., 2 story and part basement, 153x270x325 ft., publishing plant and store building, rein.-con. and brick, Pico and Figueroa Sts.

Calif., Petaluma—J. A. Kenney, 3rd and J Sts., plans 95x100 ft. warehouse and load-

SEWER—NEW JERSEY

Bids were opened by Dept. Sts. & Pub. Impvts., Jersey City, May 1, for Sect. 3 of trunk sewer from Dover to Boonton, for Rockaway Valley Watershed. (A) C. F. Goeringer Constr. Co., 51 South Washington St., Wilkesbarre, Pa., (awarded contract); (B) J. L. Sigretto, Bernardsville. The unit bids were as follows:

	A	B
290 ft. 10-in. vitrified tile pipe, 0-6 ft.	$3.85	$3.00
1,710 ft. 10-in. vitrified tile pipe, 6-8 ft.	4.60	3.15
60 ft. 10-in. vitrified tile pipe, 8-10 ft.	5.50	3.35
10 ft. 10-in. vitrified tile pipe, 10-12 ft.	6.30	4.50
320 ft. 12-in. vitrified tile pipe, 0-6 ft.	4.20	3.50
1,500-ft. 12-in. vitrified tile pipe, 6-8 ft.	5.00	3.80
300 ft. 12-in. vitrified tile pipe, 8-10 ft.	5.80	4.50
40 ft. 12-in. vitrified tile pipe, 10-12 ft.	7.00	4.50
10 ft. 15-in. vitrified tile pipe, 6-8 ft.	5.55	4.00
820 ft. 15-in. vitrified tile pipe, 8-10 ft.	6.60	5.00
400 ft. 15-in. vitrified tile pipe, 10-12 ft.	7.50	5.50
20 ft. 15-in. vitrified tile pipe, 12-14 ft.	8.80	6.00
10-ft. 18-in. vitrified tile pipe, 6-8 ft.	6.30	6.00
300 ft. 18-in. vitrified tile pipe, 8-10 ft.	7.40	6.50
210 ft. 18-in. vitrified tile pipe, 10-12 ft.	8.60	7.00
10 ft. 18-in. vitrified tile pipe, 12-14 ft.	10.00	8.00
70 ft. 20-in. vitrified tile pipe, 0-6 ft.	7.60	6.50
20 ft. 20-in. vitrified tile pipe, 6-8 ft.	8.80	7.00
2,240 ft. 20-in. vitrified tile pipe, 8-10 ft.	10.20	7.50
540 ft. 20-in. vitrified tile pipe, 10-12 ft.	11.50	8.00
10 ft. 20-in. vitrified tile pipe, 12-14 ft.	12.75	8.00
280 ft. 22-in. vitrified tile pipe 0-6 ft.	8.00	7.00
270 ft. 22-in. vitrified tile pipe, 6-8 ft.	9.30	7.50
670 ft. 22-in. vitrified tile pipe, 8-10 ft.	10.25	8.00
810 ft. 22-in. vitrified tile pipe, 10-12 ft.	12.00	8.00
160 ft. 22-in. vitrified tile pipe, 12-14 ft.	13.25	8.00
260 ft. 22-in. vitrified tile pipe, 14-16 ft.	14.75	8.00
70 ft. 22-in. vitrified tile pipe, 16-18 ft.	17.00	18.00
10 ft. 22-in. vitrified tile pipe, 18-20 ft.	20.00	18.00
10-ft. 33-in. segment block 0-6 ft.	13.20	14.50
170 ft. 33-in. segment block, 6-8 ft.	15.00	14.90
2,120 ft. 33-in. segment block, 8-10 ft.	17.00	17.50
1,080 ft. 33-in. segment block, 10-12 ft.	19.00	18.90
10 ft. 33-in. segment block, 12-14 ft.	21.00	19.00
10 ft. 33-in. monolithic sewer, 0-6 ft.	14.00	18.85
170 ft. 3.3-in. monolithic sewer, 6-8 ft.	17.00	19.37
2,120 ft. 33-in. monolithic sewer, 8-10 ft.	20.00	22.75
1,080 ft 33-in. monolithic sewer, 10-12 ft.	23.00	24.57
10 ft. 33-in. monolithic sewer, 12-14 ft.	24.00	24.70
25 ton cast iron pipe	125.00	150.00
50 type A manholes, 0-8 ft.	175.00	125.00
14 ype B manholes, 0-8 ft.	175.00	125.00
100 ft. manhole extra depth, 8 ft.+	18.00	10.00
175 M.ft.B.M. sheeting lumber	85.00	90.00
25 M.ft.B.M. foundation lumber	85.00	90.00
1 M.ft.B.M. timber piles	200.00	100.00
20 cu.yd. 1-2-4 concrete (class A)	24.00	25.00
100 cu.yd. 1-3-5 concrete (class B)	20.00	25.00
5,000 cu.yd. rock excavation	4.50	10.00
20 cu.yd. extra excavation	3.50	5.00
1—12-in. gate valve	300.00	75.00
1—12-in. flap valve	100.00	75.00
100—5-in. deep house connection	8.00	6.00
500 ft.—5-in. house connection	2.00	3.00
Extended totals using segment block	$211,676	$213,833
Extended totals using monolithic pipe	$222,734	$231,987

SEWER AND SEWAGE DISPOSAL WORKS—NEW JERSEY

Following are lowest three bids opened by Dept. Sts. & Pub. Impvts., Jersey City, May 1, for Sect. 1 of trunk sewer from Dover to Boonton, and sewage disposal works, for Rockaway Valley Watershed. (A) J. L. Sigretto, Bernardsville, (awarded contract); (B) A. A. Johnson Corp., Queens Blvd. & Van Brunt St., Long Island City, N. Y.; (C) C. F. MacEvoy Co., 141 Commerce St., Newark. The unit bids were as follows:

	A	B	C
22,500 cu.yd. earth excavation and backfilling trunk and pipes	$2.40	$2.40	$2.90
8,700 cu.yd. rock excavation	2.40	10.00	6.00
1,700 cu.yd. earth embankment—trunk only	.90	1.62	1.00
47,000 ft. 4-in. tile pipe	.36	.24	.25
100 ft. 5-in. tile pipe	.48	.32	.31
800 ft. 8-in. tile pipe	.72	.55	.75
6,500 ft. 10-in. tile pipe	1.80	.70	.90
2,000 ft. 12-in. tile pipe	2.10	1.20	1.04
5,800 ft. 15-in. tile pipe	2.70	1.90	1.50
150 ft. 18-in. tile pipe	3.60	2.80	2.09
150 ft. 20-in. tile pipe	3.60	3.00	2.49
50 ft. 22-in. tile pipe	4.80	3.90	3.10
2,800 ft. 24-in. tile pipe	6.00	5.00	5.00
2,100 ft. 27-in. tile pipe	8.40	7.50	7.50
2,100 ft. 27-in. monolithic sewer	10.92	13.00	10.00
50 ft. 33-in. segment block	8.40	7.85	12.00
50 ft. 33-in. monolithic sewer	10.92	16.90	11.75
5,200 ft. 36-in. segment sewer	9.60	9.35	12.80
5,200 ft. 36-in. monolithic sewer	12.48	19.00	12.50
5,600 ft. 39-in. segment sewer	11.04	10.30	13.60
5,600 ft. 39-in. monolithic sewer	14.35	21.00	13.30
560 ton c.i. pipe-bell and spigot	120.00	150.00	130.00
70 ton c.i. pipe-flanged	180.00	150.00	198.00
20 acres clearing and grubbing	.01	1,400.00	115.00
54,000 cu.yd. earth excavation plant structure	2.70	2.00	1.25
52,000 cu.yd. fill and embankment at plant	.01	.50	.60
10 acre soil and seed	120.00	470.00	891.00
12,000 sq.yd. sodding	1.20	.40	1.00
5,500 sq.yd. macadam roadway	1.50	1.30	2.00
10,500 ft. concrete curb and gutter	2.40	.80	2.00
1,000 sq.yd. macadam walk	.48	.90	2.00
10,500 cu.yd. 1-2-4 concrete (class A)	13.68	21.86	18.14
640 cu.yd. 1-3-5 concrete (class B)	13.68	21.36	16.10
450,000 lb. reinforcing steel	.078	.06	.06
220 cu.yd. brick masonry	36.00	65.00	40.00
500 cu.yd. rubble masonry	12.00	9.45	25.00
1,000 sq.yd. stone paving	4.80	1.75	4.02
180,000 lb. iron castings	.084	.10	.17
24,000 lb. machined iron castings	.204	.175	.25
35,000 lb. miscellaneous w.i. and steel	.204	.20	.15
4,000 lb. galvanized w.i. pipe	.12	.50	.24
6—1-in. gate valves	3.60	1.50	3.06
6—1½-in. gate valves	4.80	2.46	4.31
26—2-in. gate valves	7.38	3.86	5.76
6—3-in. gate valves	15.00	9.45	9.98

	A	B	C
15—4-in. gate valves	18.00	18.50	13.13
9—6-in. gate valves	30.00	31.10	32.41
5—8-in. gate valves	42.00	48.31	46.52
5—10-in. gate valves	60.00	72.40	69.93
30—12-in. gate valves	78.00	91.00	93.09
2—16-in. gate valves	138.00	174.00	181.13
2—4-in. sluice gates	36.00	36.00	68.94
23—12-in. sluice gates	150.00	160.00	120.65
1—18-in. sluice gate	216.00	210.00	170.63
1—12-in. flap valve	90.00	80.00	70.14
8—16-in. flap valves	120.00	106.50	85.89
5—6-in. shear gates	32.40	29.70	32.41
5—10-in. shear gates	62.40	52.80	53.15
12—4-in. hydrants	78.00	65.36	66.70
28 valve stands	18.06	40.00	19.64
48 special valve stand heads	18.00	11.00	53.76
21 valve boxes	14.40	12.00	13.10
60 M.ft.b.m. lumber in trench	90.00	90.00	103.50
10 M.ft.b.m. plank or timber piles	90.00	100.00	121.00
4 M.ft.b.m. finished woodwork	.09	.20	.1265
1 V-notch weir and recorder	1,200.00	1,000.00	1,000.00
1 floating outlet pipe	240.00	500.00	350.00
2 control for contact bed	4,200.00	3,287.00	3,615.00
20,000 cu.yd. crushed stone for contact	4.20	5.00	5.66
126,000 ft. half tile drains for contact	.18	.18	.25
25,000 lb. asphalt joint filler	.045	.14	.18
27,500 cu.yd. filter sand	1.80	1.60	4.00
18,000 cu.yd. gravel	3.60	4.00	4.60
8 appurtenances for sand filters	1,200.00	1,911.00	2,703.00
1 industrial track switch and dump cars	960.00	785.00	730.00
630 ft. industrial railroad track—straight	1.08	1.07	2.02
1 gas collector and appurtenances	480.00	450.00	400.00
1 gas holder	960.00	1,000.00	825.00
1 chlorinator	1,800.00	1,500.00	1,415.00
1 appurtenance for sterilizing plant	720.00	4,500.00	2,524.00
3 superstructures—siph. ch. and contact bed	2,820.00	7,700.00	3,036.00
Superstructure—sterilizing plant	8,400.00	8,200.00	10,570.00
1 electric line and outlet light	...	14,000.00	9,760.00
Extended totals using tile and segment block sewer	$1,065,471	$1,254,971	$1,291,804
Extended totals using monolithic concrete sewer	$1,104,401	$1,377,073	$1,292,122

Industrial Works (Continued)

ing wharves, steel and stucco. To exceed $40,000. Engineer and architect not selected. Bay Transport Co., Pier 38, San Francisco, lessee.

Ont., Cornwall—Howard Smith Paper Co. Ltd., plans 1 and 2 story, 180 x 200 ft. and 52 x 100 ft. additions to paper mill, rein.-con. and brick. Private plans.

Ont., St. Catharines—See "Buildings."

BIDS DESIRED

N. J., Verona—July 6, by Essex Mountain Sanitorium, brick, steel and concrete boiler house, plain foundation. $150,000. Guilbert & Bettelle, 2 Lombardy St., Newark, archts. and engrs.

Pa., Glassmere — Cruikshank Eng. Co., engrs., 5th Ave. Arcade, Pittsburgh, receiving bids 3 story and basement, 105 x 123 ft. factory, for Allegheny Plate Glass Co., here. $150,000.

Ill., Chicago — L. G. Hallberg & Co., archts., 116 South Michigan Ave., receiving bids 6 story, 217 x 241 ft. factory addition, fireproof, Lincoln and George Sts., for Stewart-Warner Speedometer Co., 1312 South Michigan Ave. $750,000.

Wis., Fond du Lac—Stepnoski & Mehner, archts., Forest Ave., taking bids 1 story, 56 x 106 ft., brick and concrete garage, plain foundation, for J. Grebe, 22 Rees St. $40,000.

Wis., Madison — W. Brueski, 2805 East Washington Ave., taking bids 2 story, 50 x 90 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation. $40,000. Private plans.

Wis., Madison—Schmidt Bros. Co., c/o A. J. Schmidt, 2611 Monroe St., taking bids 1 story, 60 x 125 ft. garage and repair shop, brick, rein.-con. and steel, plain foundation. $40,000. Private plans.

Wis., Milwaukee—July 2, by H. T. Schramek, archt., 808 South Pierce St., 1 story, 110 x 125 ft., brick and concrete addition to garage, plain foundation, for Modern Auto Repair Co., 2431 State St. $50,000.

Calif., San Francisco.— Francisco & Jacobus, archts., 511 5th Ave., New York City, receiving bids 1½ story, rein.-con. factory, on block bounded by Mariposa, 18th, Bryant and Florida Sts., for Nucoa Butter Co., 1964 Bryant St. To exceed $40,000.

CONTRACTS AWARDED

R. I., North Providence (Providence P. O.)—Mackie Worsted Yarn Co., Allendale, factory, here, to Famigliette Constr. Co., Charles St., Providence, $65,000.

Conn., Hartford — Connecticut Beef Co., 53 Hoadley Pl., 3 story, 50 x 100 ft. and 50 x 150 ft. brick and timber warehouse, plain foundation, Huntley Pl., to C. P. Waterman, 43 Farmington Ave. Archts. est. $75,000. Noted June 7.

N. Y., Olean—Vacuum Oil Co., 926 Exchange St., Rochester, boiler and steam plant, here, to Havens Constr. Co., Olean, $93,000.

Pa., Pittsburgh—Baltimore & Ohio R.R., Baltimore and Charles Sts., Baltimore, Md., 2 story and basement, 30 x 100 ft. freight house, brick, concrete and steel, 33rd and Liberty Sts., here, to France Bros. & Haigley, 19 West Franklin St., Baltimore, Md.

Md., Hagerstown—See "Buildings."

Ky., Louisville—Standard Sanitary Mfg. Co., 6th and A Sts., 1 story, 56 x 75 ft. and 102 x 150 ft., foundry buildings, concrete and steel, 6th and Shipp Sts., to Platoff & Bush, 122 West Liberty St., $70,000. Noted Apr. 19.

O., Cleveland—Benesch, Federman & Co., 5432 Bway., 2 story, 50 x 60 ft., brick, steel and concrete garage and warehouse, 5316 Barkwill Ave., to Super-Built Constr. Co., Union Bldg. Archts. est. $40,000.

O., Cleveland—Standard Oil Co. of Ohio, East Ohio Gas Bldg., two 1 story steam power plants, 1 at 2800 Bway. and other at East 65th St. along tracks of Erie R.R., both brick, steel and concrete, to James Stewart Co., 30 Church St., New York City.

O., Cleveland—Standard Oil Co. of Ohio, East Ohio Gas Bldg., 2 story, 92 x 165 ft. cooperage factory, brick and rein.-con., East 65th St. along tracks of Erie R.R., to James Stewart Co., 30 Church St., New York City. Archts. est. $150,000.

O., Cleveland—A. N. Jeavons, 806 Champlain Ave., N.W., 2 story and basement, 70 x 142 ft., brick and rein.-con. factory, 1633 East 40th St., to D. Lindhorst Constr. Co., 1602 Holmden Ave. Archts. est. $100,000.

O., Cleveland—B. J. Russell, 10539 Euclid Ave., 1 story, 90 x 115 ft., brick and steel factory, 22nd St. and Marion Ave., to S. W. Emerson Co., 1900 Euclid Ave. Archts. est. $40,000. Klein & Paterson Body Co., c/o owner, lessee. Noted May 24.

Mich., Detroit — Detroit Motorbus Co., Terminal and Edlie Aves., 1 story, brick, steel and concrete garage, plain foundation, Tireman Ave., to Bryant & Detwiler Co., 2336 Dime Bank Bldg., $75,000.

Mich., Detroit—Pub. Lighting Comn., Atwater St., E., four 20,000 kw. turbo units for new power plant, to Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa., $1,254,000. Noted May 24.

Mich., Menominee—Lloyd Mfg. Co., North State St., 3 story, 100 x 400 ft., rein.-con. factory, plain foundation, to H. J. Selmer Co., Cartney Bank Bldg., Green Bay, Wis. Archts. est. $75,000.

Ill., Chicago—E. J. Brach & Sons, 401 North Kilpatrick Ave., second unit 3 story, 102 x 129 ft. factory addition, fireproof, 401-53 North Kilpatrick Ave., to R. F. Wilson & Co., 1851 Elston Ave. Archts. est. $90,000. Noted Aug. 31.

Ill., Chicago—Northwestern Packing Co., 1012 Milwaukee St., 4 story and basement, 168 x 175 ft. packing house, fireproof, Augusta and Milwaukee Sts., to C. Kehl, 1775 North Maplewood Ave. Archts. est. $250,000.

Ill., Chicago—Yellow Cab Mfg. Co., 5801 Dickens Ave., 3 story, 200 x 347 ft. factory, fireproof, 5918-48 Armitage Ave., to Bulley & Andrews, 2040 West Harrison St. Archts. est. $300,000.

Wis., Brillion—Nestles Food Co., c/o F. W. Bailey, supt., 2 story, 52 x 80 ft., brick, rein.-con. and steel plant, plain foundation, to R. C. Zorn, Brillion. Archts. est. $50,000.

Wis., Hilbert—C. F. Lawler, 1 and 2 story, and basement, 46 x 80 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation, to Appleton Constr. Co., Odd Fellows Bldg., Appleton, Archts. est. $40,000.

Wis., Milwaukee — Chicago & Northwestern Ry., 226 West Jackson Blvd., Chicago, coaling station, timber, plain foundation, to Roberts & Schaefer Co., 400 North Michigan Ave., Chicago. $45,000.

Wis., Milwaukee—O. R. Pieper Co., 192 Bway., 2 story, 60 x 110 ft., brick and timber addition to warehouse, to H. Schmitt & Son, 430 Farwell Ave. Archts est. $60,000.

Wis., Milwaukee—Rockwell Mfg. Co., 572 Park St., 1 story, 72 x 100 ft. dyn kiln, brick, tile and concrete, plain foundation, to W. W. Oeflein, 86 Michigan St. Archts. est. $40,000.

Wis., Neenah—Valley Paper Mills, 145 West Wisconsin Ave., 1 story, 80 x 500 ft. main building, 95 x 116 ft. warehouse, 1 story, 130 x 144 ft. finishing room, 1 story, 60 x 160 ft. and 50 x 125 ft. power house and filtration plant, brick and concrete, plain foundations, to Appleton Constr. Co., I. O. O. F. Bldg., Appleton. Noted Mar. 1.

Minn., Minneapolis—C. F. Haglin & Sons Co., 226 Lumber Exch., will build 2 story and basement, 135 x 170 ft. warehouse, and 1 story, 100 x 170 ft. garage, brick and concrete, Laurel Ave. near Bryant Ave., by day labor. Hewitt & Brown, 1200 2nd Ave. S., archts.

Minn., Minneapolis—C. Lindley, 622 Nicollet Ave., general contract 1 story, rein.-con. and brick garage, 1415 Hennepin Ave., to M. Schumacher, 39 Dell Pl. Total cost $45,000.

Minn., Minneapolis — Royal Wet Wash Laundry Co., 140' Plymouth Ave., will build 2 story and basement, 88 x 140 ft., brick and concrete laundry addition, by day labor. $45,000. Liebenberg & Kaplin, 617 McKnight Bldg., archts. Noted July 13.

Minn., St. Paul—State Bd. Control, Capitol, general contract 3 story and basement dairy, rein.-con., brick, tile and stone, at College of Agriculture, University of Minnesota, to Louis Fleisher Co., 504 Plymouth Bldg., Minneapolis, $156,000. Noted June 21.

Minn., St. Paul—St. Paul Gas Light Co., 6th and Cedar Sts., power house, 2,500 kva. steam turbo electric power plant, 100 x 225 ft. generating plant and 60 x 150 ft. pulverizing building, both steel and concrete, on island in Mississippi River, to Siems, Helmers & Schaffner, 514 Guardian Life Bldg. This corrects report in March 22 issue.

Kan., Wichita—W. A. Dyle, Rock Island St., 2 story, 60 x 120 ft., rein.-con. and brick factory, concrete pile foundation, at 112-114 Mosley Ave., to G. Seidhoff, Broadview Hotel. $40,000.

Ont., Brantford—Brandon Shoe Co., factory to P. H. Secord & Sons, Brantford. Est. cost $75,000. Noted May 10.

Buildings

PROPOSED WORK

Mass. Hyannis — High School — School Com. plans 3 story, 100 x 125 ft., Main St., $150,000. F. T. Bowles, chn. Engineer and architect not selected.

R. I., Providence — Gymnasium — Pub. Buildings Dept., plans 4 story, 100 x 100 ft., rein.-con. and brick, Spring St. $200,000. W. E. Hartwell, City Hall, archt.

Conn., Hartford — Apartment — Golden-Storrs Co., archts., 1127 Main St., prepared plans 3 story, 120 x 120 ft., brick, plain foundation, Windsor Ave. and Westland St. $200,000. Owner's name withheld.

N. Y., Binghamton—Bank—City Natl. Bank plans 1 and 2 story and mezzanine, brick and stone, Washington and Court Sts. $165,000. Engineer and architect not announced.

N. Y., Bronxville—School—Bd. Educ. soon takes bids brick, steel and stone, plain foundation, Pondfield Rd. $450,000. Guilbert & Bettelle, 2 Lombardy St., Newark, N. J., archts. and engrs. Noted Oct. 12.

N. Y., Brooklyn—Exchange—New York Telephone Co., 15 Dey St., New York, having plans prepared by McKenzie, Voorhies & Gmelin, archts. and engrs., 342 Madison Ave., New York, 3 story, 200 x 213 ft., brick, steel and stons, plain foundation, Rockaway Ave. near Riverdale Ave. $700,000.

N. Y., Buffalo—County—Erie Co., City Hall, plans county building, West Eagle St. To exceed $200,000. R. North, Niagara Life Bldg., archt.

N. Y., Canton—Court House—St. Lawrence Co. having plans prepared by S. Williams Ogdensburg, 2 story, 77 x 127 ft., stone addition. $170,000. Address W. W. Haile, co. clk.

N. Y., Corona—Bank—Queensboro Natl. Bank, having plans prepared by T. M.

Buildings (Continued)

James Co., archts. and engrs., 342 Madison Ave., New York, 2 story, brick and stone, plain foundation, Jackson and 103rd Sts. $400,000.

N. Y., Friendship—School—Bd. Educ. plans new brick school. $150,000. Engineer and architect not selected.

N. Y., New York—Apartment— J. Axelrod, c/o G. F. Pelham, archt. and engr., 200 West 72nd St., having plans prepared 4 story, brick, steel and stone, plain foundation, East 84th St. $150,000.

N. Y., New York — Apartment — Della Penna & Erickson, archts. and engrs., 344 East 149th St., preparing plans 6 story, 80 x 85 ft., brick, steel and stone, plain foundation, Topping Ave. $150,000. Owners name withheld.

N. Y., New York—Apartment—P. Starrett, c/o J. E. R. Carpenter, archt. and engr., 598 Madison Ave., having plans prepared 14 story, 100 x 150 ft., brick, steel and stone, plain foundation, Park Ave. and 65th St.

N. Y., New York—Apartment Hotel—E. Margolies, 19 East 33rd St., had plans prepared by E. De Rosa, archt. and engr., 110 West 40th St., 12 story, 110 x 125 ft., brick, steel and stone, plain foundation, 3-11 West 47th St., Noted May 3.

N. Y., New York—Loft—Amer. News Co., 11 Park Pl., having plans prepared by R. G. Cory, archts. and engrs., 30 Church St., 10 story, 150 x 175 ft., brick, steel and stone, plain foundation, Warwick and Dominick Sts.

N. Y., New York—Office and Store—M. M. Watanson, c/o M. Zipkes, archt. and engr., 25 West 43rd St., having plans prepared 4 story, 50 x 75 ft., brick, steel and stone, plain foundation, Nassau St. $300,000.

N. Y., Portchester — Y.M.C.A., 2 West 45th St., New York City, plans brick, steel and stone, Pearl St., here. $250,000. Engineer and architect not selected.

N. Y., Rochester—Apartment—J. Joroslow, 176 Meigs St., plans 3 story, 61 x 97 ft., brick, Milburn and Berkley Sts. $150,000. Engineer and architect not announced.

N. J., East Orange—Hospital—Homeopathic Hospital, c/o Crow, Lewis & Wick, archts. and engrs., 200 5th Ave., New York City, having plans prepared 6 story, brick, steel and stone, plain foundation, here. $450,000.

N. J., Lawrenceville—School—Lawrenceville Preparatory School plans class room and administration building. $275,000. J. Dixon, 108 West State St., Trenton, pres. trustees. Engineer and architect not selected.

N. J., Newark—High School—Bd. Educ., City Hall, Broad St., having plans prepared by Guilbert & Bettelle, archts. and engrs., 2 Lombardy St., brick, stone and steel, plain foundation, South Orange Ave. and South 12th St. $750,000.

N. J., Trenton — Home — Widows' and Single Women's Home, Spring St., plans brick, steel and concrete addition. $150,000. J. O. Hunt, 219 East Hanover St., archt.

Pa., Altoona—Exchange—Bell Telephone Co., Broad and Vine Sts., Phila., plans 3 story and basement, 90x120 ft., brick, steel and concrete, office, warehouse and garage, Industrial Ave., here. $150,000. C. H. Cassidy, 2814 Broad Ave., archt.

Pa., Altoona—Store—M. Lenson & Sons, 1007 14th St., plans 3 story and basement, 28x140 ft., brick, steel and concrete, Union Ave. $150,000.

Pa., Ferndale (Johnstown P. O.)—High School—Bd. Educ. rejected bids 2 story and basement, brick and steel, here. $150,000. J. E. Adams, archt., Nemo Bldg., Johnstown, revising plans. Noted May 24.

Pa., Johnstown—High School—Bd. Educ. takes bids this summer for Central High School, 3 story and basement, 200 x 210 ft., rein.-con., brick and steel, Somerset St. $500,000. J. E. Adams, Nemo Bldg., archt. E. L. Tilton, Phila., associated archt. Noted Mar. 22.

Pa., Johnstown—School—Bd. Educ. had plans prepared by J. E. Adams, Nemo Bldg., and takes bids this summer, 3 story and basement, 40 x 100 ft. brick and steel addition to Hudson St. School. $150,000. W. Wenn, secy.

Pa., Johnstown—Store—Penn Traffic Co., Johnstown, having plans prepared by Hunting-Davis Co., Century Bldg., Pittsburgh, 5 story and basement, 79 x 87 ft. addition, brick, steel and tile, Washington St. $350,000.

Pa., Sharon—Club—Loyal Order of Foresters 292, having plans prepared by W. H. Crosby, Reno St., Oil City, for clubhouse, Main St. $155,000.

W. Va., Montgomery — **Bank** — Montgomery Natl. Bank having **plans** prepared by Hoggson Bros., 485 5th Ave., New York City, 2 story and basement, 24 x 90 ft., stone and granite. $200,000.

N. C., Charlotte—Courthouse, etc.—City and Mecklenburg Co. election July 28, to vote on $900,000 bonds for 12 story, courthouse, jail and office. M. E. Boyer, Jr., Trust Bldg., archt. Noted Mar. 15.

Ga., Atlanta — Office — Atlanta Realty Corp., Hurt Bldg., having plans prepared by H. Tallant, engr., 70 East 45th St., New York City, 17 story, 90 x 166 ft., steel and brick, plain foundation, Ivy St. $900,000.

Ga., Macon—Auditorium—City having plans prepared by Swartwout, archt., 18 West 34th St., New York City, for auditorium.

Fla., Miami—Office and Store—Tatum Bros., 214 12th St., having plans prepared by Kiehnel & Elliott, Miami, 10 story, 60 x 152 ft., rein.-con., East Flagler St. and 2nd Ave. $500,000.

Miss., Meridian—Y. M. C. A. plans to construct building. $150,000. C. W. Hayward, chn.

La., Lafayette — Orphanage — St. Marys Orphanage, c/o J. B. Jeanmard, bishop, had plans prepared by A. Bendernagel, Whitney Central Bldg., New Orleans, three 2 story and basement, brick and concrete. $150,000.

La., Shreveport—Hotel—Youree Hotel, Market and Texas Sts., plans 4 story, brick and concrete addition. $150,000.

Tenn., Memphis — Church — Episcopal Church had plans prepared by Hanker & Cairns, Madison Ave. Bldg., Gailor Memorial, 3 story, white stone, Poplar Ave. $250,000.

Tenn., Memphis—Church—First Methodist Church, Poplar Ave., had plans prepared by H. T. McGee, Madison Ave. Bldg., 2 story, brick and stone, Poplar and North 2nd Sts. Conducting campaign to raise $150,000 funds.

Tenn., Memphis—Hotel—Southern Hotel Co., Inc., 257 South Main St., having plans prepared by W. W. Ahschlanger, Inc., 65 East Huron St., Chicago, 12 story, 200 x 342 ft., containing 600 rooms, roof garden, dining halls, convention halls, lobby, 40 stores on ground floor, etc. $4,250,000.

Tenn., Memphis—Schools, etc.—St. Mary's School, 714 Poplar St., had plans prepared by E. L. Harrison, U. & P. Bank Bldg., three 2 and 3 story schools, incl. gymnasium, assembly hall, dining hall, apartments, etc. $150,000.

Ky., Lexington—City Hall and Auditorium—City Hall Building Comn. having sketches made by F. L. Packard, Hayden Bldg., Columbus, O., 3 story, concrete, brick and stone. $300,000.

Ky., Louisville — Apartment — Doric Apartment Co. having plans prepared by Joseph & Joseph, Francis Bldg., 8 story, 150 x 200 ft. addition, brick, Willow Ave. $750,000.

Ky., Louisville—High School—Bd. Educ. plans 4 story high school in West End, suburb of Louisville. $500,000. Engineer and architect not selected.

Ky., Winchester—School—Bd. Educ. having plans prepared by R. M. Bates, Watts Bldg., Huntington, W. Va., 2 story, brick, Colby Park. To exceed $150,000.

O., Canton—Mercantile and Office—H. H. Ink, Fulton Rd., plans 6 story, 60 x 150 ft., fireproof, 6th and Market Sts. $200,000.

O., Cleveland — Commercial — Welworth Realty Co., c/o L. N. Gross Co., 1241 West 3rd St., having plans prepared by Christian, Schwarzenberg & Gaeda, archts and engrs., 1900 Euclid Ave., 2 or 4 story, 92 x 195 ft., brick, steel and concrete, Euclid Ave. and East 30th St. $200,000.

O., Cleveland—School—Bd. Educ., East 6th St. and Rockwell Ave., plans 2 story, brick, steel and concrete addition to Jefferson School, West 130th St. $200,000. W. R. McCornack, East 6th St. and Rockwell Ave., archt.

O., Dayton—Hospital—Miami Valley Hospital, Apple St., having plans prepared by Schenk & Williams, Mutual Home Bldg., 5 story and basement, 80 x 200 ft., brick and stone, plain foundation. $500,000. Noted Mar. 22.

O., Steubenville — Theatre — Tri State Amusement Co. having plans prepared by C. H. Crane, 542 Griswold St., Detroit, Mich., 2 story and basement, 150 x 180 ft., brick, steel and terra cotta, 4th and Adams Sts. $500,000.

Mich., Detroit — Apartment — Kohner & Seeler, archts., 405 Kresge Bldg., preparing plans 4 story and basement, 100 x 108 ft., brick and steel, plain foundation, Lawton Ave. $150,000. Owner's name withheld.

Ill., Chicago—Apartment—E. P. Doerr, 1226 Madison Park Ave., plans two 3 story, 36 x 165 ft., fireproof, 4817-29 Lake Park Ave. $300,000. W. P. Doerr, 28 East Jackson Blvd., archt.

Ill., Chicago—Apartment—H. Miller, c/o J. K. Neebe, archt., 2532 Aubert Ave., plans 3 story, fireproof, Harrison and Leman Sts. $150,000.

Ill., Chicago—Apartment—Olsen & Urbain, archts., 155 North Clark St., preparing plans 3 story and basement, 150 x 150 ft., fireproof, Blaine and North Sacramento Sts. $200,000. Owner's name withheld.

Ill., Chicago—Apartment-Hotel—H. Minkus, c/o Leichenko & Esser, archts., 36 South Dearborn St., plans 12 story, 194 x 302 x 500 ft., fireproof, Albion St., North Shore Dr. and Lake Michigan, $3,000,000.

Ill., Chicago—Store, Office, etc.—D. S. Klafter, archt., 64 West Randolph St., preparing plans 2 story 150 x 310 ft., store, office, theatre and apartment, fireproof, Fullerton and Crawford Sts. $750,000. Owner's name withheld.

Wis., Appleton—Bank — Citizens Natl. Bank, College Ave. and Oneida St., having preliminary plans prepared by Coolidge & Hodgson, 134 South La Salle St., Chicago, 5 story, 52 x 90 ft. and 20 x 50 ft. additions, brick, concrete and stone, plain foundation. $150,000.

Wis., Beloit—City Hall—Had plans prepared and soon takes bids 2 story and basement, 80 x 100 ft., brick, concrete and steel, plain foundation. $150,000. F. A. Carpenter, Brown Blk., Rockford, Ill., archt. Noted June 14.

Wis., Green Bay—Hospital—State Bd. Control, Madison, plans 4 story, rein.-con., brick and steel addition, plain foundation here. $150,000. F. Crocker secy. Engineer and architect not selected.

Wis., Madison—Church—Grace Episcopal Church, c/o H. H. Trumpkin, 116 West Washington Ave., plans 2 or 3 story, brick, rein.-con. and steel, plain foundation, Carroll St. $150,000. Engineer and architect not selected.

Wis., Merrill—Theatre—Business—Merrill Amusement Co., having plans prepared by Wisconsin Eng. & Constr. Co., archts. and engrs., 512 3rd St., Wausau, 1 and 2 story, 54 x 120 ft., brick and concrete, plain foundation. $150,000.

Wis., Waupun—Hospital—State Bd. Control, Madison, plans 3 story, brick, rein.-con. and steel, plain foundation at State prison here. $150,000. F. Crocker secy. Engineer and architect not selected.

Ia., Marion—Jail and Court House—Linn Co. plans jail and court house. $750,000. G. A. Senninger, aud.

Minn., Luverne—School—Voted $350,000 bonds 3 story and basement, 68 x 120 ft., rein.-con., brick, tile and stone. Tyrie & Chapman, 1200 2nd Ave. S., Minneapolis, archts.

Minn., Minneapolis—Auditorium—Authorized $3,000,000 bonds for auditorium. Engineer and architect not selected.

Neb., Falls City—Hotel—Fall City Hotel Co. had plans prepared by J. H. Craddock, 315 South 15th St., Omaha, 4 story and basement, 92x130 ft., rein.-con., brick and stone. $150,000. Noted May 24.

Mo., Kansas City—High School—C. A. Smith, archt., 601 Finance Bldg., takes bids about Aug. 15, 4 story and part basement, 150 x 290 ft., rein.-con., brick, steel and stone, 48th and Paseo Sts., for Bd. Educ. $1,400,000. Noted Jan. 18.

Mo., Kansas City—School—C. A. Smith, archt., 601 Finance Bldg., takes bids about July 20, 2 story and basement, 60 x 140 ft., rein.-con., brick steel and stone addition to Bristol School, Maywood St., for Bd. Educ. $180,000. Noted May 17.

Mo., Kansas City—Schools—C. A. Smith, archt., 601 Finance Bldg., takes bids about July 10, 2 story and basement, 60 x 140 ft. addition to Mt. Washington School, $190,000, also constructing Shiloh School, 1 story and basement, 150 x 200 ft., 70th and Askew Sts., $280,000, both rein.-con., brick steel and stone for Bd. Educ. Noted May 17.

Mo., St. Louis—School—Xenia Theological Seminary, Washington and Trinity Aves., plans rein.-con. and brick buildings, plain foundations, Trinity Ave. $700,000. Engineer and architect not announced.

Mo., St. Louis—Store—Stix, Baer & Fuller Co., 6th and Washington Sts., plans 8 story, 105 x 160 ft., rein.-con., brick and steel, concrete pile foundation, Lucas Ave. $2,000,000. Engineer and architect not announced.

Mo., St. Louis — Store and Office — E. Freund, 2735 Cherokee St., plans 3 story and basement, 88 x 145 ft., rein.-con. and brick, plain foundation, Grand Blvd. $150,000. Engineer and architect not announced.

Tex., Corsicana—Office—L. C. Polk and associates plan 5 story and basement, brick and concrete, plain foundation. $150,000. Engineer and architect not announced.

Tex., Greenville—Courthouse—Hunt Co. election July 21, to vote on $400,000 bonds. 4 story, brick and concrete. O. P. Mc-

Buildings (Continued)

Whirter, co. judge. Architect not announced.

Okla., Tulsa—Jail—Voted $150,000 bonds for jail. Engineer and architect not selected.

Okla., West Tulsa (Tulsa P. O.)—Hotel—Moss Hotel had plans prepared by C. P. Nieder, Empress Theatre Bldg., Oklahoma City, 4 story and basement, 48 x 140 ft., rein.-con., brick, steel and stone. $150,000.

Colo., Denver — Office — J. A. Ferguson, U. S. Natl. Bank Bldg., having plans prepared by Fisher & Fisher, U. S. Natl. Bank Bldg., 5 story, 125 x 125 ft., addition to present 7 story building, 17th and Champa Sts.

Wash., Olympia—Capitol—State Capitol Comn., rejected bids constructing main portion Legislative Building of Capitol (exclusive of dome). Will readvertise. Total cost $5,000,000 or $6,000,000. Wilder & White, Wash., D. C., archts. Bebb & Gould, Securities Bldg., Seattle, associated archts. Noted June 21.

Calif., Covina — Dormitories — Masonic Home, East Badillo St., soon takes bids 2 story, rein.-con. and brick. $150,000. Train & Williams, Western Mutual Life Bldg., Los Angeles, archts.

Calif., Los Angeles — Apartment — A. C. Blumenthal, Loew State Bldg., plans 12 story, probably rein.-con., Hollywood Blvd. $1,000,000.

Calif., Los Angeles — Apartment Hotel San Francisco syndicate having plans prepared by Walker & Eisen, Pacific Finance Bldg., 10 story, concrete and steel, Wilshire Blvd. $850,000.

Calif., Los Angeles—Club—Southern California Athletic & Country Club having plans prepared by E. Bergstrom, Citizens Natl. Bank Bldg., 13 story and basement, 150 x 200 ft., steel, Wilshire Blvd. $2,000,000.

Calif., Los Angeles—Institutional—Plaza Community Church, c/o Train & Williams, archts., Western Mutual Life Bldg., had plans prepared 4 story and basement, hospital, club, office and auditorium, rein.-con., Los Angeles St. $150,000.

Calif., Los Angeles—Loft—L. Conrad, et al., 166 West Pico St., plans loft, rein.-con., probably 12 story, Los Angeles and 7th Sts. to exceed $250,000. Engineer and architect not selected.

Calif., Los Angeles—Store—See "Industrial Works."

Calif., Oakland—Church—First Congregational Church, 12th and Clay Sts., plans church, fireproof, 26th and Harrison Sts. $200,000. R. A. Leet, ch. building com.

Calif., Oakland—Store and Office—Owl Drug Co., 611 Mission St., San Francisco, plans 6 story, fireproof, 16th St. and Telegraph Ave. To exceed $150,000.

Calif., Santa Monica—Church and Rectory—Church of St. Augustine by the Sea, having plans prepared by Allison & Allison, Hibernian Bldg., church and rectory, brick, $150,000 or more.

Ont., Ford—School—Public School Bd. having plans prepared by Nichols & Sheppard, Windsor, 2 story and basement, brick, steel and terrazo. $210,000.

Ont., Haileyburg — Hotel — N. Servais plans to rebuild Matabanic Hotel, destroyed by fire last year, concrete and brick, 100 rooms, probably 3 story and basement. Engineer and architect not selected.

Ont., Oakridge—School—School Bd., S. S. 12, plans 2 story and basement, rein.-con. and brick. $150,000. Engineer and architect not selected.

Ont., St. Catharines—Terminal—Niagara, St. Catharines & Toronto Electric Ry. plans passenger and freight terminal, brick, concrete and steel, Welland Ave., Balfour and General Sts. $250,000-$300,000. R. L. Harrison, St. Catharines, ch. engr.

Ont., Toronto—Church—St. Michaels and All Angeles Church, St. Clair and Bracondale Aves., plans 1 story and basement, rein.-con. and brick, St. Clair Ave. $150,000. W. J. Brain, 84 Ellsworth Ave., canon. Engineer and architect not selected.

Ont., Toronto—Hospital—Home for Incurables, Bloor St., having plans prepared by E. J. Lennox, 362 Bay St., 2 or 3 story, rein.-con. and brick, Bloor St. $300,000.

Ont., Toronto—School—Bd. Educ., 155 College St., having sketches made by C. Dyson, 155 College St., 3 story, rein.-con., brick and steel, 30 rooms, in district west of Yonge St. $450,000.

Ont., Toronto—School—Havergal College, Jarvis St., plans concrete and brick, on 17 acre site, at Stop 17, Yonge St. $500,000. Engineer and architect not selected.

BIDS DESIRED

N. Y., Syracuse—High School—July 2, by Bd. Contr. & Supply, 17th Ward Junior High School, 2 story and basement, 200 x 200 ft. brick, steel and stone, Fellows Ave. $650,000. Former bids rejected. A. L. Brockway, 3rd Natl. Bank Bldg., engr. Noted June 7.

N. J., Bloomfield—High School—July 5, by Bd. Educ., 4 story, 25 x 140 ft., brick and stone addition, Broad St. $225,000. J. F. Capen, 207 Market St., Newark, archt. J. O. C. Gibbons, 207 Market St., Newark, engr. Noted June 21.

Pa., Pittsburgh—School—July 5, by Bd. Educ., Fulton Bldg., 2 story and basement, rein-con., brick, stone and tile, Boggs Ave. $150,000. S. F. Heckert, Bessemer Bldg., archt. Noted Apr. 26.

Pa., Pittsburgh—School—July 21 by Bd. Educ., Fulton Bldg., 2 story and basement, brick, stone, tile and rein.-con., Bonvue Ave. $225,000. L. Stevens, Century Bldg., archt. Noted Feb. 15.

Tenn., Nashville—Hospital, etc.—July 16, by J. H. Kirkland, chancelor of Vanderbilt University, 337 x 458 ft., hospital and laboratory, also nurses' home, power plant and laundry, brick and rein.-con., on campus. $2,000,000. Coolidge & Shattuck, 122 Ames Bldg., Boston, archts.

Ky., Louisville—Office—July 2, by Avery Building & Loan Assn., 525 West Market St., 3 story, 100 x 150 ft., 515 17 West Market St. $150,000. Noted May 10.

O., Athens—High School—July 6, by W. Alicot, secy. Bd. Educ., 2 story and basement, rein.-con. and brick, plain foundation. $250,000. W. B. Ittner, 911 Locust St., St. Louis, Mo., archt.

O., Athens—School—July 7, by W. Alicot, secy. Bd. Educ., 1 story and basement, brick, plain foundation. $150,000. W. B. Ittner, 911 Locust St., St. Louis, Mo., archt.

O., Cleveland — Apartment — H. Abrams, 13340 Forest Hill Ave., taking bids 4 story, brick and timber, East 160th St. and Cornell Rd. $150,000. M. Weis, 617 Union Bldg., archt.

O., Dover—Theatre and Lodge—July 16, by G. A. Ebeling, archt., Newman-Stern Bldg., Cleveland, 4 story, 50 x 150 ft., brick, steel and concrete, here, for Dover Pythian Castle Co. $150,000. Noted May 31.

O., Logan—Court House— July 20, by Hocking Co., brick, concrete and stone. $250,000. F. L. Packard, New Hagden Bldg., Columbus, archt. Noted Feb. 22.

Mich, Detroit — Apartment — Williams Bros., archts., 1111 Kresge Bldg., taking bids and open same about June 30, 4 story and basement, 80 x 80 ft., brick, plain foundation, Lee Pl. and Wilson Ave., for G. Copelans, c/o architects. Noted Dec. 14.

Ill., Chicago—Apartment—Olsen & Urbain, archts., 155 North Clark St., receiving bids 4 story, 200 x 200 ft., fireproof, Arlington St., near Clark St. $300,000. Owner's name withheld.

Ill., Chicago—Apartment—W. C. Presto, archt., 111 West Washington St., receiving bids 3 story, 100 x 125 ft., fireproof, Kedzie St. near Montrose Ave. $150,000. Owner's name withheld.

Wis., Milwaukee—Store—July 2, by Herbst & Kuenzli, archts., 114 Grand Ave., remodeling and building 3 story and basement, 62 x 80 ft., brick and timber addition, plain foundation, for Kuenzelmann-Esser Co., 460 Mitchell St. $150,000.

Wis., Milwaukee—Store—M. Tullgren & Sons, archts., 425 East Water St., taking bids 2 story and basement, 102 x 150 ft., brick and tile, plain foundation, Wells St., for J. Saxe, 204 11th St. $150,000.

Kan., Coffeyville—Auditorium—July 1, by T. W. Williamson & Co., archts., 312 Central Natl. Bank Bldg., Topeka, 2 story and basement, 115x172 ft. rein.-con. and stone for city. $175,000. Noted June 7.

Kan., Leavenworth—High School—July 2, by C. A. Smith, archt., 602 Finance Bldg., Kansas City, Mo., 2 story and basement, 120 x 170 ft., rein.-con., brick and stone for Bd. Educ. $225,000.

Okla., Holdenville—Lodge—July 10, by Masonic Lodge Building Comn., 5 story, 50 x 140 ft., rein.-con., 3rd and Choctaw Sts. $150,000. Toninie & Bramblet, Terminal Bldg., Oklahoma City, archts.

Okla., Pawhuska—Hotel—July 16, by C. A. and J. L. Duncan, owners, Pawhuska, and E. Forsblom, archt., 310 Sedgwick Bldg., Wichita, Kan., 5 story, 52 x 190 ft., rein.-con and brick. $200,000. Noted June 7.

Calif., Los Angeles—Club—J. J. Frauenfelder, archt., Story Bldg., receiving bids 4 story, brick, Lucas and 3rd Sts., for Los Angeles Nurses' Club, 1103 West 8th St. To exceed $150,000. Noted June 1.

BIDS RECEIVED

N. Y., New York—Schools—W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, June 22, P. S. 60, brick, steel and stone, plain foundation, East 12th St. from G. Dekempie, 30 Church St., $1,185,000; P. S. 73, 3 story, brick, steel and stone, plain foundation, West 166th St. and Woodycrest Ave., from G. Colon & Co., 81 East 125th St., $395,903. Noted June 14.

La., Shreveport—Office—D. Ricou, Merchants Bldg., (1) 4 story, (2) 6 story, 120 x 150 ft., Milam and Marshall Sts., from J. E. Johnson Constr. Co., Amicable Bldg., Waco, Tex., (1) $290,777; Standard Constr. Co., Woolworth Bldg., Houston, Tex., (2) $380,800.

O., Akron—Hospital—Summit Co., Court House, June 18, hospital addition, Springfield Lake, near here, from Clemmer & Johnson Co., 406 Metropolitan Bldg., $155,586. Noted Dec. 7.

Minn., St. Paul—School—Bd. Educ., City Hall, June 18, 3 story and basement, rein.-con., brick, tile and stone, 14th and Jackson Sts., from Lindstrom & Anderson, 206 Bremer Arcade, $184,704. Noted June 14.

Calif., Huntington Beach—School—Huntington Beach High School Dist., brick school, general contract from A. Johnson, Union Bank Bldg., Los Angeles, $178,537. Noted Feb. 1.

Calif., Stockton—City Hall—Constructing city hall, fireproof, on block bounded by El Dorado, Center, Fremont and Lindsey Sts., general contract from H. S. Williams, 180 Jessie St., San Francisco, $398,000; plumbing also heating and ventilating from Miller-Hayes Co., 125 North California St., $15,277 and $28,570 respectively; mechanical equipment (incl. electric work, plumbing and heating), from E. L. Gneckow, 647 East Main St., $62,280. Noted June 14.

CONTRACTS AWARDED

Me., Belfast—High School—School Comn., 3 story, 135 x 147 ft., rein.-con. and brick, to Forgione & Romano Co., 36 Walnut St., Portland, $150,000. Noted May 10.

N. H., Manchester—Theatre—S. James, 3 story, 100 x 150 ft., brick and steel, Lowell St., to C. A. Golden, 64 Concord St., $225,000.

Mass., Northampton—Theatre—Goldstein Bros. Amusement Co., Broadway Theatre, Springfield, 2 story, 80 x 125 ft., brick and steel, King St., here, to Atlas Constr. Co., Broadway Theatre Bldg., Springfield. Archts. est. $150,000. Noted Mar. 29.

N. Y., Brooklyn—Apartment—Machold Building Co., c/o McCarthy & Kelley, archts. and engrs., 159 Remsen St., will build 4 story, 100 x 140 ft., brick, steel and stone, plain foundation, Ocean Ave., by day labor. M. Bleecher, pres.

N. Y., Brooklyn—Apartment—M. Sarnoff, c/o E. M. Adelsohn, archt. and engr., 1778 Pitkin Ave., 4 story, 50 x 100 ft., brick, steel and stone, plain foundation, Park Pl., by day labor. $200,000.

N. Y., Bronxville — Apartment — Village Investment Co., c/o Bates & How, archts. and engrs., 35 West 38th St., New York City, will build 6 story, brick, steel and stone, plain foundation, here, by day labor. $400,000.

N. Y., Fairport—High School—General contract 2 story and basement, 135 x 166 ft., brick, terra cotta, concrete and steel, to P. G. Hauck, 503 Cox Bldg., Rochester, $158,570. Noted Apr. 19.

N. Y., New York—Apartment—J. Perlbinder, c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 6 story, brick, steel and stone, plain foundation, West 167th St., by day labor. $300,000.

N. Y., New York—Exchange—New York Telephone Co., 15 Dey St., 30 story, brick, steel and concrete, West, Barclay, Washington and Vesey Sts., to Marc Eidlitz & Son, Inc., 42 East 42nd St. Archts. est. $11,250,000. Noted Apr. 5.

N. Y., New York—Office—Bway. and 40th St. Corp., 130 West 42nd St., 24 story, 65 x 200 ft., brick, steel and stone, plain foundation, 40th St. and Bway., to S. S. Roth & Bros., 130 West 42nd St. Archts. est. $5,000,000.

Pa., Dormont (Pittsburgh P. O.)—Exchange—Bell Telephone Co. of Pennsylvania, Broad and Vine Sts., Phila., 2 story and basement, 46 x 86 x 147 ft., brick, steel, limestone, granite and tile, Pioneer Ave., here, to W. T. Grange Constr. Co., Keenan Bldg., Pittsburgh. Archts. est. $150,000.

Pa., Johnstown—Schools—Bd. Educ., c/o P. O. Thomas, Bank Bldg., 2 story and basement, 95 x 132 ft. and 36 x 67 ft., high and grade school, Southmont, near here, to W. H. Smith & Son, Johnstown. Archts. est. $175,000.

Md., Hagerstown—Office, etc.—Western Maryland Ry. Co., Standard Oil Bldg., Baltimore, 2 story, 45 x 203 ft., concrete office and storeroom, here, to Price Constr. Co., Maryland Trust Bldg., Baltimore, $160,000.

Fla., Miami Beach—Hotel—J. A. Pancoast, 5 story, rein.-con. and tile, plain and concrete foundation, 29th St. and Ocean, to C. A. Ewing Co., 219 Bradford Bldg., Miami, $247,500.

Buildings (Continued)

Fla., West Palm Beach — Theatre — C. Kettler, 3½ story, rein.-con. and steel, plain foundation, Narcissus and Myrtle Sts., to H. C. Daniels, West Palm Beach, $200,000.

Ky., Bowling Green—High School—Bd. Educ., 2 story and basement, brick, to Forbes Mfg. Co., Hopkinsville. Est. cost $250,000.

Ind., South Bend—Apartment—Washington & Colfax Realty Co., Palace Theatre Bldg., 2 story and basement, brick and timber, plain foundation, to R. Reisinger & Co., 464 Oakland Ave., Milwaukee. Archts. est. $325,000.

Mich., Sault Ste. Marie—Hospital—Chippewa Co. Memorial Hospital, 3 story and basement, brick and concrete, plain foundation, general contract to Marshall N. Hunt, 651 Bingham St., $105,869. Archts. est. $150,000. Noted May 24.

Ill., Chicago—Bank and Office—Illinois Merchants Trust Co., 112 West Adams St., 21 story, fireproof, Jackson and La Salle Sts., to H. Erickson Co., 139 North Clark St. Archts. est. $5,500,000.

Ill., Chicago—Office—Chicago Tribune, Madison and Dearborn Sts., 20 story, 100 x 300 ft., fireproof, Austin St. and Michigan Ave., to R. C. Wieboldt Co., 1534 West Van Buren St. Archts. est. $7,000,000. Noted Dec. 7.

Ill., Chicago—Store, Office and Bank—Washington Park Natl. Bank, 730 East 63rd St., 4 story, 100 x 122 ft., preproof, Cottage Grove Ave. and 63rd St., to Person Constr. Co., 1546 East 75th St. $300,000.

Wis., Janesville — Theatre—H. T. Jones, 107 North Front St., 2 story, 112 x 144 ft., brick, rein.-con. and steel, plain foundation, South Franklin St., to E. Pautz, 808 Center St. Archts. est. $150,000. Noted May 31.

Wis., La Crosse—Schools—School Bd., 3 story and part basement, 114 x 157 ft., Lincoln Grade School, and 1 and 2 story, 140 x 206 ft. vocational school, brick, tile and concrete, plain foundations, to Grahn & Bathhurst, 638 Plymouth Bldg., Minneapolis, $176,940 and $138,900 respectively. Noted Mar. 1.

Wis., Manitowoc—Hotel—Hotel Manitou 5 story and basement, 52 x 100 ft., L shape, brick, tile and concrete addition, plain foundation, Franklin St., to T. Stark & Co., 130 Muskego Ave., Milwaukee. Archts. est. $150,000.

Wis., Milwaukee—Theatre and Office—Saxe Amusement Enterprises, 204 11th St., 4 story and basement, 125 x 150 ft., brick and concrete, plain foundation, to E. Grether, 1121 2nd St. Archts. est. $400,000. Noted May 17.

Minn., St. Paul—Store and Office—Barrett & Zimmerman, Prior and University Aves., general contract 2 story and basement, 54 x 165 x 180 x 230 ft., brick, concrete and stone, to Carlsted Bros., 542 Builders Exch., Minneapolis. Total cost $150,000. Noted Jan. 25.

Kan., Arkansas City—Store and Office—G. H. Gassman, 801 North 3rd St., will build 5 story and basement, 49 x 100 ft., rein.-con., stone, brick and terra cotta, by day labor. $200,000. T. W. Williamson & Co., 312 Central Natl. Bank Bldg., Topeka, archts. Noted June 7.

Kan., Emporia — Bank and Office — Citizens Natl. Bank, 5 story and basement, 43 x 130 ft., brick and concrete, to Vaughn Constr., W. O. W. Bldg., Omaha, $225,000. Noted May 24.

Kan., Topeka — Office — Trinity Benefit Assn., 3 story and part basement, 100 x 130 ft., rein.-con. and tile, to F. M. Spencer & Son, 10th and Van Buren Sts. Archts. est. $200,000.

Neb., Lincoln—Hospital—City, 4 story and basement, 54 x 264 ft., rein.-con. brick and stone, 7th and Sewell Sts., general contract, to E. Rokahr & Sons, 1743 South 24th St., $218,615. Noted Feb. 8.

N. D., Minot—Hospital—Trinity Lutheran Hospital Assn., general contract 5 story and basement, 38 x 120 ft., rein.-con., brick, tile and stone, to S. Olsen, Minot, $105,000. Noted Apr. 26.

Ark., Pine Bluff — Theatre — Saenger Amusement Co. general contract theatre, to Stewart McGehee Constr. Co., Kahn Bldg., Little Rock, $162,000.

Calif., Glendale—Bank and Office—Security Trust & Savings Bank, 500 South Spring St., Los Angeles, 6 story, brick and steel, Bway., general contract to J. V. Neil Co., I. W. Hellman Bldg., Los Angeles, $230,000. Noted June 7.

Que., Montreal — School — Protestant School Bd., Belmont St., 3 story, Rielle St., general contract to J. Sheaver & Co., St. Patrick St., $228,111; plumbing and heating to J. Tweedle & Co., 163 Lagch St., $60,484.

Ont., North Bay—Office—Temiskaming & Northern Ontario Ry., 3 story and basement, 600 x 100 ft., rein.-con., brick and stone, Regina St., general contract to Hill, Clarke & Francis, New Liskeard. Engrs. est. $150,000. Noted June 7.

Federal Government Work

PROPOSED WORK

N. Y., New York—Nurses' Quarters—U. S. Veterans' Bureau, Arlington Bldg., Wash., D. C., rejected bids construction complete, incl. mechanical equipment, nurses' quarters at U. S. Veterans' Hospital, Bronx, here. Will readvertise. Noted May 24.

Va., Norfolk—Heating Mains—Spec. 4840—Bureau Yards & Docks, Navy Dept., Wash., D. C., rejected bids heating mains at Navy Yard, here. Noted June 21.

Tex., Ft. Worth—Helium Plant—U. S. Government, Wash., or c/o A. G. Olson, commander U. S. Helium Plant, Decatur Rd., had plans prepared enlarging and improving helium plant, incl. new machinery, here. W. I. Wicks, U. S. Bureau Mines, engr.

Tex., Galveston—Seawall Extension—U. S. Engineer, Galveston, plans 2,850 ft. rein.-con. extension to east end of seawall. L. M. Adams, dist. engr.

Calif., San Diego—Barracks—Spec. 4765—Bureau Yards & Docks, Navy Dept., Wash., D. C., rejected bids barracks buildings at Naval Base, here. Noted June 14.

Calif., San Diego—Roads—Spec. 4766—Bureau Yards & Docks, Navy Dept., Wash., D. C., rejected bids roads, walks, curbs and grading at Naval Operating Base, here. Noted June 7.

Calif., San Diego—Service Extensions—Spec. 4764—Bureau Yards & Docks, Navy Dept., Wash., D. C., rejected bids service extensions to Marine Barracks A-1 and C-2, at Naval Base, here. Noted May 31.

Panama—Towers—Spec. 4858—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans dismantling towers at St. Petersburg, Fla., and re-erecting same here.

BIDS DESIRED

Md., Baltimore—Dredging—July 31, at office U. S. Engineer, dredging in Queenstown Harbor, Md.; adv. this issue.

D. C., Wash.—Intake Chamber, etc.—July 20, at office U. S. Engineer, 250 Old Land Office Bldg., Items a, b and c being intake chamber, cut and cover conduit and tunnel respectively of water supply conduit for Dist. of Columbia; adv. this issue.

Minn., Duluth — Removing Superstructure, etc.—July 3, at office U. S. Engineer, Custom House, removing superstructure and replacing stone riprap, West Breakwater, Upper Entrance Keweenau Waterway, Mich.

Tex., Galveston—Dredging—July 21 at office U. S. Engineer, Galveston, dredging in Texas City Channel; adv. this issue.

Washington—Bridge—July 2, by C. H. Goodwin, ch. engr. U. S. Natl. Park Serv., at office Superintendent of Park, Longmire, 198 ft. steel cable highway span, in Ranier Natl. Park.

California—Bridges—July 3 by C. H. Sweetser, dist. engr., U. S. Bureau Pub. Rds., Mills Bldg., San Francisco, Pine Creek Bridge, three 40 ft. concrete girders and Alviso Creek Bridge, two 40 ft. girders on concrete piers and abutments, in Santa Barbara Co. Noted May 17.

BIDS RECEIVED

R. I., Providence—Dredging—U. S. Engineer, Providence, dredging in Harbor, from Morris & Cummings Dredging Co., 17 State St., New York City, $0.154. Noted May 24.

N. Y., Geneva—Remodeling—Treas. Dept., Wash., D. C., remodeling and enlarging U. S. Post Office, here, from Pearce Bros., Inc., 220 West 42nd St., New York City, $14,958. Noted May 31.

D. C., Wash.—Generators, etc.—Chief of Engineers, U. S. A., 2825 Munitions Bldg., seven 150 kw. and 30 kw. Diesel generating sets complete with auxiliaries, etc., from Pacific Diesel Engine Co., 2896 Glascock St., Oakland, Calif., $125,650.

Ky., Dawson Springs—Recreation Building, etc.—U. S. Veterans' Bureau, Arlington Bldg., Wash., D. C., recreation building and officers' quarters, here, (1) work complete, from J. C. Miller, Campbellsville, (1) $117,000 (2) $2,500 (3) $11,000 (4) $51,000 (180 days). Noted May 18.

Mich., Marquette—Breakwater—U. S. Engineer, Custom House, Duluth, Minn., repairs to breakwater, here, from Tidorocher Co., Detour, $62,379. Noted May 31.

Washington—Road—C. H. Purcell, dist. engr., U. S. Bureau Pub. Rds., Post Office, Portland, Ore., grading and surfacing 4.3 mi. Randle-Yakima Highway, Ranier Natl. Forest Rd., Lewis Co., from Lucich & Co., Seattle, 9,700 cu.yd. rock excav. $1.49, 15,700 cu.yd. earth excav. $0.65, 5,500 cu.yd. surfacing $2.85, 300 cu.yd. maintenance gravel or broken stone $2.70, etc., total $46,380. Noted May 31.

Calif., San Diego—U. S. Engineer Office, Central Bldg., Los Angeles, dredging from United Dredging Co., Central Bldg., Los Angeles, Area D, 75,000 cu.yd. $0.225 and Area E, 430,000 cu.yd. $0.229. Noted May 18.

CONTRACTS AWARDED

R. I., Providence—Dredging—U. S. Engineer, dredging in Duck Island Harbor, Conn., to Columbia Dredging Co., 30 Church St., New York City, $36,800. Noted June 14.

N. Y., New York—Dike—U. S. Engineer, 616 Army Bldg., 3,400 ft. timber dike north of Shooters Island, New York and New Jersey, to Rhodes & Manvel, Inc., 90 West St., $75,786. Noted May 10.

N. J., Lakehurst—Hangar—Spec. 4849—Bureau Yards & Docks, Wash., D. C., balloon hangar here, to Donnell-Zane Co., 233 Bway., New York City, $5,118 (12 days).

Pa., Phila.—Dredging—U. S. Engineer, 815 Witherspoon Bldg., dredging in Delaware River, Phila. Harbor, 201,000 cu.yd. excav., maximum allowable overdepth 84,000 cu.yd., to Amer. Dredging Co., Mariner and Merchant Bldg., $68,340. Noted June 14.

Md., Perryville—Piping—Treas. Dept., Wash., D. C., installing underground steam piping, etc., at U. S. Veterans' Hospital, here, to Enterprise Steam and Hot water Heating Co., 600 North Howard St., Baltimore, Md., $18,625. Noted May 31.

D. C., Wash. — Laboratory — Bureau of Standards, high tension laboratory, to C. A. Hofferberth Constr. Co., Woodward Bldg., $11,340.

Fla., Pensacola—Bulkhead—Spec. 4837—Bureau Yards & Docks, Navy Dept., Wash., D. C., replacing bulkhead at Naval Air Station, to C. H. Turner, 17½ South Palafax St., $31,994 (240 days). Noted June 7.

Mich., Port Huron—Dredging—U. S. Engineer, Detroit, dredging Black River Channel, here, to Port Huron Sulphite & Paper Co., Port Huron, $12,700.

Minn., St. Cloud—Hospital—Spec. 4828—Bureau Yards & Docks, Navy Dept., Wash., D. C., hospital group for U. S. Veterans Hospital, here, to Carter-Halls-Aldinger Co., Ltd., Minneapolis, Minn., Item 6, construction of buildings, pipe tunnels and covered walks, $422,837; H. Kelly & Co., Plymouth Bldg., Minneapolis, plumbing, and drainage, $112,500. Noted June 21.

Panama—Towers — Spec. 4858 — Bureau Yards & Docks, Navy Dept., Wash., D. C., dismantling towers at St. Petersburg, Fla. and erecting same at La Palma, C. Z., to Donnell-Zane Co., 233 Bway., New York City, $2,078. Noted June 7.

Miscellaneous

PROPOSED WORK

Conveyors etc.—Somerville, Mass.—See "Industrial Work."

Car Barns, etc.—Meriden, Conn.—Connecticut Co., 127 Church St., New Haven, plans car barns, etc., brick, plain foundation, Capitol Ave., here. To exceed $150,000. Private plans.

Sea Wall, etc—Greenwood, Miss.—Making plans sea wall left bank Yazoo River, $15,000; also 28,000 lin.ft. single light lamp post system. W. S. Hawkins, engr.

Power Line Extensions, etc.—Lenoir City, Tenn.—Tennessee Electric Power Co., Hamilton Natl. Bank Bldg., Chattanooga, recently purchased plant here and will provide additional service, line extensions, transformers, etc. $25,000.

Automatic Signal System — Kentucky — Louisville & Nashville R.R. Co., 10th St. and Bway., Louisville, plans equipping and installing automatic signal system from Louisville to Nashville, 187 mi. long. $1,000,000. W. H. Courtenay, ch. engr.

Fill—Ohio—See "Streets and Roads."

Stadium—Youngstown, O.—Bd. Educ., 20 West Wood St., rejected bids June 20, 1st

Miscellaneous (Continued)

unit of South High Stadium, consisting of 17 tiers, 398 ft. long, rein.-con. seats. $30,000. New plans will be prepared. Noted Dec. 14.

Transmission Line—Beaver Dam, Wis.—Wisconsin Light Power & Heat Co., Gay Bldg., Madison, plans 10 mi. high voltage transmission line along Beaver Dam Highway. $25,000. Engineer not selected.

Retaining Wall, etc.—Cedar Rapids, Ia.—See "Bridges."

Units, Gates, etc—Marinette, Wis.—Menominee & Marinette Light & Traction Co. having plans prepared for excavation of tail race, additional vertical units and additional flood and sluice gates. Mead & Seastone, Journal Bldg., Madison, engrs.

Power Unit, etc.—Peshtigo, Wis.—North Eastern Power Co., 559 Marshall St., Milwaukee, having plans prepared new 4,000 kva. unit in power plant and strengthening old dam incl. new abutments, gates, etc., here. $50,000. Mead & Seastone, Journal Bldg., Madison, engrs.

Transmission Line—Stockton, Mo.—See "Industrial Works."

Pipe Line, etc.—Corsicana, Tex.—Humble Oil Co., Great Southwestern Life Bldg., Dallas, plans 20 steel storage tanks, each 80,000 gal. capacity, also pipe line. $500,000. Private plans.

Underpass—Ft. Worth, Tex.—City plans underpass on 4th St. under Rock Island R.R. tracks. $75,000. D. L. Lewis, city engr.

Levee — Waxahachie, Tex.—Ellis Co. Levee Dist. 11, plans to reclaim 1,500 acres, levees on North Side of Chambers Creek. $52,000. W. H. Stovall, co. judge.

Electrollers—Fresno, Calif.—Had plans prepared furnishing and installing 155 electroliers with appurtenances in portions of Kerchoff Ave., Huntington Blvd., etc., c.i. and steel standards with single globe and lamp, set on concrete foundations, 2 ft. deep, 2 ft. wide, conduit to be galvanized metal tubing containing wire conductors. To exceed $25,000. W. Stranahan, city engr.

Loading Wharves—Petaluma, Calif.—See "Industrial Works."

River Levee—Sacramento, Calif.—H. G. Denton, city clk., takes bids about July 5, constructing river levee, concrete revetment. To exceed $75,000. A. Givan, city engr.

Piers—San Francisco, Calif.—State Bd. Harbor Comrs., Ferry Bldg., having preliminary plans prepared 3 piers, from 285 ft. to 350 ft. wide and from 1,200 to 1,500 ft. long, with sheds 115 ft. wide. F. G. White, Ferry Bldg., ch. engr.

Subway—San Francisco, Calif.—State Bd. Harbor Comrs., Ferry Bldg., having preliminary plans prepared for subway extending from Ferry Loop with terminals at Merchant and Mission Sts., distance of 2 city blocks. To exceed $25,000. F. G. White, ch. engr.

Power Development—Montreal, Que.—Canadian Paper Board Co., Seigneurs St., plans developing 800 hp., partly water turbines and balance steam driven electric generators, on Lachine Canal. $200,000. Kerry & Chace, Confederation Life Bldg., Toronto, engrs.

Bathing Pool—Hamilton, Ont.—City plans concrete bathing pool with sterilization equipment in Dundurn Park. $25,000. W. L. McFaul, city engr.

Power Development — Bancroft, Ont. — Bancroft Light, Heat & Power Co. plans development of 2,500 hp. at High Falls on Madawaska River, about 50 ft. head. $300,000. Private plans.

Transmission Line — Toronto, Ont. — Hydro Electric Power Comn. of Ontario, 190 University Ave., plans 3½ mi. 110,000 volt steel tower transmission line along waterfront from Humber River to Strachan Ave. $75,000. F. A. Gaby, ch. engr.

BIDS DESIRED

Asphaltic Cement, etc.—New York, N. Y.—July 2, by J. Miller, pres. Manhattan Boro. Municipal Bldg., 600,000 gal. asphaltic cement 15,000 cu.yd. asphalt wearing surface sand and 300,000 wood paving blocks.

Timber—Webb, N. Y.—July 20, by Water Control Comn., at office State Engineer, 158 State St., Albany, purchasing and removing merchantable timber and salable wood upon state land around shores of Stillwater Reservoir; bids by Bd. Black River Regulating Dist., at office Water Control Comn., 158 State St., Albany, clearing unmerchantable timber and timber growth from land around and above existing Stillwater Reservoir, etc., here. E. S. Cullings, secy. Bd. Black River Regulating Dist.; adv. this issue.

Underground Return Lines—New York, N. Y.—July 2, by Dept. Pub. Welfare, Municipal Bldg., renewing and repairing underground return lines, on Randalls Island. B. S. Coler, comr.

Landing—New Orleans, La.—July 5, by Bd. Port Comrs., 200 New Court Bldg., furnishings and erecting Poland St. landing. Contr. A involves 216 tons structural steel framing for shed (requisition E. D. 13,554); Contr. B 4,550 sq.ft. steel rolling doors (requisition E. D. 13,455).

Power Equipment, etc.—Taylorville, Ill.—July 16, by T. E. Hobson, mayor, and Bd. Aldermen, complete power plant equipment and distribution system; adv. this issue.

Pier—San Diego, Calif.—July 11, by City Council, constructing portion of mole type pier project, incl. concrete wharves, also sides and ends of pier wall. $300,000. F. G. White, Ferry Bldg., San Francisco, engr. Noted Apr. 4.

BIDS RECEIVED

Portland Cement—St. Paul, Minn.—H. W. Austin, city purch. agt., June 18, 253 bbl. Portland cement, for Dept. Pub. Wks., from Corning-Donohue Brick Co., 614 Ryan Bldg.; Minnesota Lime & Cement Co., Marshall Ave. and Albert St.; Speakes Co., Griggs and Fuller Sts.; Stiefel Material Co., 501 Concord St.; St. Paul Builders Material Co., 605 Ryan Bldg., Thompson Yards, Inc., 2694 University Ave., all above bid $2.70 per bbl. without sack, delivered, subject to 2 per cent discount for payment within 10 days. Noted June 14.

Sandstone Blocks—St. Paul, Minn.—H. W. Austin, city purch. agt., 800 sq.yd. sandstone blocks for Dept. Pub. Wks., from Sandstone Quarries Co., 510 Plymouth Bldg., Minneapolis, $2.74 per sq.yd., f.o.b. cars St. Paul. Noted June 14.

CONTRACTS AWARDED

Tower—Hartford, Conn.—Fuller Brush Co., 647 Main St., 4 story tower, brick veneer and steel, to R. G. Bent Co., 183 Ann St., $46,000. Noted May 24.

Paving Blocks—New York, N. Y.—Bd. Purch., Municipal Bldg., creosoted wood paving blocks, to W. J. Fitzgerald, 347 West 45th St., $22,565. Noted June 14.

Subway Changes—New York, N. Y.—Transit Comn., 49 Lafayette St., June 21 making changes in subway structure at Bway. incidental to widening of West 32nd St. and constructing ventilation flue at West 32nd St. and Bway., Routes 4 and 36, Manhattan Boro, from Benedetto & Sanssez, Franklin St., Astoria, $29,500. Noted June 14.

Structural Steel—Louisville, Ky.—Louisville & Nashville R.R. Co., 10th St. and Bway., in market for 150 tons structural steel for bridge work to be done by day labor. $9,000-$10,000. W. H. Courtenay, ch. engr.

Grade Separation—Detroit, Mich.—Grand Trunk Ry., Brush St. Terminal, grade separation on Dequindre St. line from Orleans to Fort Sts., incl. excavation and construction of bridges at intersections of railroad with Jefferson Ave., Larned and Congress Sts., to W. E. Lennane, 2631 Woodward Ave., $341,535. Noted Jan. 18.

Granite, etc.—Detroit, Mich—To Wisconsin Granite Co., 11 South La Salle St., Chicago, 500,000 granite blocks $106 per M, 10,650 cu.yd. crushed granite f.o.b. Detroit, $4.64 per cu.yd., total $102,416.

Wharf and Dock—Detroit, Mich.—Pub. Lighting Comn., Atwater St., E., rein.-con. wharf and dock, at site of proposed lighting plant, to Grelling Bros. 100 Blk. E. Walnut St., Green Bay, Wis., $417,400. Noted June 7.

Dike, etc. — Biron, (Wisconsin Rapids P. O.), **Wis.**—Consolidated Water Power & Paper Co., Wisconsin Rapids, 2 mi. dike, 100,000 cu.yd., approximately 10,000 cu.yd. rip rap, 10,000 cu.yd. rock excav., in connection with drainage project, to Rood Constr. Co., Wisconsin Rapids.

Athletic Stadium—Madison, Wis.—University of Wisconsin, addition to athletic stadium, rein.-con. and steel, to G. Nelson, 1117 Johnson St., $50,499.

Roof—Milwaukee, Wis.—Auditorium Bd., 5th and Cedar Sts., copper roof on Auditorium, to A. G. Goethel Co., 818 Winnebago St., $67,974.

Mechanical Equipment, etc. — Denton, Tex.—College of Industrial Arts, steam distribution system on campus, mechanical equipment to Jenison Bros., Elm St., Dallas, $46,526; concrete tunnels, to M. B. Whitlock, Denton, $47,517. Engrs. est. $100,000.

Street Lighting System—Tex., Edgewood—See "Waterworks."

Grain Elevator — Ft. Worth, Tex. — Ft. Worth Elevator Co., 1510 East 1st St., rein.-con. grain elevator, 1,750,000 bu. capacity, to Southwestern Eng. Co., Woodruff Bldg., Springfield, Mo., $1,500,000.

OFFICIAL PROPOSALS

Bids: July 9.

State Highway Work

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey for the construction of the following:

Route No. 1, Section No. 12, Rahway Avenue, Elizabeth, in the County of Union. Estimated 3,360 cu.yds. of excavation, and 24,550 sq.yds. of sheet asphalt pavement on a 6-in. concrete base.

Bids will be received at the Assembly Chamber, State House, Trenton, New Jersey, on Monday, July 9th, 1923, at 11:00 a.m., Standard Time, and opened and read immediately thereafter.

Route No. 10, Section No. 1C, Bluff Road-Anderson Avenue, in the County of Bergen. Estimated 1,865 cu.yds. of earth excavation, 3,500 cu.yds. of rock excavation, and 6,870 sq.yds. of double line eight-inch (8-in.) reinforced concrete pavement.

Bids will be received at the Assembly Chamber, State House, Trenton, New Jersey, on Monday, July 9th, 1923, at 11:15 a.m., Standard Time, and opened and read immediately thereafter.

Route No. 10, Section No. 2, Broad Avenue-Glenn Road, in the County of Bergen. Estimated 7,476 cu.yds. of excavation, and 17,825 sq.yds. of double line eight-inch (8-in.) reinforced concrete pavement.

Bids will be received at the Assembly Chamber, State House, Trenton, New Jersey, on Monday, July 9th, 1923, at 11:30 a.m., Standard Time, and opened and read immediately thereafter.

Drawing, specifications and form of bid, contract and bond for the proposed work are on file in the office of the State Highway Department, Trenton, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on deposit of Ten Dollars ($10.00) upon application to the State Highway Department, 9th floor, Broad St. Bank Building, Trenton, New Jersey. Bids must be made on the standard proposal forms in the manner designated therein, and as required by the 1922 specifications, same to be enclosed in sealed special addressed envelopes bearing the name and address of bidder and the name and section of the route on the outside, and must be accompanied by a certified check drawn to the order of the Treasurer of the State of New Jersey for not less than ten per cent (10%) of the amount of the bid, provided that the said certificate check shall not be less than $500.00 nor more than $20,000.00 and be delivered at the above place on or before the hour named. Copies of the standard proposal form and special addressed envelopes will be furnished on application. Bids not enclosed in special envelopes will be considered informal and will not be opened.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provisions of the said specifications, conditioned for the faithful performance of the provisions of the contract and specifications. Each bidder must also accompany his bid with a Statement of Equipment properly filled out.

By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

Bids: July 17 (date extended).

Paving

Pottsville, Pa.

Sealed proposals will be received by the City Council of Pottsville, Pa., up to 7:30 o'clock p.m. Standard Time of Tuesday, July 17, 1923, for paving and improving portions of several streets of the City.

The work proposed consists of laying approximately thirty-five thousand (35,000) square yards of street paving on a concrete base with necessary grading, adjustment of curbs, etc.

Bidders may examine the plans and obtain a printed copy of the Specifications on application to the City Engineer and depositing five dollars ($5.00). The deposit will be returned on the return of the specifications in good condition with a bona fide proposal for the work contemplated.

The City Council reserves the right to reject any or all bids or parts of bids or to accept any bid considered the best for the City interests.

JOHN H. STRAUCH,
City Engineer.

OFFICIAL PROPOSALS

OFFICIAL PROPOSALS

(Continued from page 393)

Bids: August. 7.

Neches River Bridge

Beaumont, Tex.

Sealed proposals addressed to B. B. Johnson, County Judge, Jefferson County for the construction of the proposed Neches River Bridge at Beaumont, Texas, will be received at the office of the County Judge, at Beaumont, until 11 o'clock, A.M., Tuesday, August 7, 1923, and then publicly opened and read.

DESCRIPTION OF WORK TO BE DONE

Furnishing of materials for and construction of a 122 ft. single leaf bascule span with necessary electrical operation devices and gasoline auxiliary; two 150 ft. steel approach trusses; nine 33 ft. concrete girder spans; fivve 35 ft. concrete girder spans and approximately 2,000 ft. of 19 foot span creosoted timber trestle. Foundation of bascule and approach trusses to be concrete piers on timber piling; concrete piles for 33 ft. concrete spans; concrete bents on timber piles for 35 ft. concrete spans, and creosoted timber piles for timber spans.

Bids will be considered as follows: (1) For the entire project if accompanied by a certified or cashiers check for twenty-four thousand dollars ($24,000.00); (2) For steel superstructure if accompanied by certified or cashiers check for eight thousand ($8,000.00) dollars; (3) Concrete substructure for steel superstructure if accompanied by certified or cashiers check for eight thousand ($8,000.00) dollars; (4) For combined concrete and timber spans if accompanied by certified or cashiers check for eight thousand ($8,000.00) dollars. These certified or cashiers checks must be made payable without recourse to the order of B. B. Johnson, County Judge of Jefferson County, as a guarantee that the bidder, if successful will enter into contract and make bond in accordance with requirements of the specifications. The right is reserved by the party of the first part to reject any and all proposals or to waive all technicalities.

Detailed plans and specifications may be seen at the office of A. C. Love, County Engineer, Beaumont, Texas, and at the office of the State Highway Department, Austin, Texas. Copies may be obtained from the County Engineer by payment of $7.50.

Proposals shall be submitted in sealed envelopes and marked "Bids for the construction of the Neches River Bridge at Beaumont, Texas."

All bids receieved will be retained by the County.

Bids: July 20.

Purchase of Merchantable Timber

Albany, N. Y.

Sealed bids for the purchase of the merchantable timber and salable wood upon the lands of the State of New York to be flowed by the enlargement of the Stillwater Reservoir on the Beaver River in the Town of Webb, Herkimer County, N. Y., will be received by the Water Control Comission at its office in the office of the State Engineer, 158 State St., Albany, N. Y., until one o'clock p.m., Standard Time, on the twentieth day of July, 1923; all bids and proposals will be publicly opened and read at the time and place aforesaid.

This contract will include the purchase and removal of the merchantable timber and salable wood upon the State land around the shores of the existing Stillwater Reservoir lying below a contour line approximately 19 feet higher than the crest of the spillway of the existing Stillwater Dam and above the flow line of the existing reservoir. The area to be lumbered includes about 3160 acres of state land.

The land will be divided into two sections, designated as Section I and II.

Section I will comprise all the State land to be flowed lying west of the east line of the middle one-third of Township 5, John Brown's Tract, and will contain approximately 1000 acres.

Section II will comprise all the State land to be flowed lying east of the east line of the middle one-third of Township 5, John Brown's Tract and will contain approximately 2160 acres.

Separate bids must be made for each section, but a bidder may bid on either or both sections.

Maps of the reservoir, regulations for lumbering and contract forms may be seen at the office of the Water Control Commission and the Conservation Commission at Albany, N. Y., and at the office of the Board of the Black River Regulating District, Watertown, N. Y. Copies of the maps, forms and regulations may be obtained from the Water Control Commission upon request.

Every bid must be accompanied by a certified check upon a National or New York State Bank payable to the Water Control Commission for five per centum (5%) of the amount of the bid.

The Commission reserves the right to reject any or all bids and to again advertise for further bids.

STATE OF NEW YORK
WATER CONTROL COMMISSION

Bids: August 1st.

Concrete Arch Bridge

Binghamton, N. Y.

Sealed proposals for the construction of a five-span reinforced concrete arch bridge will be received by the Board of Contract and Supply (Orrin J. Pickering, Secretary), Municipal Building, Binghamton, New York, until three o'clock in the afternoon of Wednesday, August 1st, 1923.

The work covers the bridge, its approaches and all appurtenances such as paving, curbing and lighting. The work includes among its items approximately 11,600 cu.yds. of concrete (not including pavement base), 9500 sq.yds. of paving and 310 tons of metal reinforcement. This list of items is not complete but is merely given to indicate the size of the job.

Proposals must be on forms furnished by the City. Plans, specifications and proposal sheets may be secured from the City Engineer until July 25th. Applications for such plans and specifications must be accompanied by $25. in cash or by a certified check for like amount. This deposit will be returned to all who bid on the work and also to all who do not bid but who return the plans and specifications in good order not later than July 30th.

Bidders must examine the site either personally or by an authorized representative at least seven days before the receipt of bids.

Each proposal must be accompanied by a deposit equal in amount to five per cent of the bid in cash or by a certified check for a like amount. The successful bidder will be required to give a surety company bond and to enter into a contract with the City of Binghamton for the performance of the work.

Board of Contract and Supply of the
City of Binghamton, N. Y.
By W. EARL WELLER,
City Engineer.

Bids: July 26.

Hydraulic Dredging

New Orleans, La.

Sealed proposals will be received by the Board of Commissioners of the Port of New Orleans at their office, Suite 200 New Court Building, until 3:00 P.M., Thursday, July 26, 1923, and then publicly opened for hydraulic dredging from 750,000 to 1,500,000 cubic yards in the Inner Harbor Navigation Canal between the Lock and Louisville and Nashville R.R. Bridge.

A deposit of $1,000.00 in cash or certified check is required with each proposal.

A bond to the amount of fifty per cent (50%) of the sum bid is required with notarial contract.

Specifications and proposal forms are on file in the office of the Supervisor of Purchases, at No. 1 Canal Street, New Orleans, Louisiana. Complete sets will be furnished to prospective bidders on deposit of $10 which will be refunded to depositors who submit proposals or return sets in good condition.

The right is reserved to reject any or all bids and to waive informalities.

J. H. WALSH,
General Manager.

Bids: July 10.

Sewer System and Appurtenances

Essex Junction, Vt.

Sealed proposals, properly endorsed, for building a sewer system and appurtenances in the Village of Essex Junction, Vermont will be received by the Trustees of the Village of Essex Junction at the office of Allen Martin, Village Clerk until two p.m. July 10, 1923. at which time they will be publicly opened and read.

All proposals must be made on the blanks furnished by the Trustees and enclosed in a plain sealed envelope addressed to Village Trustees, Essex Junction, Vt. and endorsed "Proposal for Sewer System."

Each proposal must be accompanied by a certified check for one thousand (1000) dollars, made payable to the Treasurer of the Village of Essex Junction, Vt. The certified checks of the unsuccessful bidders will be promptly returned to them and that of the successful bidder when he has signed the contract and executed the bond.

A bond acceptable to the Trustees for fifty (50) per cent of the lump sum bid will be required of the successful bidder when the contract is signed.

The proposed system calls for approximately six miles of sewers from 6" to 27" in diameter.

Plans and Specifications may be obtained at the office of Allen Martin, Village Clerk, Essex Jct., Vt.

A deposit of ten (10) dollars will be required for each set of plans and specifications, which will be returned if the plans and specifications are returned to the Village Clerk by July 20, 1923.

The Trustees reserve the right to reject any or all bids.

L. A. EVANS,
President.

Bids: July 12.

Bridge

Fort Wayne, Ind.

Notice is hereby given that the Board of County Commissioners of Allen County, Indiana, will receive sealed proposals or bids at the Auditor's office in Allen County, Indiana, until 10 o'clock A. M. on the 12th day of July, 1923, for the erection and construction of a bridge over the Maumee River at Columbia Street, Fort Wayne, Indiana.

Plans and specifications and profiles have been adopted by the Board of Commissioners and are now on file in the office of the County Auditor for the inspection of bidders.

Plans and specifications can be had on application to Orin M. Darling, County Engineer, Fort Wayne, Indiana.

Bids must be accompanied by a good and sufficient bond equal to double the amount of the bid, as required by law and the necessary affidavits required by law in the State of Indiana, in such cases made and provided.

Bonds signed by two or more freeholders and residents of the county, or by a properly authorized and qualified bonding or surety company, will be accepted by the board.

Bidders must submit their proposals, bids and affidavits on blank forms to be furnished by the County Auditor on application.

The Board of Commissioners reserves the right to reject any and all bids.

By order of the County Commissioners of Allen County, Indiana.

A. J. BAKER,
GUST F. HILGEMAN,
T. J. SHEEHAN,
Board of County Commissioners,
Allen County, Indiana.

Attest:
JOHN H. JOHNSON, Auditor,
Allen County, Indiana

OFFICIAL PROPOSALS

Bids: Jan. 11.

(S. S. D. 3-4) (Lifting Plant and Discharge Mains)

Muscatine, Ia.

Sealed bids will be received by the City Recorder of the City of Muscatine, Iowa, until 7:30 o'clock p.m., of January 11, 1923, for the furnishing of all labor, materials and appliances and do all the work of constructing a sanitary sewer and storm water sewer lifting plant in Sub Sewerage District as follows:

Improvements in Sub Sewerage District Number Three (3) of Main Sewerage District Number Four (4) in the City of Muscatine, Iowa, as laid out and ordered by the City Council of said City; consisting of the construction of a lifting plant as follows:

In the Sub Sewerage District Number Three (3) of Main Sewerage District Number Four (4), a sewerage and storm water lifting plant to be located on Lot Ten (10) Block Twenty Five (25) of A. Smalleys Addition to South Muscatine which lifting plant consists of a concrete and brick building in which is installed the necessary ejectors, pumps, motors, air compressors, etc., to lift the sewerage and storm water into the discharge mains.

That, the said sewerage improvement also include an 18 inch cement, concrete or vitrified clay pipe for storm water discharge extending from the pumping plant northerly a distance of 595 feet to the southerly end of Division Street and thence north on Division Street a distance of Sixteen Hundred five (1605) feet to Muscatine Slough. Also, an 8 or 10 inch cast iron sewerage discharge main extending from the disposal plant on Lot 10, Block 25 A. Smalleys Addition to South Muscatine easterly a distance of 1,400 feet to the Mississippi River.

Payment for said improvement will be made as follows:

Once each month The Central States Engineering Company of Muscatine, Iowa, the engineer in charge of the work for said City, will estimate the value of the materials used and the labor performed during the previous month, and there shall be paid to the contractor, 80 per cent of each of such estimates in cash out of the sewer fund of said City of Muscatine, until a sum not in excess of $15,000 shall have been so paid. Thirty days after the completion and acceptance of the improvement, the unpaid balance due thereon shall be paid in cash out of the sewer fund of said City up to the amount of $15,000 including the amount paid on monthly estimates. The remainder of the total cost of said improvement if in excess of $15,000 shall be paid by the delivery to the contractor, thirty days after completion and acceptance of said improvement, of sewer certificates of indebtedness of a face value equal to such remainder, of denominations of $500.00 or less multiple of $100.00, bearing interest at 6 per cent per annum thirty days from the date of such acceptance and payable one eighteenth May 1st, 1924, one eighteenth November 1st, 1924, one eighteenth May 1st, 1925, one eighteenth November 1st, 1925, one eighteenth May 1st, 1926, one eighteenth November 1st, 1926, one eighteenth May 1st, 1927, one eighteenth November 1st, 1927, one eighteenth May 1st, 1928, one eighteenth November 1st, 1928, one eighteenth May 1st, 1929, one eighteenth November 1st, 1929, one eighteenth May 1st, 1930, one eighteenth November 1st, 1930, one eighteenth May 1st, 1931, one eighteenth November 1st, 1931, one eighteenth May 1st, 1932, and one eigheenth November 1st, 1932. Said certificates are payable only out of a tax upon all of the taxable property of the City of Muscatine for the sewer fund of said City, levied and to be levied for the years 1923, 1924, 1925, 1926, 1927, 1928, 1929, 1930 and 1931.

The Contractor in doing the work shall conform to the plans and specifications for the work now on file in the office of the City Recorder. A certified check of 5 per cent of the price bid on some Muscatine bank, payable to the City of Muscatine, Iowa, must accompany each and every bid and be enclosed in a separate envelope.

In case the lowest responsible bidder to whom the work is awarded fails to enter into contract and furnish bond for seventy-five per cent (75%) of his bid with the approved sureties within five days after notification to that effect, said check shall be forfeited to said City as liquidated damages.

OFFICIAL PROPOSALS

Bids will be acted upon by the City Council of the City of Muscatine, Iowa, at 7:30 o'clock p.m., January 11, 1923. All proposals must be made on blanks furnished by the Central States Engineering Company. The City Council reserves the right to reject any and all bids.

Dated December 15, 1922.

G. C. PARKS,
City Recorder.

Central States Engineering Co.
By C. H. YOUNG.

A Bonding Company's Suggestion to Official Proposal Advertisers

"A large part of our contract bond business is submitted to us by wire, and I am a constant reader of the Official Proposals in order to find out the size and nature of the work that is referred to in the bond application. Very frequently I am unable to get any clear idea of what the advertisers are asking bids on, and of course the prospective bidder or contractor is also at a loss to know what kind of a job is being advertised.

"Traveling expenses are heavy at the present time, and contractors pay out considerable sums during the course of a year in investigating prospective contracts. This of course is a large charge that the owners eventually pay, and anything that will reduce the general overhead of contract work will eventually be to the advantage of the owner.

"One way to reduce this overhead is to word the advertisement so that the contractor sitting in his office will know whether or not he should investigate and prepare a bid on the proposed work."

Bids: Jan. 1.1

(S. S. D. 3-4) (South Muscatine and Musserville Sewer)

Muscatine, Ia.

Sealed bids will be received by the City Recorder of the City of Muscatine, Iowa, until 7:30 o'clock p.m. of January 11, 1923, for the furnishing of all labor, materials and appliances and do all the work of constructing cement, concrete or vitrified clay pipe sewers in Sub Sewerage District as follows: Improvements in Sub Sewerage District Number Three (3) of Main Sewerage District Number Four (4) in the City of Muscatine, Iowa, as laid out and ordered by the City Council of said City; consisting of the construction of a sanitary sewer and storm water sewer as follows:

In Sub Sewerage District Number Three (3) of Main Sewerage District Number Four (4).

3,684 lineal feet of 12 inch cement, concrete or vitrified clay pipe sewer with 12 inch cement, concrete or vitrified clay drain tile.

4,522 lineal feet of 10 inch cement, concrete or vitrified clay pipe sewer with 10 inch cement, concrete or vitrified clay drain tile.

35,463 lineal feet of 8 inch cement, concrete or vitrified clay pipe sewer with 8 inch cement, concrete or vitrified clay drain tile.

125 brick or cement concrete manholes.

10 brick or cement concrete drop manholes.

270 brick or cement concrete catchbasins.

OFFICIAL PROPOSALS

7,380 lineal feet of 10 inch cement, concrete or vitrified clay pipe storm water connections.

The work of making said improvements shall be commenced on or before the 25th day of January, 1923, and completed on or before the 1st day of January, 1924.

Payment for said improvement will be made as follows:

By issuing to the contractor upon completion of the work, bonds in anticipation of the collection of a special tax to be levied against the abutting and adjacent property to pay the cost of said improvement. The amount to be assessed to be limited to and not to exceed the special benefits to the said property resulting from said improvement, and in no case to exceed 25 per cent of the actual value of the property at the time of the levy, nor shall the amount assessed against the abutting or adjacent property exceed 80 per cent of the cost of the sewer. The difference between the cost of said improvement and the amount thereof assessable against private property as above provided shall be paid by delivering to the contractor certificates of indebtedness payable only out of the taxes to be levied for the City Sewer Fund for the years 1923, 1924, 1925, 1926, 1927, 1928, 1929, 1930 and 1931, one eighteenth of which certificates of indebtedness shall become due and payable May 1st, 1924, one eighteenth of which certificates of indebtedness shall become due and payable November 1st, 1924, one eighteenth of which certificates of indebtedness shall become due and payable May 1st, 1925, one eighteenth of which certificates of indebtedness shall become due and payable November 1st, 1925, one eighteenth of which certificates of indebtedness shall become due and payable May 1st, 1926, one eighteenth of which certificates of indebtedness shall become due and payable November 1st, 1926, one eighteenth of which certificates of indebtedness shall become due and payable May 1st, 1927, one eighteenth of which certificates of indebtedness shall become due and payable November 1st, 1927, one eighteenth of which certificates of indebtedness shall become due and payable May 1st, 1928, one eighteenth of which certificates of indebtedness shall become due and payable November 1st, 1928, one eighteenth of which certificates of indebtedness shall become due and payable May 1st, 1929, one eighteenth of which certificates of indebtedness shall become due and payable November 1st, 1929, one eighteenth of which certificates of indebtedness shall become due and payable May 1st, 1930, one eighteenth of which certificates of indebtedness shall become due and payable November 1st, 1930, one eighteenth of which certificates of indebtedness shall become due and payable May 1st, 1931, one eighteenth of which certificates of indebedness shall become due and payable November 1st, 1931, one eighteenth of which certificates of indebtedness shall become due and payable May 1st, 1932, and one eighteenth of which certificates of indebtedness shall become due and payable November 1st, 1932. Said certificates of indebtedness shall be called "Sewer Certificates of indebtedness of the City of Muscatine, Iowa"; shall be issued in sums of $500.00 each or some less multiple of $100.00, shall bear interest from thirty days after acceptance of said improvement at the rate of six per cent per annum, payable semi-annually; shall be numbered serially; and shall be signed by the Mayor and countersigned by the City Recorder.

The Contractor in doing the work shall conform to the plans and specifications for the work now on file in the office of the City Recorder. A certified check of five per cent (5%) of the price bid on some Muscatine bank, payable to the City of Muscatine, Iowa, must accompany each and every bid and be enclosed in a separate envelope.

In the case the lowest responsible bidder to whom the work is awarded fails to enter into contract, and furnish bond for seventy five per cent (75%) of his bid with the approved sureties within five days after notification to that effect, said check shall be forfeited to said City as liquidated damages.

Bids will be acted upon by the City Council of the City of Muscatine, Iowa, at 7:30 o'clock p.m., January 11, 1923. All proposals must be made on blanks furnished by the Central States Engineering Company. The City Council reserves the right to reject any and all bids.

Dated December 15, 1922.

G. C. PARKS,
City Recorder.

Central States Engineering Co.
By C. H. YOUNG.

OFFICIAL PROPOSALS

Bids: Feb. 7.

Highway Bridge

Baton Rouge, La.

Notice is hereby given that sealed bids will be received by the Louisiana Highway Commission at its offices in the Reymond Bldg., Baton Rouge, La. up to 12 o'clock Noon, Wednesday, February 7th, 1923, at which time and place they will be publicly opened, for the Construction of a Highway Bridge over the Mermentau River at Mermentau, Louisiana, to be known as the Mermentau River Bridge, Federal Aid Project No. 122.

The plans have been prepared for two alternate layouts as follows:

Alternate "A"—Vertical Lift Layout.

Beginning at the East end to consist of 1 30 ft. reinforced Concrete deck girder span, 1 100 ft. thru riveted fixed span, 1 100 ft. thru riveted Vertical Lift Span, 1 140 ft. thru riveted fixed span, and 3 30 ft. reinforced Concrete deck girder spans.

Alternate "B"—Center Bearing Swing Layout.

Beginning at the East end to consist of 1 30 ft. reinforced Concrete deck girder span, 1 216 ft. thru riveted Center Bearing swing span, 1 140 ft. thru riveted fixed span and 3 30 ft. reinforced concrete deck girder spans.

For each layout the clear Roadway width will be 18 ft., the floor will be timber on movable spans and concrete on fixed spans. The movable spans will be operated by machinery driven by gasoline engines housed over movable spans.

The foundations are similar for the two layouts and consist of Concrete Piers resting on timber piles, the channel piers will be constructed by sinking cribs but the use of cofferdams will be permitted. Cofferdams will be used for the other piers.

Plans and specifications for the proposed work prepared by J. A. L. Waddell and approved by Louisiana Highway Commission and Bureau of Public Roads are on file, and may be inspected by prospective bidders during business hours, at the office of the Louisiana Highway Commission, Reymond Bldg., Baton Rouge, and at the office of J. A. L. Waddell, 35 Nassau Street, New York City. Bidders will be furnished with a copy of the specifications and blue prints of the plans by the Louisiana Highway Commission upon receipt of Five Dollars ($5.00) which will not be returned.

Bids may be submitted on either or both of the alternate layouts and must be made on standard proposal forms in the manner designated therein and required by the specifications. Bids must be enclosed in sealed envelopes bearing the name and address of bidder and name and type of bridge on which bid is submitted on the outside and addressed to Louisiana Highway Commission. Each bid must be accompanied by a certified check in an amount equal to (5%) five per cent of the total bid, payable to Louisiana Highway Commission as a guaranty that if the bid is accepted a contract will be entered into and performance thereof properly secured within (10) ten days notice of the acceptance of bid, otherwise the deposit will be forfeited.

The Louisiana Highway Commission reserves the right to reject any or all bids.

J. M. FOURMY,
State Highway Engineer.
W. T. PETERMAN, Chairman,
Louisiana Highway Commission.

Bids: Jan. 23.

Hammerhead Crane

Aberdeen, Wash.

Sealed proposals will be received by the Port of Grays Harbor at Aberdeen, Wash., until January 23, 1923 for furnishing and erecting a 5 ton, 95 ft. radius, Hammerhead type, lumber handling crane.

Further information on application.

PORT OF GRAYS HARBOR,
Aberdeen, Wash.
FRANK H. LAMB, Pres.
J. A. VANCE, Secy.

Brain Fertilizer For Sale

¶Buy a fertilizer for your garden —wonderful crop results. ¶Talk Contract Bonds and Compensation Insurance with Swart and see what a fertilizing your brain will get—profitable results.

SWART 92 William St., New York

OFFICIAL PROPOSALS

Bids: Jan. 12.

Sewer Brick and Paving Blocks

Richmond, Va.

Sealed proposals will be received at this office until 12 o'clock Noon, January 12, 1923, for the furnishing and prompt delivery to any part of the City, of approximately 765,000 Sewer Brick. The proposal will include also alternate bids for 476,000 Sewer Brick and 165,000 Vitrified Paving Blocks. Contract terminating January 1, 1924. Forms of proposals can be obtained on application.

A certified check for amount stated ($700.00) on proposals must accompany each bid as guaranty of execution of contract.

The Director of Public Works reserves the right to reject any and all bids.

ALLEN J. SAVILLE,
Director of Public Works.

Largest Circulation of Any Technical Paper

Engineering News-Record's circulation—over 30,000 weekly—is the largest of any technical paper printed. It includes among its readers practically every worthwhile contractor, dealer, and manufacturer in the country who is interested in bidding on public works contracts—either local or outside of his immediate vicinity.

Bids: Jan. 15.

Mechanical Equipment for Sewage Screening Plant

St. Petersburg, Fla.

Sealed proposals for mechanical equipment for sewage screening plant will be received at the office of the Director of Finance of the City of St. Petersburg, Florida, until 7:30 p.m., January 15, 1923. Specifications on file with the director of finance. Certified check for $500 to accompany bid.

H. T. DAVIS,
Director of Finance.

Bids: Jan. 12.

Sewer Pipe

Richmond, Va.

Sealed proposals will be received at this office until 12 o'clock Noon, January 12, 1923, for the furnishing and prompt delivery to any part of the City of Segment Block Sewer Pipe, with specials, ranging in size from 30 in. to 66 in., approximate length 17,600 lin.ft.

In addition to this alternate proposals are asked for on approximately 2,700 lin.ft. of segment Block pipe and 31,200 pieces of Vitrified Slab Liners. Contract terminating January 1, 1924. Forms of proposal can be obtained on application.

A certified check for amount stated ($4,000,000) on proposals must accompany each bid as a guaranty of execution of contract.

The Director of Public Works reserves the right to reject any and all bids.

ALLEN J. SAVILLE,
Director of Public Works.

Bids: Jan. 12.

Vitrified Pipe

Richmond, Va.

Sealed proposals will be received at this office until 12 o'clock Noon, January 12, 1923, for the furnishing and prompt delivery to any part of the City, approximately 91,000 lin.ft. of Vitrified Pipe, with specials, ranging in size from 4 in. to 24 in. Contract terminating January 1, 1924. Forms of proposals can be obtained on application.

A certified check for amount stated ($2,500.00) on proposals must accompany each bid as a guaranty of execution of contract.

The Director of Public Works reserves the right to reject any and all bids.

ALLEN J. SAVILLE,
Director of Public Works.

U. S. GOVERNMENT

U. S. ENGINEER OFFICE, NASHVILLE, TENN. Sealed proposals will be received here until 11 A.M., January 16, 1923, and then opened, for steel hull for dipper dredge Watauga. Further information on application.

U. S. ENGINEER OFFICE, HUNTINGTON, W. VA., Dec. 23, 1922.—Sealed proposals will be received here until 11 a.m. (Eastern Time), January 23, 1923, and then opened, for furnishing and delivering lock-operating machinery, etc., for Dam No. 30, Ohio River. Further information on application.

U. S. ENGINEER OFFICE, WILMINGTON, DEL.—Sealed proposals will be received here until 12 o'clock noon, January 15, 1923, and then opened, for constructing and delivering two wooden dump scows. Further information on application.

U. S. ENGINEER OFFICE, FLORENCE, ALA.—Sealed proposals will be received here until 11 A.M. January 27, 1923, and then opened, for the construction and delivery of four steel barges. Further information on application.

U. S. ENGINEER OFFICE, PITTSBURGH, PA.—Sealed proposals for building two two-story, seven-room lockkeepers' houses at Lock No. 6, Monongahela River, will be received at this office until 12 Noon, January 31, 1923, and then publicly opened. Information on application.

U. S. ENGINEER OFFICE, NASHVILLE, TENN.—Sealed proposals will be received here until 11 a.m., January 30, 1923, and then opened, for fourteen steel barges. Further information on application.

SEALED PROPOSALS will be received and publicly opened by the Director, U. S. Veterans' Bureau, in the Office of the Quartermaster General, 2306 Munitions Building, Washington, D. C., at 11 A.M., January 16, 1923, for construction of a Neuro-Psychiatric Hospital at American Lake, Tacoma, Washington, for the Veterans' Bureau. Work will include construction of twenty-eight buildings of reinforced concrete, tile and brick, complete with water, lighting, heating and sewer systems, roads and walks. Plans and specifications may be obtained after December 9, 1922, from the Quartermaster General, Room 2306, Munitions Building, Washington, D. C., upon deposit of $100. One set of plans and specifications will be on exhibition at each of the following stations: Constructing Quartermasters at 39 Whitehall St., New York City, and Fort Mason, California, and Quartermaster Supply Officers at 1819 West Pershing Road, Chicago, Ill., Second and Arsenal Sts., St. Louis, Mo., Stacy Street Terminal, Seattle, Washington, and New Post Office Building, Portland, Oregon. If bidders on the coast will wire the Quartermaster General's Office, date they are mailing check for deposit, this will be taken as evidence of good faith and plans and specifications will be mailed them at once.

DEPARTMENT OF THE INTERIOR. United States Reclamation Service, Washington, D. C., December 27, 1922. Sealed proposals for furnishing two 5-ft. by 5-ft high-pressure sluice gates for Black Canyon Dam, Boise project, Idaho, will be received at the office of the United States Reclamation Service, Denver, Colorado, until 2 o'clock p.m., February 14, 1923. For particulars, address the United States Reclamation Service, Washington, D. C., or Denver, Colo. A. P. Davis, Director.

WANTED TO SUBLET

Approximately 200,000 cubic yards of

HYDRAULIC DREDGING

all sand, maximum disposal 700 lineal feet, depth of water 6.5 feet—65 miles from New York.

L. B. HARRISON, Paterson, N. J.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ADVERTISEMENTS ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE.

OFFICIAL PROPOSALS

Bids: Jan. 15.

Bulkhead

Jersey City, N. J.

Sealed proposals will be received by the Hudson County Park Commission at its office, 1 Exchange Place, Jersey City, N. J., on Monday, January 15th, 1923, at 11 o'clock a.m., for the construction of a Bulkhead at West Side Park, Jersey City, N. J., and work connected therewith in accordance with plans and specifications on file at the office of the Hudson County Park Commission.

Blank form of bid showing estimate of quantities must be obtained at the office of the Hudson County Park Commission.

Each bidder must accompany his bid with a certified check drawn to the order of the Hudson County Park Commission to the amount of 5% of his bid.

The successful bidder will be required to furnish a surety company's bond to be approved by the Hudson County Park Commission in the full amount of his bid with satisfactory security conditioned for the faithful performance of his contract.

There shall be two contracts ,the original and copy which shall first be signed and executed by the successful bidder and presented to the Hudson County Park Commission for signature.

Bids must be enclosed in sealed envelopes indorsed "Proposals for Bulkhead and Reclamation, West Side Park, Jersey City, N. J.," directed to the Hudson County Park Commission and delivered to the Secretary of the Commission at or before the hour above specified. The Commission reserves the right to reject any or all bids.

Dated: December 18, 1922.
Hudson County Park Commission.
BY JOSEPH FILORAMO, JR.,
Secretary.

Bids: Jan. 23.

Road Repair

Trenton, N. J.

Proposals for Bituminous Patching Material.

The Board of Freeholders of Mercer County will receive separate bids on Tuesday, January 23rd, 1923, at 2:30 o'clock in the afternoon, at their regular place of meeting, Court House, Trenton, New Jersey, for

1. Furnishing and delivering approximately 40,000 gallons of tar patching material for cold application, grade K. P. or U. C. (New Jersey).
2. Furnishing and delivering approximately 20,000 gallons of asphalt "cut back" grade "H. K." (New Jersey).

Prospective bidders are referred to specifications covering the above work prepared by Harry F. Harris, Mercer County Engineer, which specifications are on file in his office at the Court House, Trenton, New Jersey.

Each bid must be accompanied by a certified check in the amount of two hundred dollars ($200.00), payable to Edgar G. Weart, County Treasurer, also by a proposition from a surety company fulfilling the requirements of Section 507, Chapter 185, P. L., 1918.

The right is reserved to reject any or all bids and to waive any immaterial defect or informality in any bid should it be in the interest of the County to do so.

ARTHUR BRAY, JR.,
Director of Department of Road Repair.

OFFICIAL PROPOSALS

Bids: Jan. 12.

Highway Work

Albany, N. Y.

Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock p.m., on Friday, the twelfth day of January, 1923, for the improvement of highways in the following counties:

Allegany.....(one highway—2.11)
Cattaraugus..(two highways—1.97 & 7.63)
Cayuga & Tompkins..(one highway—2.80)
Oneida.....(one highway—2.75)
Ontario.....(one highway—0.41)
Rensselaer.....(one highway—4.89)
Rockland.....(one highway—3.69)
Steuben.....(one highway—5.22)
Ulster.....(one highway—5.51)

Also for the reconstruction of the following:

Fulton.....(one contract—1.50)
Rensselaer.....(one contract—2.42)

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the division engineers in whose division the roads are to be improved or reconstructed. The addresses of the division engineers and the counties in which they are in charge will be furnished upon request.

The especial attention of bidders is called to "General Information for Bidders" in the itemized proposal, specifications and contract agreement.

HERBERT S. SISSON,
Commissioner.
J. C. FINCH,
Secretary.
State Commission of Highways.

Bids: Jan. 23.

Paving

Charlotte, N. C.

Sealed proposals for the paving of certain streets in the City of Charlotte will be received by the Board of Commissioners up to 11 o'clock A. M. of the 23rd day of January, 1923.

The work to be done consists of approximately 210,000 sq. yds. of paving.

Bids will be received on Various Types.

A certified check equal to five per cent. of the amount of the bid, and made payable to the Treasurer of the City of Charlotte, will be required to accompany each bid.

Plans may be seen, and specifications may be obtained, at the office of the City Engineer.

The right is reserved to reject any or all bids or any part of a bid.

By Order of the Board of Commissioners.
W. S. STANCILL,
Commissioner of Public Works.
JOSEPH FIRTH,
City Engineer.

Bids: Jan. 23.

Hammerhead Crane

Aberdeen, Wash.

Sealed proposals will be received by the Port of Grays Harbor at Aberdeen, Wash., until January 23, 1923 for furnishing and erecting a 5 ton, 95 ft. radius, Hammerhead type, lumber handling crane.

Further information on application.

PORT OF GRAYS HARBOR,
Aberdeen, Wash.
FRANK H. LAMB, Pres.
J. A. VANCE, Secy.

OFFICIAL PROPOSALS

Bids: Feb. 7.

Highway Bridge

Baton Rouge, La.

Notice is hereby given that sealed bids will be received by the Louisiana Highway Commission at its offices in the Reymond Bldg., Baton Rouge, La. up to 12 o'clock Noon, Wednesday, February 7th, 1923, at which time and place they will be publicly opened, for the Construction of a Highway Bridge over the Mermentau River at Mermentau, Louisiana, to be known as the Mermentau River Bridge, Federal Aid Project No. 122.

The plans have been prepared for two alternate layouts as follows:

Alternate "A"—Vertical Lift Layout.

Beginning at the East end to consist of 1 30 ft. reinforced Concrete deck girder span, 1 100 ft. thru riveted fixed span, 1 100 ft. thru riveted Vertical Lift Span, 1 140 ft. thru riveted fixed span, and 3 30 ft. reinforced Concrete deck girder spans.

Alternate "B"—Center Bearing Swing Layout.

Beginning at the East end to consist of 1 30 ft. reinforced Concrete deck girder span, 1 216 ft. thru riveted Center Bearing swing span, 1 140 ft. thru riveted fixed span and 3 30 ft. reinforced concrete deck girder spans.

For each layout the clear Roadway width will be 18 ft., the floor will be timber on movable spans and concrete on fixed spans. The movable spans will be operated by machinery driven by gasoline engines housed over movable spans.

The foundations are similar for the two layouts and consist of Concrete Piers resting on timber piles, the channel piers will be constructed by sinking cribs but the use of cofferdams will be permitted. Cofferdams will be used for the other piers.

Plans and specifications for the proposed work prepared by J. A. L. Waddell and approved by Louisiana Highway Commission and Bureau of Public Roads are on file, and may be inspected by prospective bidders during business hours, at the office of the Louisiana Highway Commission, Reymond Bldg., Baton Rouge, and at the office of J. A. L. Waddell, 35 Nassau Street, New York City. Bidders will be furnished with a copy of the specifications and blue prints of the plans by the Louisiana Highway Commission upon receipt of Five Dollars ($5.00) which will not be returned.

Bids may be submitted on either or both of the alternate layouts and must be made on standard proposal forms in the manner designated therein and required by the specifications. Bids must be enclosed in sealed envelopes bearing the name and address of bidder and name and type of bridge on which bid is submitted on the outside and addressed to Louisiana Highway Commission. Each bid must be accompanied by a certified check in an amount equal to (5%) five per cent of the total bid, payable to Louisiana Highway Commission as a guaranty that if the bid is accepted a contract will be entered into and performance thereof properly secured within (10) ten days notice of the acceptance of bid, otherwise the deposit will be forfeited.

The Louisiana Highway Commission reserves the right to reject any or all bids.

J. M. FOURMY,
State Highway Engineer.
W. T. PETERMAN, Chairman,
Louisiana Highway Commission.

OFFICIAL PROPOSALS

Bids: Jan. 30.

Bridges and Roads

Charleston, W. Va.

Sealed proposals will be received by the State Road Commission of West Virginia until ten o'clock A. M. on the 30th day of January, 1923, and said proposals will be opened and read immediately thereafter at the Kanawha County Court House, Charleston, W. Va., for the construction of the following bridges and sections of State Road:—

Project 3052—Raleigh County—6 miles of the Shady Springs-Summers County Line Road for grading and draining. Certified check for $3,000.00.

Project 3133—Amigo Bridge No. 833—Raleigh County—over Devil's Fork, concrete arch 75 ft. span. Certified check for $500.00.

Project 3182-B—Pocahontas County—8.3 miles of the Sunset to Greenbank District Line Road for grading and draining. Certified check for $4,000.00.

Project 3171—Pocahontas County—2 miles of the Marlinton towards Buckeye Road for grading and draining. Certified check for $1,800.00.

Project 127—Greenbrier County—8 miles of the Lewisburg-Camp Ground Road for grading, draining and paving with Bituminous Macadam. Certified check for $11,000.00.

Project 3045-B—Monroe County—5.3 miles of the Union-Rock Camp Road for grading and draining. Certified check $2,500.00.

Project 3037—Hartland Bridge No. 805—Clay County over Elk River, steel superstructure, 565 ft. long. Certified check for $2,000.00.

Project 3091—Boone County—2.25 miles of the Seng. Creek—toward Seth Road for grading and draining. Certified check for $1,800.00.

Project 3155—Heath Bridge No. 873—Cabell County, over Heath Creek. Concrete deck girder, 37.5 span, concrete substructure. Certified check for $500.00.

Project 3074-D—Jackson County—5 miles of the Cottageville-Mason County Line Road for grading and draining. Certified check for $3,000.00.

Project 47-S—Wetzel County—1 mile New Martinsville-Willeyville Road, for grading, draining and paving with concrete sections only. Certified check for $1,000.00.

Project 3167-A—Marshall County—3 miles of the Cameron-Littleton Road for grading and draining. Certified check for $1,800.00.

Project 3163—Tyler County—5 miles of the New Martinsville-West Union Road, for grading and draining. Certified check for $3,000.00.

Project 3203-A — Preston County—3.5 miles of the Northwestern Turnpike from Aurora to Dayton for grading and draining. Certified check for $2,500.00.

Project 3187—Marion County—2.8 miles of the Flat Run-Metz Road for grading, draining and paving with concrete. Certified check for $5,000.00.

Project 3184—Barbour County—7.2 miles of the Philippi-Taylor County Line Road for grading and draining. Certified check for $5,000.00.

Project 3026—Jefferson County—7 miles of the Charlestown-Kearneysville Road for grading, draining and waterbound macadam surface course. Certified check for $5,000.00.

Project 3147—Hampshire County—5 miles of the Frenchburg-Virginia State Line Road for grading and draining. Certified check for $2,000.00.

Project 3010—Burlington Bridge No. 735—Mineral County over Patterson Creek—150 ft. steel thru truss, concrete substructure. Separate proposals will be received on substructure. Certified check for $500.00 and superstructure. Certified check for $500.00.

Project 3198—Morgan County—5 miles of the Berkeley Springs-Great Cacapon Road for grading and draining. Certified check for $4,000.00.

Project 122—B & C—Grant County—12.5 miles of the Northwestern Turnpike for grading and draining. Certified check for $6,000.00.

Project 3175—Pendleton County—5 miles of the Franklin-Elkins Road for grading and draining. Certified check for $2,400.00.

Project 3148—Hardy County—8.5 miles of the Moorefield Petersburg Road for grading and draining. Certified check for $3,500.00.

OFFICIAL PROPOSALS

Proposals will be received only upon State Standard form in accordance with plans, specifications and estimates of quantities therefor, which standard forms, plans, specifications and estimates of quantities may be obtained from the office of the Division Engineer in whose territory the proposed construction is located or from the office of the State Road Commission at Charleston, W. Va.

Each proposal must be accompanied by a certified check for the amount noted.

The right is reserved to reject any and all proposals.

THE STATE ROAD COMMISSION OF WEST VIRGINIA.
E. B. CARSKADON, Secretary.

A Bonding Company's Suggestion to Official Proposal Advertisers

"A large part of our contract bond business is submitted to us by wire, and I am a constant reader of the Official Proposals in order to find out the size and nature of the work that is referred to in the bond application. Very frequently I am unable to get any clear idea of what the advertisers are asking bids on, and of course the prospective bidder or contractor is also at a loss to know what kind of a job is being advertised.

"Traveling expenses are heavy at the present time, and contractors pay out considerable sums during the course of a year in investigating prospective contracts. This of course is a large charge that the owners eventually pay, and anything that will reduce the general overhead of contract work will eventually be to the advantage of the owner.

"One way to reduce this overhead is to word the advertisement so that the contractor sitting in his office will know whether or not he should investigate and prepare a bid on the proposed work."

Bids: Jan. 23.

Sewers and Drains

Charlotte, N. C.

Sealed proposals for the construction of certain sewers on certain streets consisting of approximately eight miles of sewers and drains with appurtenances to be laid for the City of Charlotte, N. C., will be received by the City of Charlotte, up to Eleven o'clock a.m., of the twenty-third day of January, 1923. Proposals to be addressed to the Board of Commissioners and endorsed: Proposals for Constructing Sewers.

A certified check equal to five per centum of the amount of the bid, and made payable to the Treasurer of the City of Charlotte, will be required to accompany each bid.

Plans and specifications and blank forms of proposal may be obtained at the office of the City Engineer.

W. S. STANCILL,
Commissioner of Public Works.
JOSEPH FIRTH,
City Engineer.

OFFICIAL PROPOSALS

Bids: Jan. 15.

Improvement of Grounds

Cortland, N. Y.

SEALED PROPOSALS for improvement of the grounds at the State Normal and Training School, Cortland, N. Y., will be received by Dr. Frank B. Gilbert, Deputy Commissioner of Education, Education Building, Albany, N. Y., until 12 o'clock Noon on Monday, January 15, 1923, when they will be publicly opened and read. The work in general includes grubbing and clearing, excavation, filling, vitrified pipe sewers, agricultural tile underdrains, catch basins, flag poles, granite steps, asphalt concrete roads, dirt road, concrete curbing, concrete walks, gravel walks, tennis courts, basket ball field, playground, one-quarter mile running track, concrete bleachers, etc. Proposals shall be enclosed in an envelope clearly marked "Proposal for Grading," sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of the proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of the Specifications. The right is reserved to reject any or all bids. Drawings, specifications and blank forms of proposal may be obtained at the Education Department, Albany, N. Y., upon reasonable notice to and in the discretion of the Deputy Commissioner of Education, Frank B. Gilbert, Education Building, Albany, N. Y.

Dated, December 26, 1922.

Bids: Feb. 1.

Heating, Sanitary and Electrical Work

Thiells, N. Y.

Sealed proposals for Construction, Heating, Sanitary and Electric Work—Attendants' Home—Assembly Hall and Industrial Building (Girls' Group) at Letchworth Village, Thiells, N. Y., will be received by Mr. Mortimer B. Patterson, President of the Board of Managers of Letchworth Village, at No. 7 Wall Street, New York City, until 12 o'clock Noon on Thursday, February 1, 1923, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3928, 3929, 3930, 3931, 3932, 3933 and Addenda dated December 12, 1922, 4040 and 4041. The right is reserved to reject any or all bids. Drawings and specifications may be examined at No. 7 Wall St., New York City; at Letchworth Village, Thiells, N. Y.; at the New York Office of the Department of Architecture, Room 1058, 25 Broadway, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

Dated: December 29, 1922.

Bids: Jan. 29.

Sewer Work

Spring Lake, N. J.

The Mayor and Council of the Borough of Spring Lake, N. J., will receive sealed proposals until 8.00 p.m., Monday, January 29, 1923, for the construction of about 1,500 lineal feet of six inch and eight inch sewer and one man hole.

Plans and specifications can be examined at the office of the Borough Engineer, First National Bank Building, Spring Lake, N. J. Copies can be procured by depositing Ten ($10.00) dollars with the Engineer.

Certified check in 10% of amount of bid is required with proposal.

Right is reserved to reject any or all bids.

By order of the Mayor and Council.

JOHN M. BRALY,
Borough Engineer.

Spring Lake, N. J.

OFFICIAL PROPOSALS

Bids: Jan. 22.

Sewer Work

Mamaroneck, N. Y.

Notice is hereby given that sealed bids will be received by the Board of Sewer Commissioners of Sewer District No. 1 of the Town of Mamaroneck, Westchester County, N. Y., until 8:30 o'clock p.m., Eastern Standard Time, on January 22, 1923, at the office of the Board of Sewer Commissioners at the Weaver Street School House on Weaver Street in said Town of Mamaroneck, Westchester County, N. Y., for furnishing materials and performing the labor required for (1) constructing Contract No. 4 of District One, Section A, (2) and constructing house connections from said sewer to the property line along said sewer where required, of the Sewer System in Sewer District No. 1 of the Town of Mamaroneck, Westchester County, N. Y., all in accordance with plans and specifications on file in the office of the Board of Sewer Commissioners, at the Weaver Street School House on Weaver Street, in said Town of Mamaroneck, Westchester County, N. Y., and also in the office of the Engineer to the Sewer Commission, L. E. Van Etten, No. 12 Lawton Street, New Rochelle, N. Y.

H. R. MITCHELL,
Secretary.

Bids: Feb. 7.

Bridges

Appleton, Wisc.

Sealed bids will be received by the undersigned, city clerk of the city of Appleton, Wisconsin, up to 4:00 o'clock P.M., February 7th, 1923, for furnishing all labor and material and constructing according to plans and specifications, bridges across the Fox River at Lawe street and Cherry street.

The Lawe-st bridge over the Fox River will be of reinforced concrete, resting on steel cylinder piers sunk to bed rock and on the footings for columns on shore. It provides for a twenty-foot roadway and six foot sidewalk. The Cherry street bridge over the Fox river, will be of steel girder type, resting on concrete piers, sunk to bed rock and the footings for abutments on shore. It provides for a thirty-two foot roadway and a seven foot sidewalk. Plans and specifications are on file and may be examined in the office of E. L. Williams, city clerk, and O. F. Weissgerber, city engineer and in the office of Harrington, Howard & Ash, consulting engineers, Kansas City, Mo.

Copies of the plans and specifications may be secured from the consulting engineers by depositing $25.00, these plans are to be returned upon request, at which time a refund of $15.00 will be made. A bond in the full amount of the contract will be required.

A certified check in the sum of not less than 5% of the total bid, made payable to the city clerk, must accompany each bid.

Council reserves the right to reject any or all bids.

Dated January 4th, 1923.

BY ORDER OF THE COMMON COUNCIL E. L. Williams, City Clerk.

OFFICIAL PROPOSALS

Bids: Jan. 25.

Sluice Gates

Buffalo, N. Y.

Sealed proposals will be received by the Commissioner of Public Works at the Municipal Bldg., Buffalo, N. Y., for 56 rectangular sluice gates varying in size from 16-in. square to 48-in equare, and appurtenances to be furnished f.o.b. cars, Buffalo, N. Y.

Forms of proposal, drawings and specifications may be obtained on application to the above address.

ARTHUR W. KREINHEDER,
Commissioner of Public Works,
Buffalo, N. Y.

Bids: Jan. 30.

Gate-Valves and Hydrants

CONTRACT 213

New York, N. Y.

Sealed bids will be received by the Board of Water Supply at its offices, twenty-second floor, Municipal Building, Park Row, Centre and Chambers Streets, New York City, until 11 a.m., Eastern Standard Time, on Tuesday, January 30, 1923, for Contract 213, for furnishing and delivering gate-valves and hydrants for the Mt. Prospect, Park Slope, Fort Hamilton and Clove conduits and Narrows Siphon No. 2 of the Catskill Aqueduct, all as set forth in the specifications. All deliveries shall be made, with all transportation charges prepaid, at designated storage yards within the limits of the City of New York.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders, forms of bid and contract, specifications, contract drawings, etc., can be obtained at the office of the secretary at the above address, by depositing the sum of ten dollars ($10) in cash or its equivalent for each pamphlet. For further particulars apply to the office of the Chief Engineer at the above address.

GEORGE J. GILLESPIE,
President.
JAMES F. SINNOTT,
PHILIP F. DONOHUE,
Commissioners, Board of Water Supply.
BENJ. F. EINBIGLER, Secretary.

Bids: Jan. 23.

Intercepting Sewer

Toledo, Ohio.

Sealed proposals will be received by the Director of Public Service, Toledo, Ohio, until twelve o'clock noon, eastern standard time, on the 23rd day of January, 1923, and then publicly opened and read for the construction of Contract No. 5 of the Intercepting Sewer System, consisting of

18,955 feet of 87 in. Circular Sewer
2,255 feet of 84 in. Circular Sewer
2,640 feet of 78 in. Circular Sewer

OFFICIAL PROPOSALS

all of which will be built in tunnel, together with manholes and appurtenances.

Bidders are invited to submit prices on monolithic concrete, vitrified segment block and brick.

Plans, specifications, contract and bond forms can be secured at the office of the Director of Public Service upon deposit of twenty dollars ($20.00) for each set, which will be refunded provided they are returned in good order on or before February 20, 1923.

Information regarding the work can be obtained through the following offices of our consulting engineers, Fuller & McClintock: 170 Broadway, New York, 319 Summit-Cherry Building, Toledo, 421 Produce Exchange Building, Kansas City Mo., 879 N. Parkway, Memphis, Tenn., and 1001 Chestnut Street, Philadelphia, Pa.

Each proposal must be accompanied by a bond executed by the bidder and a surety company satisfactory to the Director of Public Service in the sum of Ten Per Cent (10%) of the amount of the bid, or in lieu of a bond the bidder may deposit with the Director of Public Service, a certified check on a solvent bank, payable to the order of the Director of Public Service, in amount equal to such bond, said bond or certified check being required as a guarantee that if the bid be accepted, a contract will be entered into and its performance properly secured.

The contract bond will be Fifty Per Cent (50%) of the amount of the contract. Labor and material bids must be separately stated with the price therefor.

The Director of Public Service reserves the right to reject any or all bids or to accept any bid which he may deem advantageous to the City of Toledo.

W. T. JACKSON,
Director of Public Service.
GORGE E. LASKA,
Secretary.

Bids: Feb. 5.

Electric Power Plant Construction

Shelbyville, Ill.

Sealed proposals will be received by the City Council of Shelbyville, Illinois, until one o'clock p.m., February 5th, 1923, for the installation of a complete electric light and power plant. The specifications provide fourteen separate sections, and bids will be received for the plant complete or for any one or more of the divisions.

Bids will be opened by the City Council on the above date. Plans and specifications and form for bids may be obtained from W. A. Fuller Company, Railway Exchange Building, St. Louis, Missouri, Consulting Engineers, on payment of Three ($3.00) Dollars for plans and Five ($5.00) Dollars for copy of specifications.

Dated January 2nd, 1923.

WM. C. RAETZ, City Clerk.

PUT YOURSELF "ON THE CARPET"

¶If you ever caught an employee buying inferior machinery, material or service chances are you'd put him on the carpet and give him a lecture on just how expensive such mistakes are. ¶Are you one of the many Contractors who are paying standard rates for Contract Bonds and putting up with an inferior service when the same standard rate will buy SWART SERVICE? ¶—and remember this—when there is a better service SWART will be rendering it. ¶So just put yourself on the carpet and say to yourself, "maybe SWART is right. At least it will do no harm to find out. I'll make an appointment with him right now while I am thinking about it."

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HARMON V. SWART

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Nation-wide publicity reaches the greatest number of responsible bidders best fitted to do work in the most up-to-the-minute manner at lowest cost.

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Buyers of bonds are naturally influenced by the efforts made to let contracts to reliable bidders at favorable prices.

Why You Should Advertise in ENGINEERING NEWS-RECORD—

Engineering News-Record is a consolidation of the three leading publications in the engineering and construction field—Engineering News, Engineering Record and The Contractor. It has a circulation of over 30,000 copies weekly—several times that of any other paper in the field—and includes among its readers almost every worthwhile contractor, engineer, manufacturer and dealer in the country interested in bidding on work outside his own vicinity.

Engineering News-Record is the one nationally recognized medium through which prospective bidders on work outside of their immediate localities keep regularly informed of the newest work on which bids are desired. Many rely entirely upon the announcements in this paper and, therefore, do not see those advertised elsewhere.

Over 3,000 Official Proposals Appear Annually—

Perhaps the best indication of what other cities and towns think of the results obtainable through the official proposals columns of *Engineering News-Record* is the fact that more than 3,000 of their announcements appear each year. Many of their letters telling of the savings realized as a result of their advertising in this great medium are further proof of the worthwhileness of national publicity through *Engineering News-Record.*

For Official Proposals

The Dominant Paper

0183

OFFICIAL PROPOSALS

Bids: Feb. 9 and Feb. 23.

Two Junior High School Buildings

Jamestown, N. Y.

Notice is hereby given that sealed proposals for furnishing labor and materials to construct two Junior High School Buildings, in the city of Jamestown, N. Y., will be received by the Board of Education, as follows:

1. For a Junior High School Building, located on Front Street, bids will be received up to 2 o'clock P.M., February 9th, 1923, at the offices of the Board of Education in the High School Building on East Second Street, Jamestown, N. Y., at which time they will be opened and publicly read.

2. For a Junior High School Building located on Buffalo Street, bids will be received up to 2 o'clock P. M. February 23rd, 1923, at the offices of the Board of Education in the High School Building on East Second Street, Jamestown, N. Y., at which time they will be opened and publicly read.

Bids will be received for the work on each school under four separate contracts, as follows:

(a) For the General Construction, which includes all Masonry, Carpentry, Sheet and Iron, Roofing, Painting and all work kindred thereto.

(b) For Plumbing and Gas Fitting, and all work kindred thereto.

(c) For heating and ventilating, and all work kindred thereto.

(d) For Electrical Work and all work kindred thereto.

The Board of Education reserves the right to accept or reject any or all proposals and at its discretion to waive informalities.

All bids must be made in the form provided by the specifications and presented in sealed envelopes addressed to the Board of Education, endorsed, *"Proposal for Front Street Junior High School, Jamestown, N. Y.," or "Proposal for Buffalo Street Junior High School, Jamestown, N. Y.,"* and stating the branch of the work covered. All bids to hold good for at least twenty days after opening same.

No bid will be considered unless accompanied by certified check to the order of the Board of Education of Jamestown, N. Y., in an amount equal to 5% of the amount of the bid or a bid bond of like amount, binding the bidder to execute the contract if awarded to him. The terms of the proposal with surety required are fixed by the specifications.

Copies of the Plans and Specifications will be on file in the offices of the Board of Education in the present High School Building, on East Second Street, Jamestown, N. Y., and at the offices of the Architects for the purpose of examination or estimating.

A limited number of copies of the plans and specifications have been provided by Messrs. Guilbert & Betelle and Johnson & Ford, associated Architects, and will be loaned to prospective bidders on deposit of a certified check in the sum of $25.00 for each set of plans loaned. If the plans and specifications are returned, the check will be returned, otherwise the deposit may become forfeited. All applications for plans should be made to Johnson & Ford, Architects, Fenton Building, Jamestown, N. Y., and check drawn to their order.

The Board of Education, of Jamestown, N. Y.

E. SNELL HALL,
President.
MILDRED R. FALCONER,
Clerk.

January 4th, 1923.

U. S. GOVERNMENT

OFFICE OF CONSTRUCTING QUARTERMASTER, FORT BLISS, TEXAS.—Sealed proposals, in triplicate, will be received at this office until 10:00 a.m., February 1st, 1923, then publicly opened for drilling, casing and equipping complete, ready for operation, one eight inch well at Doña Ana Target Range, New Mexico. Plans and specifications furnished upon receipt of certified check for $10.00 to guarantee return.

OFFICIAL PROPOSALS

Bids: Jan. 16.

Sewer

Summit, N. J.

Sealed proposals will be received by the Common Council of the City of Summit, N. J., at 8 P. M. Tuesday, January 16, 1923, for the construction of a Concrete or Vitrified Pipe Storm Water Sewer with appurtenances in Essex and Whittredge Roads.

The approximate quantities are as follows:

2,950 cu.yd. earth excavation 0 ft. to 8 ft. deep.
805 cu.yd. earth excavation 8 ft. to 14 ft. deep.
60 cu.yd. earth excavation 14 ft. to 16 ft. deep.
835 lin. ft. of 27 in. Vit. Tile or Concrete pipe.
1,613 lin. ft. of 24 in. Vit. Tile or Concrete pipe.
280 lin. ft. of 15 in. Vit. Tile or Concrete pipe.
60 lin. ft. of 12 in. Vit. Tile or Concrete pipe.
11 manholes.
3 catch basins.

Each proposal must be accompanied by a certified check or cash for five per cent. of the total amount of bid. A Surety Bond for the full amount of the contract will be required of the successful bidder. The Common Council reserves the right to reject any or all bids, or to accept any bid.

Plans, specifications and proposal blanks may be obtained at the office of the City Engineer, in the City Hall, Summit.

FREDERICK C. KENTZ,
City Clerk.

JOHN C. BRIGHAM,
City Engineer.

Bids: Jan. 23.

Sidewalks

Charlotte, N. C.

Sealed proposals will be received by the Board of Commissioners of Charlotte, N. C., up to 11 o'clock a.m., of the 23rd day of January, 1923, for the grading and paving of the sidewalks on various streets consisting of approximately 45,000 sq.yds. of concrete walk.

A certified check equal to 5 per cent of the amount of the bids and drawn payable to the Treasurer of the City of Charlotte, will be required to accompany each proposal. Specificaltons can be obtained at the office of the City Engineer.

The right is reserved to reject any or all bids.

JOSEPH FIRTH,
City Engineer.
W. S. STANCILL,
Commissioner of Public Works.

U. S. GOVERNMENT

U. S. ENGINEER OFFICE, CINCINNATI, O. Sealed proposals will be received here until 2 p. m. Feb. 8, 1923, and then opened for furnishing and delivering horses and props for Ohio River Dams Nos. 34, 36, and 38. Further information on application.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., January 6, 1923.—SEALED PROPOSALS will be opened in this office at 3 p.m., January 30, 1923, for construction of an extension to delivery platform at U. S. Appraisers Warehouse, New York, N. Y. Drawing and specifications may be obtained from the Office of Supervising Chief Engineer, 731 Custom House, New York, N. Y., or at this office, in the discretion of the Supervising Architect, Jas. A. Wetmore, Acting Supervising Architect.

U. S. ENGINEER OFFICE, HUNTINGTON, W. VA., Dec. 23, 1922.—Sealed proposals will be received here until 11 a.m. (Eastern Time), January 23, 1923, and then opened, for furnishing and delivering lock-operating machinery, etc., for Dam No. 30, Ohio River. Further information on application.

U. S. GOVERNMENT

U. S. ENGINEER OFFICE, NASHVILLE, TENN. Sealed proposals will be received here until 11 A.M., January 18, 1923, and then opened, for steel hull for dipper dredge Watauga. Further information on application.

U. S. ENGINEER OFFICE, WILMINGTON, DEL.—Sealed proposals will be received here until 12 o'clock noon, January 15, 1923, and then opened, for constructing and delivering two wooden dump scows. Further information on application.

U. S. ENGINEER OFFICE, FLORENCE, ALA.—Sealed proposals will be received here until 11 A.M. January 27, 1923, and then opened, for the construction and delivery of four steel barges. Further information on application.

U. S. ENGINEER OFFICE, PITTSBURGH, PA.—Sealed proposals for building two two-story, seven-room lockkeepers' houses at Lock No. 6, Monongahela River, will be received at this office until 12 Noon, January 31, 1923, and then publicly opened. Information on application.

U. S. ENGINEER OFFICE, NASHVILLE, TENN.—Sealed proposals will be received here until 11 a.m., January 30, 1923, and then opened, for fourteen steel barges. Further information on application.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., Jan. 24, 1923, for constructing about 900,000 cubic yards of earthwork by the hydraulic method in the Sny Island Levee Drainage District, Ill. Further information on application.

U. S. ENGINEER OFFICE, CINCINNATI, O. Sealed proposals will be received here until 2 p.m., Jan. 30, 1923, and then opened, for constructing, assembling, testing and delivering one dredging ladder for 24-inch pipe line dredge. Further information on application.

U. S. ENGINEER OFFICE, GALVESTON, TEX. Sealed proposals will be received here until 12 m., Feb. 1, 1923, and then opened, for dredging the Houston Ship Channel, Texas. Further information on application.

U. S. ENGINEER OFFICE, ROOM 608, ARMY BUILDING, NEW YORK CITY. Sealed proposals will be received here until 12 o'clock noon, January 26, 1923, and then opened, for furnishing and erecting complete, on concrete foundations already constructed, one 100-foot Range Finding Tower. Further information on application here and at Office of Chief of Engineers, Construction Section, Washington, D. C.

DEPARTMENT OF THE INTERIOR, UNITED STATES RECLAMATION SERVICE, Washington, D. C., January 3, 1923.—Sealed proposals will be received at the office of the United States Reclamation Service, Denver, Colo., until 2 o'clock p.m., February 13, 1923, for the inspection of engineering materials and machinery for the Reclamation Service for a period of one year. For further particulars address the United States Reclamation Service, Washington, D. C., or Denver, Colo. A. P. Davis, Director.

BIDS INVITED.—Sealed bids will be received by the Constructing Quartermaster, Fort Benning, Georgia, for construction of twenty-three sets of two family houses. Bids will be opened at Fort Benning, Georgia, at 12 o'clock noon, central time, January 30th, 1923. Twenty five dollars deposit required to insure return of plans.

U. S. ENGINEER OFFICE, GALVESTON, TEX., Sealed proposals will be received here until 11 a.m. Feb. 21 1923, and then opened, for dredging channels at Brazos Island Harbor, Texas. Further information on application.

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Tell the Aetna engineers about your special facilities for completing the contract.
ÆTNA CASUALTY AND SURETY COMPANY
HARTFORD, CONN.
AGENTS EVERYWHERE

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Positions Wanted, 4 cents a word, minimum charge 75 cents an insertion.
Positions Vacant and all other classifications, 8 cents a word, minimum $2.

Box Numbers in care of any of our offices count as 10 words in addition to advertising copy. *Replies* are forwarded each day as received at all of our offices without additional charge. *Discount* of 10% is allowed if one payment is made in advance for 4 consecutive insertions.

THE ABOVE RATES ARE FOR ADVERTISEMENTS SET UNDISPLAYED, FOR DISPLAY RATES SEE "EQUIPMENT" HEADING.

E. N. R.

POSITIONS VACANT

A DRAFTSMAN wanted by a manufacturer of special track work in the East; must be thoroughly familiar with designing and detailing both steam and street constructions. P-464, Eng. News-Record, Real Estate Trust Bldg., Philadelphia, Pa.

ASSISTANT sanitary engineer wanted by Alabama State Board of Health, Montgomery, Alabama, experienced in water work and sewage design and operation; salary $200; application should contain full record, photograph and sample of lettering.

BUILDING superintendent, with wide experience in construction of reinforced concrete buildings; must be good executive and capable of speedy construction; state experience in detail and salary desired. P-484, Eng. News-Record, Real Estate Trust Bldg., Philadelphia, Pa.

BY LARGE reinforcing bar company, first class detailers wanted on reinforced concrete buildings; good opportunity for men of experience; give references, age, experience and salary desired. P-479, Eng. News-Record, 10th Ave. at 36th St., New York.

DETAILER for structural steel and ornamental iron; state age, experience and salary; permanent position for right man; location, Connecticut. P-478, Eng. News-Record, 10th Ave. at 36th St., New York City.

DRAFTSMAN, experienced, wanted for structural steel buildings; apply by mail only, giving age, nationality, education, experience and salary expected. Post & McCord, 101 Park Ave., New York.

DRAFTSMAN for detailing structural steel for buildings. State age, nationality, education, experience, salary expected and date available. The James H. Tower Iron Works, Providence, R. I.

DRAFTSMEN, experienced (only) detailers and checkers on tank work; state salary, experience and when available first letter. Address P. O. Box 386, Iola, Kansas.

DRAFTSMAN for gravity concrete filter design wanted; must be thoroughly familiar with reinforced concrete and filter piping construction; state qualifications and salary expected. H. F. Huy, Western New York Water Co., 704 Electric Bldg., Buffalo, N. Y.

DRAFTSMEN on structural steel work wanted for buildings. Apply Hay Foundry & Iron Works, Newark, N. J.

EXPERIENCED engineer wanted to handle 2,000 H.P. power plant and mechanical equipment of manufacturing company; must have technical education. P-427, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

FABRICATING firm in South wants two or three good detailers and checkers to help build up permanent organization; no rush in reporting for duty; competent men wanted, thoroughly experienced on office and mill buildings, theatres, schools and stores; give references and state age, nationality, married or single, and salary wanted in first letter. P-483, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

POSITIONS VACANT

EXPERIENCED structural detailers and checkers; state age, experience, nationality, education and salary expected, in first letter. Indiana Bridge Company, Muncie, Indiana.

SEVERAL bridge designers and draftsmen wanted for State Highway Department in the Middle West. Should have at least two years' concrete and steel designing and preferably several years of general engineering experience. Give complete statement of experience and earliest date available. Submit sample of work if possible. Initial salary about $175.00 per month. P-449, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

SEVERAL draftsmen wanted immediately on structural steel, concrete conveyors, special track work and ornamental iron, also recent engineering graduates and some shop foremen. Cleveland Engineering Agency, Rose Building, Cleveland, Ohio.

STRUCTURAL steel draftsman wanted with three to five years' experience on steel building and bridge work; apply giving experience record, salary required, and date available to S. R. Webb, engineer, Carolina Steel & Iron Co., Greensboro, N. C.

STRUCTURAL designers wanted, experienced in reinforced concrete and steel; salaries $150 to $250. Elwyn E. Seelye, 101 Park Ave., New York City.

SURVEYOR, Spanish speaking engineer, for surface survey of mining property in the tropics, Colombia, South America; tropical experience necessary. Give complete experience record and salary desired. P-498, Eng. News-Record, 10th Ave. at 36th St., New York City.

STRUCTURAL STEEL DRAFTSMEN

Detailers and Checkers experienced on office and theatre buildings. Permanent position to men who can make good. Apply Employment Dept.

SUBMARINE BOAT CORPORATION
Newark Bay Shipyard, Port Newark, N. J.

POSITIONS VACANT

SUPERINTENDENT for concrete road paving, must be first-class man with large amount of practical experience and have sufficient engineering and executive ability to manage work complete; state age, experience and wages desired in first letter. Paul C. Kroeck, Contractor, 1000 Humboldt Blvd., Milwaukee, Wis.

CIVIL SERVICE EXAMINATION

WISCONSIN civil service examination (unwritten) for assistant building engineer, open to all citizens of the United States, will be held January 27, 1923. For information and application write at once to Wisconsin Civil Service Commission, Madison, Wis.

EMPLOYMENT AGENCIES

GENERAL ENGINEERING AGENCY, Fulton Bldg., Pittsburgh, requires for Eastern, Southern, Western employers designing engineers, architectural, structural, mechanical, electrical; detailing draftsmen; plant engineers; erecting engineers, foremen; shopmen; professors; instructors; salesmen; instrumentmen; topographers; cadets.

EMPLOYMENT SERVICE

SALARIED POSITIONS, $2,500 to $25,000 upward; executive, technical, administrative, engineering, manufacturing, professional, managing, financial, etc., all lines. If you are qualified and receptive to tentative offers for a new connection, you are invited to communicate in strict confidence with the undersigned, who will conduct preliminary negotiations for such positions. A method is provided through which you may receive overtures in confidence without jeopardizing present connections and in a manner conforming strictly to professional ethics. Send name and address only. Preliminary particulars will be sent without obligating or compromising you in any way. R. W. Bixby, Inc., 404 Lockwood Bldg., Buffalo, N. Y.

EDUCATIONAL

WILSON COURSES are meeting the needs of men in the profession who lack *first class* training in

Reinforced Concrete Design
Structural Steel Design
Structural Drafting
Bridge Engineering
Intensive System of Training

Prepared by an *expert* Engineer with 30 years of experience in this country and abroad.

More practical than college work; ideal evening work; terms to suit. Students all over the world.

Required for enrollment: technical education, High School mathematics or their equivalent.

Free Literature.

Wilson Engineering Corporation
10 Broadway, Hanover, Mass.

EXECUTIVES

Qualified men—Technical, Commercial and Manufacturing—seeking new positions find our effective and confidential service extremely satisfactory. Our Mr. H. H. Harrison can negotiate a suitable connection for you as he has done for thousands of others since 1909. Inquiries invited; confidences respected.

THE NATIONAL BUSINESS BOURSE, Inc.
Confidential Negotiators
Association Building, Chicago

Construction Men

Learn "Line" and "Grade" by Actual Practice.

Level, Transit, and Plane Table Work.
"Running" of Farm, Stadia, Highway and Railroad Surveys.

Estimating

Day and evening courses. Booklet.

The Pan-American Engineering School
39 West 17th St., New York City

POSITIONS WANTED

Civil Engineers

CANADIAN civil engineer, B.Sc., seeks appointment in China, South America, but would consider offers from States; eighteen years' experience in large sewerage schemes, waterworks, highways, town planning, reinforced-concrete construction, general building work, contracting and business experience, engineering investigations for company promotion; used to handling workmen; commanded engineer company in France; three years as professor of civil engineering in Canadian Technical College. PW-492, Eng. News-Record, 10th Ave. at 36th St., New York City.

CIVIL engineer, ten years' experience in economical location, design, and construction of Federal Aid Highways. Thoroughly capable of handling either office or field work, or supervising both. Difficult location, design or construction preferred. At present completing 50 mile Federal Aid Project through difficult country. Available about Jan. 15. PW-466, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

CIVIL engineer, graduate, age 30, married, 10 years' experience municipal executive design and construction, 6 years specialist in city planning zoning. Prefer consulting firm or city doing city planning work. PW-416, Eng. News-Record, Leader-News Bldg., Cleveland, Ohio.

CIVIL engineer, age 29, technical education, seven years' experience, school buildings, industrial plants, available Jan. 1st, desires position as civil engineer, resident engineer or superintendent. PW-407, Eng. News-Record, Real Estate Trust Bldg., Phila., Pa.

CIVIL engineer and superintendent, with 16 years' broad experience in railroad and highway location and construction and general engineering practice in charge of surveys, reports, plans, estimates and construction, wishes position, preferably with contracting firm. PW-467, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

CIVIL engineer, 39, M.Am.Soc. C.E., 17 years' experience in water supply, sewerage, paving, hydraulics, reinforced concrete design and construction, wishes position with consulting engineer; now completing $300,000 bridge construction upon own plans; location in South preferred. PW-476, Eng. News-Record, Real Estate Trust Bldg., Philadelphia, Pa.

CIVIL engineer, technical education, 30, single, 8 years' experience on concrete, steel-frame, school construction, docks and warehouses, desires position as resident engineer or superintendent. PW-473, Eng. News-Record, 10th Ave. at 36th St., New York City.

Municipal Engineer—Contractor

Seven years' experience as construction engineer in street and sewer department of a large city.

Eight years' experience as superintendent and as contractor estimating and constructing sewer and water systems.

Desires executive position with large contractor or as City Manager for a municipality. Inquiry invited. Address Box

P.W.-457, Engineering News-Record,
1570 Old Colony Bldg., Chicago, Ill.

GENERAL MANAGER

Large steel fabricating and warehousing plant. Has handled all details of the business. Engineering, sales, shops, erecting, finances, etc. Released thru outside purchase. Available immediately.

PW-382, Engineering News-Record
10th Ave. and 36th St., N. Y. C.

POSITIONS WANTED

CIVIL engineer, graduate; fifteen years' experience design, construction of heavy concrete work, power plants, sewage disposal works, highways, pavements. PW-500, Eng. News-Record, 10th Ave. at 36th St., New York City.

CIVIL engineer, graduate; fourteen years design and construction; railroads, sewerage systems; steam, electric and industrial plants; subways, tunnels, shafts; docks; waterfront and hydro-electric development; valuation. PW-312, Eng. News-Record, 10th Ave. at 36th St., New York City.

ENGINEER, technical education, twelve years' experience all types railway location and construction, in responsible charge office and field, design and execution, for railroads, or as contractor's engineer, including terminals and grade-crossing elimination, desires position with railroad or development enterprise; location immaterial; ten years' additional experience railroad valuation; industrial plants, waterworks, highway construction, river and harbor improvement, municipal works. PW-487, Eng. News-Record, Real Estate Trust Bldg., Philadelphia, Pa.

CONSTRUCTION engineer, graduate C. E., three years as architect's resident engineer, 4 years as contractor's superintendent on industrial construction, age 28; permanent connection desired. PW-474, Eng. News-Record, Real Estate Trust Bldg., Philadelphia, Pa.

RESIDENT engineer on sewer and municipal construction; design experience; technical education; ten years' experience. PW-497, Eng. News-Record, 10th Ave. at 36th St., New York City.

Surveying

STUDENT, I. C. S. surveying and mapping course, desires position as rodman or computer; ten months' experience; available immediately; location immaterial. PW-482, Eng. News-Record, Leader-News Bldg., Cleveland, Ohio.

TRANSITMAN, levelman, concrete highway inspector, married, age 28, four years' experience, wishes position with construction company or highway department; location immaterial; available immediately; state salary and conditions. Box 86, Mansfield, Pa.

TRANSITMAN—Young man, twenty-one years of age, three and one-half year in general engineering surveying, mapping and office work, desires position with firm of civil engineers, or contractors; location immaterial; references furnished. L. B. Turner, c/o Y. M. C. A., Manchester, N. H.

YOUNG man desires position as rodman on railroad survey party. Completed course in surveying. Now studying course in engineering. Age 21. Salary $100.00 per month and traveling expenses when absent from terminal. Two years' experience. PW-440, Eng. News-Record, Leader-News Bldg., Cleveland, O.

YOUNG man, 20, four years' practical engineering experience, wishes position as transitman or plane table topographer; location immaterial; available immediately; state full conditions and salary. PW-468, Eng. News-Record, 10th Ave. at 36th St., New York City.

Estimator

BUILDER'S or contractor's assistant wish to connect with growing firm to take charge of every detail, from soliciting, estimating, designing to signing of contracts; can also take complete charge of correspondence and bookkeeping; graduate civil engineer (30), eight years' broad practical business experience; excellent references. L.B., 607 Rugby Rd., Brooklyn, N. Y.

POSITIONS WANTED

Bridge and Structural

STRUCTURAL designer, ten years on first class hotels, theatres, office buildings, structural steel and reinforced concrete. PW-490, Eng. News-Record, 10th Ave. at 36th St., New York City.

Draftsmen and Designers

DRAFTSMAN, three years' varied experience, desires position tracing and detailing steel and reinforced concrete structures. PW-466, Eng. News-Record, Real Estate Trust Bldg., Philadelphia, Pa.

DRAFTSMAN, having twenty years' experience on building construction, estimating, superintendence, conveying, installation, wishes position; salary $1,800. PW-501, Eng. News-Record, Real Estate Trust Bldg., Philadelphia, Pa.

ENGINEER draftsman desires immediate connection, 11 years' experience. PW-465, Eng. News-Record, Real Estate Trust Bldg., Phila., Pa.

GRADUATE engineer, 12 years' factory design, construction and maintenance. PW-493, Eng. News-Record, 10th Ave. at 36th St., New York City.

LADY, experienced in drafting room, desires position; location anywhere; salary moderate. Address PW-459, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

Superintendents

BUILDING superintendent, 18 years' experience on high class work, open for position about March 1, 1923. Can furnish entire organization if desired. PW-450, Eng. News-Record, Leader-News Bldg., Cleveland, Ohio.

BUILDING superintendent, willing to travel, desires responsible position with a large building construction company. Box 102, Elkins Park, Pa.

CONSTRUCTION superintendent desires placement, nine years' field and office experience in concrete and steel construction. PW-495, Eng. News-Record, Real Estate Trust Bldg., Philadelphia, Pa.

CONSTRUCTION superintendent, college graduate, twenty years' experience, twelve years manager of erection on steel bridges and industrial buildings, familiar with foundations, falsework, concrete and plant layouts; free after January 15. PW-480, Eng. News-Record, Real Estate Trust Bldg., Philadelphia, Pa.

GENERAL superintendent, 38, accustomed to handling large construction and extensive organizations, soon available; dams, power and industrial plants, bridges; tunnels, docks, etc.; graduate engineer; can design as well as construct; New York interview. PW-485, Eng. News-Record, 10th Ave. at 36th St., New York City.

SUPERINTENDENT of asphalt pavements wishes position with reliable company, anywhere; positively an A-1 organizer with a long experience. PW-471, Eng. News-Record, 10th Ave. at 36th St., New York City.

SUPERINTENDENT construction, twenty years' experience, go any place, handle any size job on hydro-electric plants, dams, heavy foundations, pulp paper mills, railroads, transmission lines, reinforced concrete, waterworks sewers, understands camps; references. PW-448, Eng. News-Record, 10th Ave. at 36th St., New York City.

SUPERINTENDENT of asphalt paving and construction, with 16 years' experience on various types of roads and streets, seeks a new connection; location immaterial. PW-463, Eng. News-Record, Leader-News Bldg., Cleveland, Ohio.

The Erie Employment & Supply Co.

8701 Union Ave., Cleveland, Ohio

Boarding Camps, and Commissaries, operated for Railroads, Manufacturers, Contractors, Coal Mines, etc. We furnish laborers, mechanics and all classes of skilled help. Employment offices at Cleveland, O., Cincinnati, O., Toledo, O., Columbus, O., St. Louis, Mo., Indianapolis, Ind., Chicago, Ill., Danville, Ill., and Buffalo, N. Y.

POSITIONS WANTED

Miscellaneous

ACCOUNTANT—General and cost man desires permanent position with contracting or construction company; best references. PW-430, Eng. News-Record, Real Estate Trust Bldg., Phila., Pa.

A YOUNG man, 33, desires position with construction or industrial company; eleven years' experience as paymaster, field auditor and cost accountant on construction work (tunnels, subways, piers buildings, etc.); high-class references. PW-475, Eng. News-Record, 10th Ave. at 36th St., New York City.

CALIFORNIA construction companies, office man, twenty-six and single, available March 1; nine years' experience on marine, business and industrial projects in Eastern states and tropics. PW-434, Eng. News-Record, 10th Ave. at 36th St., New York City.

ENGINEERING business executive, 15 years' experience, office management, construction, sales, structural and mechanical design industrial building and power plants, industrial management, reclamation, petroleum engineering; age 36; location immaterial. PW-477, Eng. News-Record, 10th Ave. at 36th St., New York City.

ENGINEERING student, nineteen, desires connection with engineer, architect or engineering firm; studying engineering evenings; salary secondary; New York City only. PW-502, Eng. News-Record, 10th Ave. at 36th St., New York City.

EXECUTIVE now connected with one of New York's most prominent builders and in responsible charge of high class construction, seeks a position of greater opportunity. PW-452, Eng. News-Record, 10th Ave. at 36th St., New York City.

EXECUTIVE, 35, sixteen years' engineering and business experience, including sales, varied investigations, production work, material control, stores and cost accounting, seeks connection requiring competent analyst and executive. PW-470, Eng. News-Record, 10th Ave. at 36th St., New York City.

EXPEDITOR, five years' experience in purchasing, factory inspection and follow ups, expert in traffic tracing; will entertain temporary assignment; go anywhere. PW-472, Eng. News-Record, 10th Ave. at 36th St., New York City.

FINANCIAL man, accountant office manager, technical graduate, thoroughly familiar with plans, specification and office routine, five years' experience, wishes to secure responsible position with progressive company. PW-469, Eng. News-Record, 10th Ave. at 36th St., New York City.

HYDRAULIC engineer, at present responsible charge design and construction, hydro-electric and waterworks projects, thirteen years in charge projects of magnitude, Member Am. Soc. C. E., graduate C. E., age forty, desires change. PW-420, Eng. News-Record, Real Estate Trust Bldg., Phila., Pa.

MAN having thirteen years' experience on various types of construction in the capacities of engineer, foreman and superintendent; layout work from plans, supervise handling of labor and plant, economically and efficiently; available immediately. PW-481, Eng. News-Record, 10th Ave. at 36th St., New York City.

MUNICIPAL engineer and waterworks superintendent desires employment in a city of 25,000 or over; salary $5,000. PW-236, Eng. News-Record, Real Estate Trust Bldg., Philadelphia, Pa.

PRACTICAL man, 38, having broad experience on waterworks construction, capable of handling large force of skilled labor; would also consider position as master mechanic with growing concern. PW-494, Eng. News-Record, 10th Ave. at 36th St., New York City.

ENGINEERS—CONTRACTORS

A great reservoir of brains and experience is available, practically without cost.

Several years ago, hap-hazardly reading the various technical periodicals and reports, the writer became amazed at the vast amount of detailed information as to design, methods, costs, etc., included in obscure paragraphs or drawings of general articles whose titles could in no way indicate the presence of such information. He began to card-index such semi-hidden information, and it is remarkable how much, in the course of a year, is printed regarding some one minor detail—matter usually lost completely for any future use the minute the article has been laid aside.

For instance:—an article covering a certain river improvement may contain the detail plans of the pontoons used in dredging—an article on a railroad terminal may show the exact design of a timber trestle supporting the running rail of an overhead crane—an article on a stadium may show dimension drawings of bins and hoppers or concrete materials—an article on a dam may give detail methods of grouting the foundation.

Whatever the problem usually it will be found that, over a period of years, several other parties have encountered the same thing and recorded their methods of handling—often in that obscure paragraph—practically unavailable to others in after years.

In considering your own problem will it not be of advantage, will it not be time saved, will it not be money in pocket, to know and compare what others have done in similar cases?

It is now proposed to carry forward this indexing and cross-indexing and by monthly publication make instantly available many references on any one subject. Your support and subscription is solicited for this service. A refund for unexpired time will be made to any one at any time dissatisfied with the value.

Please send your check for $1.00 for twelve months

The Index of Details (of Design and Construction)

P. O. Box 1033

Detroit, Michigan

POSITIONS WANTED

SANITARY engineer, 25 years of age, Massachusetts Institute of Technology graduate, B. S. degree, desires position, preferably with consulting, engineering or construction firm, in sanitary or civil engineering work; wants to learn work from A to Z; like hard work and plenty of it; location immaterial; first salary, secondary consideration; if temporary position would start work at $175 per month. PW-491, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

STRUCTURAL engineer, designer, estimator, salesman steel ornamental iron, wants position as contract engineer. PW-465, Eng. News-Record, 10th Ave. at 36th St., New York City.

TRAINED executive, now employed, seeks position of greater responsibility and of harder work. Foreign service acceptable. Spanish speaking country preferred. Experience: Graduate civil engineer, seven years pioneer engineering in tropics, six years contractor's superintendent of construction on public improvements. Qualifications: Skilled in all clerical and manual labor of contracting and engineering; especially recommended for attention to details and skilful organization. PW-424, Eng. News-Record, Leader-News Bldg., Cleveland, Ohio.

TESTING engineer, graduate, age 32, married, several years' experience with large commercial testing laboratory; desires position with opportunity for advancement; can take complete charge of physical and chemical laboratories. PW-489, Eng. News-Record, Real Estate Trust Bldg., Philadelphia, Pa.

TIMEKEEPER, engineer, cost accountant; civil engineering graduate; ten years' field and office general building construction experience. PW-445, Eng. News-Record, Leader-News Bldg., Cleveland, Ohio.

VALUATION engineer, eight years' experience, government and railroads, embracing all phases from inventory to final assembly and subsequent reports and records required under Valuation Order No. 3, versed in legal aspects and filing protests against Tentative Valuations and Land Reports, is prepared to represent carriers desiring to protect their interests. PW-488, Eng. News-Record, Real Estate Trust Bldg., Philadelphia, Pa.

YOUNG woman, liberal arts college graduate, seeks work in civil engineering office; two years' experience in drawing, lettering, stenography and typing. PW-461, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

REPRESENTATION WANTED

Representatives Wanted

We want live repesentatives in all large cities for the sale of steel reinforcement and accessories for reinforced concrete, etc. We are an old established concern.

REPRESENTATION WANTED

Liberal commissions paid to live sales engineers who are willing to enter into yearly contracts. Sales engineers with established business preferred. RW-431, Eng. News-Record, Real Estate Trust Bldg., Philadelphia, Pa.

SALESMEN WANTED

Two High Grade Equipment Salesmen

Wanted by large firm offering good salary, bonus and permanent position. SW-446, Eng. News-Record, 10th Ave. at 36th St., New York City.

SALESMEN AVAILABLE

SALESMAN, 6 years' experience in fireproof building materials and reinforced concrete, at present employed, desires to make a change; technical school graduate, 28 years old, married; best of references; state salary. SA-486, Eng. News-Record, Leader-News Bldg., Cleveland, Ohio.

REPRESENTATIVES AVAILABLE

Sales Representative

Civil and architectural engineer, with office at 219 North American Building, Philadelphia, wants to represent the product or products in this vicinity of some established manufacturer. D. C. Finston.

SALES representative, civil, mechanical engineer with extensive technical and selling experience, wants to represent manufacturers in Illinois. Box 428, Galesburg, Ill.

BUSINESS OPPORTUNITIES

Services and Capital Desired

A MODERN steel fabricating shop having excellent facilities for the manufacture of some growing specialties, as well as the smaller and medium size of general fabricating, is looking for a capable executive. One with engineering knowledge and able to become financially interested in the company to the extent of about $25,000.00 preferred. Business has splendid possibilities. Repeat orders and high testimonials from customers of national repute testify to the excellence and merit of its product. References exchanged and thorough investigation from responsible parties solicited. Address BO-447, Eng. News-Record, 10th Ave. at 36th St., New York City.

Partner Wanted

ENGINEER familiar with reinforced concrete and structural designing to become partner in well established sales agency; about $5,000 required. Box 287, Charleston, W. Va.

Additional Undisplayed Ads Continued on page 118

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ADVERTISEMENTS ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE.

OFFICIAL PROPOSALS

Bids: Feb. 1.

Heating, Sanitary and Electrical Work

Theills, N. Y.

Sealed proposals for Construction, Heating, Sanitary and Electric Work—Attendants' Home—Assembly Hall and Industrial Building (Girls' Group) at Letchworth Village, Thiells, N. Y., will be received by Mr. Mortimer B. Patterson, President of the Board of Managers of Letchworth Village, at No. 7 Wall Street, New York City, until 12 o'clock Noon on Thursday, February 1, 1923, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3928, 3929, 3930, 3931, 3932, 3933 and Addenda dated December 12, 1922, 4040 and 4041. The right is reserved to reject any or all bids. Drawings and specifications may be examined at No. 7 Wall St., New York City; at Letchworth Village, Thiells, N. Y.; at the New York Office of the Department of Architecture, Room 1058, 25 Broadway, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

Dated: December 29, 1922.

Bids: Jan. 30.

Gate-Valves and Hydrants

CONTRACT 213

New York, N. Y.

Sealed bids will be received by the Board of Water Supply at its offices, twenty-second floor, Municipal Building, Park Row, Centre and Chambers Streets, New York City, until 11 a.m., Eastern Standard Time, on Tuesday, January 30, 1923, for Contract 213, for furnishing and delivering gate-valves and hydrants for the Mt. Prospect, Park Slope, Fort Hamilton and Clove conduits and Narrows Siphon No. 2 of the Catskill Aqueduct, all as set forth in the specifications. All deliveries shall be made, with all transportation charges prepaid, at designated storage yards within the limits of the City of New York.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders, forms of bid and contract, specifications, contract drawings, etc., can be obtained at the office of the secretary at the above address, by depositing the sum of ten dollars ($10) in cash or its equivalent for each pamphlet. For further particulars apply to the office of the Chief Engineer at the above address.

GEORGE J. GILLESPIE,
President.
JAMES P. SINNOTT,
PHILIP F. DONOHUE,
Commissioners, Board of Water Supply.
BENJ. F. EINBIGLER, Secretary.

OFFICIAL PROPOSALS

Bids: Feb. 9 and Feb. 23.

Two Junior High School Buildings

Jamestown, N. Y.

Notice is hereby given that sealed proposals for furnishing labor and materials to construct two Junior High School Buildings, in the city of Jamestown, N. Y., will be received by the Board of Education, as follows:

1. For a Junior High School Building, located on Front Street, bids will be received up to 2 o'clock P.M., February 9th, 1923, at the offices of the Board of Education in the High School Building on East Second Street, Jamestown, N. Y., at which time they will be opened and publicly read.

2. For a Junior High School Building located on Buffalo Street, bids will be received up to 2 o'clock P. M. February 23rd, 1923, at the offices of the Board of Education in the High School Building on East Second Street, Jamestown, N. Y., at which time they will be opened and publicly read.

Bids will be received for the work on each school under four separate contracts, as follows:

(a) For the General Construction, which includes all Masonry, Carpentry, Sheet and Iron, Roofing, Painting and all work kindred thereto.

(b) For Plumbing and Gas Fitting, and all work kindred thereto.

(c) For heating and ventilating, and all work kindred thereto.

(d) For Electrical Work and all work kindred thereto.

The Board of Education reserves the right to accept or reject any or all proposals and at its discretion to waive informalities.

All bids must be made in the form provided by the specifications and presented in sealed envelopes addressed to the Board of Education, endorsed, *"Proposal for Front Street Junior High School, Jamestown, N. Y.," or "Proposal for Buffalo Street Junior High School, Jamestown, N. Y."* and stating the branch of the work covered. All bids to hold good for at least twenty days after opening same.

No bid will be considered unless accompanied by certified check to the order of the Board of Education of Jamestown, N. Y., in an amount equal to 5% of the amount of the bid or a bid bond of like amount, binding the bidder to execute the contract if awarded to him. The terms of the proposal with surety required are fixed by the specifications.

Copies of the Plans and Specifications will be on file in the offices of the Board of Education in the present High School Building, on East Second Street, Jamestown, N. Y., and at the offices of the Architects for the purpose of examination or estimating.

A limited number of copies of the plans and specifications have been provided by Messrs. Guilbert & Betelle and Johnson & Ford, associated Architects, and will be loaned to prospective bidders on deposit of a certified check in the sum of $25.00 for each set of plans loaned. If the plans and specifications are returned, the check will be returned, otherwise the deposit may become forfeited. All applications for plans should be made to Johnson & Ford, Architects, Fenton Building, Jamestown, N. Y., and check drawn to their order.

The Board of Education, of Jamestown, N. Y.

E. SNELL HALL,
President.
MILDRED R. FALCONER,
Clerk.

January 4th, 1923.

OFFICIAL PROPOSALS

Bids: Feb. 7.

Highway Bridge

Baton Rouge, La.

Notice is hereby given that sealed bids will be received by the Louisiana Highway Commission at its offices in the Reymond Bldg., Baton Rouge, La. up to 12 o'clock Noon, Wednesday, February 7th, 1923, at which time and place they will be publicly opened, for the Construction of a Highway Bridge over the Mermentau River at Mermentau, Louisiana, to be known as the Mermentau River Bridge, Federal Aid Project No. 122.

The plans have been prepared for two alternate layouts as follows:

Alternate "A"—Vertical Lift Layout.

Beginning at the East end to consist of 1 30 ft. reinforced Concrete deck girder span, 1 100 ft. thru riveted fixed span, 1 100 ft. thru riveted Vertical Lift Span, 1 140 ft. thru riveted fixed span, and 3 30 ft. reinforced Concrete deck girder spans.

Alternate "B"—Center Bearing Swing Layout.

Beginning at the East end to consist of 1 30 ft. reinforced Concrete deck girder span, 1 216 ft. thru riveted Center Bearing swing span, 1 140 ft. thru riveted fixed span and 3 30 ft. reinforced concrete deck girder spans.

For each layout the clear Roadway width will be 18 ft., the floor will be timber on movable spans and concrete on fixed spans. The movable spans will be operated by machinery driven by gasoline engines housed over movable spans.

The foundations are similar for the two layouts and consist of Concrete Piers resting on timber piles, the channel piers will be constructed by sinking cribs but the use of cofferdams will be permitted. Cofferdams will be used for the other piers.

Plans and specifications for the proposed work prepared by J. A. L. Waddell and approved by Louisiana Highway Commission and Bureau of Public Roads are on file, and may be inspected by prospective bidders during business hours, at the office of the Louisiana Highway Commission, Reymond Bldg., Baton Rouge, and at the office of J. A. L. Waddell, 35 Nassau Street, New York City. Bidders will be furnished with a copy of the specifications and blue prints of the plans by the Louisiana Highway Commission upon receipt of Five Dollars ($5.00) which will not be returned.

Bids may be submitted on either or both of the alternate layouts and must be made on standard proposal forms in the manner designated therein and required by the specifications. Bids must be enclosed in sealed envelopes bearing the name and address of bidder and name and type of bridge on which bid is submitted on the outside and addressed to Louisiana Highway Commission. Each bid must be accompanied by a certified check in an amount equal to (5%) five per cent of the total bid, payable to Louisiana Highway Commission as a guaranty that if the bid is accepted a contract will be entered into and performance thereof properly secured within (10) ten days notice of the acceptance of bid, otherwise the deposit will be forfeited.

The Louisiana Highway Commission reserves the right to reject any or all bids.

J. M. FOURMY,
State Highway Engineer.

W. T. PETERMAN, Chairman,
Louisiana Highway Commission.

OFFICIAL PROPOSALS

Bids: Feb. 1.

Highway Work

Raleigh, N. C.

Sealed bids for the construction of the following projects will be received by the North Carolina State Highway Commission at Raleigh, N. C., until 10:00 a.m., on the 1st day of February, 1923, when they will be opened and read:

Topsoil, Sand Clay or Gravel Projects including drainage pipe, structures, etc.

Project No.	County	Length (Miles)
107	Bertie	10.43
147	Hertford	17.36
363	Onslow	15.22
391-B	Robeson	1.10
403	Chatham	7.01
486	Wake	9.04
512	Caswell	11.67
555	Montgomery	20.55
752	Stokes	9.67
815	Cleveland	11.63

Macadam or Sand Asphalt Projects including drainage pipe, structures, etc.

Project No.	County	Length (Miles)
275	Sampson	13.80
991	Transylvania	7.31

Hard Surface Project including drainage pipe, structures, etc.

155-B	Martin	19.31
163	Nash	14.96
273	Sampson	2.44
391-A	Robeson	1.03
429	Granville	6.94
671	Rowan	7.34
743	Forsyth	11.35

Overhead Crossing.

291-B	Wilson	

Specifications, proposal forms, etc., may be obtained from the State Highway Commission at Raleigh, N. C.

Plans may be seen in the Raleigh office, or in the offices of the District Engineers.

Bridge plans may be obtained from the State Highway Commission at Raleigh, N. C., upon PAYMENT of Five ($5.00) Dollars per set.

The right is reserved to reject any or all bids.

By order of the North Carolina State Highway Commission.

Bids: Jan. 29.

Road Improvement

Mineola, L. I., N. Y.

Sealed proposals will be received by the Board of Supervisors of Nassau County, in its Chambers, in the Court House at Mineola, Long Island, on Monday, January 29, 1923, at 11 a.m. for the Improvement of the Long Beach Road between Barnum Island Creek and the Upland by the construction of bulk head and filling.

Plans and specifications may be seen at the office of W. Fred Starks, County Engineer, at Mineola, Long Island.

Each bid must be accompanied by a certified check on a solvent bank in the sum of three per cent of the amount of the total contract, made payable to the County of Nassau.

The Board of Supervisors reserves the right to reject any or all bids, waive any informality in the bids, and to accept the bid which it deems most favorable to the interest of the County.

By order of the Board of Supervisors.
By JESSE MERRITT,
Clerk.

Dated at Mineola, L. I., January 11, 1923.

Bids: Jan. 29.

Sewer Work

Spring Lake, N. J.

The Mayor and Council of the Borough of Spring Lake, N. J., will receive sealed proposals until 8.00 p.m., Monday, January 29, 1923, for the construction of about 1,500 lineal feet of six inch and eight inch sewer and one man hole.

Plans and specifications can be examined at the office of the Borough Engineer, First National Bank Building, Spring Lake, N. J. Copies can be procured by depositing Ten ($10.00) dollars with the Engineer.

Certified check in 10% of amount of bid is required with proposal.

Right is reserved to reject any or all bids.

By order of the Mayor and Council.
JOHN M. BRALY,
Borough Engineer.

Spring Lake, N. J.

OFFICIAL PROPOSALS

Bids: Feb. 2.

High School Building

Perry, N. Y.

Sealed bids will be received by the Board of Education, District No. 6, Towns of Perry and Castile, Perry, N. Y., at the office of the Secretary, T. H. Donnelly, High School building on Leicester street, on or before 12 o'clock, noon, Eastern Standard Time, Feb. 2nd, 1923, for making the proposed alterations in the old building, and the construction of a two-story brick addition 146 x 150 feet, according to plans and specifications prepared by Gordon & Kaelber, Architects, 125 Sibley Building, Rochester, N. Y.

The plans and specifications may be inspected at the office of said architects or said secretary of the Board of Education, and obtained together with bidding sheets at the office of said architects.

Each bid shall be accompanied by a certified check amounting to 5% of the amount of the bid. If the bid is accepted a contract will be entered into within 30 days. The performance of said contract shall be properly secured by the United States Government bonds or surety bonds duly approved by the Board of Education.

The Board of Education may, at its discretion, reject all bids as the interests of the District may appear.

Bids will be received on the following types of work:

No. 1. Mason, Steel and Iron, Tile and Marble work.
No. 2. Carpenter work and Hardware.
No. 3. Painting and Finishing.
No. 4. Roofing and Metal work.
No. 5. Electrical work.
No. 6. Sprinkler System.
No. 7. Heating and Ventilating.
No. 8. Plumbing.

If any contractor prefers to submit a general bid on the first six types of work listed above, the Board will receive and consider it.

By order of the Board of Education.
G. L. PECK.
W. D. OLMSTED.
MRS. ANNA SMITH.
MRS. THEO CALKINS.
DR. C. R. BROWN.
W. W. McMAHAN.
W. A. AUSTIN.

Jan. 10, 1923.

Bids: Jan. 23.

Paving

Charlotte, N. C.

Sealed proposals for the paving of certain streets in the City of Charlotte will be received by the Board of Commissioners up to 11 o'clock A. M. of the 23rd day of January, 1923.

The work to be done consists of approximately 210,000 sq. yds. of paving.

Bids will be received on Various Types.

A certified check equal to five per cent. of the amount of the bid, and made payable to the Treasurer of the City of Charlotte, will be required to accompany each bid.

Plans may be seen, and specifications may be obtained, at the office of the City Engineer.

The right is reserved to reject any or all bids or any part of a bid.

By Order of the Board of Commissioners.
W. S. STANCILL,
Commissioner of Public Works.
JOSEPH FIRTH,
City Engineer.

Bids: Jan. 23.

Sewers and Drains

Charlotte, N. C.

Sealed proposals for the construction of certain sewers on certain streets consisting of approximately eight miles of sewers and drains with appurtenances to be laid for the City of Charlotte, N. C., will be received by the City of Charlotte, up to Eleven o'clock a.m., of the twenty-third day of January, 1923. Proposals to be addressed to the Board of Commissioners and endorsed: Proposals for Constructing Sewers.

A certified check equal to five per centum of the amount of the bid, and made payable to the Treasurer of the City of Charlotte, will be required to accompany each bid.

Plans and specifications and blank forms of proposal may be obtained at the office of the City Engineer.

W. S. STANCILL,
Commissioner of Public Works.
JOSEPH FIRTH,
City Engineer.

OFFICIAL PROPOSALS

Bids: Feb. 7.

Bridges

Appleton, Wisc.

Sealed bids will be received by the undersigned, city clerk of the city of Appleton, Wisconsin, up to 4:00 o'clock P.M., February 7th, 1923, for furnishing all labor and material and constructing according to plans and specifications, bridges across the Fox River at Lawe street and Cherry street.

The Lawe-st bridge over the Fox River will be of reinforced concrete, resting on steel cylinder piers sunk to bed rock and on the footings for columns on shore. It provides for a twenty-foot roadway and six foot sidewalk. The Cherry street bridge over the Fox river, will be of steel girder type, resting on concrete piers, sunk to bed rock and the footings for abutments on shore. It provides for a thirty-two foot roadway and a seven foot sidewalk. Plans and specifications are on file and may be examined in the office of E. L. Williams, city clerk, and O. F. Weissgerber, city engineer and in the office of Harrington, Howard & Ash, consulting engineers, Kansas City, Mo.

Copies of the plans and specifications may be secured from the consulting engineers by depositing $25.00, these plans are to be returned upon request, at which time a refund of $15.00 will be made. A bond in the full amount of the contract will be required.

A certified check in the sum of not less than 5% of the total bid, made payable to the city clerk, must accompany each bid.

Council reserves the right to reject any or all bids.

Dated January 4th, 1923.

BY ORDER OF THE COMMON COUNCIL E. L. Williams, City Clerk.

Bids: Feb. 7.

Highway Work

Albany, N. Y.

Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock p.m. on Wednesday, February 7, 1923, for the improvement of highways in the following counties:

COLUMBIA.....(one highway: 2.70)
DUTCHESS.....(one highway: 1.33)
ERIE.....(two highways: 6.61 & 4.84)
HAMILTON.....(one highway: 10.07)
SARATOGA.....(two highways: 0.08 & 0.11)
SCHUYLER.....(one highway: 3.47)

Also for the reconstruction of the following:

FULTON.....(one contract: 1.50)
GREENE.....(one contract: 3.88)
MONTGOMERY.....(one contract: 4.00)
SARATOGA.....(one contract: 4.21)

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the division engineers in whose division the roads are to be improved or reconstructed. The addresses of the division engineers and the counties in which they are in charge will be furnished upon request.

The especial attention of bidders is called to "General Information for Bidders" in the itemized proposal, specifications and contract agreement.

HERBERT S. SISSON,
Commissioner.

J. C. FINCH,
Secretary.

Bids: Jan. 23.

Sidewalks

Charlotte, N. C.

Sealed proposals will be received by the Board of Commissioners of Charlotte, N. C., up to 11 o'clock a.m., of the 23rd day of January, 1923, for the grading and paving of the sidewalks on various streets consisting of approximately 45,000 sq.yds. of concrete walk.

A certified check equal to 5 per cent of the amount of the bids and drawn payable to the Treasurer of the City of Charlotte, will be required to accompany each proposal. Specificaltons can be obtained at the office of the City Engineer.

The right is reserved to reject any or all bids.

JOSEPH FIRTH,
City Engineer.
W. S. STANCILL,
Commissioner of Public Works.

OFFICIAL PROPOSALS

Bids: Feb. 5.

Junior High School Building

Trenton, N. J.

Sealed proposals for the complete construction of a new Junior High School Building will be received by the committee on Buildings and Grounds of the Board of Education of Trenton, in the County of Mercer, at the meeting room of the Board in the Administration Building No. 9 South Stockton Street, Trenton, New Jersey, at 8:30 o'clock p.m., eastern standard time, on Monday the 5th day of February, 1923, at which place and time all bids received will be unsealed and contents publicly announced. No bids will be received previous to the time designated, and none will be received thereafter.

All bids shall be presented to the committee at the place and time mentioned by the parties bidding, or their agents, when called for by the chairman of the committee.

Bids for the general construction, for the heating and ventilating, for the plumbing, and for the electrical work, will be taken separately.

A certified check for not less than five (5%) per cent of the amount of the bid must accompany each proposal, made payable to the Board of Education of the City of Trenton, to be treated as liquidated damages in case the bidder receiving the award shall fail to execute a contract and furnish the required bond, within ten days after notification of the acceptance of their bid.

The Board of Education reserves the right to reject any or all bids, or to waive defects or informalities in any bid if it be deemed to the interest of the city so to do.

Copies of the plans and specifications will be on file at the office of the Secretary of the Board of Education, in the Administration Building, for the purpose of estimating.

A limited number of copies of the plans and specifications will be loaned to the prospective bidders on deposit of a certified check drawn to the order of the Board of Education, Trenton, New Jersey, in the sum of $25.00.

These plans and specifications may be obtained by application to the Architect Ernest Sibley, Edgewood Lane and Bluff Road, Palisade, New Jersey, or from J. Osborne Hunt, Associate Architect Hunt Building, 219 East Hanover Street, Trenton, New Jersey. Deposits will be forfeited unless plans and specifications are returned to the Architects within ten days after bids are opened.

(Signed) ROBERT C. BELLVILLE,
Secretary.

For the Board of Education, City of Trenton, New Jersey.

Bids: Feb. 5.

Sewer Arms

Springwells, Mich.

Sealed bids will be received up to 8 p.m., Feb. 5, 1923, by the Village Clerk at the Village Hall, Springwells, Michigan, for the construction Sewer Arms Sections No. 25 to Section No. 35.

The work is divided into eleven sections containing approximately 33,000 ft. of 20" to 120" sewer. Sewers may be built in open cut or tunnel with brick, concrete, reinforced concrete pipe for sizes over 24". Sizes 24" and under may be built of Double Strength Vitrified Pipe.

Plans and specifications are on file at the office of the Village Clerk and copies may be secured from the office of Clarence W. Hubbell, Consulting Engineer, 2348 Penobscot Bldg., Detroit. A deposit of $10.00 will be required for the plans and specifications which will be refunded upon their return in good order on or before Feb. 16, 1923.

A certified check made payable to the Village of Springwells for the sum of $2,500.00 must accompany each bid on each Section. Contractors may bid on any or all Sections. In case of failure or neglect to enter into contract and furnish the required bonds within the time specified the certified check shall be forfeited to the Village of Springwells as liquidated damages.

No proposals will be received unless made on the blanks furnished and delivered to the Village Clerk on or before 8 p.m., Feb. 6, 1923.

The Village reserves the right to reject any or all bids.

By order of the Village Council.
B. P. ESPER,
Village Clerk.

OFFICIAL PROPOSALS

Bids: Feb. 14.

Scherzer Rolling Lift Bridge

New Orleans, La.

Proposal No. 202. City of New Orleans, Louisiana, Department of Public Finances, Purchasing Division, Room 24, City Hall. Sealed proposals will be received at this office until the hour of 11 o'clock a.m., Wednesday, February 14th, 1923, for furnishing and erecting a Scherzer Rolling Lift Bridge over the New Orleans Navigation Canal on the axis of Broad street, in the City of New Orleans, in accordance with plans and specifications on file in this office, complete set of which will be furnished on receipt of a deposit of $5.00, which deposit will be returned when the plans and specifications are returned in good order to this office.

Deposit ten per cent of amount of bid. Cash, Bid Bond or Certified check enclosed with bid.

Bond fifty per cent of contract price.

Contract before the City Notary at bidders expense.

Bidders must have paid their City License in order that their bid may be accepted.

The City reserves the right to reject any and all bids.

R. M. MURPHY,
Commissioner of Public Finances.
January 15th, 1923.

Bids: Feb. 9.

Paving

New Castle, Pa.

Sealed proposals will be received at the office of the City Clerk, City Building, New Castle, Pa., up until 10:00 o'clock, Friday morning, February 9, 1923, for the paving of Montgomery Street (formerly Moravia Road), in the Seventh Ward, beginning at a point following the center line 643.9 feet eastwardly and northwardly from the east end of the County Bridge over the Mahoning River, thence to a point at the end of the present pavement in Montgomery Street near the County Bridge over the Mahoning River and near to the Pittsburgh, Youngstown & Ashtabula Railway tracks, the said paving to be of concrete and of the width of eighteen (18) feet, said paving to be done in accordance with plans and specifications approved by Council and on file in the office of the City Engineer, New Castle, Pa. Each proposal to be accompanied by a certified check for $1,000.00 payable to the order of C. Ed Brown, City Clerk, as a guarantee that the bidder whose proposal is accepted will sign the contract and furnish the required bond, which check is to be returned to the successful bidder upon signing the contract and the approval of the bond, and to the unsuccessful bidders upon award of the contract. Rights reserved to reject any or all bids.

C. ED BROWN,
City Clerk,
New Castle, Pa.

Bids: Jan. 30.

Bridges and Roads

Charleston, W. Va.

Sealed proposals will be received by the State Road Commission of West Virginia until ten o'clock A. M. on the 30th day of January, 1923, and said proposals will be opened and read immediately thereafter at the Kanawha County Court House, Charleston, W. Va., for the construction of the following bridges and sections of State Road:—

Project 3052—Raleigh County—6 miles of the Shady Springs-Summers County Line Road for grading and draining. Certified check for $3,000.00.

Project 3133—Amigo Bridge No. 833—Raleigh County—over Devil's Fork, concrete arch 75 ft. span. Certified check for $500.00.

Project 3182-B—Pocahontas County—8.3 miles of the Sunset to Greenbank District Line Road for grading and draining. Certified check for $4,000.00.

OFFICIAL PROPOSALS

Project 3171—Pocahontas County—2 miles of the Marlinton towards Buckeye Road for grading and draining. Certified check for $1,800.00.

Project 127—Greenbrier County—8 miles of the Lewisburg-Camp Ground Road for grading, draining and paving with Bituminous Macadam. Certified check for $11,000.00.

Project 3045-B—Monroe County—5.3 miles of the Union-Rock Camp Road for grading and draining. Certified check $2,500.00.

Project 3037—Hartland Bridge No. 805—Clay County over Elk River, steel superstructure, 565 ft. long. Certified check for $2,000.00.

Project 3091—Boone County—2.25 miles of the Seng. Creek—toward Seth Road for grading and draining. Certified check for $1,800.00.

Project 3155—Heath Bridge No. 873—Cabell County, over Heath Creek. Concrete deck girder, 37.5 span, concrete substructure. Certified check for $500.00.

Project 3074-D—Jackson County—5 miles of the Cottageville-Mason County Line Road for grading and draining. Certified check for $3,000.00.

Project 47-S—Wetzel County—1 mile New Martinsville-Willeyville Road, for grading, draining and paving with concrete sections only. Certified check for $1,000.00.

Project 3167-A—Marshall County—3 miles of the Cameron-Littleton Road for grading and draining. Certified check for $1,800.00.

Project 3163—Tyler County—5 miles of the New Martinsville-West Union Road, for grading and draining. Certified check for $3,000.00.

Project 3203-A — Preston County—3.5 miles of the Northwestern Turnpike from Aurora to Dayton for grading and draining. Certified check for $2,500.00.

Project 3187—Marion County—2.8 miles of the Flat Run-Metz Road for grading, draining and paving with concrete. Certified check for $5,000.00.

Project 3184—Barbour County—7.2 miles of the Philippi-Taylor County Line Road for grading and draining. Certified check for $5,000.00.

Project 3026—Jefferson County—7 miles of the Charlestown-Kearneysville Road for grading, draining and waterbound macadam surface course. Certified check for $5,000.00.

Project 3147—Hampshire County—5 miles of the Frenchburg-Virginia State Line Road for grading and draining. Certified check for $2,000.00.

Project 3010—Burlington Bridge No. 735—Mineral County over Patterson Creek—150 ft. steel thru truss, concrete substructure. Separate proposals will be received on substructure. Certified check for $500.00 and superstructure. Certified check for $500.00.

Project 3198—Morgan County—5 miles of the Berkeley Springs-Great Cacapon Road for grading and draining. Certified check for $4,000.00.

Project 122—B & C—Grant County—12.5 miles of the Northwestern Turnpike for grading and draining. Certified check for $6,000.00.

Project 3175—Pendleton County—5 miles of the Franklin-Elkins Road for grading and draining. Certified check for $2,400.00.

Project 3148—Hardy County—8.5 miles of the Moorefield Petersburg Road for grading and draining. Certified check for $3,500.00.

Proposals will be received only upon State Standard form in accordance with plans, specifications and estimates of quantities therefor, which standard forms, plans, specifications and estimates of quantities may be obtained from the office of the Division Engineer in whose territory the proposed construction is located or from the office of the State Road Commission at Charleston, W. Va.

Each proposal must be accompanied by a certified check for the amount noted.

The right is reserved to reject any and all proposals.

THE STATE ROAD COMMISSION OF WEST VIRGINIA.
E. B. CARSKADON, Secretary.

Compensation Insurance
The intelligent handling of Workmen's Compensation Insurance is most essential to contractors. I have specialized in this business for twenty years and know how to handle insurance for the best interests of the contractors.
Alfred S. Hamilton
110 William St., New York

Repledging our Annual Pledge—Better Service on
Contract Bonds
Compensation Insurance
HARMON V. SWART
92 William St., New York.

OFFICIAL PROPOSALS

Bids: Jan. 25.

Sluice Gates

Buffalo, N. Y.

Sealed proposals will be received by the Commissioner of Public Works at the Municipal Bldg., Buffalo, N. Y., for 56 rectangular sluice gates varying in size from 16-in. square to 48-in equare, and appurtenances to be furnished f.o.b. cars, Buffalo, N. Y.

Forms of proposal, drawings and specifications may be obtained on application to the above address.

ARTHUR W. KREINHEDER,
Commissioner of Public Works,
Buffalo, N. Y.

U. S. GOVERNMENT

SEALED PROPOSALS, indorsed "Proposals for Natatorium, Annapolis, Md., Specification No. 4754," will be received at the Bureau of Yards and Docks, Navy Department, Washington, D. C., until 11 o'clock a.m., Jan. 24, 1923, and then and there publicly opened, for a natatorium at the Naval Academy, Annapolis, Md. The work includes timber piles; plain and reinforced concrete; brickwork; plain and molded granite work; membraneous waterproofing and built-up roofing; copper roofing, wall covering and sheet metal work; skylights; wood roof sheathing, frames, and sash and doors; steel framing; metal stairwork, pipe railings and other accessories; interior marble and tile; plastering; hardware; painting and glazing; plumbing; heating; ventilating; electric lighting; mechanical equipment and piping for swimming pool, including pressure filters, motor-driven centrifugal pump, coagulant devices, heater, ultra-violet ray sterilizers, and a portable pool cleaner. Drawings and Specification No. 4754 may be obtained on application to the Bureau or to the Superintendent, Naval Academy, Annapolis, Md. Deposit of a check or postal money order for $25, payable to the Chief of the Bureau of Yards and Docks, is required as security for the safe return of the drawings and specification. L. E. GREGORY, Chief of Bureau. December 13, 1922.

SEALED PROPOSALS will be received and opened by the Director, U. S. Veterans Bureau, in the office of the Quartermaster General, 2306 Munitions Building, Washington, D. C., at 11 a.m., February 16, 1923, for construction of a 500 bed Neuro-Psychiatric Hospital to be erected for the U. S. Veterans Bureau at Camp Custer, Battle Creek, Michigan. The work will include the construction of about thirty buildings of reinforced concrete and brick, complete with sewer, water, heating and lighting systems, roads and walks. Plans and specifications may be obtained after January 16, 1923, from the Quartermaster General, Room 2306 Munitions Building, Washington, D. C., upon deposit of $100. One set of plans and specifications will be on exhibition at each of the following stations: Constructing Quartermasters at 39 Whitehall Street, New York, N. Y., Army Supply Base, Boston 9, Mass., and Quartermaster Supply Officers at 1819 West Pershing Road, Chicago, Ill., and Second and Arsenal Streets, St. Louis, Mo.

SEALED PROPOSALS will be opened by the Supt. of Lighthouses, Philadelphia, Pa., 2 p.m., Feb. 13, 1923, for building stone and reinforced concrete breakwater at Harbor of Refuge Light Station, Delaware Bay, Del. Information on application.

U. S. ENGINEER OFFICE, ROOM 608, ARMY BUILDING, NEW YORK CITY. Sealed proposals will be received here until 12 o'clock noon, January 26, 1923, and then opened, for furnishing and erecting complete, on concrete foundations already constructed, one 100-foot Range Finding Tower. Further information on application here and at Office of Chief of Engineers, Construction Section, Washington, D. C.

BIDS INVITED.—Sealed bids will be received by the Constructing Quartermaster, Fort Benning, Georgia, for construction of twenty-three sets of two family houses. Bids will be opened at Fort Benning, Georgia, at 12 o'clock noon, central time, January 30th, 1923. Twenty five dollars deposit required to insure return of plans.

U. S. ENGINEER OFFICE, GALVESTON, TEX., Sealed proposals will be received here until 11 a.m. Feb. 21 1923, and then opened, for dredging channels at Brazos Island Harbor, Texas. Further information on application.

U. S. GOVERNMENT

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., Jan. 24, 1923, for constructing about 900,000 cubic yards of earthwork by the hydraulic method in the Sny Island Levee Drainage District, Ill. Further information on application.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., January 6, 1923.—SEALED PROPOSALS will be opened in this office at 3 p.m., January 30, 1923, for construction of an extension to delivery platform at U. S. Appraisers Warehouse, New York, N. Y. Drawing and specifications may be obtained from the Office of Supervising Chief Engineer, 731 Custom House, New York, N. Y., or at this office, in the discretion of the Supervising Architect, Jas. A. Wetmore, Acting Supervising Architect.

U. S. ENGINEER OFFICE, HUNTINGTON, W. VA., Dec. 23, 1922.—Sealed proposals will be received here until 11 a.m. (Eastern Time), January 23, 1923, and then opened, for furnishing and delivering lock-operating machinery, etc., for Dam No. 30, Ohio River. Further information on application.

COMMISSIONERS, D. C., Washington, January 15, 1923. Sealed proposals for constructing the Smothers School, will be received in Room 509, District Building, until 2 o'clock p.m., January 29, 1923. For detailed information apply to Room 427, District Building. A deposit of $10.00 required to insure return of plans and specifications. Cuno H. Rudolph, James F. Oyster, Charles Keller, Commissioners, D. C.

OFFICE OF CONSTRUCTING QUARTERMASTER, FORT BLISS, TEXAS.—Sealed proposals, in triplicate, will be received at this office until 10:00 a.m., February 1st, 1923, then publicly opened for drilling, casing and equipping complete, ready for operation, one eight inch well at Dona Ana Target Range, New Mexico. Plans and specifications furnished upon receipt of certified check for $10.00 to guarantee return.

U. S. GOVERNMENT

U. S. ENGINEER OFFICE, CINCINNATI, O. Sealed proposals will be received here until 2 p. m. Feb. 8, 1923, and then opened for furnishing and delivering horses and props for Ohio River Dams Nos 34, 36 and 38. Further information on application.

U. S. ENGINEER OFFICE, FLORENCE, ALA.—Sealed proposals will be received here until 11 A.M. January 27, 1923, and then opened, for the construction and delivery of four steel barges. Further information on application.

U. S. ENGINEER OFFICE, PITTSBURGH, PA.—Sealed proposals for building two two-story, seven-room lockkeepers' houses at Lock No. 6, Monongahela River, will be received at this office until 12 Noon, January 31, 1923, and then publicly opened. Information on application.

U. S. ENGINEER OFFICE, NASHVILLE, TENN.—Sealed proposals will be received here until 11 a.m., January 30, 1923, and then opened, for fourteen steel barges. Further information on application.

U. S. ENGINEER OFFICE, CINCINNATI, O. Sealed proposals will be received here until 2 p.m., Jan. 30, 1923, and then opened, for constructing, assembling, testing and delivering one dredging ladder for 24-inch pipe line dredge. Further information on application.

U. S. ENGINEER OFFICE, GALVESTON, TEX. Sealed proposals will be received here until 12 m., Feb. 1, 1923, and then opened, for dredging the Houston Ship Channel, Texas. Further information on application.

U. S. ENGINEER OFFICE, CINCINNATI, O. Sealed proposals will be received here until 2 p.m., Feb. 12, 1923, and then opened, for furnishing and delivering structural steel, forgings, etc., for Ohio River Dams Nos. 36 and 38. Further information on application.

U. S. ENGINEER OFFICE, ROOM 608, ARMY BUILDING, NEW YORK CITY. Sealed proposals will be received here until 12 o'clock noon, February 10, 1923, and then opened, for constructing one concrete plotting room and switchboard room at Fort Tilden, Long Island, N. Y. Further information on application.

Wanted—Correspondents
for Engineering News-Record

If you want to earn some extra money and are a resident in one of the cities named below;

If you can spare an hour or two a day *during business hours* for calling upon architects, contractors, engineers and city departments;

Then write me concerning your qualifications and present connection, if you live in

ALABAMA
Anywhere

ARIZONA
Bisbee
Globe
Tuscon

ARKANSAS
Little Rock

CALIFORNIA
Los Angeles

CONNECTICUT
Hartford

ILLINOIS
Springfield

INDIANA
Evansville
South Bend

IOWA
Dubuque

KANSAS
Leavenworth

KENTUCKY
Louisville
Fall River

MONTANA
Butte

NEVADA
Carson City

NEW JERSEY
Except Trenton

NEW YORK
Schenectady

OREGON
Astoria
Medford
Salem

OHIO
Cincinnati
Toledo

SOUTH CAROLINA
Except Columbia

SOUTH DAKOTA
Sioux Falls

VIRGINIA
Norfolk

WASHINGTON
Tacoma
Walla Walla

ALBERTA
Calgary

MANITOBA
Winnipeg

QUEBEC
Quebec

Alden W. Welch

Engineering News-Record, 10th Ave. at 36th St., New York

OFFICIAL PROPOSALS

Bids—Feb. 6

Filtration Plant

Zelienople Borough, Pa.

The Council of Zelienople Borough, Pennsylvania, will receive bids for the furnishing of materials, labor and equipment and the construction of a water filtration plant, on the evening of Tuesday, February 6th, 1923, up until 7 o'clock p.m., Eastern Standard Time, at the Municipal offices in the Borough of Zelienople.

The work consists of 2-300,000 gallon-per-day mechanical filter units, with the accompanying auxiliary works, 1-350 gallon-per-minute motor driven centrifugal low-lift pump, and other equipment as per Plans and Specifications.

Any intending Bidder will be required to indicate to the satisfaction of the Engineers, or upon appeal to the satisfaction of the Municipal Council, that they have had experience in building work of this class, and to show their financial ability and give references as to past experience. Any Contractors inexperienced in the building of mechanical filtration plants or the structural work incidental thereto need not apply.

The work will be advertised in three parts, Part No. 1 being the structural work, Part No. 2 being the mechanical equipment, and Part No. 3 being a Venturi water meter, but the contract may be let as one contract depending upon the bids received.

Each Bidder will be required to furnish a Banker's Certificate or a satisfactory Bidder's Bond in the amount of ten per cent (10%) of the total amount of the bid, guaranteeing that he will enter into the contract precisely as originally prepared, provided said contract is awarded him.

The Contractor to whom the contract will be awarded will be required to furnish a satisfactory Bond on a satisfactory Bonding Company, in the amount of one hundred per cent (100%) of his total bid, said Bond to guarantee the faithful performance of the contract in all respects and the completion of said contract within the time specified or any extensions which might be granted thereto.

Plans, Specifications and Bidding Blanks may be received from the Engineers, Hudson & Myron, 808 Wabash Building, Pittsburgh, Pa., upon proper application, and a deposit of $10.00 may be required of any Bidder, subject to the presentation and return of said Plans, Specifications, etc. In case a Contractor receiving Plans does not offer a bid and returns the Plans in good condition, then $5.00 of the $10.00 will be refunded to him, the other $5.00 being retained to cover the cost of excessive sets of Plans. In case any Contractor, however, receiving Plans and data and submitting a bid, and in case all data, with Plans, is returned to the office in good condition, then said Contractor will be refunded the entire amount of $10.00. In case any Contractor receiving Plans and data and not returning the same within two (2) weeks' time after the opening of bids, then said Contractor will forfeit the entire amount of the deposit of $10.00

The Borough Council reserves the right to reject any part or the total parts of all bids received.

WM. M. SEATON, President of Council,
EDWIN MEEDER, Secretry of Council,
Zelienople Borough, Pennsylvania.
HUDSON & MYRON, Engineers,
808 Wabash Building,
Pittsburgh, Pa.

Bids: March 5.

Paving

Hillsdale, Mich.

Bids will be received up to and including March 5th, 1923, at the office of the City Clerk, Hillsdale, Michigan, for the paving of parts of Railroad and Union Streets, approximately 5,496 square yards, brick, sheet asphalt or asphaltic-concrete.

Plans and specifications are on file in the office of the City Clerk, and the City reserves the right to reject any or all bids.

W. J. LA BARRE,
City Clerk.

Compensation Insurance

The intelligent handling of Workmen's Compensation Insurance is most essential to contractors. I have specialized in this business for twenty years and know how to handle insurance for the best interests of the contractors.

Alfred S. Hamilton
110 William St., New York

OFFICIAL PROPOSALS

Bids: Feb. 14.

Roads and Bridges

Richmond, Va.

Sealed bids will be received at the Office of the Virginia State Highway Commission, corner 10th and Marshall Streets, Richmond, Va., until 10:30 A.M., Wednesday, February 14th, 1923, for the construction of:

1.—(a) PROJECT 48-C, ROUTE 14—From Big Island to Snowden in Bedford and Amherst Counties, 5.2 Miles of 16 ft. Bit. Macadam roadway, involving approximately 16 Acres Clearing and Grubbing, 91,000 Cu. Yds. Excavation, 600 Lin. Ft. Vitrified Clay Pipe, 1250 Lin. Ft. Cast Iron Pipe, 560 Cu. Yds. Concrete Class "A" 84 Cu. Yds. Class "B" Concrete, 40,500 Lbs. Reinforcing Steel, 3900 Cu. Yds. Dry Rubble Masonry Retaining Wall, 8,160 Lin. Ft. Wooden Guard Rail, 952 Lin. Ft. Wooden Guard Rail with Steel Posts.

1.—(b) THREE BRIDGES OVER: Hunting, Battery and Peters Creeks, having total length of 190 ft. width of roadway 19 ft., involving approximately 346 Cu. Yds. Class "A" Concrete, 90 Cu. Yds. Class "B" Concrete, 66,330 Lbs. Reinforcing Steel.

2.—PROJECT 107 ROUTE 23—From Pearisburg toward Ripplemead in Giles County, 2.8 miles of 12 ft. Surface Treated Macadam Roadway, involving approximately 23,138 Cu. Yds. Excavation, 190 Lin. Ft. Vitrified Clay Pipe, 236 Lin. Ft. Cast Iron Pipe, 18 Cu. Yds. Class "B" Concrete, 28 Cu. Yds. Class "B" Concrete, 2269 Lbs. Reinforcing Steel, 700 Lin. Ft. Wooden Guard Rail.

3.—PROJECT 136-A, ROUTE 17—From Orange County Line 2.75 miles west in Greene County, approximately 2.75 miles of Bituminous Macadam roadway involving approximately 1 acre of Clearing and Grubbing, 10,647 Cu. Yds. Excavation, 290 Lin. Ft. Cast Iron Pipe, 114 Lin. Ft. Vitrified Clay Pipe, 19 Cu. Yds. Class "B" Concrete, 400 Lin. Ft. Wooden Guard Rail.

4.—PROJECT 135-C, ROUTE 17—From Barboursville to Green County Line in Orange County, 0.8 miles of 12 Bituminous Macadam road, involving approximately 5633 Sq. Yds. Bituminous Macadam.

5.—PROJECT F-178, ROUTE 1—From Clarksville to the North Carolina Line, in Mecklenburg County, 6.13 miles of 18 ft. Concrete Road, involving approximately 16 Acres Clearing and Grubbing, 43,400 Cu. Yds. Excavation, 782 Lin. Ft. Cast Iron Pipe, 654 Lin. Ft. Vit. Clay Pipe encased in concrete, 110 Cu. Yds. Class "A" Concrete, 100 Cu. Yds. Class "B" concrete, 9100 Lbs. Reinforcing Steel 2169 Lin. Ft. Wooden Guard Rail.

6.—(a) PROJECT 141-B, ROUTE 18—From 1.12 Miles South of Brookneal to Volens, 7.52 miles of Soil Roadway, involving approximately 19 Acres Clearing and Grubbing, 47,900 Cu. Yds. Excavation, 1057 Lin. Ft. Vitrified Clay Pipe, 53.6 Lin. Ft. Cast Iron Pipe, 2 55 Cu. Yds. Class "A" Concrete, 533 Cu. Yds. Class "B" Concrete, 20,823 Lbs. Reinforcing Steel, 2368 Lin. Ft. Wooden Guard Rail.

7.—(a) PROJECT S-158, ROUTE 1—The Streets of Clarksville in Mecklenburg County, 0.93 miles of 50 and 18 ft. Concrete Pavement, involving approximately 4000 Cu. Yds. Excavation, 282 Lin. Ft. Cast Iron Pipe, 850 Lin. Ft. Wooden Guard Rail, 2 Catch Basins, complete with Cover, 2 Drop Inlets, 5000 Lin. Ft. Combination Curb and Gutter.

8.—PROJECT 186-B, ROUTE 12 — The Bridge over Sandy River near Danville in Pittsylvania County, involving approximately 146.5 Cu. Yds. Class "A" Concrete, 39.3 Cu. Yds. Class "B" Concrete, 22,610 Lbs. Reinforcing Steel.

9.—PROJECT 192-C, ROUTE 3—From Station 43700 to Fairfield in Rockbridge and Augusta Counties, 11.07 miles of Bituminous Macadam roadway, involving approximately 2 Acres Clearing and Grubbing, 57,000 Cu. Yds. Excavation, 1,100 Lin. Ft. Cast Iron Pipe, 268 Lin. Ft. Vitrified Clay Pipe, 267 Cu. Yds. Class "B" Concrete, 17,500 Lbs. Reinforcing Steel.

9.—(b) BRIDGES over Marl and Christian Creeks, and the South River in Rockbridge and Augusta Counties, involving approximately 124 Cu. Yds. Class "A" Concrete, 347 Cu. Yds. Class "B" Concrete 25,515 Lbs. Reinforcing Steel.

10.—PROJECT F-221, ROUTE 4—From Tasley to a point 6 miles south in Accomac County, 6 miles of 18 ft. Concrete Roadway involving approximately 4 Acres Clearing and Grubbing, 13,119 Cu. Yds. Excavation, 23,800 Cu. Yds. Borrow Excavation, 633 Lin. Ft. Cast Iron Pipe.

11.—PROJECT F246-A, ROUTE 12Y—From Franklin to the North Carolina State Line, 7.86 miles of 18 ft. Concrete Roadway, involving approximately 10 Acres Clearing and Grubbing, 51,346 Cu. Yds. Excavation, 1078 Lin. Ft. Cast Iron Pipe, 440 Lin. Ft. Vitrified Clay Pipe encased in concrete, 75 Cu. Yds. Class "B" Concrete, 70 Cu. Yds. Class "B" Concrete, 4071 Lbs. Reinforcing Steel.

12.—PROJECT S268-A & B, ROUTE 4X—From Tasley to Onancock in Accomac County, 3.02 Miles 18 ft. Concrete Roadway, involving approximately 10,540 Cu. Yds. Excavation, 272 Lin. Ft. Cast Iron Pipe, 18 Cu. Yds. Class "A" Concrete, 57 Cu. Yds. Class "B" Concrete, 3388 Lbs. Reinforcing Steel.

13.—(a) PROJECT F225B, ROUTE 1—From Rappahannock River to Fredericksburg in Spotsylvania County—0.65 Miles of Concrete roadway, involving approximately 4791 Cu. Yds. excavation, 54 Lin. Ft., Cast Iron Pipe, 4 Cu. Yds. Class "B" Concrete, 1083 Lin. Ft. Wooden Guard Rail.

14.—PROJECT S225B, ROUTE 1—BRIDGE over Spotsylvania Power Company's Canal at Falmouth, Va., having total length of 77 ft. 6 in. Roadway 22 ft., involving approximately 184 Cu. Yds. Class "B" Concrete, 24,700 Lbs. Reinforcing.

15.—PROJECT S256, ROUTE 11—From Burke's Garden Siding to Tazewell in Tazewell County, 1.98 Miles of Bituminous Macadam roadway, involving approximately 13,508 Cu. Yds. of Excavation, 56 Lin. Ft. pipe, 234 Cu. Yds. Class "B" Concrete, 2296 Lin. Ft. Wooden Guard Rail.

(B) ALTERNATE BIDS ARE REQUESTED FOR SURFACE TREATED MACADAM.

A certified check or bidder's bond must accompany each bid. Amount of certified checks, as follows: Project F-48C—$5,000.00 (b) Bridges—$750.00. Project F.107—$3,500.00. Project F-136A—$3,250.00. Project F-135-C—$550.00.. Project F-178—$5,000.00. Project F-141B—$3,000.00. Project S-158—$3,500.00. Project F-186B—$500.00. Project F-192C—$5,000.00 (b) Bridges—$750.00. Project F.221A—$5,000.00. Project F-246A — $5,000.00. Project S-268A & B—$5,000.00. Project F-225B Road $3,500.00. Bridge $350.00. Project S-256—$2,200.00. Amount of bidders bond 20% in excess of certified checks.

Plans and specifications are on file at the Office of the Virginia State Highway Commission, Corner 10th & Marshall Sts., Richmond, Va., and at the Offices of the following District Engineers: Project 48C, 141B and 186 at Lynchburg, Va., Project F-107 at Roanoke, Projects F-136A and F-135C at Culpeper, Va., Projects F-178 and S-158 at Richmond, Va., Projects F-192C at Staunton, Va., Projects F-221A, F-246A and S-268 at Suffolk, Va. Project F-225B and Bridge, Fredericksburg, Va., Project S-256 at Bristol.

Additional plans for bidders for the above projects can be obtained upon application to the State Highway Commissioner, upon receipt of $5.00 made payable to Mr. H. G. Shirley, Chairman, $2.50 of which will be refunded if plans are returned in good condition within two weeks after bids are opened, and bridge plans from W. F. Hobart, 805½ E. Franklin Street, Richmond, Va., to cost as follows: Project F-48C—$1.52, Project F-192C Bridges — $1.52, Project F-186B—$0.54.

Engineers will be at the following places to show prospective bidders over the projects: Projects F-48C at Big Island, Va., 11:00 A.M. Tuesday, January 30th, Project F-107, Friday, January 26th at the Pearisburg Hotel, Pearisburg, Va., at 9:30 A.M. Project F-135C and F-136A at Southern Railroad Station, Barboursville, Va., 10:00 A.M. Thursday, February 1st. Project F-141B, Brookneal Hotel, Brookneal, Va., 9:30 A.M. Friday, February 9th. Projects S-158 and F-178 at Clarksville Hotel, Clarksville, Va., at 9:30 A.M. Thursday, February 8th. Project F-186B, Burton Hotel, Danville, Va., 10:00 A.M. Thursday, January 25th. Project F-192C at Fairfield, 10:30 A.M. Wednesday, January 31. Project F-221, and S-268 at Railroad Station, Tasley, Va., 10:00 A.M. Tuesday February 6th. Project F-246 at Franklin Hotel, Franklin, Va., 10:00 A.M. Wednesday, February 7th. Project F-225B and Bridge, at the District En gineer's Office, Fredericksburg, Va., 10:30 A.M. Friday, February 2nd. Project S-256, County Engineers Office, Tazewell C. H., 12 noon, Thursday, January 25th.

The State Highway Commission reserves the right to reject any or all bids.

H. G. SHIRLEY, Chairman.
State Highway Commission

C. S. MULLEN,
Asst. Engr. Construction.
January 19, 1923.

OFFICIAL PROPOSALS

Bids: Feb. 6.

Ditch Improvements

Muscatine, Ia.

Notice is hereby given that sealed bids will be received by the undersigned for the Board of Supervisors of Muscatine County, Iowa, up to 2 o'clock P.M. on the 6th day of February, 1923, for the construction of ditch improvements in Sub-Districts Number 1 and 3 of Drainage District Number 2 of Muscatine County, Iowa, in accordance with the approved plans and specifications therefor on file in my office.

The proposed improvement in Sub-District Number 1 consists of excavating a ditch of the following dimensions:

Length	Bottom Width	Side Slopes	Approximate Cu. Yds.
3400	6	2 to 1	28,745
1000	6	1 to 1	2,433
5800	4	1 to 1	11,490
10200			42,668

The proposed improvement in Sub-District Number 3 consists of excavating ditches of the following dimensions:

	Length	Bottom Width	Side Slopes	Approximate Cu. Yds.
Main Ditch	5000	6	1 to 1	11,509
	6112	4	1 to 1	9,841
Wing Ditches	1800	3	1 to 1	1,200
	12912			22,550

Work in Sub-District Number 1 shall be commenced not later than April 1, 1923, and be completed not later than May 25, 1923.

Work in Sub-District Number 3 shall be commenced not later than June 1, 1923, and be completed not later than July 31, 1923.

Monthly estimates will be rendered for eighty per cent (80%) of the value of the work completed and paid in drainage warrants, bonds, or cash, and the total upon completion and acceptance of the work.

Cash or certified check equal to ten per cent (10%) must accompany bid.

Instruction and specifications are on file and open to inspection. Copies may be obtained from the undersigned or from C. H. Young, Chief Engineer, Central States Engineering Company, Muscatine, Iowa, upon a deposit of $5.00 to insure their return.

F. W. JOHNSTON,
County Auditor,
Muscatine County,
Muscatine, Iowa.

Bids: Feb. 14.

Hospital Construction Work

Marcy, N. Y.

Sealed proposals for Construction, Heating, Sanitary and Electric Work, Farm Colony Building for 125 patients, at the Utica State Hospital, Marcy Division, Marcy, N. Y., will be received by the State Hospital Commission, Capitol, Albany, N. Y., until 3 o'clock P.M., on Wednesday, February 14, 1923, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 4028, 4029, 4031 and 4033. The right is reserved to reject any or all bids. Drawings and specifications may be examined at the Utica State Hospital, Utica, N. Y., at the New York Office of the Department of Architecture, Room 1058, 25 Broadway, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

L. M. FARRINGTON,
Secretary, State Hospital Commission.
Dated: January 16, 1923.

OFFICIAL PROPOSALS

Bids: March 12.

Sewers

New Castle, Pa.

Sealed proposals will be received at the office of the City Clerk, City Building, New Castle, Pa., up until 10:00 o'clock Monday morning, March 12, 1923, for the construction of the extension of the City of New Castle Main Sewer in the Seventh Ward from its present southern terminus to the site of the proposed Sewage Disposal Plant in Taylor Township. The work will consist of the construction of approximately 4840 feet of 48 in. circular sewer in open cut of which approximately 320 feet will be Class A Cast Iron Pipe, and the balance reinforced monolithic concrete, reinforced concrete pipe, or brick, as determined by the bids. In addition there will be approximately 720 feet of 10 in. vitrified pipe sewer, 880 feet of 8 in. pipe sewer of which 850 feet will be vitrified pipe and 30 feet Class A Cast Iron Pipe, a sewage ejector station complete with air compressors and 50 feet of 4 in. Class B Cast Iron force main, manholes, frames and covers and other miscellaneous work. The said work to be done in accordance with plans and specifications on file in the office of the City Engineer, New Castle, Pa., and in the offices of Fuller & McClintock, Consulting Engineers, 170 Broadway, New York City, copies of which may be had for a deposit of $10.00.

Each proposal to be accompanied by a certified check, or cash, in the sum of at least five per cent (5%) of the total of the bid submitted, which shall become the property of the City as liquidated damages in case the successful bidder fails to furnish bond and enter into a contract. Checks to be returned upon approval of the contract and bond by the City. Checks will be returned to unsuccessful bidders. A bond with approved security will be required of the successful bidder.

The City reserves the right to reject any or all bids.

C. ED. BROWN, City Clerk.

Bids: Feb. 14.

Reservoir and Pipe Lines

Wellsville, Ohio.

Sealed proposals will be received at the office of the Director of Public Service, Wellsville, Ohio, until 12 o'clock noon of Wednesday, February 14th, 1923, for constructing an earthen reservoir, capacity 140,000,000 gallons, and 3½ miles of gravity pipe lines connecting with the City Water Works distribution system. Copies of specifications may be obtained from the Director of Public Service and copies of plans will be furnished by The W. J. Sherman Co., Engineers, 302 Produce Exchange Bldg., Toledo, Ohio, upon deposit with them of $10.00, of which sum one-half will be refunded if plans are returned to the Toledo office before March 1st, 1923.

T. R. SNOWDEN,
Director of Public Service.
Wellsville, Ohio,
January 15th, 1923.

OFFICIAL PROPOSALS

Bids: Feb. 14.

State Hospital Work

Kings Park, N. Y.

Sealed proposals for Construction, Heating, Sanitary and Electric Work, Additions to Employees' Home, and also Fire Escapes, Buildings A, B, C and D, at the Kings Park State Hospital, Kings Park, N. Y., will be received by the State Hospital Commission, Capitol, Albany, N. Y., until three o'clock P.M., on Wednesday, February 14, 1923, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3974, 3975, 3976, 3977 and 4036. The right is reserved to reject any or all bids. Drawings and specifications may be examined at the Kings Park State Hospital, Kings Park, N. Y.; at the New York Office of the Department of Architecture, Room 1058, 25 Broadway, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

L. M. FARRINGTON,
Secretary, State Hospital Commission.
Dated: January 16, 1923.

Subcontractor

I want to sublet about 14,000 lineal feet of 8-in. reinforced concrete road, together with drains, curbs, headwalls, etc., to responsible outfit. Necessary plant is on job, and arrangements made for material supplies.

Excellent opportunity for a live man to make a quick clean up and have large part of his season to take other work.

CL-558, Engineering News-Record
10th Ave. at 36th St., New York City.

Comparing or "Knocking" There's a Difference

¶If you judge Swart Service side by side with any other Contract Bond and Compensation Insurance Service the result will be a contrast rather than a comparison—¶There are many reasons for this, each reason being a part of the intimate, painstaking care with which the whole case is handled. This begins with the mere filling in of the application through the complete investigation, after which the case is prepared and presented to the underwriters much the same as a lawyer prepares and presents a case to a judge. ¶It is simply a matter of making each one of the component parts so perfect that the result as a whole could not be other than a contrast rather than a comparison. ¶With the price the same as for the ordinary sort the advantage to you is the greater.

Swart Service Really Serves

HARMON V. SWART

Contract Bonds—Compensation Insurance
92 William Street, New York

CONTRACT BONDS FOR RESPONSIBLE CONTRACTORS

The Aetna can issue bonds more promptly because it employs expert engineering advisers.

ÆTNA CASUALTY AND SURETY COMPANY

HARTFORD, CONN. AGENTS EVERYWHERE

OFFICIAL PROPOSALS

Bids: Feb. 7.

Highway Work

Albany, N. Y.

Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock p.m. on Wednesday, February 7, 1923, for the improvement of highways in the following counties:

COLUMBIA.....(one highway: 2.70)
DUTCHESS.....(one highway: 1.33)
ERIE.....(two highways: 6.61 & 4.84)
HAMILTON.....(one highway: 10.07)
SARATOGA.....(two highways: 0.08 & 0.11)
SCHUYLER.....(one highway: 3.47)

Also for the reconstruction of the following:

FULTON.....(one contract: 1.50)
GREENE.....(one contract: 3.88)
MONTGOMERY.....(one contract: 4.00)
SARATOGA.....(one contract: 4.24)

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the division engineers in whose division the roads are to be improved or reconstructed. The addresses of the division engineers and the counties in which they are in charge will be furnished upon request.

The especial attention of bidders is called to "General Information for Bidders" in the itemized proposal, specifications and contract agreement.

HERBERT S. SISSON,
Commissioner.

J. C. FINCH,
Secretary.

Bids—Jan. 29

State Road Work

Hartford, Conn.

SEALED PROPOSALS will be received by the State Highway Commissioner, 12 Washington Street, Hartford, Conn., until 2 p.m., Monday, January 29, 1923 for the following sections of State work, in accordance with plans and specifications on file in the office of the State Highway Commissioner and at the following places:

TOWNS OF BETHANY-NAUGATUCK: About 24,880 linear feet of 3 inches bituminous macadam over 6 inch base on the Naugatuck-New Haven Road. NOTE: Bituminous material shall be either tar or asphalt. Local stone will be admitted for the base course only. The top course shall consist of trap rock. Specifications may be seen at the office of E. C. Welden, Division Engineer, 106 Elm Street, New Haven, Conn.

TOWNS OF CLINTON-KILLINGWORTH: About 36,650 linear feet of 4 inch trap rock macadam (waterbound) on the Clinton Killingworth Road. Specifications may be seen at the office of E. C. Welden, Division Engineer, 106 Elm Street, New Haven, Conn.

TOWN OF CROMWELL-MIDDLETOWN: The substructure and approaches for the new steel truss bridge over Little River on the River Road. NOTE: Cement and piles required for this work will be furnished by the State.

TOWNS OF CROMWELL-MIDDLETOWN: One through truss steel superstructure of about 154 foot span complete in place including concrete roadway. Plans and specifications for both of the above jobs at the office of R. W. Stevens, Division Engineer, 12 Washington Street, Hartford, Conn.

TOWN OF EAST HADDAM: About 20,600 linear feet of 7 inch waterbound macadam on Town Street. NOTE: Local stone of suitable quality will be admitted for this work. Plans and specifications at the office of R. W. Stevens, Division Engineer, 12 Washington Street, Hartford, Conn.

TOWN OF GUILFORD: The substructure and retaining walls for a new steel truss bridge over West River on the Shore Road. NOTE: The cement required for this work will be furnished by the State.

TOWN OF GUILFORD: One steel truss superstructure, of about 80 foot span complete in place including concrete road.

TOWN OF GUILFORD: About 11,470 linear feet of plain and reinforced cement concrete pavement on the Shore Road. NOTE: Cement for the above work will be furnished by the State. Plans and specifications for the above work at the office of E. C. Welden, Division Engineer, 106 Elm St., New Haven, Conn.

TOWN OF MANCHESTER: About 4,000 linear feet of 3 inch Sheet Asphalt over 6 inch concrete base on South Main Street. NOTE: Cement for the above work will be furnished by the State. Plans and specifications at the office of R. W. Stevens, Division Engineer, 12 Washington St., Hartford, Conn.

TOWN OF ROCKY HILL: About 17,870 linear feet of plain cement concrete pavement on the River Road. NOTE: Cement for the above work will be furnished by the State. Specifications for the above work at the office of R. W. Stevens, Division Engineer, 12 Washington St., Hartford, Conn.

TOWN OF THOMASTON: About 14,400 linear feet of plain cement concrete pavement on the Thomaston-Waterbury Road. NOTE: Cement for the above work will be furnished by the State. Plans and specifications at the office of D. C. Loewe, Division Engineer, Winsted, Conn.

All bids must be accompanied by a surety company bond or a certified check not less than one-third of the cost of the work. The State Highway Commissioner reserves the right to reject any and all bids.

Dated at Hartford, Connecticut, January 15, 1923.

C. J. BENNETT,
State Highway Commissioner,
12 Washington St., Hartford, Conn.

Bids: Feb. 1.

Highway Work

Raleigh, N. C.

Sealed bids for the construction of the following projects will be received by the North Carolina State Highway Commission at Raleigh, N. C., until 10:00 a.m., on the 1st day of February, 1923, when they will be opened and read:

Topsoil, Sand Clay or Gravel Projects including drainage pipe, structures, etc.

Project No.	County	Length (Miles)
107	Bertie	10.43
147	Hertford	17.36
363	Onslow	15.22
391-B	Robeson	1.10
403	Chatham	7.01
486	Wake	9.04
512	Caswell	11.67
555	Montgomery	20.55
752	Stokes	9.67
815	Cleveland	11.63

Macadam or Sand Asphalt Projects including drainage pipe, structures, etc.

Project No.	County	Length (Miles)
275	Sampson	13.80
991	Transylvania	7.31

Hard Surface Project including drainage pipe, structures, etc.

155-B	Martin	19.31
163	Nash	14.96
273	Sampson	2.44
391-A	Robeson	1.03
429	Granville	6.94
671	Rowan	7.34
743	Forsyth	11.35

Overhead Crossing.

291-B	Wilson

Specifications, proposal forms, etc., may be obtained from the State Highway Commission at Raleigh, N. C.

Plans may be seen in the Raleigh office, or in the offices of the District Engineers.

Bridge plans may be obtained from the State Highway Commission at Raleigh, N. C., upon PAYMENT of Five ($5.00) Dollars per set.

The right is reserved to reject any or all bids.

By order of the North Carolina State Highway Commission.

Bids: Jan. 29.

Sewer Work

Spring Lake, N. J.

The Mayor and Council of the Borough of Spring Lake, N. J., will receive sealed proposals until 8.00 p.m., Monday, January 29, 1923, for the construction of about 1,500 lineal feet of six inch and eight inch sewer and one man hole.

Plans and specifications can be examined at the office of the Borough Engineer, First National Bank Building, Spring Lake, N. J. Copies can be procured by depositing Ten ($10.00) dollars with the Engineer.

Certified check in 10% of amount of bid is required with proposal.

Right is reserved to reject any or all bids.

By order of the Mayor and Council.

JOHN M. BRALY,
Borough Engineer.

Spring Lake, N. J.

Bids: Jan. 30.

Gate-Valves and Hydrants

CONTRACT 213

New York, N. Y.

Sealed bids will be received by the Board of Water Supply at its offices, twenty-second floor, Municipal Building, Park Row, Centre and Chambers Streets, New York City, until 11 a.m., Eastern Standard Time, on Tuesday, January 30, 1923, for Contract 213, for furnishing and delivering gate-valves and hydrants for the Mt. Prospect, Park Slope, Fort Hamilton and Clove conduits and Narrows Siphon No. 2 of the Catskill Aqueduct, all as set forth in the specifications. All deliveries shall be made, with all transportation charges prepaid, at designated storage yards within the limits of the City of New York.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders, forms of bid and contract, specifications, contract drawings, etc., can be obtained at the office of the secretary at the above address, by depositing the sum of ten dollars ($10) in cash or its equivalent for each pamphlet. For further particulars apply to the office of the Chief Engineer at the above address.

GEORGE J. GILLESPIE,
President.
JAMES P. SINNOTT,
PHILIP F. DONOHUE,
Commissioners, Board of Water Supply.
BENJ. F. EINBIGLER, Secretary.

Bids: Feb. 12.

Road Work

Salem, N. J.

Notice is hereby given that sealed bids will be received by the Road Committee of the Board of Chosen Freeholders of the County of Salem for the construction of the Pennsville-Salem Road, 2nd and 3rd sections, in the township of Lower Penn's Neck, in the County of Salem, with a Bituminous Macadam surface upon broken stone foundation, estimated amount of Bituminous Macadam surfaced pavement required is 33,356 square yards; and opened and read in public at the Court House in the City of Salem, N. J., on Monday, February 12, 1923, at 2 P.M., standard time.

Drawings, specifications and form of bid, contract and bond for the proposed work will be furnished by the County Engineer, H. B. Keasbey, Salem, N. J.

E. G. OCHS, Clerk.

U. S. GOVERNMENT

OFFICE OF CONSTRUCTING QUARTERMASTER, FORT BLISS, TEXAS.—Sealed proposals, in triplicate, will be received at this office until 10:00 a.m., February 1st, 1923, then publicly opened for drilling, casing and equipping complete, ready for operation, one eight inch well at Dona Ana Target Range, New Mexico. Plans and specifications furnished upon receipt of certified check for $10.00 to guarantee return.

U. S. ENGINEER OFFICE, CINCINNATI, O. Sealed proposals will be received here until 2 p.m., Feb. 12, 1923, and then opened, for furnishing and delivering structural steel, forgings, etc., for Ohio River Dams Nos. 36 and 38. Further information on application.

U. S. ENGINEER OFFICE, ROOM 608, ARMY BUILDING, NEW YORK CITY. Sealed proposals will be received here until 12 o'clock noon, February 10, 1923, and then opened, for constructing one concrete plotting room and switchboard room at Fort Tilden, Long Island, N. Y. Further information on application.

U. S. ENGINEER OFFICE, FLORENCE, ALABAMA.—Sealed proposals will be received here until 11 A.M., February 12, 1923, and then opened, for furnishing and delivering one electric generator of 937.5 kva. capacity with direct connected excited. Further information on application.

U. S. ENGINEER OFFICE, FLORENCE, ALA.—Sealed proposals will be received here until 11 A.M., February 17, 1923, and then opened, for furnishing displacement tanks for the regulating gates of Wilson Dam. Further information on application.

U. S. GOVERNMENT

U. S. ENGINEER OFFICE, CINCINNATI, O. Sealed proposals will be received here until 2 p. m. Feb, 8, 1923, and then opened for furnishing and delivering horses and props for Ohio River Dams Nos. 34, 36, and 38. Further information on application.

U. S. ENGINEER OFFICE, FLORENCE, ALA.—Sealed proposals will be received here until 11 A.M. January 27, 1923, and then opened, for the construction and delivery of four steel barges. Further information on application.

U. S. ENGINEER OFFICE, PITTSBURGH, PA.—Sealed proposals for building two two-story, seven-room lockkeepers' houses at Lock No. 6, Monongahela River, will be received at this office until 12 Noon, January 31, 1923, and then publicly opened. Information on application.

U. S. ENGINEER OFFICE, NASHVILLE, TENN.—Sealed proposals will be received here until 11 a.m., January 30, 1923, and then opened, for fourteen steel barges. Further information on application.

U. S. ENGINEER OFFICE, CINCINNATI, O. Sealed proposals will be received here until 2 p.m., Jan. 30, 1923, and then opened, for constructing, assembling, testing and delivering one dredging ladder for 24-inch pipe line dredge. Further information on application.

U. S. ENGINEER OFFICE, GALVESTON, TEX. Sealed proposals will be received here until 12 m., Feb. 1, 1923, and then opened, for dredging the Houston Ship Channel, Texas. Further information on application.

U. S. GOVERNMENT

SEALED PROPOSALS will be received and opened by the Director, U. S. Veterans Bureau, in the office of the Quartermaster General, 2306 Munitions Building, Washington, D. C., at 11 a.m., February 16, 1923, for construction of a 500 bed Neuro-Psychiatric Hospital to be erected for the U. S. Veterans Bureau at Camp Custer, Battle Creek, Michigan. The work will include the construction of about thirty buildings of reinforced concrete and brick, complete with sewer, water, heating and lighting systems, roads and walks. Plans and specifications may be obtained after January 16, 1923, from the Quartermaster General, Room 2306 Munitions Building, Washington, D. C., upon deposit of $100. One set of plans and specifications will be on exhibition at each of the following stations: Constructing Quartermasters at 39 Whitehall Street, New York, N. Y., Army Supply Base, Boston 9, Mass., and Quartermaster Supply Officers at 1819 West Pershing Road, Chicago, Ill., and Second and Arsenal Streets, St. Louis, Mo.

SEALED PROPOSALS will be opened by the Supt. of Lighthouses, Philadelphia, Pa., 2 p.m., Feb. 13, 1923, for building stone and reinforced concrete breakwater at Harbor of Refuge Light Station, Delaware Bay, Del. Information on application.

U. S. ENGINEER OFFICE, WILMINGTON, DEL.—Sealed proposals will be received here until 11 A.M., Feb. 24, 1923, and then opened, for constructing and delivering one steel quarter boat and two steel barges. Further information on application.

U. S. GOVERNMENT

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C. Jan. 17, 1923.—SEALED PROPOSALS will be opened in this office at 3 p.m., Feb. 7, 1923, for the Mechanical Equipment (exclusive of outside services, elevators, lighting fixtures and certain equipment) of the Administration Building and Mess Hall and Kitchen Building, at the U. S. Veterans' Hospital, Chelsea, N. Y. Specifications may be obtained at this office in the discretion of the Supervising Architect. Proposals will be considered only from individuals, firms or corporations possessing satisfactory financial and technical ability, equipment and organization to insure speedy completion of the contract, and who have established a record for expedition on contracts of similar character and magnitude. The fact that any concern obtains a set of the plans and specifications from any source whatever and submits a bid shall not constitute a waiver of the foregoing stipulations. Jas. A. Wetmore, Acting Supervising Architect.

U. S. ENGINEER OFFICE, FLORENCE, ALA.—Sealed proposals will be received here until 11 A. M., February 21, 1923, and then opened, for furnishing castings and other parts for the regulating gates of Wilson Dam. Further information on application.

U. S. ENGINEER OFFICE, WILMINGTON, DEL.—Sealed proposals will be received here until 11 A.M., Feb. 6, 1923, and then opened, for furnishing and delivering stone for repairs to the jetty at the mouth of Broadkill River, Del. Further information on application.

POSITIONS VACANT

EMPLOYMENT

POSITIONS WANTED

POSITIONS VACANT

CAPABLE detailer and checker of structural steel wanted for building and bridges, apply Richmond Structural Steel Co., Richmond, Va.

COMPRESSED air. Experienced inspectors wanted on masonry tunnel construction under high air pressure. Apply in person. Passaic Valley Sewerage Commissioners, 128 Market Street, Newark, N. J.

BRIDGE draftsman wanted by State Highway Commission in Middle West. About a year's experience in bridge or structural drafting required. Submit a sample of work with detailed statement of education and experience, age, and date available. Initial salary $150.00 to $175.00 per month. P-571, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

DRAFTSMAN, experienced, wanted for structural steel buildings; apply by mail only, giving age, nationality, education, experience and salary expected. Post & McCord, 101 Park Ave., New York.

DRAFTSMAN wanted for map and topographical work; state age, experience, salary expected, submit sample of work and state how soon can report to Engineering Department, The Consolidation Coal Company, Fairmont, W. Va.

POSITIONS VACANT

DRAFTSMAN wanted by consulting engineering office, location North Carolina. College graduate preferred. Must be experienced and capable in reinforced concrete design and the design of water works, sewerage and sewage disposal systems. Some knowledge of small power plant design desirable. In replying send recent photograph and give full synopsis of training and experience, state salary expected and earliest date available. Others than thoroughly experienced designing draftsmen need not reply. P-505, Eng. News-Record, Real Estate Trust Bldg., Phila., Pa.

DRAFTSMAN, experienced detailers and checkers on shop drawings in connection with structural shop. Give age, experience, etc. Stupp Bros. B. & I. Co., St. Louis, Mo.

DRAFTSMEN. Engineering and Contracting Company recently organized, location New York City, wants draftsmen experienced in design of concrete and steel structures and conveying machinery. Good opening for men who can be developed for executive positions with expanding business. P-520, Eng. News-Record, 10th Ave. at 36th St., N. Y. C.

DRAFTSMEN on structural steel work wanted for buildings. Apply Hay Foundry & Iron Works, Newark, N. J.

POSITIONS VACANT

DRAFTSMEN, experienced (only) detailers and checkers on structural steel. State salary, experience, and when available first letter. Pittsburgh-Des Moines Steel Co., Des Moines, Iowa.

DRAFTSMEN, first class detailers and checkers for structural steel. Philadelphia vicinity. Only experienced men need apply. P-582, Eng. News-Record, Real Estate Trust Bldg., Phila., Pa.

Construction Men

Learn "Line" and "Grade" by Actual Practice.

Level, Transit, and Plane Table Work.
"Running" of Farm, Stadia, Highway and Railroad Surveys.

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39 West 17th St., New York City

CONSTRUCTION SUPERINTENDENT

controlling complete organization and familiar with New Jersey methods, *wanted* to handle thirty thousand square yards, one-course, reinforced concrete road and other miscellaneous items; located in northern part of state. To an able man a good opportunity is offered, with a bonus. Send your record with your reply.

P-594, Engineering News-Record
Real Estate Trust Bldg., Philadelphia, Pa.

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Get into the higher strata in your own line. Engineering has its highs and its lows. A *high*-grade engineer will lift you to his own level when he teaches you what he knows. An expert who knows his business and can also impart his knowledge and experience is a rarity, and Wilson Courses are in a class by themselves because there is the brain of genius behind them. Get into line for some good practical evening work; look into our proposition; literature is free.

We offer courses in *Reinforced Concrete Designing* and *Estimating; Structural Steel Design. Bridges, Steel* and *Concrete. Drafting.*
Easy terms of payment. Required for enrolment: technical education, high school mathematics, or their equivalent.

WILSON ENGINEERING CORPORATION
10 Broadway, Hanover, Mass.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ADVERTISEMENTS ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE.

OFFICIAL PROPOSALS

Bids: Feb. 28.

Lock and Dam Construction of the Illinois Waterway Contract No. 2

Springfield, Ill.

1. Sealed proposals for the construction of STARVED ROCK LOCK AND DAM, located in the Illinois River, two miles above Utica, and seven miles below Ottawa, La Salle County, Illinois, will be received at the office of the Director of the Department of Public Works and Buildings, Division of Waterways, Room 122, State House, Springfield, Illinois, until Ten (10) o'clock A.M., Central Standard Time of the 28th day of February, 1923, and then publicly opened and read.

2. Copies of the plans, specifications, proposal blank, form of bond, and contract may be obtained by prospective bidders at the office of the Department, Room 1404, 25 East Jackson Boulevard, Chicago, Illinois, upon depositing a check for Ten Dollars ($10.00), made payable to the Director of the Department of Public Works and Buildings, which sum will be returned within ten (10) days after the contract has been awarded, if the plans are returned in good condition within that time.

3. Each proposal shall be accompanied by a certified check or draft drawn on some responsible bank doing business in the City of Chicago, and made payable to the order of the Director of the Department of Public Works and Buildings, for five (5) per cent of the amount of the proposal. In lieu of a certified check or draft, the proposal may be accompanied by a bond executed in the form prescribed by the Department of Public Works and Buildings and with a surety company approved by the Department in the penal sum of ten (10) per cent of the amount of the proposal.

4. The Department of Public Works and Buildings reserves the right to reject any or all bids. The contract, if let, will be awarded to the lowest responsible bidder.

C. R. MILLER,
Director, Department of Public Works and Buildings.
WILLIAM L. SACKETT,
Superintendent of Waterways.
M. G. BARNES,
Chief Engineer,
Division of Waterways.

Bids: Feb. 16.

Filtration Plant

Gloucester, N. J.

Sealed proposals will be received by the Council of the City of Gloucester, N. J., at the City Hall, on the 16th day of February, 1923, until 8:00 p.m., for the construction of a 3,000,000 gallon rapid sand filtration plant, with alterations and improvements to the present building.

Each proposal must be accompanied by a certified check, made out in proper form, for the sum of 5% of the amount bid.

Plans and specifications are on file and may be seen at the City Hall, Gloucester, N. J., and at the office of the Engineers, Remington & Vosbury, 601 Market Street, Camden, where prospective bidders will be given an opportunity for their examination. Complete sets of plans and specifications will be issued upon a deposit of $15.00. This deposit will be refunded only to those submitting a bona fide bid upon the work and returning the plans in good condition.

The right is reserved to reject any or all bids.

ALLEN W. REDFIELD,
City Clerk.

OFFICIAL PROPOSALS

Bids: Feb. 12.

Brass Corporations, Sidewalk Cocks, Etc.

Springfield, Mass.

Notice is hereby given that sealed proposals will be received by the Board of Water Commissioners of the Springfield Municipal Water Works, at its office in the Municipal Building, Springfield, Mass., at 11:30 o'clock a.m., Feb. 12, 1923, for the following brass corporations, inverted key sidewalk cocks, tee handle M. & F. cocks, inverted key stop and waste cocks, and compression bibbs with hose spouts.

700—¾-in. corporations with tail pieces.
150—1-in. corporations with tail pieces.
50—1¼-in. corporations bodies only.
75—1½-in. corporations bodies only.
40—2-in. corporations with tail pieces.
25—¾-in. inverted key sidewalk cocks.
800—1-in. inverted key sidewalk cocks.
200—1¼-in. inverted key sidewalk cocks.
50—1½-in. inverted key sidewalk cocks.
100—1-in. tee handle M. & F. cocks.
50—¾-in. inverted key stop and waste cocks with special handles.
1,000—1-in. inverted key stop and waste cocks with special handles.
200—1¼-in. inverted key stop and waste cocks with special handles.
600—½-in. compression bibbs with hose spouts.

The proposal shall be placed in a sealed envelope addressed to the Board of Water Commissioners, Springfield, Mass., and plainly marked on the outside "Sealed Proposal for Brass Goods." The proposal shall contain a schedule giving dates of the earliest shipment of at least 20 per cent of each item of the proposal and of the shipment of the completed order.

The Board of Water Commissioners reserves the right to increase or decrease the number of any of the items designated above according to its needs during the year 1923. The number specified is given as a basis of estimate only.

The Board of Water Commissioners reserves the right to reject any or all bids, or to accept any bid or any portion of any bid which it may be to the best interests of the city so to do.

Price shall include freight prepaid to Armory, Mass.

For further information and specifications, apply to the Superintendent at the above address.

BOARD OF WATER COMMISSIONERS,
SPRINGFIELD, MASS.
H. M. KING, Superintendent.

Bids: Feb. 14.

Reservoir and Pipe Lines

Wellsville, Ohio.

Sealed proposals will be received at the office of the Director of Public Service, Wellsville, Ohio, until 12 o'clock noon of Wednesday, February 14th, 1923, for constructing an earthen reservoir, capacity 140,000,000 gallons, and 3½ miles of gravity pipe lines connecting with the City Water Works distribution system. Copies of specifications may be obtained from the Director of Public Service and copies of plans will be furnished by The W. J. Sherman Co., Engineers, 302 Produce Exchange Bldg., Toledo, Ohio, upon deposit with them of $10.00, of which sum one-half will be refunded if plans are returned to the Toledo office before March 1st, 1923.

T. R. SNOWDEN,
Director of Public Service.
Wellsville, Ohio,
January 15th, 1923.

OFFICIAL PROPOSALS

Bids: Feb. 16.

Highway Bridge

Pikeville, Ky.

Sealed proposals will be received by the Fiscal Court of Pike County, Kentucky, at the office of the County Judge at Pikeville, Kentucky, on Friday February 16th, 12 a.m. for the construction and erection of a highway bridge across the Tug Fork of Big Sandy River near Edgarton, West Virginia, and Freeburn, Ky. This bridge to be constucted jointly by Pike County, Kentucky and Mingo County, West Virginia. The required length is approximately 300 feet and two 150 spans are proposed. Clear width of roadway 16 feet and either three of four inch wood floor. This bridge to be designed by the contractor in accordance with situation plan and profile and other information to be furnished by the County Road Engineer of Pike County and to comply with specifications furnished by him.

Plans for this bridge are to be submitted at the above mentioned time and place together with bids and are to be subject to the approval of the County Road Engineer. To insure an economical design, as cuch latitude as possible will be given to the bidders as to type of bridge, span length etc., so long as requirements as to river channel etc., are complied with. The loading, stresses, quality, of materials etc., must conform to the requirements of the Kentucky State Highway Department standards for specification for bridges. This will be a ten ton capacity bridge. Prospective bidders are asked to submit bids on both concrete and steel structures.

Situation plans, profiles, specifications etc. will be sent to any one interested upon request by J. S. Bentley, County Road Engineer, room 208 Hughes Building, Pikeville, Kentucky. A change of $3.00 for each set of blue prints and specifications to cover cost of blue printing, typing, etc. will be made. All bids must be accompanied by a certified check for $2,500.00 payable to the Treasurer of Pike County, Kentucky, to insure that bidder will enter into proper contract. Checks of unsuccessful bidders will be returned as soon as contract is awarded.

The Fiscal Court reserves the right to reject any and all bids.

By order of the Fiscal Court of Pike County, Ky.

J. S. BENTLEY,
County Road Engineer.
W. E. FLANNARY, County Judge.

Bids: Feb. 12.

Road Work

Salem, N. J.

Notice is hereby given that sealed bids will be received by the Road Committee of the Board of Chosen Freeholders of the County of Salem for the construction of the Pennsville-Salem Road, 2nd and 3rd sections, in the township of Lower Penn's Neck, in the County of Salem, with a Bituminous Macadam surface upon broken stone foundation, estimated amount of Bituminous Macadam surfaced pavement required is 33,356 square yards; and opened and read in public at the Court House in the City of Salem, N. J., on Monday, February 12, 1923, at 2 P.M., standard time.

Drawings, specifications and form of bid, contract and bond for the proposed work will be furnished by the County Engineer, H. B. Keasbey, Salem, N. J.

E. G. OCHS, Clerk.

OFFICIAL PROPOSALS

Bids: Feb. 14.

Water System

Voorheesville, N. Y

Notice is hereby given that sealed proposals will be received by the Board of Trustees of the Village of Voorheesville, N. Y., at their office in the "Hose House" in the Village of Voorheesville, N. Y., until two (2:00) o'clock p.m. on the fourteenth (14th) day of February, 1923, for the construction of about 3½ miles of cast iron water pipe and appurtenances and a concrete reservoir.

All proposals must be made upon printed forms to be obtained from the engineer; and the unit prices written in words and figures, and accompanied by cash or a certified check, made payable to the Village of Voorheesville, N. Y., for one thousand dollars ($1,000.00).

All proposals must be enclosed in a sealed envelope, directed to the Board of Trustees, Village of Voorheesville, N. Y., and endorsed upon the outside of the envelope "Proposal for Water System."

Plans and specifications may be obtained of the engineer. A deposit of five dollars will be required for the plans and specifications, which will be refunded upon their return in good order on or before February 20, 1923.

The Board of Trustees reserve the right to reject any or all proposals.

By order of the Board of Trustees of the Village of Voorheesville, N. Y.

GILBERT H. DARING,
Village Clerk,
Voorheesville, N. Y.

W. W. CHADSEY,
Engineer,
434 State Street,
Schenectady, N. Y.

Bids: Feb. 6.

Building Construction and Remodelling

Toms River, N. J.

Sealed bids will be received at the Court House on or before 12 o'clock noon on Tuesday, February 6th, 1923, by the Board of Chosen Freeholders of Ocean County, State of New Jersey, for the Erection and Completion of a New Brick and Concrete Detention Building for Witnesses and the complete remodeling of Wardens Dwelling, at Toms River, N. J., including all labor and material required for the following work.

Item No. 1. General Construction and Completion of Building.
Item No. 2. Steel Work in Detention Quarters.
Item No. 3. Plumbing and Drainage.
Item No. 4. Heating System.
Item No. 5. Electrical Wiring.
Item No. 6. Lighting Fixtures.

The work to be done according to plans, specifications of P. P. Elkinton, Architect and Engineer and under his personal supervision.

Bids will be opened publicly on Tuesday, February 6th, 1923, at the Freeholders Room, Court House, Toms River, N. J.

All bids must be sealed and addressed to the Board of Chosen Freeholders of the County of Ocean, State of New Jersey, marked on envelope "Proposal for work on Detention Rooms and Warden Dwelling" Item No.

Each bidder must enclose with estimate a certified check in sum of 10% of the amount of his bid as a guarantee that he will accept and carry out his proposal if contract is awarded to him.

Certified checks will be returned to the unsuccessful bidders after contracts are awarded.

Plans and specifications can be obtained at the office of the Architect, P. P. Elkinton, Toms River, N. J.

A deposit of $15.00 will be required on all plans and specifications taken out of the Office to be refunded when plans and specifications are returned to the Architect.

The right is reserved to reject any or all bids.

By order of the Board of Chosen Freeholders of the County of Ocean.

D. O. PARKER, Clerk.

Compensation Insurance

The intelligent handling of Workmen's Compensation Insurance is most essential to contractors. I have specialized in this business for twenty years and know how to handle insurance for the best interests of the contractors.

Alfred S. Hamilton
110 William St., New York

OFFICIAL PROPOSALS

Bids: Feb. 6.

Ditch Improvements

Muscatine, Ia.

Notice is hereby given that sealed bids will be received by the undersigned for the Board of Supervisors of Muscatine County, Iowa, up to 2 o'clock P.M. on the 6th day of February, 1923, for the construction of ditch improvements in Sub-Districts Number 1 and 3 of Drainage District Number 2 of Muscatine County, Iowa, in accordance with the approved plans and specifications therefor on file in my office.

The proposed improvement in Sub-District Number 1 consists of excavating a ditch of the following dimensions:

Length	Bottom Width	Side Slopes	Approximate Cu. Yds.
3400	6	2 to 1	28,745
1000	6	1 to 1	2,433
5800	4	1 to 1	11,490
10200			42,668

The proposed improvement in Sub-District Number 3 consists of excavating ditches of the following dimensions:

	Length	Bottom Width	Side Slopes	Approximate Cu. Yds.
Main Ditch	5000	6	1 to 1	11,509
	6112	4	1 to 1	9,841
Wing Ditches	1800	3	1 to 1	1,200
	12912			22,550

Work in Sub-District Number 1 shall be commenced not later than April 1, 1923, and be completed not later than May 25, 1923.

Work in Sub-District Number 3 shall be commenced not later than June 1, 1923, and be completed not later than July 31, 1923.

Monthly estimates will be rendered for eighty per cent (80%) of the value of the work completed and paid in drainage warrants, bonds, or cash, and the total upon completion and acceptance of the work.

Cash or certified check equal to ten per cent (10%) must accompany bid.

Instruction and specifications are on file and open to inspection. Copies may be obtained from the undersigned or from C. H. Young, Chief Engineer, Central States Engineering Company, Muscatine, Iowa, upon a deposit of $5.00 to insure their return.

F. W. JOHNSTON,
County Auditor,
Muscatine County,
Muscatine, Iowa.

Bids: March 12.

Sewers

New Castle, Pa.

Sealed proposals will be received at the office of the City Clerk, City Building, New Castle, Pa., up until 10:00 o'clock Monday morning, March 12, 1923, for the construction of the extension of the City of New Castle Main Sewer in the Seventh Ward from its present southern terminus to the site of the proposed Sewage Disposal Plant in Taylor Township. The work will consist of the construction of approximately 4840 feet of 48 in. circular sewer in open cut of which approximately 320 feet will be Class A Cast Iron Pipe, and the balance reinforced monolithic concrete, reinforced concrete pipe, or brick, as determined by the bids. In addition there will be approximately 720 feet of 10 in. vitrified pipe sewer, 880 feet of 8 in. pipe sewer of which 850 feet will be vitrified pipe and 30 feet Class A Cast Iron Pipe, a sewage ejector station complete with air compressors and 50 feet of 4 in. Class B Cast Iron force main, manholes, frames and covers and other miscellaneous work. The said work to be done in accordance with plans and specifications on file in the office of the City Engineer, New Castle, Pa., and in the offices of Fuller & McClintock, Consulting Engineers, 170 Broadway, New York City, copies of which may be had for a deposit of $10.00.

Each proposal to be accompanied by a certified check, or cash, in the sum of at least five per cent (5%) of the total of the bid submitted, which shall become the property of the City as liquidated damages in case the successful bidder fails to furnish bond and enter into a contract. Checks to be returned upon approval of the contract and bond by the City. Checks will be returned to unsuccessful bidders. A bond with approved security will be required of the successful bidder.

The City reserves the right to reject any or all bids.

C. ED. BROWN, City Clerk.

OFFICIAL PROPOSALS

Bids: Feb. 24.

Sewerage System and Disposal Works

Cuba, N. Y.

Sealed proposals will be received by the Board of Trustees of the Village of Cuba, N. Y., until 2 o'clock P.M., on the 24th day of February, 1923, for the construction of a sewerage system and sewage disposal works.

Plans may be seen and specifications obtained at the office of the Board at Cuba, N. Y., or at the office of Hopkins and Field, Engineers, 349 Cutler Building, Rochester, N. Y.

The Board hereby reserves and has the right to reject any or all bids or to accept the one that in its judgment will be for the best interests of the Village.

A surety bond satisfactory to the Board and in amount of $25,000 will be required of the one to whom the contract may be awarded.

A certified check, made payable to the order of the Board of Trustees, Cuba, N. Y., to the amount of $2,000 must be deposited by each bidder and accompany his bid as a guarantee that in case the contract is awarded to him, he will, within ten days thereafter, execute such contract and furnish his bond.

Bids must be sealed and addressed to the Board of Trustees, Cuba, N. Y., and marked on the outside of the envelopes "Proposal for Sewerage System and Disposal Works."

H. W. EVANS, President.
A. O. RENWICK, Trustee.
H. J. DEMCEY, Trustee.

H. M. SETCHEL,
Village Clerk.

Dated: Cuba, N. Y.,
Jan. 27th, 1923.

Bids: Feb. 27.

Drilling Well

Canton, Ill.

Notice is hereby given by the Fire and Water Committee of the City Council of the City of Canton, Illinois, that they will at three (3) o'clock on the 27th day of February, 1923, receive bids for the drilling of a well sixteen hundred and fifty (1,650) feet in depth and also for the purchase of the necessary casing and fittings for said well. Detailed information may be secured from Mr. E. F. Motsinger, City Engineer, Canton, Illinois.

Bids: Feb. 14.

Street Improvements

Camden, Arkansas.

Sealed proposals will be received by the Board of Commissioners, of Camden Paving District No. 2, care of D. V. Snow, Secretary, Camden, Arkansas, until 10 a.m. February 14, 1923, immediately after which hour, said proposals will be publicly opened and read at the City Hall.

The approximate quantities of the principal items of work to be done in the District are as follows:

1,700 lin.ft. of vitrified clay pipe storm sewers 10" to 27" in diameter.
5,500 cu.yd. of grading.
9,400 lin.ft. of concrete curb.
17,600 sq.yd. of pavement.

Alternate bids will be received on reinforced concrete pavement and asphaltic concrete (Topeka Mix), wearing surface on concrete base.

All work will be paid for in cash on periodic estimates of work done and materials furnished.

Certified check or bidders bond for at least 3% of amount of total bid will be required.

Plans and specifications are on file at the office of the Engineer, State Nat. Bk. Bldg., Texarkana, Ark.-Tex., and with the Chairman of the Board of Commissioners at Camden, Arkansas.

Specifications may be secured from the Engineer upon deposit of $2.00, of which amount $1.00 will be refunded upon the return to him of the said specifications.

The right is reserved to reject any or all bids.

E. W. COPELAND,
Chairman.
D. V. SNOW,
S. T. TYSON,
Board of Commissioners
Camden Paving District No. 2.

E. F. PETERSEN, Engineer,
Texarkana, Ark.-Tex.

OFFICIAL PROPOSALS

Bids: Feb. 19.

Filtration Plant

Carlyle, Ill.

Sealed proposals will be received at the office of the City Clerk, Carlyle, Illinois, up to two o'clock P.M., of the 19th day of February, 1923, for furnishing material and labor and constructing a complete city filtration plant.

LOCATION OF WORK.

The location of the proposed work is on the South Side of the present City Water Works at Carlyle, Illinois, and the west bank of the Kaskaskia River. A stub switch from the B. & O. Railroad extends along the west side of the building.

LIST OF QUANTITIES.

Bidders will base their prices upon the quantities shown on the plans, and the following table of quantities is submitted in explanation of portions of the plans that may be difficult to calculate. These quantities shall take precedence over the plans for the particular items mentioned herein, in case there be any discrepancy between the two:

Item 1. 1,600 cubic yards excavation.
Item 2. 313 cubic yards Portland cement concrete.
Item 3. 25,350 pounds reinforcing steel.
Item 4. Brick filter building, including doors, windows, roof, stairs, hand railing, walls, stove and chimney, also roof on clear water well.
Item 5. Baffles in mixing chamber and sedimentation basin.
Item 6. Two new centrifugal pumps with motors, transformer, valves and connections as shown on plans, including the foot-valve.
Item 7. Filter appurtenances, piping, valves, connections as shown on plans.
Item 8. Two orifice boxes, and piping necessary for proper operation.
Item 9. One Wallace & Tiernan type M S A solution feed chlorinator with calibrated scale and 25 ft. rubber tubing, and 500 lb. capacity weighing scale.
Item 10. Ten (10) inch vitrified sewer pipe as shown on plans.
Item 11. Filter sand and gravel and chemicals.
Item 12. Mixing chamber and sedimentation basin valves, valve stems, and stands, overflow drains, connections, etc.
Item 13. Connection of pump and filters, piping to present city water suction and supply mains.

INFORMATION FOR BIDDERS.

All of the above material to be furnished and work done in accordance with the plans and specifications on file at the office of the City Clerk, and at the office of the Engineers, Dawson and Walraven, Springfield, Illinois, where bidders will have ample opportunity to consult the plans, but anyone desiring a copy of the plans for personal use may obtain the same upon application to the Engineers and payment of three ($3.00) dollars to cover the cost of the prints.

The City reserves the right to reject any and all bids, and no bids will be considered which are not in conformity with the specifications.

H. J. C. BOCKEMEYER,
Mayor.
J. ARCH MEANS,
City Clerk.

DAWSON & WALRAVEN,
Engineers.
Springfield, Ill.
(Seal)

Bids: Feb. 26.

Garbage and Refuse Destructor

Tulsa, Oklahoma.

Sealed bids will be received by Board of Commissioners of Tulsa, Oklahoma, until 5 p.m., February 26th, 1923, for the construction of a Garbage and Refuse Destructor of forty (40) tons capacity in twelve (12) hours.

General Plans and Specifications can be secured from Charles Schultz, City Engineer.

The right is reserved to reject any and all bids or to accept the one which is, in the judgment of the Board of Commissioners, the most advantageous for the City.

A certified check for two thousand dollars ($2,000.00) payable to City Auditor to accompany all bids.

Jan. 23rd, 1923.

OFFICIAL PROPOSALS

Bids: Feb. 20.

Drain Construction

Charleston, S. C.

Sealed Proposals will be received by the Street Department, Charleston, S. C., until 6 P.M., Tuesday, February 20th, 1923, for the construction of 35,000 feet, more or less, of terra cotta pipe drains with appurtenances, and 3,000 feet, more or less, of reinforced concrete drains and appurtenances.

The right is reserved to reject any or all bids. For specifications, etc., apply to

J. H. DINGLE,
City Engineer.

January 20th, 1923.

A Bonding Company's Suggestion to Official Proposal Advertisers

"A large part of our contract bond business is submitted to us by wire, and I am a constant reader of the Official Proposals in order to find out the size and nature of the work that is referred to in the bond application. Very frequently I am unable to get any clear idea of what the advertisers are asking bids on, and of course the prospective bidder or contractor is also at a loss to know what kind of a job is being advertised.

"Traveling expenses are heavy at the present time, and contractors pay out considerable sums during the course of a year in investigating prospective contracts. This of course is a large charge that the owners eventually pay, and anything that will reduce the general overhead of contract work will eventually be to the advantage of the owner.

"One way to reduce this overhead is to word the advertisement so that the contractor sitting in his office will know whether or not he should investigate and prepare a bid on the proposed work."

Bids: Mar. 7.

Water Works System

Rawlins, Wyo.

Sealed proposals will be received until eight o'clock p.m. on the 7th day of March, 1923, for the construction of the waterworks system for the City of Rawlins, Wyoming, according to the plans and specifications on file with the City Clerk of said city. Copies of said plans and specifications may be obtained on request from the undersigned City Clerk or from The Weiland Engineering Company, 721 Thatcher Building, Pueblo, Colorado. This proposal must be accompanied by a certified check upon some solvent bank in the sum of 5% of the amount of the bid, payable to the City Treasurer of the City of Rawlins, Wyoming, with the understanding that if the proposal is accepted, the bidder will, within ten days after being notified of such acceptance, enter into a contract and give good and sufficient bond, signed by such surety or sureties as may be approved by the Mayor and Board of Trustees of said City for the full amount bid for said work. In case of failure to enter into a satisfactory contract and give an acceptable bond, said check will be forfeited to the City of Rawlins, Wyoming, as liquidated damages. Otherwise it will be returned to the bidder. The Board of Trustees of the City of Rawlins, Wyoming, reserves the right to reject any and all bids tendered. $5.00 deposit for plans and specifications to be refunded on return of same. All bids must be sealed, addressed to the Board of Trustees, and marked "Proposal for Water Works System."

OFFICIAL PROPOSALS

Bids may be accepted by the Board of Trustees on any item in the "Proposal" unless the bidder specifically states on the blank form provided at the end of the "Proposal" that he will not enter into a contract unless awarded all of the work or material as set forth in his "Proposal," or else states in the blank form just what portion of the work or material he will enter into a contract for.

LABOR AND MATERIAL.—The following approximate bill of labor and material is here submitted:

24—Reinforced concrete collection boxes and appurtenances.
1000—Lineal feet of 6-inch vitrified tile collection pipe line.
14331—Lineal feet of 4-inch Redwood or Creosoted Fir machine banded wood stave pipe.
1891—Lineal feet of 5-inch Redwood or Creosoted Fir machine banded wood stave pipe.
6491—Lineal feet of 8-inch Redwood or Creosoted Fir machine banded wood stave pipe
5918—Lineal feet of 10-inch Redwood or Creosoted Fir machine banded wood stave pipe
9373—Lineal feet of 12-inch Redwood or Creosoted Fir machine banded wood stave pipe
26928—Lineal feet of 14-inch continuous wood stave pipe.
136752—Lineal feet of 16-inch continuous wood stave pipe.
202684—Lineal feet of trench excavation.
Cast iron specials, valves, air valves, valve boxes, and other appurtenances, required in the construction of the pipe lines.
1—2,000,000 gallon reinforced concrete reservoir with all appurtenances, including valves and valve chambers.
3580—Lineal feet of 12-inch cast iron or Matheson joint pipe.
3290—Lineal feet of 10-inch cast iron or Matheson joint pipe.
3800—Lineal feet of 6-inch cast iron or Matheson joint pipe.
10670—Lineal feet of trench excavation.
50—Fire Hydrants, together with cast iron specials and valves required to properly lay said pipe.
1—10-inch pressure regulator and concrete box.

By Order of the Board of Trustees.
H. LARSEN,
President of the Board of Trustees.

Attest:
LEE I. METHUDY,
City Clerk.

Approved this 4th Day of January, 1923.
E. A. KELL,
Mayor.

Bids: Feb. 7.

Highway Work

Albany, N. Y.

Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock p.m. on Wednesday, February 7, 1923, for the improvement of highways in the following counties:

COLUMBIA.....(one highway: 2.70)
DUTCHESS.....(one highway: 1.33)
ERIE.....(two highways: 6.61 & 4.84)
HAMILTON.....(one highway: 10.07)
SARATOGA.....(two highways: 0.08 & 0.11)
SCHUYLER.....(one highway: 3.47)

Also for the reconstruction of the following:

FULTON.....(one contract: 1.50)
GREENE.....(one contract: 3.88)
MONTGOMERY.....(one contract: 4.00)
SARATOGA.....(one contract: 4.24)

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the division engineers in whose division the roads are to be improved or reconstructed. The addresses of the division engineers and the counties in which they are in charge will be furnished upon request.

The especial attention of bidders is called to "General Information for Bidders" in the itemized proposal, specifications and contract agreement.

HERBERT S. SISSON,
Commissioner.

J. C. FINCH,
Secretary.

OFFICIAL PROPOSALS

Bids: Feb. 14.

Hospital Construction Work

Marcy, N. Y.

Sealed proposals for Construction, Heating, Sanitary and Electric Work, Farm Colony Building for 125 patients, at the Utica State Hospital, Marcy Division, Marcy, N. Y., will be received by the State Hospital Commission, Capitol, Albany, N. Y., until 3 o'clock P.M., on Wednesday, February 14, 1923, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 4028, 4029, 4031 and 4033. The right is reserved to reject any or all bids. Drawings and specifications may be examined at the Utica State Hospital, Utica, N. Y., at the New York Office of the Department of Architecture, Room 1058, 25 Broadway, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

L. M. FARRINGTON,
Secretary, State Hospital Commission.
Dated: January 16, 1923.

Bids: Feb. 7.

Dredging and Fill

McCOMAS CONTRACT NO. 1

Baltimore, Md.

Proposals for dredging and making fill at the proposed McComas Street Bulkhead, Baltimore, will be received until 11 o'clock a.m., February 7th, 1923. Approximate quantity of dredging 1,300,000 cubic yards.

Proposals must be in duplicate, addressed to the Board of Awards, and sent to the City Register's Office, City Hall, Baltimore, accompanied by a certified check of the bidder for $5,000 on a Clearing House Bank, drawn to the order of the Mayor and City Council of Baltimore.

The right is reserved to reject any or all bids.

A bond in the amount of the contract price will be required for the proper performance of the contract.

Specifications may be obtained at the office of the Harbor Board, Recreation Pier, Broadway.

BANCROFT HILL,
Harbor Engineer.

APPROVED:
A. E. CHRISTHILF,
Chief Engineer.

APPROVED:
WM. F. BROENING,
President Board of Awards.
FRANK DRISCOLL,
Asst. City Solicitor.

Bids: Feb. 8.

Steam or Motor Roller

Flemington, N. J.

Bids will be received by the Board of Freeholders of Hunterdon County, New Jersey, in their rooms in the County Bldg., Flemington, N. J., on Feb. 8, 1923, at 11 o'clock a.m., for one 10-Ton Steam or Motor Roller with Scarifier attached. A "Buffalo-Pitts" Roller now at the County Bldg., Clinton, N. J., to be taken in trade.

Each bid must be accompanied by a certified check in an amount equal to 10 per cent of the total bid.

By order of the Board of Chosen Freeholders of Hunterdon County, N. J.

F. J. DINEEN, Clerk.

SERVICE

Webster coined the word
Swart wrote the meaning

Contract Bonds
Compensation Insurance

HARMON V. SWART
92 William St., New York.

OFFICIAL PROPOSALS

Bids: Feb. 14.

State Hospital Work

Kings Park, N. Y.

Sealed proposals for Construction, Heating, Sanitary and Electric Work Additions to Employees' Home, and also Fire Escapes, Buildings A, B, C and D, at the Kings Park State Hospital, Kings Park, N. Y., will be received by the State Hospital Commission, Capitol, Albany, N. Y., until three o'clock P.M., on Wednesday, February 14, 1923, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3974, 3975, 3976, 3977 and 4036. The right is reserved to reject any or all bids. Drawings and specifications may be examined at the Kings Park State Hospital, Kings Park, N. Y.; at the New York Office of the Department of Architecture, Room 1058, 25 Broadway, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

L. M. FARRINGTON,
Secretary, State Hospital Commission.
Dated: January 16, 1923.

Bids: Feb. 23.

Water Works and Sewerage Systems

Scottsville, N. Y.

Notice is hereby given that the Board of Trustees of the Village of Scottsville, N. Y., will receive bids for the construction of a sewerage system and disposal works; and also for the construction of a water works system, the latter consisting of about five and one-half miles of cast iron pipe, hydrants, valves, special castings, pump house, rapid sand filter, stand pipe and accessories.

Plans and specifications may be seen at the office of the Village Clerk, Scottsville, and plans seen and specifications obtained at the office of Hopkins and Field, Engineers, 349 Cutler Building, Rochester, N. Y.

Each bid on each system shall be accompanied by a certified check for one thousand dollars ($1,000), payable to the order of Eugene T. Swain, Village Clerk, to be returned in case the bid is rejected, or to be forfeited in case the bidder should refuse to enter into a contract satisfactory to said Village and in accordance with his proposal. Each bidder whose bid is accepted shall be required to furnish a surety bond satisfactory to the Village Board in the amount of sixty per cent of the bid, to assure the faithful performance of the contract. The Village reserves the right to examine any bidder as to his ability and his equipment with reference to the carrying out of the contract, and said Board reserves the right to reject any or all bids.

Bids shall be enclosed in sealed envelopes addressed to the Village Board, Scottsville, N. Y., and delivered to the said Board at the Village Hall in Scottsville, on or before the 23d day of February, 1923, at 11 o'clock a.m., at which time and place the bids will be opened.

Dated January 27, 1923.
The Village of Scottsville,
By WILLIAM S. DUNN,
President.
EUGENE T. SWAIN,
Village Clerk.

GEORGE Y. WEBSTER,
Attorney for Village.
Rochester, N. Y.

Bids: Feb. 20.

Sheet Asphalt Paving

Charleston, S. C.

Sealed Proposals will be received by the Street Department, Charleston, S. C., until 6 P.M., Tuesday, February 20th, 1923, for the construction of from 200,000 to 300,000 square yards of Sheet Asphalt Pavement. The right is reserved to reject any or all bids. For specifications, etc., apply to

J. H. DINGLE,
City Engineer.

OFFICIAL PROPOSALS

Bids: Feb. 19.

Reconstruction of Streets

Spring Lake, N. J.

Sealed bids will be received by the Mayor and Council of the Borough of Spring Lake, N. J., for the reconstruction of certain streets in the said Borough of Spring Lake, the work to consist of grading and paving with Sheet Asphalt on concrete base and including such incidental items as resetting curbs, building underdrains, manholes, etc.

The estimated quantities are approximately as follows:

Excavation ..... 7,[illegible] cu. yds.
Concrete Base ..... 4,7[illegible] cu. yds.
Sheet Asphalt Surface ..... 28,5[illegible] sq. yds.

Said bids will be opened and publicly read at the rooms of the Borough Council in the Borough Hall in said Borough of Spring Lake, N. J., February 19th, 1923, at 2 o'clock P.M.

Plans and specifications, prepared by John M. Braly, Engineer, are on file in the office of the Engineer where they may be seen by prospective bidders during business hours. The standard proposal form is attached to the specifications.

Copies of the plans and specifications may be obtained from the Engineer by making a deposit of $10.00. The deposit will be refunded after the opening of the bids upon the return of the copy of plans and specifications in good condition.

Bids must be made on the standard proposal forms in the manner designated and required by the specifications; must be enclosed in sealed envelopes bearing the name and address of the bidder; marked "Proposal for Paving East Lake Ave., etc." and addressed to Hon. O. H. Brown, Mayor, Borough of Spring Lake, N. J.

Each proposal must be accompanied by a certified check in a sum not less than ten (10%) per cent of the total amount bid on the work, payable to the Collector of the Borough of Spring Lake, and also an undertaking form from a Surety Company, authorized to do business in New Jersey, agreeing to provide the bidder, if successful, with the required bond.

Proposals, checks and agreements of surety must be delivered at the office and on the hour above named.

The Borough Council reserves the right to reject any or all bids, should it, upon consideration, deem it to the best interest of the Borough so to do.

By order of the Mayor and Council of the Borough of Spring Lake.

P. S. BROWN,
Borough Clerk.

JOHN M. BRALY,
Borough Engineer.

Bids: Feb. 9.

Paving

New Castle, Pa.

Sealed proposals will be received at the office of the City Clerk, City Building, New Castle, Pa., up until 10:00 o'clock, Friday morning, February 9, 1923, for the paving of Montgomery Street (formerly Moravia Road), in the Seventh Ward, beginning at a point following the center line 643.9 feet eastwardly and northwardly from the east end of the County Bridge over the Mahoning River, thence to a point at the end of the present pavement in Montgomery Street near the County Bridge over the Mahoning River and near to the Pittsburgh, Youngstown & Ashtabula Railway tracks, the said paving to be of concrete and of the width of eighteen (18) feet, said paving to be done in accordance with plans and specifications approved by Council and on file in the office of the City Engineer, New Castle, Pa. Each proposal to be accompanied by a certified check for $1,000.00 payable to the order of C. Ed Brown, City Clerk, as a guarantee that the bidder whose proposal is accepted will sign the contract and furnish the required bond, which check is to be returned to the successful bidder upon signing the contract and the approval of the bond, and to the unsuccessful bidders upon award of the contract. Rights reserved to reject any or all bids.

C. ED BROWN,
City Clerk,
New Castle, Pa.

Hauling Contracts Wanted

Road work, Material Handling, etc. Have several fleets of trucks ready for service anywhere. No job too large. Special equipment for any kind of dump truck hauling or unloading. Unlimited references. Glad to estimate.

HAMBRIDGE CONTRACTING CO.
68th and Greenway Ave., Philadelphia, Pa.

OFFICIAL PROPOSALS

Bids: Feb. 16.

Highway Bridge

Pikeville, Ky.

Sealed proposals will be received by the Fiscal Court of Pike County, Kentucky, at the office of the County Judge at Pikeville, Kentucky, on Friday February 16th, 12 a.m. for the construction and erection of a highway bridge across the Tug Fork of Big Sandy River near Edgarton, West Virginia, and Freeburn, Ky. This bridge to be constucted jointly by Pike County, Kentucky and Mingo County, West Virginia. The required length is approximately 300 feet and two 150 spans are proposed. Clear width of roadway 16 feet and either three of four inch wood floor. This bridge to be designed by the contractor in accordance with situation plan and profile and other information to be furnished by the County Road Engineer of Pike County and to comply with specifications furnished by him.

Plans for this bridge are to be submitted at the above mentioned time and place together with bids and are to be subject to the approval of the County Road Engineer. To insure an economical design, as euch latitude as possible will be given to the bidders as tc type of bridge, span length etc., so long as requirements as to river channel etc., are complied with. The loading, stresses, quality, of materials etc., must conform to the requirements of the Kentucky State Highway Department standards for specification for bridges. This will be a ten ton capacity bridge. Prospective bidders are asked to submit bids on both concrete and steel structures.

Situation plans, profiles, specifications etc, will be sent to any one interested upon request by J. S. Bentley. County Road Engineer, room 208 Hughes Building, Pikeville, Kentucky. A change of $3.00 for each set of blue prints and specifications to cover cost of blue printing, typing, etc. will be made. All bids must be accompanied by a certified check for $2,500.00 payable to the Treasurer of Pike County, Kentucky, to insure that bidder will enter into proper contract. Checks of unsuccessful bidders will be returned as soon as contract is awarded.

The Fiscal Court reserves the right to reject any and all bids.

By order of the Fiscal Court of Pike County, Ky.

J. S. BENTLEY,
County Road Engineer.
W. E. FLANNARY, County Judge.

Bids: Feb. 10.

Cast Iron Pipe, Hydrants and Valves

Buffalo, N. Y.

Sealed proposals will be received by the Commissioner of Public Works at the Municipal Building, Buffalo, New York, for:
1,600 tons cast iron pipe 6 in. to 16 in.
70 tons cast iron specials 6 in. to 16 in.
200 hydrants.
341 valves 4 in. to 16 in
to be furnished, f.o.b. Buffalo, New York.

Forms of proposal and specifications may be obtained on application to the above address.

ARTHUR W. KREINHEDER,
Commissioner of Public Works.

Bids: Feb. 20.

Sheet Asphalt Paving

Charleston, S. C.

Sealed Proposals will be received by the Street Department, Charleston, S. C., until 6 P.M., Tuesday, February 20th, 1923, for the construction of from 200,000 to 300,000 square yards of Sheet Asphalt Pavement. The right is reserved to reject any or all bids. For specifications, etc., apply to

J. H. DINGLE,
City Engineer.

OFFICIAL PROPOSALS

Bids: March 12.

Sewers

New Castle, Pa.

Sealed proposals will be received at the office of the City Clerk, City Building, New Castle, Pa., up until 10:00 o'clock Monday morning, March 12, 1923, for the construction of the extension of the City of New Castle Main Sewer in the Seventh Ward from its present southern terminus to the site of the proposed Sewage Disposal Plant in Taylor Township. The work will consist of the construction of approximately 4840 feet of 48 in. circular sewer in open cut of which approximately 320 feet will be Class A Cast Iron Pipe, and the balance reinforced monolithic concrete, reinforced concrete pipe, or brick, as determined by the bids. In addition there will be approximately 720 feet of 10 in. vitrified pipe sewer, 880 feet of 8 in. pipe sewer of which 850 feet will be vitrified pipe and 30 feet Class A Cast Iron Pipe, a sewage ejector station complete with air compressors and 50 feet of 4 in. Class B Cast Iron force main, manholes, frames and covers and other miscellaneous work. The said work to be done in accordance with plans and specifications on file in the office of the City Engineer, New Castle, Pa., and in the offices of Fuller & McClintock, Consulting Engineers, 170 Broadway, New York City, copies of which may be had for a deposit of $10.00.

Each proposal to be accompanied by a certified check, or cash, in the sum of at least five per cent (5%) of the total of the bid submitted, which shall become the property of the City as liquidated damages in case the successful bidder fails to furnish bond and enter into a contract. Checks to be returned upon approval of the contract and bond by the City. Checks will be returned to unsuccessful bidders. A bond with approved security will be required of the successful bidder.

The City reserves the right to reject any or all bids.

C. ED. BROWN, City Clerk.

Bids: Feb. 24.

Sewerage System and Disposal Works

Cuba, N. Y.

Sealed proposals will be received by the Board of Trustees of the Village of Cuba, N. Y., until 2 o'clock P.M., on the 24th day of February, 1923, for the construction of a sewerage system and sewage disposal works.

Plans may be seen and specifications obtained at the office of the Board at Cuba, N. Y., or at the office of Hopkins and Field, Engineers, 349 Cutler Building, Rochester, N. Y.

The Board hereby reserves and has the right to reject any or all bids or to accept the one that in its judgment will be for the best interests of the Village.

A surety bond satisfactory to the Board and in amount of $25,000 will be required of the one to whom the contract may be awarded.

A certified check, made payable to the order of the Board of Trustees, Cuba, N. Y., to the amount of $2,000 must be deposited by each bidder and accompany his bid as a guarantee that in case the contract is awarded to him, he will, within ten days thereafter, execute such contract and furnish his bond.

Bids must be sealed and addressed to the Board of Trustees, Cuba, N. Y., and marked on the outside of the envelopes "Proposal for Sewerage System and Disposal Works."

H. W. EVANS, President.
A. O. RENWICK, Trustee.
H. J. DEMCEY, Trustee..
H. M. SETCHEL,
Village Clerk.
Dated: Cuba, N. Y.,
Jan. 27th, 1923.

OFFICIAL PROPOSALS

Bids: Feb. 23.

Water Works and Sewerage Systems

Scottsville, N. Y.

Notice is hereby given that the Board of Trustees of the Village of Scottsville, N. Y., will receive bids for the construction of a sewerage system and disposal works; and also for the construction of a water works system, the latter consisting of about five and one-half miles of cast iron pipe, hydrants, valves, special castings, pump house, rapid sand filter, stand pipe and accessories.

Plans and specifications may be seen at the office of the Village Clerk, Scottsville, and plans seen and specifications obtained at the office of Hopkins and Field, Engineers, 349 Cutler Building, Rochester, N. Y.

Each bid on each system shall be accompanied by a certified check for one thousand dollars ($1,000), payable to the order of Eugene T. Swain, Village Clerk, to be returned in case the bid is rejected, or to be forfeited in case the bidder should refuse to enter into a contract satisfactory to said Village and in accordance with his proposal. Each bidder whose bid is accepted shall be required to furnish a surety bond satisfactory to the Village Board in the amount of sixty per cent of the bid, to assure the faithful performance of the contract. The Village reserves the right to examine any bidder as to his ability and his equipment with reference to the carrying out of the contract, and said Board reserves the right to reject any or all bids.

Bids shall be enclosed in sealed envelopes addressed to the Village Board, Scottsville, N. Y., and delivered to the said Board at the Village Hall in Scottsville, on or before the 23d day of February, 1923, at 11 o'clock a.m., at which time and place the bids will be opened.

Dated January 27, 1923.

The Village of Scottsville,
By WILLIAM S. DUNN,
President.
EUGENE T. SWAIN,
Village Clerk.
GEORGE Y. WEBSTER,
Attorney for Village.
Rochester, N. Y.

Bids: Feb. 12.

Road Work

Salem, N. J.

Notice is hereby given that sealed bids will be received by the Road Committee of the Board of Chosen Freeholders of the County of Salem for the construction of the Pennsville-Salem Road, 2nd and 3rd sections, in the township of Lower Penn's Neck, in the County of Salem, with a Bituminous Macadam surface upon broken stone foundation, estimated amount of Bituminous Macadam surfaced pavement required is 33,356 square yards; and opened and read in public at the Court House in the City of Salem, N. J., on Monday, February 12, 1923, at 2 P.M., standard time.

Drawings, specifications and form of bid, contract and bond for the proposed work will be furnished by the County Engineer, H. B. Keasbey, Salem, N. J.

E. G. OCHS, Clerk.

Sewer Contractors With Trenching Machine

We will sub-let about 5,000 ft. of 6 in. to 15-in. sewer to a reliable contractor with a good trenching machine. This work is located in West Virginia in the Ohio Valley. The work runs up to 22 ft. in depth and in sandy loam soil with few gas and water services. Seventy per cent of the work is less than 12 ft. in depth. Bids are desired on digging the trench and laying the pipe which will be furnished along the trench.

Kennedy Construction Co.
Parkersburg, West Virginia

Compensation Insurance

The intelligent handling of Workmen's Compensation Insurance is most essential to contractors. I have specialized in this business for twenty years and know how to handle insurance for the best interests of the contractors.

Alfred S. Hamilton
110 William St., New York

Hauling Contracts Wanted

Road work, Material Handling, etc. Have several fleets of trucks ready for service anywhere. No job too large. Special equipment for any kind of dump truck hauling or unloading. Unlimited references. Glad to estimate.

HAMBRIDGE CONTRACTING CO.
68th and Greenway Ave., Philadelphia, Pa.

OFFICIAL PROPOSALS

Bids: Feb. 28.

Lock and Dam Construction of the Illinois Waterway Contract No. 2

Springfield, Ill.

1. Sealed proposals for the construction of STARVED ROCK LOCK AND DAM, located in the Illinois River, two miles above Utica, and seven miles below Ottawa, La Salle County, Illinois, will be received at the office of the Director of the Department of Public Works and Buildings, Division of Waterways, Room 122, State House, Springfield, Illinois, until Ten (10) o'clock A.M., Central Standard Time of the 28th day of February, 1923, and then publicly opened and read.

2. Copies of the plans, specifications, proposal blank, form of bond, and contract may be obtained by prospective bidders at the Office of the Department, Room 1404, 25 East Jackson Boulevard, Chicago, Illinois, upon depositing a check for Ten Dollars ($10.00), made payable to the Director of the Department of Public Works and Buildings, which sum will be returned within ten (10) days after the contract has been awarded, if the plans are returned in good condition within that time.

3. Each proposal shall be accompanied by a certified check or draft drawn on some responsible bank doing business in the City of Chicago, and made payable to the order of the Director of the Department of Public Works and Buildings, for five (5) per cent of the amount of the proposal. In lieu of a certified check or draft, the proposal may be accompanied by a bond executed in the form prescribed by the Department of Public Works and Buildings and with a surety company approved by the Department in the penal sum of ten (10) per cent of the amount of the proposal.

4. The Depeartment of Public Works and Buildings reserves the right to reject any or all bids. The contract, if let, will be awarded to the lowest responsible bidder.

C. R. MILLER,
Director, Department of Public Works and Buildings.
WILLIAM L. SACKETT,
Superintendent of Waterways.
M. G. BARNES,
Chief Engineer,
Division of Waterways.

Bids: Feb. 21.

Combined Garbage Incinerator Plant

Sea Cliff, N. Y.

Sealed proposals will be received by the Board of Trustees of the Incorporated Village of Sea Cliff, Nassau County, New York, at the Village Offices in said Village until Wednesday evening, February 21st, 1923 at 8 o'clock p.m., for the construction of a Combined Garbage Incinerator Plant and Storage Building in the Incorporated Village of Sea Cliff, for the disposal of ashes, garbage, etc.

Specifications covering the work may be obtained upon request of the Village Clerk, Sea Cliff, New York.

The Board of Trustees reserves the right to reject any and all bids.

By order of the Board of Trustees,
RUTH H. BRANTHWAITE, Clerk.
Dated Sea Cliff, N. Y. January 29, 1923.

Bids: Feb. 20.

Drain Construction

Charleston, S. C.

Sealed Proposals will be received by the Street Department, Charleston, S. C., until 6 P.M., Tuesday, February 20th, 1923, for the construction of 35,000 feet, more or less, of terra cotta pipe drains with appurtenances, and 3,000 feet, more or less, of reinforced concrete drains and appurtenances.

The right is reserved to reject any or all bids. For specifications, etc., apply to

J. H. DINGLE,
City Engineer.

January 20th, 1923.

OFFICIAL PROPOSALS

Bids: Feb. 26.

Highway Bridge

Massena, N. Y.

Sealed proposals will be received at the office of the Town Clerk of the Town of Massena, New York until 2:00 P. M., on February 26th, 1923, and at that time publicly opened and read, for furnishing of all materials, equipment and labor necessary to construct a highway bridge over the Grasse River in the Town of Massena, New York.

The bridge will consist of a riveted steel cantilever superstructure with a concrete substructure. The superstructure will be seven hundred and sixty-five (765) feet long, consisting of two anchor arms, each one hundred and fifty-seven and one half (157.5) feet long; two cantilever arms, each one hundred and twelve and one half (112.5) feet long and a suspended span, two hundred and twenty-five (225) feet long.

The bridge will have one roadway, eighteen feet wide, and two sidewalks, each six feet wide.

The work will also require the grading of the approaches.

Proposals will be received separately for the substructure and for the superstructure.

Plans and specifications may be had at the office of the Town Board or of the Consulting Engineers, the Jarrett-Chambers Company, Inc., No. 30 East 42nd Street, New York City, upon deposit of ten dollars for superstructure plans or five dollars for substructure plans, which will be refunded when the plans are returned.

A certified check, payable to the Town Board of Massena, New York, shall be enclosed with each proposal. Checks accompanying proposals for the superstructure shall be for the sum of ten thousand dollars. Checks accompanying proposals for the substructure shall be for three thousand dollars.

The right is reserved to reject any or all proposals or to waive any informality in the proposals received.

ANDREW J. HANMER,
Supervisor,
FRANK A. HOUGH,
Town Clerk,
Massena, N. Y.
JARRETT-CHAMBERS COMPANY, INC.,
Engineers,
New York.

Bids: Feb. 14.

Furnishing Cast Iron Water Pipe Contract 34-W

Washington, D. C.

Sealed proposals for furnishing 32,000 ft. of 6 in., 15,000 ft. of 8 in., 12,000 ft. of 12 in., 1,000 ft. of 16 in., 500 ft. of 24 in., B. & S., C. I. Water Pipe, and 50 tons Special Castings, will be received at the office of the Washington Suburban Sanitary Commission, Evans Building, Washington, D. C., until 3 P. M., Wednesday, Feb. 14. Specifications obtainable from Robert B. Morse, Chief Engineer of District, Hyattsville, Md.

T. HOWARD DUCKETT,
EMORY H. BOGLEY,
J. BOND SMITH,
Commissioners.

OFFICIAL PROPOSALS

Bids: Feb. 27.

Oil Engine Pumping Unit

Laporte, Ind.

The Board of Public Works of the City of Laporte, Indiana, will on the 27th day of February, 1923, at 10 o'clock a.m. receive sealed bids for a 2,450 G.P.M. Oil Engine Pumping Unit. Specifications may be had from J. H. Harding, Water Works Supt.

Bids: Feb. 28.

State Hospital Work

Middletown, N. Y.

Sealed proposals for Sanitary Work—Additional Fire Protection and Water Supply, at the Middletown State Homeopathic Hospital, Middletown, N. Y., will be received by the State Hospital Commission, Capitol, Albany, N. Y., until 3 o'clock P. M. on Wednesday, February 28, 1923, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of each proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specification No. 4037, Proposals Nos. 1 and 2. The right is reserved to reject any or all bids. Drawings and specifications may be examined at the Middletown State Homeopathic Hospital, Middletown, N. Y., at the New York Office of the Department of Architecture, Room 1058, 25 Broadway; and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

L. M. FARRINGTON,
Secretary, State Hospital Commission.
Dated: February 2, 1923.

U. S. GOVERNMENT

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., February 1, 1923—Sealed proposals will be opened in this office at 3 p.m., March 5, 1923 for protection of site and building and approach work at the United States Immigrant Station, Boston, Mass. Drawings and specifications may be obtained from the Supervising Chief Engineer, Room 437, U. S. Post Office Building, Boston, Mass., or at this office in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

U. S. ENGINEER OFFICE, Nashville, Tenn. Sealed proposals will be received here until 11 a.m., March 6, 1923, and then opened, for one electric towboat. Further information on application.

Ever Hear About John Webster's Crab?

¶The great John Webster in writing his classic, "The Duchess of Malfi," makes the following comparison of the habit-set man who would not change his ways and methods:

"Like the irregular crab,
Which, though 't goes backward, thinks
It goes right
Because it goes its own way."

¶Perhaps if we could just step one side and watch ourselves go by some of us would supplant our present methods with others that would be more in step with our wishes for success and progress. ¶The most sincere wishes in the world backed by equally sincere efforts do not produce results commensurate with those efforts if the method is wrong. ¶If you look over the efforts that are being made in your behalf on Contract Bonds and Compensation Insurance and compare them to Swart Service you may see a similarity to "the irregular crab." ¶If no difference, don't change. That's fair, isn't it?

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HARTFORD, CONN. AGENTS EVERYWHERE

U. S. GOVERNMENT

U. S. ENGINEER OFFICE, CINCINNATI, O. Sealed proposals will be received here until 2 p.m., Feb. 12, 1923, and then opened, for furnishing and delivering structural steel, forgings, etc., for Ohio River Dams Nos. 36 and 38. Further information on application.

SEALED PROPOSALS will be received and opened by the Director, U. S. Veterans Bureau, in the office of the Quartermaster General, 2306 Munitions Building, Washington, D. C., at 11 a.m., February 16, 1923, for construction of a 500 bed Neuro-Psychiatric Hospital to be erected for the U. S. Veterans Bureau at Camp Custer, Battle Creek, Michigan. The work will include the construction of about thirty buildings of reinforced concrete and brick, complete with sewer, water, heating and lighting systems, roads and walks. Plans and specifications may be obtained after January 16, 1923, from the Quartermaster General, Room 2306 Munitions Building, Washington, D. C., upon deposit of $100. One set of plans and specifications will be on exhibition at each of the following stations: Constructing Quartermasters at 39 Whitehall Street, New York, N. Y., Army Supply Base, Boston 9, Mass., and Quartermaster Supply Officers at 1819 West Pershing Road, Chicago, Ill., and Second and Arsenal Streets, St. Louis, Mo.

U. S. ENGINEER OFFICE, WILMINGTON, DEL.—Sealed proposals will be received here until 11 A.M., Feb. 24, 1923, and then opened, for constructing and delivering one steel quarter boat and two steel barges. Further information on application.

UNITED STATES ENGINEER OFFICE, Room 616, Army Building, New York City—Sealed proposals will be received here until 12 o'clock Noon, March 2, 1923, and then opened, for dredging in Shrewsbury River, N. J. Further information on application.

U. S. GOVERNMENT

SEALED PROPOSALS, indorsed "Proposals for Refrigerating Equipment, Gulfport, Miss. Specification No. 4780," will be received at the Bureau of Yards and Docks, Navy Department, Washington, D. C., until 11 o'clock a.m., Feb. 21, 1923, and then and there publicly opened, for refrigerating and ice-making equipment, using as refrigerant any satisfactory substance except ammonia, and consisting of motor-driven compressors, condensers, liquid receiver, motor-driven brine pumps, combination freezing and brine-cooling tank with expansion coils, water-precooler tank with coils, charcoal filters, brine agitator, water-agitating system by compressed air, automatic can filler, hand-operated can hoist, automatic can dump and ice chute, ice cans, oil and scale traps, piping and other accessories; and for coldstorage rooms with insulation for compartments including doors, floors, and equipment for the storage and handling of goods at the U. S. Veterans' Hospital, Gulfport, Miss. Drawings and Specification No. 4780 may be obtained on application to the Bureau of Yards and Docks. Deposit of a check or postal money order for $10, payable to the Chief of the Bureau of Yards and Docks, is required as security for the safe return of the drawings and specification. L. E. GREGORY, Chief of Bureau, January 5, 1923.

SEALED PROPOSALS, indorsed "Proposals for Stack, Gulfport, Miss., Specification No. 4781," will be received at the Bureau of Yards and Docks, Navy Department, Washington, D. C., until 11 o'clock a.m., Feb. 21, 1923, and then and there publicly opened, for a radial brick stack on a concrete foundation, at the U. S. Veterans' Hospital, Gulfport, Miss. Specification No. 4781 may be obtained on application to the Bureau of Yards and Docks. Deposit of a check or postal money order for $10, payable to the Chief of the Bureau of Yards and Docks, is required as security for the safe return of the specification. L. E. GREGORY, Chief of Bureau, January 5, 1923.

U. S. GOVERNMENT

SEALED PROPOSALS, indorsed "Proposals for Hospital Construction, Gulfport, Miss., Specification No. 4774," will be received at the Bureau of Yards and Docks, Navy Department, Washington, D. C., until 11 o'clock a.m., Feb. 26, 1923, and then and there publicly opened, for the following work at the U. S. Veterans' Hospital, Gulfport, Miss.

Part I. New buildings, roads and walks; and removing existing building, roads and walks. The work includes plain and reinforced concrete; cast concrete; hollow tile work; structural steel; interior marble work; wood framing, sash, doors and finish; stucco; plaster and metal lath; tile, prepared and built-up roofing; sheet metal work; steel sash; steel covered sash and doors; miscellaneous steel and iron work; hardware; painting and glazing; and dumbwaiters.

Part II. Plumbing work inside the buildings, and outside sewers and drains, including soil, vent and drain piping; hot and cold water lines; interior stand pipe system; all valves, fittings, plumbing fixtures, and floor drains.

Part III. Complete heating and steam distributing systems for each building and an outside steam distributing system including high pressure and vacuum return lines; hot water heaters; underground concrete trenches, manholes; and cast iron manhole frames and covers.

Part IV. Lighting systems for each building; power systems and telephone conduits in certain buildings; and outside electric distributing systems including transformers, panel boards, fixtures, conduits, fibre ducts, and wiring.

Part V. Boiler plant equipment and piping, including brick settings for return tubular boilers, smoke flue, feed water heater, steel storage tanks, feed water and vacuum pumps, combined twin pump and receiver, fuel oil pumps and heater, motor-driven sludge pump, drip traps, incinerator with hot water heating and sterilizing equipment, complete piping systems for all apparatus, and the installation of horizontal return tubular boilers furnished by the Government.

Drawings and specification No. 4774 may be obtained on application to the Bureau of Yards and Docks, Navy Department, Washington, D. C. Deposits of checks or postal money orders, payable to the Chief of the Bureau of Yards and Docks, are required as security for the safe return of the drawings and specifications. Deposits shall be in the following amounts: Part I—$50, Part II—$50, Part III—$25, Part IV—$25, Part V—$15; and complete (all parts) $100. L. E. Gregory, Chief of Bureau, January 5, 1923.

U. S. ENGINEER OFFICE, GALVESTON, TEX., Sealed proposals will be received here until 11 a.m., Feb. 21, 1923, and then opened, for dredging channels at Brazos Island Harbor, Texas. Further information on application.

U. S. ENGINEER OFFICE, PROVIDENCE, R. I. Sealed proposals will be received here until 12 o'clock, noon, March 7, 1923, and then opened, for dredging in Connecticut River, Conn. Further information on application.

U. S. ENGINEER OFFICE, FLORENCE, ALABAMA.—Sealed proposals will be received here until 11 A.M., February 12, 1923, and then opened, for furnishing and delivering one electric generator of 937.5 kva. capacity with direct connected excited. Further information on application.

U. S. ENGINEER OFFICE, FLORENCE, ALA.—Sealed proposals will be received here until 11 A.M., February 17, 1923, and then opened, for furnishing displacement tanks for the regulating gates of Wilson Dam. Further information on application.

U. S. ENGINEER OFFICE, FLORENCE, ALA.—Sealed proposals will be received here until 11 A. M., February 21, 1923, and then opened, for furnishing castings and other parts for the regulating gates of Wilson Dam. Further information on application.

Wanted—Correspondents
for Engineering News-Record

If you want to earn some extra money and are a resident in one of the cities named below;

If you can spare an hour or two a day *during business hours* for calling upon architects, contractors, engineers and city departments;

Then write me concerning your qualifications and present connection, if you live in

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E. N. R.

POSITIONS VACANT

ASSISTANT engineer for State Bureau of Public Health, Santa Fe, New Mexico. University graduate in sanitary engineering, with not less than three years' experience in waterworks and sewage disposal. Beginning salary $2,400 and travel expenses. Give full particulars, training, experience, references, in letter of application, to Director of Public Health, Santa Fe, New Mexico.

CARPENTER foreman for concrete bridge forms, this is complicated work and only capable men will be considered. No others need apply. P-649, Eng. News-Record, Leader-News Bldg., Cleveland, Ohio.

CHIEF draftsman wanted to take complete charge drafting room, Middle West structural plant. Principally industrial mining and bridge structures. Capacity 1,000 tons per month. Position permanent and excellent opportunity for man with executive ability. Apply giving experience, age, married or single and salary expected to P-670, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

CIVIL engineer, with instrument, for one or two years, experienced in accurate subdivision work, excavation surveys, etc. Address Box 232, Asheville, N. C.

COMPRESSED air; experienced inspectors wanted on masonry tunnel construction under high air pressure. Apply in person. Passaic Valley Sewerage Commissioners, 128 Market Street, Newark, N. J.

DESIGNERS and estimators wanted by large reinforcing bar company. Must have experience with organization handling reinforcing steel. Give references, experience, and salary desired. P-651, Eng. News-Record, 10th Ave. at 36th St., New York City.

DETAILERS for reinforced concrete structures. Designing, estimating and selling opportunities for capable men. Give references, age, experience, education. The Building Products Co., Toledo, Ohio.

POSITIONS VACANT

DRAFTSMEN, experienced (only) detailers and checkers on structural steel. State salary, experience, and when available first letter. Pittsburgh-Des Moines Steel Co., Des Moines, Iowa.

DRAFTSMEN, first class detailers and checkers for structural steel. Philadelphia vicinity. Only experienced men need apply. P-582, Eng. News-Record, Real Estate Trust Bldg., Phila., Pa.

DRAFTSMEN experienced in detailing and checking structural steel for buildings, permanent position for efficient men. Give age, experience, references. We operate throughout entire United States. International Steel & Iron Co., Evansville, Indiana.

DRAFTSMEN, experienced detailers and checkers wanted for buildings and bridges. State age, salary, experience and earliest date available. Permanent position for good men. The Mt. Vernon Bridge Co., Mt. Vernon, Ohio.

DRAFTSMEN: On structural steelwork for bridges and buildings. Apply giving experience, etc., to the Berlin Construction Co., Inc., Berlin, Conn.

DRAFTSMAN, with some engineering experience. Knowledge of mill construction and structural work in steel, wood and concrete necessary. Should be able to estimate. Temporary engagement. Reply stating age, if married, details of experience, references and salary desired. Security Cement & Lime Company, Hagerstown, Maryland.

DRAFTSMEN calculators wanted on special track work. With or without experience but must have thorough working knowledge of mathematics. P-658, Eng. News-Record, Real Estate Trust Bldg., Phila., Pa.

DRAFTSMEN, structural detailers and checkers wanted for heavy bridge work and buildings. State qualifications and salary expected. Bethlehem Steel Company, Bridge and Fabrication Department, Steelton, Penna.

POSITIONS VACANT

DRAFTSMEN—Mechanical, experienced in mechanical and chemical layout work, power house layout work, and machine design. Give age, experience and salary expected. Apply to the Engineering Department. E. I. Du Pont de Nemours & Company, Inc., Wilmington, Delaware.

ELECTRICAL draftsman, technical graduate preferred, experienced in substation and transmission line design, motor application and control. Some knowledge of mining desirable but not necessary. State age, experience in detail, education, salary expected and when available. Location, Eastern Pennsylvania. P-565, Eng. News-Record, Real Estate Trust Bldg., Phila., Pa.

ESTIMATOR wanted. Must prove his ability, beyond doubt, to accurately estimate costs on high class bank and office buildings, apartments, hotels and industrial plants. Not over forty years old. Must show a successful record covering several years and including connection as estimator with at least one of the larger construction companies. For the services of such a man we will pay liberal salary and commission on contracts awarded through his solicitation. State salary and send full record in first letter. P-653, Eng. News-Record, 10th Ave. at 36th St., New York City.

EXPERIENCED structural detailers and checkers; state age, experience, nationality, education and salary expected, in first letter. Indiana Bridge Company, Muncie, Indiana.

EXPERIENCED detailer and checker on shop drawings for structural shop. Give age, experience, etc. Stupp Bros. B. & I. Co., St. Louis, Mo.

EXPERIENCED structural detailers and checkers wanted on mill and office buildings. In reply state experience, salary and earliest date you can report. Riverside Bridge Co., Martins Ferry, Ohio.

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Miscellaneous (Continued)

sawed creosoted yellow pine and 11,200 ft. corrugated culvert metal. R. W. Gearhart, Marion, co. engr.

Bridge Material—Onawa, Ia.—Feb. 20, by Auditor Monona Co., furnishing 5 cars fir bridge plank and 1 car cypress piling. M. T. Kneale, Onawa, co. engr.

Culverts, etc.—Osceola, Ia.—Feb. 23, by Auditor Clarke Co., 38 box culverts and 8 extensions, 1,136.5 cu.yd. rein.-con. V. J. Brown, Osceola, co. engr.

Road Maintenance Machine—Stillwater, Minn.—March 6, by J. F. Kilty, aud. Washington Co., one power road-maintenance machine.

Grand Stand, etc.—Kansas City, Mo.—Osborn Eng. Co., 2848 Prospect Ave., S. E., Cleveland, O., taking bids 1 deck rein.-con. and steel grandstand, 18,000 capacity, 2 story, 30 x 65 ft., brick and stone office building, also grading work, 20th and Brooklyn Sts., here, for Kansas City Baseball Club, c/o G. Muehlebach, 18th and Walnut Sts. Noted Jan. 4.

Levee—Whitham, Mo.—See "Excavation, Drainage, Irrigation."

Electrical Distribution System — Venice, Calif. — Feb. 20, to vote on $100,000 bonds for electrical distributing system.

Supplies—Ottawa, Ont.—Feb. 20, by Bd. Control, furnishing asphalt, asphalt filler, brasswork, broken stone, castings, c.i. pipe, cement, draughting supplies, lead pipe, pig lead, plank and cedar, sand, service posts, special pipe castings, valves, vitr. clay or cement sewer pipe, road oils, fuel oil, refined tar and meters. $200,000. A. F. Macallum, city engr.

Supplies—Toronto, Ont.—Taking bids treated wood blocks, sand, portland cement, gravel, mineral dust or filter, rubble stone, iron, steel, etc. $150,000. R. C. Harris, city engr.

BIDS RECEIVED

Park—Astoria, N. Y.—Park Bd. at office Dept. Parks, Municipal Bldg., New York, opened bids Feb. 8, improving Astoria Park, here, from T. Di Roma, 33 Evelyn Pl., New York, $111,903; G. Williamson, 46 West Bway., New York, $116,580; Benedetto & Sanssez, $116,647. Noted Feb. 1.

CONTRACTS AWARDED

Motor Trucks—Long Island City, N. Y.—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., furnishing and delivering twenty-one 3 to 3½ ton motor trucks, to White Co., Thompson Ave., $95,865. Noted Feb. 1.

Structural Steel — New York, N. Y. — Transit Comn., 49 Lafayette St., furnishing and erecting 1,360 ton structural steel incl. 1,920 ton sheet steel piling, for 3rd addition to shops at Lenox Ave. and 148th St., to McClintic Marshall Co., 50 Church St., $293,888. Engrs. est. $294,000. Noted Feb. 8.

Tar Road Oil, etc.—New York, N. Y.—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., furnishing and delivering 200,000 gal. tar road oil and 50,000 gal. bituminous surfacing material, to Barrett Co., 17 Battery Pl., $20,900 and $8,250 respectively; 6,000 cu.yd. broken trap rock stone, to New York Trap Rock Corp., 101 Park Ave., $29,640; 4,000 cu.yd. binder stone, to Calvin Tompkins Co., 30 Church St., $7,720; 1,000 ton limestone dust, to E. Meyer Co., 25 Church St., $5,800; 4,000 bags Portland cement, to T. J. Mallette, Inc., $29,000; 6,000 cu.yd. sand grits and 3,000 cu.yd. hard ashes, to Ames Building Material Co., 3437 Kingsbridge Rd., $14,880 and $2,220 respectively; 1,000 cu.yd. fine sand, to Gallagher-Shand, Inc., 420 East 105th St., $1,750. Noted Feb. 8.

Street Sweeper — Watertown, N. Y. — Street sweeper, to Austin Western Road Mchy. Co., 400 North Michigan Ave., Chicago, $7,000. Noted Jan. 11.

Pipe Line—Curtis Bay (Baltimore P. O.) **Md.**—Amer. Oil Co., American Bldg., Baltimore, vitr. pipe line to oil tanks, here, to Whiting-Turner Constr. Co., Stewart Bldg., Baltimore, $15,000.

Road Oil—Monticello, Ill—Piatt Co., furnishing 630,000 gal. E-3 road oil, to Standard Oil Co., 400 East Cerro Gordo St., Decatur, $5.46 per hundred gal.

Pile Driving, Crane, etc. — Aberdeen, Wash.—Port of Grays Harbor Comrs., pile driving and timber construction for 96 x 280 ft. dock, to Grays Harbor Constr. Co., Hoquiam, $40,000; (90 days); 5 ton, 95 ft. radius, Hammerhead type crane, to Colby Steel & Eng. Co., 446 Central Bldg., Seattle, $26,400; 40 ton steel rail and fittings, to Western Railway Supply Co., Northwestern Bank Bldg., $2,700.

Heating and Ventilating—Montreal, Que.—McGill University, Sherbrooke St. W., contract for plumbing, heating and ventilating for pathological building, to Garth & Co., Craig St. W., $78,500.

OFFICIAL PROPOSALS

OFFICIAL PROPOSALS

Bids: March 12.

Sewers

New Castle, Pa.

Sealed proposals will be received at the office of the City Clerk, City Building, New Castle, Pa., up until 10:00 o'clock Monday morning, March 12, 1923, for the construction of the extension of the City of New Castle Main Sewer in the Seventh Ward from its present southern terminus to the site of the proposed Sewage Disposal Plant in Taylor Township. The work will consist of the construction of approximately 4840 feet of 48 in. circular sewer in open cut of which approximately 320 feet will be Class A Cast Iron Pipe, and the balance reinforced monolithic concrete, reinforced concrete pipe, or brick, as determined by the bids. In addition there will be approximately 720 feet of 10 in. vitrified pipe sewer, 880 feet of 8 in. pipe sewer of which 850 feet will be vitrified pipe and 30 feet Class A Cast Iron Pipe, a sewage ejector station complete with air compressors and 50 feet of 4 in. Class B Cast Iron force main, manholes, frames and covers and other miscellaneous work. The said work to be done in accordance with plans and specifications on file in the office of the City Engineer, New Castle, Pa., and in the offices of Fuller & McClintock, Consulting Engineers, 170 Broadway, New York City, copies of which may be had for a deposit of $10.00.

Each proposal to be accompanied by a certified check, or cash, in the sum of at least five per cent (5%) of the total of the bid submitted, which shall become the property of the City as liquidated damages in case the successful bidder fails to furnish bond and enter into a contract. Checks to be returned upon approval of the contract and bond by the City. Checks will be returned to unsuccessful bidders. A bond with approved security will be required of the successful bidder.

The City reserves the right to reject any or all bids.

C. ED. BROWN, City Clerk.

Bids: Feb. 24.

Sewerage System and Disposal Works

Cuba, N. Y.

Sealed proposals will be received by the Board of Trustees of the Village of Cuba, N. Y., until 2 o'clock P.M., on the 24th day of February, 1923, for the construction of a sewerage system and sewage disposal works.

Plans may be seen and specifications obtained at the office of the Board at Cuba, N. Y., or at the office of Hopkins and Field, Engineers, 349 Cutler Building, Rochester, N. Y.

The Board hereby reserves and has the right to reject any or all bids or to accept the one that in its judgment will be for the best interests of the Village.

A surety bond satisfactory to the Board and in amount of $25,000 will be required of the one to whom the contract may be awarded.

A certified check, made payable to the order of the Board of Trustees, Cuba, N. Y., to the amount of $2,000 must be deposited by each bidder and accompany his bid as a guarantee that in case the contract is awarded to him, he will, within ten days thereafter, execute such contract and furnish his bond.

Bids must be sealed and addressed to the Board of Trustees, Cuba, N. Y., and marked on the outside of the envelopes "Proposal for Sewerage System and Disposal Works."

H. W. EVANS, President.
A. O. RENWICK, Trustee.
H. J. DEMCEY, Trustee.
H. M. SETCHEL,
Village Clerk.
Dated: Cuba, N. Y.,
Jan. 27th, 1923.

OFFICIAL PROPOSALS

Bids: Mar. 7.

Additions to Montebello Filters

Baltimore, Md.

Sealed proposals, in duplicate, endorsed, "Bids for Additions to Montebello Filters, Contract No. 63, Water Department," addressed to the Board of Awards of Baltimore City, will be received at the office of the City Register, City Hall, Baltimore, Md., until 11 A.M., Wednesday, March 7th, 1823, at which time they will be publicly opened and read.

Plans and specifications may be obtained at the office of the Water Engineer, Room 204, City Hall, Baltimore, Md., on or after February 17th, 1923. A charge of twenty-five (25) dollars will be made for each set of plans and specifications; this amount will be refunded upon the return of these plans and specifications before March 14th, 1923, in good condition. Specifications used in making a bid will be considered as returned. Blueprints will be furnished to prospective bidders only upon written request, at 25 cents each, which amount will not be refunded.

A certified check of the bidder on a clearing house bank, made payable to the Mayor and City Council of Baltimore, for the sum of thirty-five (35) thousand dollars, will be required with each bid.

The principal items are approximately as follows:

Excavation, 365,000 cu.yds.
Rolled embankment, 74,000 cu.yds.
Concrete, 45,400 cu.yds.
Steel reinforcement, 3,760,000 pounds.
Setting cast iron pipe, valves and sluice gate, 800 tons.

The successful bidder will be required to give bond equal in amount to the value of the contract to comply with the city charter respecting contracts.

The Board of Awards reserves the right to reject any or all bids.

Approved: WM. A. MEGRAW,
Water Engineer.

Bids: Mar. 2.

Sewer
No. 100

Milwaukee, Wis.

Sealed proposals for the construction of extensions to the intercepting sewer system of the City of Milwaukee, Wis., will be received by the Sewerage Commission of the said City at its office, 508 Market Street, Milwaukee, Wisconsin, until 1:30 p.m., the 2nd day of March, 1923, at which time and place during the session of the said Commission, the proposals will be publicly opened and read.

The work to be done embraces the building of the following work:

4,220 lineal feet of 42" concrete sewer.

Together with all manholes and other appurtenances.

The time allowed for the completion of this contract shall be six (6) months from the date of the Engineer's notice to begin work.

The liquidated damages for not completing the work within the time above stated shall, for each day in excess thereof, be Twenty-five ($25.00) Dollars.

Each proposal submitted must be accompanied by a cash deposit of, or, in lieu thereof, by a certified check drawn upon a National or State Bank or Trust Company, and to the order of the "Sewerage Commission of the City of Milwaukee" to the amount of Two Thousand ($2,000.00) Dollars.

Specifications and blank forms of proposals can be obtained and detailed plans examined at the office of the Sewerage Commission, 508 Market Street, and a full set of plans will be sent to any contractor upon receipt of five (5) dollars. This sum will be returned upon surrender of the plans in good condition within thirty (30) days after award of the contract.

The Sewerage Commission of the City of Milwaukee reserves the right to reject any and all bids submitted.

Published by authority of the Sewerage Commission of the City of Milwaukee.

JOHN H. FOWLES,
Secretary.

Countersigned:
LOUIS M. KOTECKI,
Comptroller.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ADVERTISEMENTS ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE.

OFFICIAL PROPOSALS

Bids: Feb. 28.

State Hospital Work

Middletown, N. Y.

Sealed proposals for Sanitary Work—Additional Fire Protection and Water Supply, at the Middletown State Homeopathic Hospital, Middletown, N. Y., will be received by the State Hospital Commission, Capitol, Albany, N. Y., until 3 o'clock P. M. on Wednesday, February 28, 1923, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of each proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specification No. 4037, Proposals Nos. 1 and 2. The right is reserved to reject any or all bids. Drawings and specifications may be examined at the Middletown State Homeopathic Hospital, Middletown, N. Y., at the New York Office of the Department of Architecture, Room 1058, 25 Broadway; and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

L. M. FARRINGTON,
Secretary, State Hospital Commission.
Dated: February 2, 1923.

Bids: Feb. 21.

Main Sanitary Sewer—East Side

Ashtabula, Ohio.

Sealed proposals will be received at the office of the City Manager in the City Hall, Ashtabula, Ohio, until 12 o'clock noon, Eastern Standard Time, February 21st, 1923, and then publicly opened and read, for the construction of an East Side Main Sanitary Sewer.

The following quantities give a general idea of the amount and character of the work to be done:

7,800 lin.ft. 15" to 27" Vit. Pipe Sewer.
2,100 lin.ft. 42" Sewer.
2,000 lin.ft. Sewer in tunnel.

Copies of plans and specifications and blank proposals may be obtained at the office of the City Engineer, City Hall, Ashtabula, Ohio, or at the office of George B. Gascoigne, 648 Leader News Building, Cleveland Ohio, after February 10th, 1923. A charge of $10.00 will be made for each set of plans and specifications. All checks for said plans and specifications shall be made payable to the City Treasurer of Ashtabula, Ohio.

The City of Ashtabula, Ohio.
W. M. COTTON,
City Manager.

Bids upon approximately two miles of storm drains averaging about 54" in diameter will be received about the middle of March, 1923.

Silver Tongued oratory may cloak an excuse, but results delivered leave no room for argument. Swart service really serves.

HARMON V. SWART
Contract Bonds
Compensation Insurance
92 William St., New York

OFFICIAL PROPOSALS

Bids: Feb. 26.

Sanitary Sewer System and Sewage Disposal Plant

Blasdell, N. Y.

Sealed proposals will be received by the Board of Trustees of the Village of Blasdell, Erie County, N. Y., until 8 p. m., Feb. 26th., 1923, at the office of the Village Clerk in said Village, for the construction of sanitary sewers and for the construction of a sewage disposal plant.

Plans and specifications and forms of contract may be seen at the office of the Village Clerk or at the office of Frederick K. Wing Company, Engineers, 1314 Prudential Building, Buffalo, N. Y.

The Board of Trustees reserves the right to reject any and all bids, or to accept the bid for sewers or for sewage disposal plant separately—whichever way in its best judgment, it deems best for the interests of the village.

A bond amounting to 50% of the contract, will be required of the successful contractor or contractors.

Each proposal must be accompanied by a certified check in the sum of at least 3% of the amount of the bid. Checks are to be made payable to the order of W. F. Salisbury, Village Treasurer, and said checks become the property of the Village, as liquidated damages, in case the successful bidder fails to furnish the bond and enter into a contract within five days after notice from the Board of Trustees so to do.

Bids must be addressed to the Village Clerk, Blasdell, N. Y., and must be marked on the outside, "Proposal for Sewers" or "Proposal for Disposal Plant" or "Proposal for Sewers and Disposal Plant."

IRA DUNMIRE,
President.
FOREST F. GLEZEN,
Village Clerk.

Blasdell, N. Y.,
Feb. 6th, 1923.

Bids: March 13.

Sewerage

Matewan, N. J.

Sealed bids or proposals for the construction of Sewers and Sewage Disposal Works will be received by the Mayor and Council at the Truck House Building, Jackson Street, Matewan, New Jersey, on the thirteenth day of March, 1923, at eight o'clock in the evening.

The work mainly consists of about 6½ miles of 6 inch to 12 inch vitrified pipe sewers and an Imhoff Tank.

For any information, or explanation that may be desired regarding drawings and specifications, bidders shall apply to George A. Johnson Company, Inc., Consulting Engineers, 150 Nassau Street, New York. Drawings and specifications, may be obtained from George A. Johnson Company at the price of $15, which will not be refunded.

Each bid must be accompanied in a separate envelope by a certified check in the amount of seven thousand dollars ($7,000) for schedule number one, three thousand dollars ($3,000) for schedule number two, and a bond guaranteeing that if the proposal of the bidder is accepted and the contract awarded to him or them, the said bidder will enter into the said contract and execute the necessary instruments therefor, and upon the execution of said contract the said Surety Company will become surety on said bond guaranteeing the performance of the same.

The Borough reserves the right to accept any bids or to reject any or all bids.

WILLIAM H. SUTPHIN,
Mayor.

OFFICIAL PROPOSALS

Bids: Feb. 26.

Highway Bridge

Massena, N. Y.

Sealed proposals will be received at the office of the Town Clerk of the Town of Massena, New York until 2:00 P. M., on February 26th, 1923, and at that time publicly opened and read, for furnishing of all materials, equipment and labor necessary to construct a highway bridge over the Grasse River in the Town of Massena, New York.

The bridge will consist of a riveted steel cantilever superstructure with a concrete substructure. The superstructure will be seven hundred and sixty-five (765) feet long, consisting of two anchor arms, each one hundred and fifty-seven and one half (157.5) feet long; two cantilever arms, each one hundred and twelve and one half (112.5) feet long and a suspended span, two hundred and twenty-five (225) feet long.

The bridge will have one roadway eighteen feet wide, and two sidewalks, each six feet wide.

The work will also require the grading of the approaches.

Proposals will be received separately for the substructure and for the superstructure.

Plans and specifications may be had at the office of the Town Board or of the Consulting Engineers, the Jarrett-Chambers Company, Inc., No. 30 East 42nd Street, New York City, upon deposit of ten dollars for superstructure plans or five dollars for substructure plans, which will be refunded when the plans are returned.

A certified check, payable to the Town Board of Massena, New York, shall be enclosed with each proposal. Checks accompanying proposals for the superstructure shall be for the sum of ten thousand dollars. Checks accompanying proposals for the substructure shall be for three thousand dollars.

The right is reserved to reject any or all proposals or to waive any informality in the proposals received.

ANDREW J. HANMER,
Supervisor,
FRANK A. HOUGH,
Town Clerk.
Massena, N. Y.
JARRETT-CHAMBERS COMPANY, INC.
Engineers,
New York.

Bids: Feb. 21.

Combined Garbage Incinerator Plant

Sea Cliff, N. Y.

Sealed proposals will be received by the Board of Trustees of the Incorporated Village of Sea Cliff, Nassau County, New York, at the Village Offices in said Village until Wednesday evening, February 21st, 1923 at 8 o'clock p.m., for the construction of a Combined Garbage Incinerator Plant and Storage Building in the Incorporated Village of Sea Cliff, for the disposal of ashes, garbage, etc.

Specifications covering the work may be obtained upon request of the Village Clerk, Sea Cliff, New York.

The Board of Trustees reserves the right to reject any and all bids.

By order of the Board of Trustees,
RUTH H. BRANTHWAITE, Clerk.
Dated Sea Cliff, N. Y. January 29, 1923.

OFFICIAL PROPOSALS

Bids: Feb. 28.

Lock and Dam Construction of the Illinois Waterway Contract No. 2

Chicago, Ill.

1. Sealed proposals for the construction of STARVED ROCK LOCK AND DAM, located in the Illinois River, two miles above Utica, and seven miles below Ottawa, La Salle County, Illinois, will be received at the office of the Director of the Department of Public Works and Buildings, Division of Waterways, Room 122, State House, Springfield, Illinois, until Ten (10) o'clock A.M., Central Standard Time of the 28th day of February, 1923, and then publicly opened and read.

2. Copies of the plans, specifications, proposal blank, form of bond, and contract may be obtained by prospective bidders at the Office of the Department, Room 1404, 25 East Jackson Boulevard, Chicago, Illinois, upon depositing a check for Ten Dollars ($10.00), made payable to the Director of the Department of Public Works and Buildings, which sum will be returned within ten (10) days after the contract has been awarded, if the plans are returned in good condition within that time.

3. Each proposal shall be accompanied by a certified check or draft drawn on some responsible bank doing business in the City of Chicago, and made payable to the order of the Director of the Department of Public Works and Buildings, for five (5) per cent of the amount of the proposal. In lieu of a certified check or draft, the proposal may be accompanied by a bond executed in the form prescribed by the Department of Public Works and Buildings and with a surety company approved by the Department in the penal sum of ten (10) per cent of the amount of the proposal.

4. The Department of Public Works and Buildings reserves the right to reject any or all bids. The contract, if let, will be awarded to the lowest responsible bidder.

C. R. MILLER,
Director, Department of Public Works and Buildings.
WILLIAM L. SACKETT,
Superintendent of Waterways.
M. G. BARNES,
Chief Engineer,
Division of Waterways.

Bids: Feb. 22.

Levee Work

Beardstown, Ill.

1. Sealed bids will be received by the Commissioners of the South Beardstown Drainage and Levee District, of Cass County, Illinois, at the First State Bank, at Beardstown, Cass County, Illinois, up to the hour of two o'clock in the afternoon of the 22nd day of February, A. D., 1923, at which time and place said bids will be publicly opened.

2. The work for which bids are asked is the furnishing and erecting of the following:

(a) Raising and widening the levee from Station 0 to 18 by hauling in sand, approximately 14,000 cubic yards.

(b) Raising and widening the levee from Station 18 to 67 by dredge or dry land machinery, approximately 32,000 cubic yards.

(c) Raising and widening the levee from Station 67 to 329 by dredge boat work, approximately 120,500 cubic yards.

(d) Emmerson slough improvement. Filling the upper end of Emmerson slough.

(e) Borrow pit improvement, by closing the channel at certain points with earth embankments.

L. B. KINSEY,
Civil Engineer.
Pekin, Ill.

Proposal Ads for the Feb. 22 issue should be in our hands not later than 11 A. M., Monday, February 19th. Earlier closing for press due to holiday, Feb. 22.

OFFICIAL PROPOSALS

Bids: Feb. 27.

Drilling Well

Canton, Ill.

Notice is hereby given by the Fire and Water Committee of the City Council of the City of Canton, Illinois, that they will at three (3) o'clock on the 27th day of February, 1923, receive bids for the drilling of a well sixteen hundred and fifty (1,650) feet in depth and also for the purchase of the necessary casing and fittings for said well. Detailed information may be secured from Mr. E. F. Motsinger, City Engineer, Canton, Illinois.

A Bonding Company's Suggestion to Official Proposal Advertisers

"A large part of our contract bond business is submitted to us by wire, and I am a constant reader of the Official Proposals in order to find out the size and nature of the work that is referred to in the bond application. Very frequently I am unable to get any clear idea of what the advertisers are asking bids on, and of course the prospective bidder or contractor is also at a loss to know what kind of a job is being advertised.

"Traveling expenses are heavy at the present time, and contractors pay out considerable sums during the course of a year in investigating prospective contracts. This of course is a large charge that the owners eventually pay, and anything that will reduce the general overhead of contract work will eventually be to the advantage of the owner.

"One way to reduce this overhead is to word the advertisement so that the contractor sitting in his office will know whether or not he should investigate and prepare a bid on the proposed work."

Bids: Feb. 21.

Sewers

Sturgis, Mich.

The City Commission of the City of Sturgis, Mich., will receive sealed proposals until 2:00 p.m. Wednesday, February, 21st, 1923, for the construction of the following sewers: 700 ft. of 54 in.; 530 ft. of 36 in.; 30 ft. of 27 in.; 50 ft. of 18 in.; 5,080 ft. of 12 in.; 3,650 ft. of 10 in.; 4,715 ft. of 8 in.; 2,000 ft. of 6 in. house connections laid from sewer to curb line; 315 lineal ft. of manholes; plans and specifications are on file in office of City Engineer. Copies of same may be secured by a deposit of $5.00. A certified check for $1,000.00 must accompany bid. Right is reserved to rejeet any or all bids. Further information on application. By order of City Commission, City of Sturgis, Michigan.

ARTHUR H. NILES,
City Engineer.

Hauling Contracts Wanted

Road work, Material Handling, etc. Have several fleets of trucks ready for service anywhere. No job too large. Special equipment for any kind of dump truck hauling or unloading. Unlimited references. Glad to estimate.

HAMBRIDGE CONTRACTING CO.
68th and Greenway Ave., Philadelphia, Pa.

OFFICIAL PROPOSALS

Bids: Feb. 23.

Sewer

NO. 99

Milwaukee, Wis.

Sealed proposals for the construction of extensions to the intercepting sewer system of the City of Milwaukee, Wisconsin, will be received by the Sewerage Commission of the said City at its offices, 508 Market Street, Milwaukee, Wisconsin, until 1:30 p.m., the 23rd day of February, 1923, at which time and place during the session of the said Commission, the proposals will be publicly opened and read.

The work to be done embraces the building of the following work:

1,130 lineal feet of 48" Concrete Sewer.
1,550 lineal feet of 48" Cast Iron Pipe Sewer.

Together with other appurtenances.

The time allowed for the completion of this contract shall be six (6) months from the date of the Engineer's notice to begin the work.

The liquidated damages for not completing the work within the time above stated, shall, for each day in excess thereof, be Twenty-five ($25.00) Dollars.

Each proposal submitted must be accompanied by a cash deposit of, or, in lieu thereof, by a certified check drawn upon a National or State Bank or Trust Company, and to the order of the "Sewerage Commission of the City of Milwaukee" to the amount of Twenty-five Hundred ($2,500.00) Dollars.

Specifications and blank forms of proposals can be obtained and detailed plans examined at the office of the Sewerage Commission, 508 Market Street, and a full set of plans will be sent to any contractor upon receipt of five (5) Dollars. This sum will be returned upon surrender of the plans in good condition within thirty (30) days after award of the contract.

The Sewerage Commission of the City of Milwaukee reserves the right to reject any and all bids submitted.

Published by authority of the Sewerage Commission of the City of Milwaukee.

JOHN H. FOWLES,
Secretary.

Countersigned:
LOUIS M. KOTECKI,
Comptroller.

Bids: Feb. 27.

Bridge

Trenton, N. J.

Proposals for Bridge 216.6, Washington's Crossing-Pennington Road. The Board of Freeholders of Mercer County will receive bids on Tuesday, Feb. 27, 1923, at 2:30 o'clock in the afternoon, at their regular place of meeting, Court House, Trenton, New Jersey, for constructing a steel I beam bridge encased in concrete with a clear span of 35 feet over Woolseys branch of Jacobs creek on the road leading from Washington's Crossing to Pennington.

Prospective bidders are referred to plans and specifications covering the above work prepared by Harry F. Harris, Mercer County Engineer, which plans and specifications are on file in his office at the Court House, Trenton, New Jersey. Copies of said plans and specifications may be obtained upon deposit of the sum of ten dollars, which will be refunded if the plans are and specifications are returned in good condition within 48 hours after the bids are opened.

Each bid must be accompanied by a certified check in the amount of one thousand dollars ($1,000.00) payable to Edgar G. Weart, County Treasurer, also by a proposition from a surety company fulfilling the requirements of Section 507, Chapter 185, P. L., 1918.

The right is reserved to reject any or all bids and to waive any immaterial defect or informality in any bid should it be in the interest of the County to do so.

CHARLES H. REICHERT,
Director of Department of Bridges.

ATTENTION CONTRACTORS

Sublet wanted on Sewers, Water Line and Drainages. We have complete equipment for this class of work. Our equipment consists of two Trenching Machines, Backfiller Team and Truck, 5½ tons and Dragline specifications of Trenching Machine.
DEPTH—8, 10, 14, 20 ft.
WIDTH—16, 20, 24, 32, 45, 48, 52, 78
Will accept any work in Central States
CHAS. MALLOY & CO., Bensenville, Ill.

OFFICIAL PROPOSALS

Bids: Mar. 6.

State Road Work

Charleston, W. Va.

Sealed proposals will be received by the State Road Commission of West Virginia at its offices in Charleston, W. Va., until 10 o'clock a.m., on the 6th day of March, 1923, and opened and read immediately thereafter, at the Kanawha County Court House, Charleston, W. Va., for the construction of the following bridges, sections of state road and surface treatment:

Project 116—Kanawha County—Witcher Overhead Crossing No. 835—over New York Central Lines. Concrete structure, including encased steel girder over tracks. Total length 440 ft. Certified check $2,000.

Project 3039-3177—Fayette County—3.9 miles of the Gauley Bridge toward Ansted Road for grading, draining and paving with bituminous macadam. Certified check $4,000.

Project 3151-B—Boone County—4.1 miles of the Low Gap-Madison Road for grading and draining. Certified check $2,500.

Project 3041—Greenbrier County—3.1 miles of the Crawley-Clintonville Road for paving with bituminous macadam. Certified check $3,000.

Project 3180—Nicholas County—3.8 miles of the Drennen to Project 96 Road for grading and draining. Certified check $2,000.

Project 3170-B—Clay County—4 miles of the Head of Dulls Creek to Kanawha County line road for grading and draining. Certified check $2,500.

Project 121—Mercer County—16 miles of the Spanishburg-Flat Top Road for grading and draining. Certified check $11,000.

Project 3201—Lincoln County—7 miles of the Hamlin-Griffithsville Road for grading, draining and paving with bituminous macadam. Certified check for $6,000.

Project 3068—Ritchie County—9 miles of the Cairo-Harrisville Road for grading, draining and paving with cement concrete, rock asphalt, bituminous concrete or warrenite bitulithic. Certified check $10,000.

Project 3241—Ohio County—1.0 mile of the National Pike from Glenwood to Altenheim Hill. Reconstruction for paving with brick, sheet asphalt or warrenite bitulithic on concrete base. Certified check for $3,500.

Project 3132-A—Jackson County—2.5 miles of the Ravenswood-Sandyville Road for grading, draining and gravel surfacing. Certified check $2,000.

(Adjoining section 2.25 miles to be let by the Jackson County Court.)

Project 3227—0.6 miles and 3084-A—3.0 miles Wood County—Mineral Wells to Elizabeth Road for grading, draining and paving with concrete. Certified check $3,500.

(See note below.)

Project 3084-B—4.0 miles Wood County and Project 66—4.5 miles Wirt County—Mineral Wells to Elizabeth Road for grading, draining and paving with concrete. Certified check $8,500.

(See note below.)

Project 3038—2.1 miles and Project 3009-A—1.2 miles—Wirt County—Mineral Wells to Elizabeth Road, for grading, draining and paving with concrete. Certified check $3,500.

(Note: Bids will also be received for Projects 3227 and 3084-A; 3084-B and 66; 3038 and 3009-A combined, aggregating 15.4 miles for grading, draining and paving with concrete. Certified check $15,500.)

Project 3240—Roane County—3 miles of the Walton-Kanawha County Line Road, for paving with concrete. Certified check for $3,000.

Project 3081—Wetzel County—3 miles of the New Martinsville-Wileyville Road for gravel surfacing. Certified check for $1,200.

Projects 58-A and B—3092-3080—103-A and B—Tyler-Pleasants County—11.8 miles of the Sistersville-Grape Island Road for grading, draining and gravel surfacing. Certified check for $6,000.

Project 3100 — Gilmer County — Linn Bridge No. 848 over Leading Creek, 100 ft. steel through truss Ashlar Masonry substructure. Separate proposals will be received on substructure. Certified check for $500, and superstructure certified check for $500.

Project 125—Taylor County—Northwestern Turnpike, between Pruntytown-Harrison County Line 4.53 miles, grading, draining and paving with concrete. Certified check $9,000.

Project 3204—Harrison County—Northwestern Turnpike, Salem-Doddridge County Line, 1.54 miles for grading, draining and paving with concrete. Certified check $2,000.

Project 3199—Webster County—McGuire Gap to Webster Springs, 2.23 miles for grading and draining. Certified check $1,500.

OFFICIAL PROPOSALS

Project 126—Preston County—Northwestern Turnpike, from Aurora to the Maryland State Line, 4 miles for grading and draining. Certified check $2,500.

Project 3159—Lewis County—6.56 miles of the Staunton and Parkersburg Pike between Weston and the Upshur County Line for grading, draining and paving with concrete. Certified check for $10,000.

Project 3146—Grant County—9 miles Petersburg toward Maysville Road for grading and draining. Certified check $3,500.

Project 3149—Tannery Bridge No. 831—Grant County over Lunice Creek 130 ft. steel through truss concrete substructure. Separate proposals will be received for substructure. Certified check $500 and superstructure certified check for $500.

Project 3010—Mineral County—10.5 miles Northwestern Turnpike from New Creek to Hampshire County Line for paving with waterbound macadam. Certified check $6,000.

Project 3011-B—Hampshire County—5 miles of the Mineral County Line—Mechanicsburg Gap Road for paving with waterbound macadam. Certified check for $3,000.

Projects 2039, 2040, 2041, 2042, 2043, 2044 and 3060—Mercer County—32 miles cleaning and tar cold surface application, including furnishing and applying stone chips. Certified check $500.

Project 87—Mason County—4 5 miles cleaning and tar cold surface application, including furnishing and applying stone chips. Certified check $500.

Proposals will be received only upon State Standard forms, in accordance with plans, specifications and estimates of quantities therefor, which standard forms, plans, specifications and estimates of quantities may be obtained from the Division Engineer in whose territory the proposed construction work is located or from the office of the State Road Commission at Charleston, W. Va.

Each proposal must be accompanied by a certified check in the amount above specified.

The right is reserved to reject any and all proposals.

THE STATE ROAD COMMISSION OF WEST VIRGINIA.

E. B. CARSKADON, Secretary.

U. S. GOVERNMENT

COMMISSIONERS, D. C., WASHINGTON, February 9, 1923. Sealed proposals will be received at Room 509, District Building, until 2 o'clock p.m., March 1st, 1923, for paving streets with concrete aggregating about 140,000 square yards. For detailed information apply to Room 427, District Building.

SEALED PROPOSALS, indorsed "Proposals for Stack, Gulfport, Miss., Specification No. 4781," will be received at the Bureau of Yards and Docks, Navy Department, Washington, D. C., until 11 o'clock a.m., Feb. 21, 1923, and then and there publicly opened, for a radial brick stack on a concrete foundation, at the U. S. Veterans' Hospital, Gulfport, Miss. Specification No. 4781 may be obtained on application to the Bureau of Yards and Docks. Deposit of a check or postal money order for $10, payable to the Chief of the Bureau of Yards and Docks, is required as security for the safe return of the specification. L. E. GREGORY, Chief of Bureau, January 5, 1923.

UNITED STATES ENGINEER OFFICE, Room 616, Army Building, New York City—Sealed proposals will be received here until 12 o'clock Noon, March 2, 1923, and then opened, for dredging in Shrewsbury River, N. J. Further information on application.

Compensation Insurance

Some contractors "give" this insurance to a friend, either personal or political. How many, we wonder, "engage" the services of a specialist to advise them right in the intricate problems that arise in this business.

Alfred S. Hamilton
110 William St., New York

U. S. GOVERNMENT

U. S. ENGINEER OFFICE, Room 716, Army Building, 39 Whitehall Street, New York, N. Y. Sealed proposals will be received here until 12 m., March 13, 1923, and then opened, for dredging in Newtown Creek, New York, N. Y. Further information on application.

SEALED PROPOSALS, indorsed "Proposals for Hospital Construction, Gulfport, Miss., Specification No. 4774," will be received at the Bureau of Yards and Docks, Navy Department, Washington, D. C., until 11 o'clock a.m., Feb. 26, 1923, and then and there publicly opened, for the following work at the U. S. Veterans' Hospital, Gulfport, Miss.

Part I. New buildings, roads and walks; and removing existing building, roads and walks. The work includes plain and reinforced concrete; cast concrete; hollow tile work; structural steel; interior marble work; wood framing, sash, doors and finish; stucco; plaster and metal lath; tile, prepared and built-up roofing; sheet metal work; steel sash; steel covered sash and doors; miscellaneous steel and iron work; hardware; painting and glazing; and dumbwaiters.

Part II. Plumbing work inside the buildings, and outside sewers and drains, including soil, vent and drain piping; hot and cold water lines; interior stand pipe system; all valves, fittings, plumbing fixtures, and floor drains.

Part III. Complete heating and steam distributing systems for each building and an outside steam distributing system including high pressure and vacuum return lines; hot water heaters; underground concrete trenches; manholes; and cast iron manhole frames and covers.

Part IV. Lighting systems for each building; power systems and telephone conduits in certain buildings; and outside electric distributing systems including transformers, panel boards, fixtures, conduits, fibre ducts, and wiring.

Part V. Boiler plant equipment and piping, including brick settings for return tubular boilers, smoke flue, feed water heater, steel storage tanks, feed water and vacuum pumps, combined twin pump and receiver, fuel oil pumps and heater, motor-driven sludge pump, drip traps, incinerator with hot water heating and sterilizing equipment, complete piping systems for all apparatus, and the installation of horizontal return tubular boilers furnished by the Government.

Drawings and specification No. 4774 may be obtained on application to the Bureau of Yards and Docks, Navy Department, Washington, D. C. Deposits of checks or postal money orders, payable to the Chief of the Bureau of Yards and Docks, are required as security for the safe return of the drawings and specifications. Deposits shall be in the following amounts: Part I—$50, Part II—$50, Part III—$25, Part IV—$25, Part V—$15; and complete (all parts) $100. L. E. Gregory, Chief of Bureau. January 5, 1923.

U. S. ENGINEER OFFICE, GALVESTON, TEX., Sealed proposals will be received here until 11 a.m., Feb. 21, 1923, and then opened, for dredging channels at Brazos Island Harbor, Texas. Further information on application.

U. S. ENGINEER OFFICE, PROVIDENCE, R. I. Sealed proposals will be received here until 12 o'clock, noon, March 7, 1923, and then opened, for dredging in Connecticut River, Conn. Further information on application.

U. S. ENGINEER OFFICE, FLORENCE, ALA.—Sealed proposals will be received here until 11 A.M., February 17, 1923, and then opened, for furnishing displacement tanks for the regulating gates of Wilson Dam. Further information on application.

U. S. ENGINEER OFFICE, FLORENCE, ALA.—Sealed proposals will be received here until 11 A. M., February 21, 1923, and then opened, for furnishing castings and other parts for the regulating gates of Wilson Dam. Further information on application.

U. S. GOVERNMENT

SEALED PROPOSALS, indorsed "Proposals for Refrigerating Equipment, Gulfport, Miss. Specification No. 4780," will be received at the Bureau of Yards and Docks, Navy Department, Washington, D. C., until 11 o'clock a.m., Feb. 21, 1923, and then and there publicly opened, for refrigerating and ice-making equipment, using as refrigerant any satisfactory substance except ammonia, and consisting of motor-driven compressors, condensers, liquid receiver, motor-driven brine pumps, combination freezing and brine-cooling tank with expansion coils, water-precooler tank with coils, charcoal filters, brine agitator, water-agitating system by compressed air, automatic can filler, hand-operated can hoist, automatic can dump and ice chute, ice cans, oil and scale traps, piping and other accessories; and for coldstorage rooms with insulation for compartments including doors, floors, and equipment for the storage and handling of goods at the U. S. Veterans' Hospital, Gulfport, Miss. Drawings and Specification No. 4780 may be obtained on application to the Bureau of Yards and Docks. Deposit of a check or postal money order for $10, payable to the Chief of the Bureau of Yards and Docks, is required as security for the safe return of the drawings and specification. L. E. GREGORY, Chief of Bureau, January 5, 1923.

DEPARTMENT OF THE INTERIOR, UNITED STATES RECLAMATION SERVICE, Washington, D. C., February 3, 1923. Sealed proposals will be received at the office of the United States Reclamation Service, Denver, Colo., until 2 o'clock p.m., March 13, 1923, for furnishing one hydraulic turbine with synchronous by-pass valve for the Pilot Butte power plant, Riverton project, Wyoming. For particulars, address the United States Reclamation Service, Denver, Colorado, or Washington, D. C. A. P. Davis, Director.

U. S. GOVERNMENT

U. S. ENGINEER OFFICE, WILMINGTON, DEL.—Sealed proposals will be received here until 11 A.M., Feb. 24, 1923, and then opened, for constructing and delivering one steel quarter boat and two steel barges. Further information on application.

Contractors Everywhere Read These Advertisements

to see where bids are desired on contracts suited to their available plant and organization. The suggestion is therefore made to advertisers that they word their advertisements so that the contractor will get a good idea of the size and kind of work to be let, and perhaps the plant needed. This should result in an increased number of desirable bidders.

DEPARTMENT OF THE INTERIOR, UNITED STATES RECLAMATION SERVICE, Washington, D. C., February 3, 1923. Sealed proposals will be received at the office of the United States Reclamation Service, Denver, Colo., until 2 o'clock p.m., March 13, 1923, for furnishing one 1,000 kva. generator, transformers, and switching apparatus for the Pilot Butte power plant, Riverton project, Wyoming. For particulars, address the United States Reclamation Service, Denver, Colorado, or Washington, D. C. A. P. Davis, Director.

U. S. GOVERNMENT

U. S. ENGINEER OFFICE, Nashville, Tenn. Sealed proposals will be received here until 11 a.m., March 6, 1923, and then opened, for one electric towboat. Further information on application.

U. S. ENGINEER OFFICE, Florence, Ala.—Sealed proposals will be received here until 11 a.m., March 12, 1923, and then opened, for the construction and delivery of one steel barge 60 ft. by 22 ft. by 4 ft. Further information on application.

U. S. ENGINEER OFFICE, HUNTINGTON, W. VA.—Sealed proposals will be received here until 11 a.m., March 17, 1923 and then opened for constructing two two-story, twelve-room, lockkeepers' double houses at each of Dams Nos. 14 and 26, Ohio River. Further information on application.

SEALED PROPOSALS, indorsed "Proposals for Distilling Apparatus and Heater, Guantanamo, Cuba, Specification No. 4769," will be received at the Bureau of Yards and Docks, Navy Department, Washington, D. C. until 11 o'clock a.m., Feb. 28, 1923, and then and there publicly opened, for furnishing and installing sea-water distilling apparatus having a capacity of 25,000 gallons per 24 hours when operating as a quadruple effect at the Naval Station, Guantanamo, Cuba; also the furnishing and delivery of a closed feed water heater which will be installed by the Government. The Government will furnish all labor except skilled erector who shall supervise the installation of the distilling apparatus. Drawings and Specification No. 4769 may be obtained on application to the bureau. Deposit of a check or postal money order for $10, payable to the Chief of the Bureau of Yards and Docks, is required as security for the safe return of the drawings and specification. L. E. GREGORY, Chief of Bureau, January 30, 1923.

POSITIONS VACANT

EMPLOYMENT

POSITIONS WANTED

POSITIONS VACANT

ASSISTANT engineer for State Bureau of Public Health, Santa Fe, New Mexico. University graduate in sanitary engineering, with not less than three years' experience in waterworks and sewage disposal. Beginning salary $2,400 and travel expenses. Give full particulars, training, experience, references, in letter of application, to Director of Public Health, Santa Fe, New Mexico.

A-1 FOREMAN wanted for reinforced concrete and brick buildings; state age, salary and references. P-699, Eng. News-Record, 10th Ave. at 36th St., New York.

A WELL KNOWN manufacturer of gypsum roofs desires to make a permanent connection with a progressive sales engineer, now calling on the engineers, contractors and architects in the New England states. Give present connections, headquarters, experience, etc., when writing. P-703, Engineering News-Record, Leader-News Bldg., Cleveland, Ohio.

COMPRESSED air; experienced inspectors wanted on masonry tunnel construction under high air pressure. Apply in person. Passaic Valley Sewerage Commissioners, 128 Market Street, Newark, N. J.

WORKS MANAGER

Wanted by old established and progressive Company fabricating and erecting STRUCTURAL STEEL, plate work, concrete bars, etc. Man preferred with engineering experience. Advise age, present and past employment, salary expected and reference, and when could report.

P-700, Engineering News-Record,
1570 Old Colony Bldg., Chicago, Ill.

POSITIONS VACANT

CHIEF draftsman wanted to take complete charge drafting room, Middle West structural plant. Principally industrial mining and bridge structures. Capacity 1,000 tons per month. Position permanent and excellent opportunity for man with executive ability. Apply giving experience, age, married or single and salary expected to P-670, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

DETAILER for structural steel and ornamental iron; state age, experience and salary; permanent position for righ man; location, Connecticut. P-478, Eng. News-Record, 10th Ave. at 36th St., New York City.

DRAFTSMEN

First class men with experience on conveying machinery, structural and mechanical work. Reply must give experience fully, salary expected and when available.

Pittsburgh Plate Glass Company
Columbia Chemical Division, Barberton, O.

POSITIONS VACANT

DRAFTSMAN, with some engineering experience. Knowledge of mill construction and structural work in steel, wood and concrete necessary. Should be able to estimate. Temporary engagement. Reply stating age, if married, details of experience, references and salary desired. Security Cement & Lime Company, Hagerstown, Maryland.

DRAFTSMEN calculators wanted on special track work. With or without experience but must have thorough working knowledge of mathematics. P-658, Eng. News-Record, Real Estate Trust Bldg., Phila., Pa.

DRAFTSMEN, structural detailers and checkers wanted for heavy bridge work and buildings. State qualifications and salary expected. Bethlehem Steel Company, Bridge and Fabrication Department, Steelton, Penna.

DRAFTSMEN—Mechanical, experienced in mechanical and chemical layout work, power house layout work, and machine design. Give age, experience and salary expected. Apply to the Engineering Department. E. I. Du Pont de Nemours & Company, Inc., Wilmington, Delaware.

DRAFTSMAN—experienced in structural steel reinforced concrete and general building construction; hydro-electric work; position probably temporary; give full particulars of experience, age, references, date available and salary expected in first letter. Drawer A, Potsdam, New York.

SEARCHLIGHT SECTION

EMPLOYMENT—BUSINESS OPPORTUNITIES

Positions Wanted, 4 cents a word, minimum charge 75 cents an insertion.
Positions Vacant and all other classifications, 8 cents a word, minimum $2.

Box Numbers in care of any of our offices count as 10 words in addition to advertising copy. *Replies* are forwarded each day as received at all of our offices without additional charge. *Discount* of 10% is allowed if one payment is made in advance for 4 consecutive insertions.

THE ABOVE RATES ARE FOR ADVERTISEMENTS SET UNDISPLAYED. FOR DISPLAY RATES SEE "EQUIPMENT" HEADING.

E. N. R.

POSITIONS VACANT

DRAFTSMEN, experienced (only) detailers and checkers on structural steel. State salary, experience, and when available first letter. Pittsburgh-Des Moines Steel Co., Des Moines, Iowa.

DRAFTSMEN experienced in detailing and checking structural steel for buildings, permanent position for efficient men. Give age, experience, references. We operate throughout entire United States. International Steel & Iron Co., Evansville, Indiana.

ENGINEERING graduate to investigate, analyze and report on performance of all types of machinery, systems and business methods in use by largest concerns in country. Steady advancement. Travel half time. Salary and all expenses. State age, education, experience, religion, married or single. P-690, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

EXPERIENCED structural detailers and checkers; state age, experience, nationality, education and salary expected, in first letter. Indiana Bridge Company, Muncie, Indiana.

EXPERIENCED detailer and checker on shop drawings for structural shop. Give age, experience, etc. Stupp Bros. B. & I. Co., St. Louis, Mo.

EXPERIENCED structural steel detailers wanted. Also experienced structural steel estimator and designer. Permanent position. St. Louis Structural Steel Company, St. Louis, Missouri.

EXPERIENCED structural steel detailers and checkers; day and evening work. Weinberger & Weishoff, Inc., 345 Madison Ave., New York.

FIRST-CLASS structural steel detailers and checkers with experience on mill buildings, office buildings, etc. Position in Pittsburgh district. State experience and salary desired. P-525, Eng. News-Record, Leader-News-Bldg., Cleveland, O.

MUNICIPAL draftsman and designer, must have ability to design sewers, streets and concrete and make neat plats. Salary $150-$175. Give references and full details of experience in first letter. Address Kenneth Markwell, Chief Draftsman, City Engineer Department, Memphis, Tennessee.

POSITIONS VACANT

MAN wanted, experienced in purchase and sale of used contractors and railroad equipment in the East. Interest in business if results justify. P-691, Eng. News-Record, 10th Ave. at 36th St., New York.

ORNAMENTAL draftsman on iron work in metropolitan district. Kindly state salary, age and experience or application will not be considered. P-700, Eng. News-Record, 10th Ave. at 36th St., New York City.

POWER plant engineer wanted, located in Missouri. State fully experience, references, education, age, married or single, salary expected. P-694, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

SALES engineer wanted who is thoroughly conversant with modern concrete highway construction to join sales force of a national manufacturer of road building equipment in the Pittsburgh District. Preference given to man understanding general construction as well. P-686, Eng. News-Record, Leader-News Bldg., Cleveland, Ohio.

SEVERAL bridge designers and draftsmen wanted for State Highway Department in the Middle West. Should have at least two years' concrete and steel designing and preferably several years of general engineering experience. Give complete statement of experience and earliest date available. Submit sample of work if possible. Initial salary about $175.00 per month. P-449, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

STRUCTURAL detailer with ability to design steel for buildings. State experience and reference, also salary desired. Permanent position if satisfactory. Apply James McKinney & Son, Albany, N. Y.

SUPERINTENDENT wanted for sand and gravel bank. Must understand machinery and have had at least ten years' experience in a plant having crushing, screening and washing machinery. Must understand loading and measuring scows. Best reference required. P-688, Eng. News-Record, 10th Ave. at 36th St., New York.

WELL known manufacturer of gypsum roofs desires to make a permanent connection with a progressive sales engineer, now calling on the engineers, contractors and architects in the Southern states east of the Mississippi. Give present connections, headquarters, experience, etc., when writing. P-704, Engineering News-Record, Leader-News Bldg., Cleveland, Ohio.

EMPLOYMENT AGENCIES

SEVERAL draftsmen wanted immediately on structural steel, concrete conveyors, special track work and ornamental iron, also recent engineering graduates and some shop foremen. Cleveland Engineering Agency, Rose Building, Cleveland, Ohio.

STRUCTURAL designers, draftsmen and detailers. We have over fifty vacancies for qualified men. Write fully your experience first letter. Harrison Employment Service, 19 S. La Salle St., Chicago, Ill.

EMPLOYMENT SERVICE

STRUCTURAL draftsmen and detailers. We have over fifty positions for experienced and qualified men. Write fully first letter. H. H. Harrison & Co., Employment Service, 19 S. La Salle St., Chicago, Ill.

EXECUTIVES

Qualified men—Technical, Commercial and Manufacturing—seeking new positions find our effective and confidential service extremely satisfactory. Our Mr. H. H. Harrison can negotiate a suitable connection for you as he has done for thousands of others since 1909. Inquiries invited; confidences respected.

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Confidential Negotiators
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We have calls received from our large and carefully selected clientele for Factory Managers, Superintendents, Foremen, Designing Engineers, Draftsmen, Plant Engineers and Sales Engineers. A staff of experts for confidentially negotiating a satisfactory placement of your services.

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Built upon a record of sixteen years of square dealing
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Engineers, construction superintendents, sales-engineers, draftsmen—enroll with us! We will assist you in making that new connection you desire. We will handle preliminary negotiations for you—confidentially, efficiently and with no sacrifice of dignity. There is no charge for our services unless we are successful in placing you.

Construction Men

Learn "Line" and "Grade" by Actual Practice.

Level, Transit, and Plane Table Work.
"Running" of Farm, Stadia, Highway and Railroad Surveys.

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Day and evening courses. Booklet.

The Pan-American Engineering School
39 West 17th St., New York City

HIGHER ENGINEERING ***(By Mail)***

Get into the higher strata in your own line. Engineering has its highs and its lows. A *high*-grade engineer will lift you to his own level when he teaches you what he knows. An expert who knows his business and can also impart his knowledge and experience is a rarity, and Wilson Courses are in a class by themselves because there is the brain of genius behind them. Get into line for some good practical evening work; look into our proposition; literature is free.

We offer courses in *Reinforced Concrete Designing* and *Estimating; Structural Steel Design, Bridges, Steel* and *Concrete, Drafting.*
Easy terms of payment. Required for enrollment: technical education, high school mathematics, or their equivalent.

WILSON ENGINEERING CORPORATION
10 Broadway, Hanover, Mass.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ADVERTISEMENTS ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE.

OFFICIAL PROPOSALS

Bids: March 13.

Sewerage

Matewan, N. J.

Sealed bids or proposals for the construction of Sewers and Sewage Disposal Works will be received by the Mayor and Council at the Truck House Building, Jackson Street, Matewan, New Jersey, on the thirteenth day of March, 1923, at eight o'clock in the evening.

The work mainly consists of about 6½ miles of 6 inch to 12 inch vitrified pipe sewers and an Imhoff Tank.

For any information, or explanation that may be desired regarding drawings and specifications, bidders shall apply to George A. Johnson Company, Inc., Consulting Engineers, 150 Nassau Street, New York. Drawings and specifications may be obtained from George A. Johnson Company at the price of $15, which will not be refunded.

Each bid must be accompanied in a separate envelope by a certified check in the amount of seven thousand dollars ($7,000) for schedule number one, three thousand dollars ($3,000) for schedule number two, and a bond guaranteeing that if the proposal of the bidder is accepted and the contract awarded to him or them, the said bidder will enter into the said contract and execute the necessary instruments therefor, and upon the execution of said contract the said Surety Company will become surety on said bond guaranteeing the performance of the same.

The Borough reserves the right to accept any bids or to reject any or all bids.

WILLIAM H. SUTPHIN,
Mayor.

Bids: March 20.

Park Slope and Fort Hamilton Conduits

CONTRACT 197

New York, N. Y.

SEALED BIDS will be received by the Board of Water Supply, at its offices, twenty-second floor, Municipal Building, Park Row, Center and Chambers Streets, New York City, until 11 A.M., Eastern Standard time, on Tuesday, March 20, 1923, for Contract 197, for the construction of the Park Slope and Fort Hamilton conduits, portions of the City conduits of the Catskill aqueduct, extending from Shaft 23 of the City tunnel at Schermerhorn street and Third avenue along Third avenue, Dean street, Fourth avenue, Douglass street, St. Johns place, Eighth, Prospect, Tenth and Gravesend Avenue, Fort Hamilton parkway and 86th street to Shore road and along Shore road to 79th street, in the Borough of Brooklyn, New York City.

The conduits will consist of about 39,290 linear feet of 72-inch and 2,140 linear feet of 66-inch steel pipe, about 310 tons of cast-iron pipe and special castings of various sizes, a Venturi meter, valves and other appurtenances, all of which will have to be maintained for one year.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders, forms of bid and contract, specifications, contract drawings, etc., can be obtained at the office of the Secretary at the above address, by depositing the sum of ten dollars ($10) in cash or its equivalent for each pamphlet. For further particulars apply to the office of the Chief Engineer at the above address.

GEORGE J. GILIESPIE,
President,
JAMES P. SINNOTT,
PHILIP F. DONOHUE,
Commissioners, Board of Water Supply.
BENJ. F. EINBIGLER,
Secretary.

OFFICIAL PROPOSALS

Bids: Mar. 6.

State Road Work

Charleston, W. Va.

Sealed proposals will be received by the State Road Commission of West Virginia at its offices in Charleston, W. Va., until 10 o'clock a.m., on the 6th day of March, 1923, and opened and read immediately thereafter, at the Kanawha County Court House, Charleston, W. Va., for the construction of the following bridges, sections of state road and surface treatment:

Project 116—Kanawha County—Witcher Overhead Crossing No. 835—over New York Central Lines. Concrete structure, including encased steel girder over tracks. Total length 440 ft. Certified check $2,000.

Project 3039-3177—Fayette County—3.9 miles of the Gauley Bridge toward Ansted Road for grading, draining and paving with bituminous macadam. Certified check $4,000.

Project 3151-B—Boone County—4.1 miles of the Low Gap-Madison Road for grading and draining. Certified check $2,500.

Project 3041—Greenbrier County—3.1 miles of the Crawley-Clintonville Road for paving with bituminous macadam. Certified check $3,000.

Project 3180—Nicholas County—3.8 miles of the Drennen to Project 96 Road for grading and draining. Certified check $2,000.

Project 3170-B—Clay County—4 miles of the Head of Dulls Creek to Kanawha County line road for grading and draining. Certified check $2,500.

Project 121—Mercer County—16 miles of the Spanishburg-Flat Top Road for grading and draining. Certified check $11,000.

Project 3201—Lincoln County—7 miles of the Hamlin-Griffithsville Road for grading, draining and paving with bituminous macadam. Certified check for $6,000.

Project 3068—Ritchie County—9 miles of the Cairo-Harrisville Road for grading, draining and paving with cement concrete, rock asphalt, bituminous concrete or warrenite bitulithic. Certified check $10,000.

Project 3241—Ohio County—1.0 mile of the National Pike from Glenwood to Altenheim Hill. Reconstruction for paving with brick, sheet asphalt or warrenite bitulithic on concrete base. Certified check for $3,500.

Project 3132-A—Jackson County—2.5 miles of the Ravenswood-Sandyville Road for grading, draining and gravel surfacing. Certified check $2,000.

(Adjoining section 2.25 miles to be let by the Jackson County Court.)

Project 3227—0.6 miles and 3084-A—3.0 miles Wood County—Mineral Wells to Elizabeth Road for grading, draining and paving with concrete. Certified check $3,500.

(See note below.)

Project 3084-B—4.0 miles Wood County and Project 66—4.5 miles Wirt County—Mineral Wells to Elizabeth Road for grading, draining and paving with concrete. Certified check $8,500.

(See note below.)

Project 3038—2.1 miles and Project 3009-A—1.2 miles—Wirt County—Mineral Wells to Elizabeth Road, for grading, draining and paving with concrete. Certified check $3,500.

(Note: Bids will also be received for Projects 3227 and 3084-A; 3084-B and 66; 3038 and 3009-A combined, aggregating 15.4 miles for grading, draining and paving with concrete. Certified check $15,500.)

Project 3240—Roane County—3 miles of the Walton-Kanawha County Line Road, for paving with concrete. Certified check for $3,000.

Project 3081—Wetzel County—3 miles of the New Martinsville-Wileyville Road for gravel surfacing. Certified check for $1,200.

OFFICIAL PROPOSALS

Projects 58-A and B—3092-3080—103-A and B—Tyler-Pleasants County—11.8 miles of the Sistersville-Grape Island Road for grading, draining and gravel surfacing. Certified check for $6,000.

Project 3100 — Gilmer County — Linn Bridge No. 848 over Leading Creek, 100 ft. steel through truss Ashlar Masonry substructure. Separate proposals will be received on substructure. Certified check for $500, and superstructure certified check for $500.

Project 125—Taylor County—Northwestern Turnpike, between Pruntytown-Harrison County Line 4.53 miles, grading, draining and paving with concrete. Certified check $9,000.

Project 3204—Harrison County—Northwestern Turnpike, Salem-Doddridge County Line, 1.54 miles for grading, draining and paving with concrete. Certified check $2,000.

Project 3199—Webster County—McGuire Gap to Webster Springs, 2.23 miles for grading and draining. Certified check $1,500.

Project 126—Preston County—Northwestern Turnpike, from Aurora to the Maryland State Line, 4 miles for grading and draining. Certified check $2,500.

Project 3159—Lewis County—6.56 miles of the Staunton and Parkersburg Pike between Weston and the Upshur County Line for grading, draining and paving with concrete. Certified check for $10,000.

Project 3146—Grant County—9 miles Petersburg toward Maysville Road for grading and draining. Certified check $3,500.

Project 3149—Tannery Bridge No. 831—Grant County over Lunice Creek 130 ft. steel through truss concrete substructure. Separate proposals will be received for substructure. Certified check $500 and superstructure certified check for $500.

Project 3010—Mineral County—10.5 miles Northwestern Turnpike from New Creek to Hampshire County Line for paving with waterbound macadam. Certified check $6,000.

Project 3011-B—Hampshire County—5 miles of the Mineral County Line—Mechanicsburg Gap Road for paving with waterbound macadam. Certified check for $3,000.

Projects 2039, 2040, 2041, 2042, 2043, 2044 and 3060—Mercer County—32 miles cleaning and tar cold surface application, including furnishing and applying stone chips. Certified check $500.

Project 87—Mason County—4.5 miles cleaning and tar cold surface application, including furnishing and applying stone chips. Certified check $500.

Proposals will be received only upon State Standard forms, in accordance with plans, specifications and estimates of quantities therefor, which standard forms, plans, specifications and estimates of quantities may be obtained from the Division Engineer in whose territory the proposed construction work is located or from the office of the State Road Commission at Charleston, W. Va.

Each proposal must be accompanied by a certified check in the amount above specified.

The right is reserved to reject any and all proposals.

THE STATE ROAD COMMISSION OF
WEST VIRGINIA.

Compensation Insurance

Some contractors "give" this insurance to a friend, either personal or political. How many, we wonder, "engage" the services of a specialist to advise them right in the intricate problems that arise in this business.

Alfred S. Hamilton
110 William St., New York

OFFICIAL PROPOSALS

Bids: Mar. 2.

Sewer
No. 100

Milwaukee, Wis.

Sealed proposals for the construction of extensions to the intercepting sewer system of the City of Milwaukee, Wis., will be received by the Sewerage Commission of the said City at its office, 508 Market Street, Milwaukee, Wisconsin, until 1:30 p.m., the 2nd day of March, 1923, at which time and place during the session of the said Commission, the proposals will be publicly opened and read.

The work to be done embraces the building of the following work:

4,220 lineal feet of 42" concrete sewer.

Together with all manholes and other appurtenances.

The time allowed for the completion of this contract shall be six (6) months from the date of the Engineer's notice to begin work.

The liquidated damages for not completing the work within the time above stated shall, for each day in excess thereof, be Twenty-five ($25.00) Dollars.

Each proposal submitted must be accompanied by a cash deposit of, or, in lieu thereof, by a certified check drawn upon a National or State Bank or Trust Company, and to the order of the "Sewerage Commission of the City of Milwaukee" to the amount of Two Thousand ($2,000.00) Dollars.

Specifications and blank forms of proposals can be obtained and detailed plans examined at the office of the Sewerage Commission, 508 Market Street, and a full set of plans will be sent to any contractor upon receipt of five (5) dollars. This sum will be returned upon surrender of the plans in good condition within thirty (30) days after award of the contract.

The Sewerage Commission of the City of Milwaukee reserves the right to reject any and all bids submitted.

Published by authority of the Sewerage Commission of the City of Milwaukee.

JOHN H. FOWLES,
Secretary.

Countersigned:
LOUIS M. KOTECKI,
Comptroller.

Bids: Mar. 14.

High School Building

Buffalo, N. Y.

Pursuant to Subdivision 8 of Section 875 of the Education Law, sealed proposals for furnishing the labor and material required in the construction of the Lewis J. Bennett High School, 2885 Main Street, City of Buffalo, New York, are invited and will be received by the Board of Education at its office, No. 1401 Telephone Building, Buffalo, New York, until 2.00 p.m., on March 14, 1923, at which time said proposals will be publicly opened and read.

Instructions to bidders and other information, together with plans and specifications of the building, may be procured from the office of the Associated Buffalo Architects, Inc., Room No. 40 Delaware Court Building, No. 232 Delaware Avenue, Buffalo, New York, on and after February 14, 1923.

A deposit of fifty dollars ($50.00) will be required on each set of plans taken from the office of the Architects, which sum will be paid upon return of said documents intact and in good condition to the Architects not later than April 15, 1923.

To be entitled to consideration, the proposals must be made upon the forms provided by the Architects, which must be fully completed and must be delivered to the Board of Education not later than 2:00 p.m. of the date prescribed for the opening of proposals on the building.

All bids must be without conditions inserted by the bidder or limitations by letter or otherwise.

Security to accompany bid must be furnished by all bidders as provided in instruction to bidders and in bid form.

The Board of Education reserves the right to reject any or all bids.

Dated February 14, 1923.

BOARD OF EDUCATION.
JAMES STORER,
Secretary.

OFFICIAL PROPOSALS

Bids: March 20.

Steel and Concrete Bridge Work
SOUTH END BRIDGE

Manchester, N. H.

Sealed bids for the construction of the South End Bridge over the Merrimac River and the Boston and Maine Railroad in the City of Manchester, N. H., including the approaches, will be received by the Surveyor of the Department of Highways of said City at his office in City Hall until 2 o'clock p.m. on Tuesday, March 20, 1923, at which time and place the bids will be publicly opened and read aloud.

The work will extend from Second Street on the west to the junction of Byron and McElwain Streets on the east, a distance of about 2,100 feet, and consists of the following:

An approach about 400 feet long on the west.

A viaduct on the west about 350 feet long with seven reinforced concrete spans.

A river bridge over the Merrimac River about 460 feet long with three steel deck truss spans carrying a reinforced concrete deck.

A viaduct on the east about 370 feet long with six reinforced concrete spans and one steel span encased in concrete.

An approach about 500 feet long on the east.

The roadway pavement will be of bituminous macadam.

Each bid must be accompanied by a properly certified check for Fifty Thousand (50,000) Dollars. A bond in the sum of Five Hundred Thousand (500,000) Dollars of an approved surety company will be required for the faithful performance of the contract.

A more complete description of the work to be done is given in Notice to Bidders, Forms of Bid, Contract, Bond, the Specifications and the Contract Drawings accompanying the same.

Copies of the foregoing may be inspected at the office of the Commissioners, Department of Highways, Manchester, N. H., and may be obtained from the engineers, Fay, Spofford & Thorndike, 200 Devonshire Street, Boston, Mass., by payment of a twenty-five (25) dollar deposit.

Receipt of bids will be subject to the conditions stated in said Notice to Bidders.

The right is reserved to reject any or all bids.

E. R. CONANT,
Surveyor of the Department of Highways.
JOHN H. GLEASON,
JOSEPH QUIRIN,
L. J. FARRELL,
Commissioners, Department of Highways for the City of Manchester, N. H.
Fay, Spofford & Thorndike, Engineers,
200 Devonshire Street,
Boston, Massachusetts.
February 19, 1923.

Bids: March 6th.

Road Work

Norwalk, Conn.

Sealed bids will be received by the Mayor and City Council of Norwalk, Conn., at the Mayor's Office, City Hall, South Norwalk, Conn., at 7 p.m., March 6th, 1923, for constructing a road leading to the new park, now known as Calf Pasture Beach.

This work consists of about 23,000 yards of earth and gravel excavation and 200 yards of rock excavation from the roadway site, and about 4,000 yards of excavation from gravel barrow pit, all to be used for fill in the new road. The road is to be a boulevard 100 ft. wide and a crossroad of 75 ft. wide. There are about 13,000 sq.yds. of gravel road surface.

Plans and specifications may be secured from the City Engineer, South Norwalk, Conn., upon the payment of Ten ($10.00) Dollars, which sum will be refunded when the plans are returned in good condition to the City Engineer.

CALVIN L. BARTON,
Mayor.

OFFICIAL PROPOSALS

Bids: March 9.

Sewerage System Extensions

Milwaukee, Wis.

Sealed proposals for the construction of extensions to the intercepting sewer system of the City of Milwaukee, Wisconsin, will be received by the Sewerage Commission of the said City at its offices, 508 Market Street, Milwaukee, Wisconsin, until 1:30 p.m., the 9th day of March, 1923, at which time and place during the session of the said Commission, the proposals will be publicly opened and read.

The work to be done embraces the building of the following work:

8,475 Lineal feet 84" concrete sewer.
400 Lineal feet 72" concrete sewer.
687 Lineal feet 54" concrete sewer.
653 Lineal feet 18" concrete sewer.

Together with all manholes and other appurtenances.

The time allowed for the completion of this contract shall be twelve (12) months from the date of the Engineer's notice to begin work.

The liquidated damages for not completing the work within the time above stated shall, for each day in excess thereof, be Twenty-five ($25.00) Dollars.

Each proposal submitted must be accompanied by a cash deposit of, or, in lieu thereof, by a certified check drawn upon a National or State Bank or Trust Company, and to the order of the "Sewerage Commission of the City of Milwaukee" to the amount of Five Thousand ($5,000.00) Dollars.

All cash deposits or certified checks deposited by bidders to whom the contract is not awarded will be returned upon application to the Secretary of the Sewerage Commission after the contract has been awarded, or after the rejection of all bids. The cash deposit or certified check which has been deposited by the successful bidder will be returned to him as soon as the contract is properly executed and approved by the City Attorney and by the Sewerage Commission.

Specifications and blank forms of proposals can be obtained and detailed plans examined at the office of the Sewerage Commission, 508 Market Street, and a full set of plans will be sent to any contractor upon receipt of five dollars ($5.00). This sum shall be returned upon surrender of the plans in good condition within thirty (30) days after award of the contract.

The Sewerage Commission of the City of Milwaukee reserves the right to reject any and all bids submitted.

Published by authority of the Sewerage Commission of the City of Milwaukee.

JOHN H. FOWLES,
Secretary.

Countersigned:
LOUIS M. KOTECKI,
Comptroller.

Bids: March 22.

Dragline

Fond du Lac, Wis.

Sealed bids will be received at the office of the City Clerk up to three o'clock p.m., March 22nd, 1923, for furnishing one One Cubic Yard or Three-Quarters Cubic Yard Caterpillar Mounted Dragline for the City of Fond du Lac, Wisconsin, according to the plans and specifications on file in the City Clerk's office.

A certified check in the sum of 10% of the amount of the bid must accompany the proposal.

PARK BOARD.
A. M. HUNTER, Secretary.
Dated February 21, 1923.

Practical experience intelligently applied—That' the result getter. Swart service really serves.

HARMON V. SWART
Contract Bonds
Compensation Insurance
92 William St., New York

CONTRACT BONDS FOR RESPONSIBLE CONTRACTORS
Aetna bonds are often issued as a direct result of expert engineering advice.
ÆTNA CASUALTY AND SURETY COMPANY
HARTFORD, CONN. AGENTS EVERYWHERE

OFFICIAL PROPOSALS

Bids: Mar. 7.

Additions to Montebello Filters

Baltimore, Md.

Sealed proposals, in duplicate, endorsed, "Bids for Additions to Montebello Filters, Contract No. 63, Water Department," addressed to the Board of Awards of Baltimore City, will be received at the office of the City Register, City Hall, Baltimore, Md., until 11 A.M., Wednesday, March 7th, 1823, at which time they will be publicly opened and read.

Plans and specifications may be obtained at the office of the Water Engineer, Room 204, City Hall, Baltimore, Md., on or after February 17th, 1923. A charge of twenty-five (25) dollars will be made for each set of plans and specifications; this amount will be refunded upon the return of these plans and specifications before March 14th, 1923, in good condition. Specifications used in making a bid will be considered as returned. Blueprints will be furnished to prospective bidders only upon written request, at 25 cents each, which amount will not be refunded.

A certified check of the bidder on a clearing house bank, made payable to the Mayor and City Council of Baltimore, for the sum of thirty-five (35) thousand dollars, will be required with each bid.

The principal items are approximately as follows:

Excavation, 365,000 cu.yds.
Rolled embankment, 74,000 cu.yds.
Concrete, 45,400 cu.yds.
Steel reinforcement, 3,760,000 pounds.
Setting cast iron pipe, valves and sluice gate, 800 tons.

The successful bidder will be required to give bond equal in amount to the value of the contract to comply with the city charter respecting contracts.

The Board of Awards reserves the right to reject any or all bids.

Approved: WM. A. MEGRAW,
Water Engineer.

Bids: March 5.

Annual Supplies

Hamilton, Ont.

Sealed tenders will be received by the undersigned addressed to Thos. W. Jutten, Esq., Mayor, Chairman Board of Control, City Hall, Hamilton, Ont., up to 12 o'clock noon, Monday, March 5th, 1923, for supplying the Corporation of the City of Hamilton with the following:

Broken Stone and Screenings, Asphalt Cement, Limestone Dust, Asphalt Sand, Sand and Gravel, Creosoted Wooden Blocks, Sewer Pipe, Iron Castings (ordinary), Cast Iron Pipe and Special Castings, Valves, Extension Boxes, Fuel Oil, Road Oil, Concrete and Garbage Duck Covers, Waterproof Clothing, Bass Brooms, Sectional Sweepers, Brass Work, including ordinary and special brass and bronze castings for water department, special Iron Hydrant Castings and Bronze and Manganese Castings for same.

Tenders to be on forms supplied and plainly marked on the outside—"Tender for Asphalt Sand" or as the case may be.

Specifications and forms of tender for the above can be obtained at the office of the Purchasing Agent, City Hall, Hamilton, Ont.

The lowest or any tender not necessarily accepted.

S. H. KENT,
City Clerk.

Hamilton, February 15th, 1923.

Bids: March 15.

Engine, Generator and Switchboard

Oxford, Miss.

Sealed proposals will be received by the Board of Mayor and Aldermen of the City of Oxford, Mississippi, until noon, Central Standard Time, Thursday, March 15th, for engine, generator and switchboard equipment for the Municipal Water and Light Plant. Proposals will be considered for either oil engine or steam engine equipment. The right to reject any or all bids is retained.

For further information and specifications apply to R. J. FARLEY, Mayor, or T. M. EARLY, Superintendent Water and Light Plant.

OFFICIAL PROPOSALS

Bids: Feb. 28.

Lock and Dam Construction of the Illinois Waterway Contract No. 2

Chicago, Ill.

1. Sealed proposals for the construction of STARVED ROCK LOCK AND DAM, located in the Illinois River, two miles above Utica, and seven miles below Ottawa, La Salle County, Illinois, will be received at the office of the Director of the Department of Public Works and Buildings, Division of Waterways, Room 122, State House, Springfield, Illinois, until Ten (10) o'clock A.M., Central Standard Time of the 28th day of February, 1923, and then publicly opened and read.

2. Copies of the plans, specifications, proposal blank, form of bond, and contract may be obtained by prospective bidders at the Office of the Department, Room 1404, 25 East Jackson Boulevard, Chicago, Illinois, upon depositing a check for Ten Dollars ($10.00), made payable to the Director of the Department of Public Works and Buildings, which sum will be returned within ten (10) days after the contract has been awarded, if the plans are returned in good condition within that time.

3. Each proposal shall be accompanied by a certified check or draft drawn on some responsible bank doing business in the City of Chicago, and made payable to the order of the Director of the Department of Public Works and Buildings, for five (5) per cent of the amount of the proposal. In lieu of a certified check or draft, the proposal may be accompanied by a bond executed in the form prescribed by the Department of Public Works and Buildings and with a surety company approved by the Department in the penal sum of ten (10) per cent of the amount of the proposal.

4. The Department of Public Works and Buildings reserves the right to reject any or all bids. The contract, if let, will be awarded to the lowest responsible bidder.

C. R. MILLER,
Director, Department of Public Works and Buildings.

WILLIAM L. SACKETT,
Superintendent of Waterways.

M. G. BARNES,
Chief Engineer,
Division of Waterways.

Bids: March 6.

Bituminous Road Materials and Calcium Chloride

Lansing, Mich.

Notice to Manufacturers and Distributors of Bituminous Materials and Calcium Chloride:

Sealed proposals will be received at the office of Frank F. Rogers, State Highway Commissioner, Lansing, Michigan, until 10 o'clock a.m., Central Standard Time, Tuesday, March 6, 1923, for furnishing to counties approximately:

1,549,300 gallons of Surface Treatment Material.
82,500 gallons of Cold Patch Material.
126,500 gallons of Joint Filler Material.
274,000 gallons of Bituminous Macadam (Penetration) Material.
174,000 gallons of Light Oil for Dust Palliative.
4,540 tons of Calcium Chloride.

in approximate quantities stated, in accordance with provisions of specifications and instructions to bidders.

Specifications, instructions to bidders and proposal blanks may be obtained at the office of the State Highway Department, Lansing, Michigan.

A certified check in the sum of five (5) per cent of amount of bid, made payable to Frank F. Rogers, State Highway Commissioner, must accompany each proposal.

The right is reserved to reject any or all proposals.

FRANK F. ROGERS,
State Highway Commissioner.

Lansing, Michigan.
February 19, 1923.

Hauling Contracts Wanted

Road work, Material Handling, etc. Have several fleets of trucks ready for service anywhere. No job too large. Special equipment for any kind of dump truck hauling or unloading. Unlimited references. Glad to estimate.

HAMBRIDGE CONTRACTING CO.
68th and Greenway Ave., Philadelphia, Pa.

OFFICIAL PROPOSALS

Bids: Mar. 2.

$160,000 Street Improvement Bonds

Lincolnton, N. C.

Sealed proposals will be received by the Board of Aldermen of the Town of Lincolnton, North Carolina, until 2nd day of March, 1923, at 8 o'clock p.m., when they will be publicly opened for the purchase of one-hundred and sixty thousand dollars street and sidewalk improvement bonds; said bonds will mature, serially. Eight bonds on March 1st, in each of the years 1925 to 1939, inclusive; Ten bonds on March 1st in each of the years 1940 to 1943, inclusive.

All bonds dated March 1st, 1923; denominations $1,000.00; principal and semi-annual interest payable in New York or such other place as may be agreed upon by the purchaser and the Board of Aldermen; coupon bonds with privilege of registration as to principal alone; bidder will name rate of interest not exceeding six per cent. Interest payable semi-annually on September 1st and March 1st in each year.

These bonds are direct and general obligations of the Town of Lincolnton, issued under and pursuant to the Municipal Finance Act, and and unlimited tax for the payment of principal and interest has been authorized by law and ordinance.

All bids must be on blank forms which will be furnished by the undersigned and must be enclosed in sealed envelope marked "Proposal for Bonds" and addressed to Dr. J. R. Gamble, Mayor, and must be accompanied by certified check or cash drawn to the order of J. O. Allen, Town Treasurer, upon an incorporated Bank or Trust company for two per centum of the face amount of bonds bid for to secure the Town against any loss resulting from the failure of the bidder to comply with the terms of his bid. Purchaser must pay accrued interest from the date of the bonds to the date of the delivery. The bonds cannot be sold at less than par and accrued interest. Purchaser to pay for lithographing and printing of bonds, likewise to furnish legal opinion at his own expense. Bonds will be delivered to the purchaser, at such place as the purchaser may designate, at purchaser's expense, including New York exchange, and must then be paid for in New York funds.

The right is reserved to reject any and all bids.

By order of the Board of Aldermen, Town of Lincolnton, North Carolina, this the 6th day of February, 1923.

Signed R. H. DELLINGER,
Clerk Board of Aldermen,
Town of Lincolnton, N. C.

U. S. GOVERNMENT

SEALED PROPOSALS for furnishing and erecting 6 direct fired heaters for heating hangars at Mitchel Field, L. I., N. Y., will be received and publicly opened at 11 a.m., Feb. 28, 1923, at Constructing Quartermaster's Office, Room 510, 39 Whitehall Street, New York City, N. Y. Information at above address.

SEALED PROPOSALS for constructing, delivering and erecting water tank and tower. Office, District Engineer, Mississippi River Dredging District, Post Office Box 1017, Memphis, Tenn. Sealed proposals for constructing, delivering and erecting one Water Tank and Tower at U. S. Dredge Depot, will be received here until 9:30 a.m., March 22, 1923, and then opened. Further information on application.

ATTENTION CONTRACTORS

Sublet wanted on Sewers, Water Line and Drainages. We have complete equipment for this class of work. Our equipment consists of two Trenching Machines, Backfiller Team and Truck, 5½ tons and Dragline specifications of Trenching Machine.
DEPTH—8, 10, 14, 20 ft.
WIDTH—16, 20, 24, 32, 45, 48, 52, 78
Will accept any work in Central States
CHAS. MALLOY & CO., Bensenville, Ill.

U. S. GOVERNMENT

U. S. ENGINEER OFFICE, Nashville, Tenn. Sealed proposals will be received here until 11 a.m., March 6, 1923, and then opened, for one electric towboat. Further information on application.

U. S. ENGINEER OFFICE, Florence, Ala.—Sealed proposals will be received here until 11 a.m., March 12, 1923, and then opened, for the construction and delivery of one steel barge 60 ft. by 22 ft. by 4 ft. Further information on application.

U. S. ENGINEER OFFICE, HUNTINGTON, W. VA.—Sealed proposals will be received here until 11 a.m., March 17, 1923, and then opened for constructing two two-story, twelve-room, lockkeepers' double houses at each of Dams Nos. 14 and 26, Ohio River. Further information on application.

U. S. ENGINEER OFFICE, WILMINGTON, DEL.—Sealed proposals will be received here until 11 A.M., Feb. 24, 1923, and then opened, for constructing and delivering one steel quarter boat and two steel barges. Further information on application.

U. S. GOVERNMENT

SEALED PROPOSALS, indorsed "Proposals for Distilling Apparatus and Heater, Guantanamo, Cuba, Specification No. 4769," will be received at the Bureau of Yards and Docks, Navy Department, Washington, D. C. until 11 o'clock a.m., Feb. 28, 1923, and then and there publicly opened, for furnishing and installing sea-water distilling apparatus having a capacity of 25,000 gallons per 24 hours when operating as a quadruple effect at the Naval Station, Guantanamo, Cuba; also the furnishing and delivery of a closed feed water heater which will be installed by the Government. The Government will furnish all labor except skilled erector who shall supervise the installation of the distilling apparatus. Drawings and Specification No. 4769 may be obtained on application to the bureau. Deposit of a check or postal money order for $10, payable to the Chief of the Bureau of Yards and Docks, is required as security for the safe return of the drawings and specification. L. E. GREGORY, Chief of Bureau. January 30, 1923.

U. S. ENGINEER OFFICE, PROVIDENCE, R. I. Sealed proposals will be received here until 12 o'clock, noon, March 7, 1923, and then opened, for dredging in Connecticut River, Conn. Further information on application.

U. S. GOVERNMENT

UNITED STATES ENGINEER OFFICE, Room 616, Army Building, New York City—Sealed proposals will be received here until 12 o'clock Noon, March 2, 1923, and then opened, for dredging in Shrewsbury River, N. J. Further information on application.

U. S. ENGINEER OFFICE, Room 716, Army Building, 39 Whitehall Street, New York, N. Y. Sealed proposals will be received here until 12 m., March [illegible], 1923, and then opened, for dredging in Newtown Creek, New York, N. Y. Further information on application.

U. S. ENGINEERS OFFICE, 815 Witherspoon Bldg., Philadelphia, Pa. Bids are wanted until Mar. 21, 1923, for dredging in Delaware River, Philadelphia Harbor. Further information on application.

UNITED STATES ENGINEER OFFICE, DETROIT, MICH.—Sealed proposals will be received here until 11 a.m., eastern time, March 21, 1923, and then opened, for dredging below the Locks, St. Marys River, Mich. Further information on application.

UNITED STATES ENGINEER OFFICE, DETROIT, MICH.—Sealed proposals will be received here until 11 a.m., eastern time, March 20, 1923, and then opened, for dredging Vidal Shoals, St. Marys River, Mich. Further information on application.

EMPLOYMENT

POSITIONS VACANT

A-1 FOREMAN wanted for reinforced concrete and brick buildings; state age, salary and references. P-699, Eng. News-Record, 10th Ave. at 36th St., New York.

A WELL KNOWN manufacturer of gypsum roofs desires to make a permanent connection with a progressive sales engineer, now calling on the engineers, contractors and architects in the New England states. Give present connections, headquarters, experience, etc., when writing. P-703, Engineering News-Record, Leader-News Bldg., Cleveland, Ohio.

CITY engineer—only those with experience need apply. City has a population of 8,000. State age, experience, and salary expected. Address, H. C. Gowran, Mayor, Two Rivers, Wisconsin.

DETAILER for structural steel and ornamental iron; state age, experience and salary; permanent position for righ man; location, Connecticut. P-478, Eng. News-Record, 10th Ave. at 36th St., New York City.

DRAFTSMEN calculators wanted on special track work. With or without experience but must have thorough working knowledge of mathematics. P-658, Eng. News-Record, Real Estate Trust Bldg., Phila., Pa.

POSITIONS VACANT

DRAFTSMEN, structural detailers and checkers wanted for heavy bridge work and buildings. State qualifications and salary expected. Bethlehem Steel Company, Bridge and Fabrication Department, Steelton, Penna.

DRAFTSMEN—Mechanical, experienced in mechanical and chemical layout work, power house layout work, and machine design. Give age, experience and salary expected. Apply to the Engineering Department. E. I. Du Pont de Nemours & Company, Inc., Wilmington, Delaware.

DRAFTSMAN—experienced in structural steel reinforced concrete and general building construction; hydro-electric work; position probably temporary; give full parti ulars of experience, age, references, date available and salary expected in first letter. Drawer A, Potsdam, New York.

DRAFTSMEN experienced in detailing and checking structural steel for buildings, permanent position for efficient men. Give age, experience, references. We operate throughout entire United States. International Steel & Iron Co., Evansville, Indiana.

DRAFTSMEN, detailers and checkers, on shop detailing for structural steel. Morava Construction Co., 85th and Stewart Avenue, Chicago, Ill.

POSITIONS VACANT

DRAFTSMAN wanted for general ornamental iron work, preferably with some architectural experience, however experience in ornamental iron work unnecessary. Permanent position for right man. State qualifications, salary expected and when can report. Address The Ingalls Iron Works Company, Birmingham, Alabama.

DRAFTSMAN wanted; first class mechanic Structural with elevator or conveyor experience. Give full information and salary required. Location, Cleveland. P-720, Eng. News-Record, Leader-News Bldg., Cleveland, Ohio.

DRAFTSMAN and designer. Experienced on industrial plant construction. Give full information regarding experience, age, etc. Good opportunity. The Austin Company, 1026 Bulletin Building, Philadelphia, Pa.

ENGINEERING graduate to investigate, analyze and report on performance of all types of machinery, systems and business methods in use by largest concerns in country. Steady advancement. Travel half time. Salary and all expenses. State age, education, experience, religion, married or single. P-690, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

DRAFTSMEN

First class men with experience on conveying machinery, structural and mechanical work. Reply must give experience fully, salary expected and when available.

Pittsburgh Plate Glass Company
Columbia Chemical Division, Barberton, O.

ORNAMENTAL DRAFTSMAN

Structural steel and ornamental iron fabricating concern in Massachusetts would like to hear from a high grade, thoroughly experienced Ornamental Iron draftsman; structural drafting knowledge desirable but not essential. Please state fully age, education, experience.

P-711, Engineering News-Record,
10th Ave. at 36th St., New York City

HIGHER ENGINEERING
(HOME STUDY)

An enthusiastic student has suggested that we set forth in our advertising the class of men who are studying the Wilson Courses, and we are complying with this request. The majority of our students are Technical Graduates with from no experience to 10 years: others have picked up what they know in a haphazard manner and lack confidence in their methods and are afraid to go ahead with important work. In this class are some City Engineers, County Engineers, and men who see a good job ahead and realize that they cannot fill it without further training. Bright High School men who have no technical training, but have years of practical experience on Construction Work; Draftsmen who are ambitious; Older men use this work for "brush-up" purposes. Our courses go right to the heart of your problems; we finish off grads. of all other schools who have weak spots in their training.

Reinforced Concrete Engineering Estimating. Structural Steel Designing & Drafting. Bridges: Steel & Concrete.

Guaranteed to give satisfaction; you cannot fail to be benefited by a Wilson course. Easy terms of payment; free literature.

WILSON ENGINEERING CORPORATION
10 Broadway, Hanover, Mass.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ADVERTISEMENTS ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE.

OFFICIAL PROPOSALS

Bids: Mar. 20.

Narrows Siphon No. 2 Contract 198

New York, N. Y.

Sealed bids will be received by the Board of Water Supply, at its offices, twenty-second floor, Municipal Building, Park Row, Centre and Chambers Streets, New York City, until 11 a.m., Eastern Standard time, on Tuesday, March 20, 1923, for Contract 198, for the construction of Narrows Siphon No. 2, a 42-inch, flexible-jointed, cast-iron submarine pipe-line about 8,800 feet long, with shore connections of 42-inch and 48-inch bell-and-spigot cast-iron pipes about 560 feet in length. This siphon is a portion of the Catskill aqueduct and will extend across the Narrows of New York harbor from 86th Street and Shore Road, Bay Ridge, Brooklyn, to Vanderbilt Avenue and Bay Street, Clifton, Staten Island.

The work consists principally of furnishing approximately 4,650 tons of submarine pipes, dredging a trench in which the pipe-line will be laid across the Narrows, including the shore ends, and refilling over the pipe-line. The land work is to include furnishing and laying about 330 tons of cast-iron pipe and special castings of various sizes, furnishing and setting two large meters, building chambers and manholes and doing other incidental work.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders, forms of bid and contract, specifications, contract drawings, etc., can be obtained at the office of the Secretary at the above address, by depositing the sum of ten dollars ($10) in cash or its equivalent for each pamphlet. For further particulars apply to the office of the Chief Engineer at the above address.

GEORGE J. GILLESPIE,
President.
JAMES P. SINNOTT,
PHILIP F. DONOHUE,
Commissioners, Board of Water Supply.
BENJ. F. EINBIGLER, Secretary.

Bids: March 5.

Annual Supplies

Hamilton, Ont.

Sealed tenders will be received by the undersigned addressed to Thos. W. Jutten, Esq., Mayor, Chairman Board of Control, City Hall, Hamilton, Ont., up to 12 o'clock noon, Monday, March 5th, 1923, for supplying the Corporation of the City of Hamilton with the following:

Broken Stone and Screenings, Asphalt Cement, Limestone Dust, Asphalt Sand, Sand and Gravel, Creosoted Wooden Blocks, Sewer Pipe, Iron Castings (ordinary), Cast Iron Pipe and Special Castings, Valves, Extension Boxes, Fuel Oil, Road Oil, Concrete and Garbage Duck Covers, Waterproof Clothing, Bass Brooms, Sectional Sweepers, Brass Work, including ordinary and special brass and bronze castings for water department, special Iron Hydrant Castings and Bronze and Manganese Castings for same.

Tenders to be on forms supplied and plainly marked on the outside—"Tender for Asphalt Sand" or as the case may be.

Specifications and forms of tender for the above can be obtained at the office of the Purchasing Agent, City Hall, Hamilton, Ont.

The lowest or any tender not necessarily accepted.

S. H. KENT,
City Clerk.

Hamilton, February 15th, 1923.

OFFICIAL PROPOSALS

Bids: March 20.

Steel and Concrete Bridge Work

SOUTH END BRIDGE

Manchester, N. H.

Sealed bids for the construction of the South End Bridge over the Merrimac River and the Boston and Maine Railroad in the City of Manchester, N. H., including the approaches, will be received by the Surveyor of the Department of Highways of said City at his office in City Hall until 2 o'clock p.m. on Tuesday, March 20, 1923, at which time and place the bids will be publicly opened and read aloud.

The work will extend from Second Street on the west to the junction of Byron and McElwain Streets on the east, a distance of about 2,100 feet, and consists of the following:

An approach about 400 feet long on the west.

A viaduct on the west about 350 feet long with seven reinforced concrete spans.

A river bridge over the Merrimac River about 460 feet long with three steel deck truss spans carrying a reinforced concrete deck.

A viaduct on the east about 370 feet long with six reinforced concrete spans and one steel span encased in concrete.

An approach about 500 feet long on the east.

The roadway pavement will be of bituminous macadam.

Each bid must be accompanied by a properly certified check for Fifty Thousand (50,000) Dollars. A bond in the sum of Five Hundred Thousand (500,000) Dollars of an approved surety company will be required for the faithful performance of the contract.

A more complete description of the work to be done is given in Notice to Bidders, Forms of Bid, Contract, Bond, the Specifications and the Contract Drawings accompanying the same.

Copies of the foregoing may be inspected at the office of the Commissioners, Department of Highways, Manchester, N. H., and may be obtained from the engineers, Fay, Spofford & Thorndike, 200 Devonshire Street, Boston, Mass., by payment of a twenty-five (25) dollar deposit.

Receipt of bids will be subject to the conditions stated in said Notice to Bidders.

The right is reserved to reject any or all bids.

E. R. CONANT,
Surveyor of the Department of Highways.
JOHN H. GLEASON,
JOSEPH QUIRIN,
L. J. FARRELL,
Commissioners, Department of Highways for the City of Manchester, N. H.
Fay, Spofford & Thorndike, Engineers,
200 Devonshire Street,
Boston, Massachusetts.
February 19, 1923.

Bids: March 19.

Sewer

Plainfield, N. J.

Proposals will be received by the Common Council of the City of Plainfield, N. J., on Monday, March 19, 1923, at 8:30 p.m., for constructing about 1,000 lin.ft. of 20-inch sanitary sewer from 8 to 14 feet deep.

For plans, specifications and further information apply to City Engineer, City Hall, Plainfield, N. J.

ALEXANDER W. VARS,
City Engineer.

OFFICIAL PROPOSALS

Bids: March 9.

Sewerage System Extensions

Milwaukee, Wis.

Sealed proposals for the construction of extensions to the intercepting sewer system of the City of Milwaukee, Wisconsin, will be received by the Sewerage Commission of the said City at its offices, 508 Market Street, Milwaukee, Wisconsin, until 1:30 p.m., the 9th day of March, 1923, at which time and place during the session of the said Commission, the proposals will be publicly opened and read.

The work to be done embraces the building of the following work:

8,475 Lineal feet 84" concrete sewer.
400 Lineal feet 72" concrete sewer.
687 Lineal feet 54" concrete sewer.
653 Lineal feet 18" concrete sewer.

Together with all manholes and other appurtenances.

The time allowed for the completion of this contract shall be twelve (12) months from the date of the Engineer's notice to begin work.

The liquidated damages for not completing the work within the time above stated, shall, for each day in excess thereof, be Twenty-five ($25.00) Dollars.

Each proposal submitted must be accompanied by a cash deposit of, or, in lieu thereof, by a certified check drawn upon a National or State Bank or Trust Company, and to the order of the "Sewerage Commission of the City of Milwaukee" to the amount of Five Thousand ($5,000.00) Dollars.

All cash deposits or certified checks deposited by bidders to whom the contract is not awarded will be returned upon application to the Secretary of the Sewerage Commission after the contract has been awarded, or after the rejection of all bids. The cash deposit or certified check which has been deposited by the successful bidder will be returned to him as soon as the contract is properly executed and approved by the City Attorney and by the Sewerage Commission.

Specifications and blank forms of proposals can be obtained and detailed plans examined at the office of the Sewerage Commission, 508 Market Street, and a full set of plans will be sent to any contractor upon receipt of five dollars ($5.00). This sum shall be returned upon surrender of the plans in good condition within thirty (30) days after award of the contract.

The Sewerage Commission of the City of Milwaukee reserves the right to reject any and all bids submitted.

Published by authority of the Sewerage Commission of the City of Milwaukee.

JOHN H. FOWLES,
Secretary.

Countersigned:
LOUIS M. KOTECKI,
Comptroller.

Bids: Mar. 14.

Tank Trailers

Hackensack, N. J.

Sealed proposals will be received by the Road Committee of the Board of Chosen Freeholders of the County of Bergen at the office of the Clerk of the Board in the Court House, Hackensack, N. J., on March 14th, 1923, at 2 p.m., for the furnishing of two (2) one thousand (1,000) gallons capacity tank trailers for transporting asphaltum.

For specifications and other detailed information, communicate with the Supervisor of Roads, Court House, Hackensack, N. J.

JOHN A. W. DONALDSON,
Chairman of Road Committee.

OFFICIAL PROPOSALS

Bids: Mar. 27.

Barge Canal Terminal

Albany, N. Y.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Tuesday, March 27th, 1923, at which place and hour they will be publicly opened and read, for the construction of Barge Canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, and amendatory laws, as follows:

TERMINAL CONTRACT NO. 237.

For constructing a terminal freighthouse at Oswego. Contract plans, sheets 1 to 9, inclusive.

Plans may be seen and detailed specifications, engineer's estimates of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y.; at the office of the Assistant Superintendent of Public Works for the Western Division, at Rochester, N. Y.; at the offices of the Superintendent of Public Works, Erie Basin Terminal, Buffalo, N. Y., and Terminal Warehouse, Pier 6, East River, New York City.

Blueprint copies of plans will be furnished by the State Engineer and Surveyor upon the receipt at his office in the Telephone Building, Albany, N. Y., of payment at the rate of fifteen cents (15c.) per sheet. Refund will not be made for any blueprints which may be returned.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank or trust company in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of the contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent) of the estimated cost of the work, according to the contract price, and an additional bond known as the labor bond, in the sum of ten per centum (10 per cent) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y.; and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the state for doing the work and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

EDWARD S. WALSH.
Superintendent of Public Works.

February 21st, 1923.

OFFICIAL PROPOSALS

Bids: March 15.

Engine, Generator and Switchboard

Oxford, Miss.

Sealed proposals will be received by the Board of Mayor and Aldermen of the City of Oxford, Mississippi, until noon, Central Standard Time, Thursday, March 15th, for engine, generator and switchboard equipment for the Municipal Water and Light Plant. Proposals will be considered for either oil engine or steam engine equipment. The right to reject any or all bids is retained.

For further information and specifications apply to R. J. FARLEY, Mayor, or T. M. EARLY, Superintendent Water and Light Plant.

A Bonding Company's Suggestion to Official Proposal Advertisers

"A large part of our contract bond business is submitted to us by wire, and I am a constant reader of the Official Proposals in order to find out the size and nature of the work that is referred to in the bond application. Very frequently I am unable to get any clear idea of what the advertisers are asking bids on, and of course the prospective bidder or contractor is also at a loss to know what kind of a job is being advertised.

"Traveling expenses are heavy at the present time, and contractors pay out considerable sums during the course of a year in investigating prospective contracts. This of course is a large charge that the owners eventually pay, and anything that will reduce the general overhead of contract work will eventually be to the advantage of the owner.

"One way to reduce this overhead is to word the advertisement so that the contractor sitting in his office will know whether or not he should investigate and prepare a bid on the proposed work."

Bids: Mar. 12.

High and Low Pressure Steam and Water Piping in Pumping Station

Bay City, Mich.

Sealed proposals for high and low pressure steam and water piping, including boiler feed pumps, feed water heater and all accessories in Pumping Station, will be received at the office of the City Manager, City Hall, Bay City, Michigan, until ten o'clock A. M., Eastern Standard Time, on March 12th, 1923.

All bids must be made on blank proposal forms, and be accompanied by a proposal bond or certified check for $4,000.00.

Plans, proposal forms, contract and specifications may be obtained at the office of the City Manager, City Hall, Bay City, Michigan, and also from The Frazier-Ellms-Sheal Company, Engineers, B. F. Keith Building, Cleveland, Ohio, upon deposit of twenty dollars, to be refunded upon return of plans and specifications in good condition.

The City reserves the right to accept any bid or to reject any and all bids.

WM. H. REID,
City Manager.

OFFICIAL PROPOSALS

Bids: Mar. 6.

Road Oiling

Baltimore, Md.

Sealed proposals for oiling 5 sections of State Highway, as follows, requiring approximately 576,127 gallons of oil.

Counties	Miles	Gallons
District No. 1 and 2.		
Cecil, Queen Anne, Somerset, Talbot, Wicomico, Worcester	24.76	48,381
District No. 3.		
Montgomery and Prince George	35.10	66,145
District No. 5.		
Carroll, Frederick, Howard, Montgomery	110.01	213,976
District No. 6.		
Garrett, Allegany, Frederick, Washington	60.45	120,912
District No. 4 and 7.		
Anne Arundel, Baltimore, Harford	57.35	126,713
	288.67	576,127

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M., on the 6th day of March, 1923, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application.

No bids will be received unless accompanied by a certified check for the sum of Five Hundred ($500) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 21st day of February, 1923.

JOHN N. MACKALL,
Chairman.

L. H. STEUART,
Secretary.

Bids: Mar. 12.

Low Service Pumps

Bay City, Mich.

Sealed proposals for two 10 M.G.D. Steam Turbo-centrifugal pumps with condenser and auxiliaries and one 5 M.G.D. motor driven Centrifugal pump, all complete with connecting piping, will be received at the office of the City Manager, City Hall, Bay City, Michigan, until ten o'clock A.M., Eastern Standard Time, on March 12th, 1923.

All bids must be made upon blank proposal forms, and be accompanied by a proposal bond or certified check for $2,500.00.

Plans, proposal forms, contract and specifications may be obtained at the office of the City Manager, City Hall, Bay City, Michigan, and also from The Frazier-Ellms-Sheal Company, Engineers, B. F. Keith Building, Cleveland, Ohio, upon deposit of ten dollars, to be refunded upon return of plans and specifications in good condition.

The City reserves the right to accept any bid or to reject any and all bids.

WM. H. REID,
City Manager.

Bids: Mar. 12.

Plumbing for Pumping Station and Filtration Plant

Bay City, Mich.

Sealed proposals for furnishing and installing Plumbing for Pumping Station and Filtration Plant will be received at the office of the City Manager, City Hall, Bay City, Michigan, until ten o'clock A.M., Eastern Standard Time, on March 12, 1923.

All bids must be made upon blank proposal forms furnished by the City, and each bid must be accompanied by a proposal bond or certified check for $2,000.00.

Plans, proposal forms, contract and specifications may be obtained at the office of the City Manager, City Hall, Bay City, Michigan, and also from The Frazier-Ellms-Sheal Company, Engineers, B. F. Keith Building, Cleveland, Ohio, upon deposit of twenty-five dollars, which deposit will be refunded upon return of plans and specifications in good condition.

The City reserves the right to accept any bid or to reject any and all bids.

WM. H. REID,
City Manager.

OFFICIAL PROPOSALS

Bids: Mar. 21.

Water Works Improvements

Roxboro, N. C.

Sealed proposals will be received by the Mayor and Board of Commissioners of the Town of Roxboro, North Carolina, until 2 o'clock p.m., Wednesday, March 21st, 1923, for developing a new source of water supply. The principal items entering into the work are as follows:

Laying 20,000 feet of 12-inch cast iron B & S water pipe.

Building concrete and brick filter plant; concrete and brick pumping station; concrete reservoir; and earth dam with masonry spillway.

Furnishing and erecting filter equipment.

Furnishing and installing one 500 GPM centrifugal pump with electric motor and one 500 GPM centrifugal pump with gas engine drive.

Clearing impounding reservoir site—60 acres.

Plans will be on file and may be seen at the office of The Ludlow Engineers at Winston-Salem, N. C., or at the office of the Mayor at Roxboro, N. C., after March 1st. After that date copies of the Specifications, Bid Blank, and Contract Form may be obtained from the Engineers.

For the convenience of prospective bidders the Engineers will furnish full set of blue print copies of the plans upon application accompanied by a check for $7.50 to cover the cost, or separate prints at $1.00 each.

Each bid must be accompanied by a certified check payable to the Treasurer of the Town of Roxboro, in the sum of $4,000 with complete bids, or approximately 5% of the amount of partial bids.

Proposals will be opened publicly with the usual rights reserved.

DR. W. A. BRADSHER.
R. G. COLE.
R. L. HARRIS,
Water Works Committee.
THE LUDLOW ENGINEERS,
Winston-Salem, N. C.
J. L. LUDLOW,
Consulting Engineer.

Bids: Mar. 10.

Covered Drains

Monte Vista, Colo.

The Bowen Drainage District will receive up to 2 p.m. of March 10th bids for construction of about eighteen miles of covered drains. $5.00 deposit for plans and specifications.

O. A. CRAMER, Secretary.
Monte Vista, Colorado.

Bids: Mar. 13.

Street Paving

South Bend, Ind.

Notice is hereby given that sealed proposals will be received by the Department of Public Works of the City of South Bend, Ind., up to 10:00 o'clock a.m., of the 13th day of March, 1923, for the execution of the following work:

Pavement on the following streets.

Leer Street	4,505.0	sq.yds.
Fassnacht Ave.	6,949.0	" "
Harper Ct.	674.0	" "
Marine St.	2,217.0	" "
Golden Avenue	1,793.0	" "
Harrison Avenue	6,615.0	" "
Poland St.	1,542.0	" "
Carroll St.	970.0	" "

Complete drawings and specifications of said work are now on file in the office of the Department of Public Works in the City Hall, of South Bend, Indiana. The Board reserves the right to reject any or all bids.

BOARD OF PUBLIC WORKS.
L. B. SLAUGHTER.
L. P. HARDY.
ALBERT F. HONER.
VERONICA C. SWEENEY,
Clerk of Board.

Compensation Insurance
Some contractors "give" this insurance to a friend, either personal or political. How many, we wonder, "engage" the services of a specialist to advise them right in the intricate problems that arise in this business.
Alfred S. Hamilton
110 William St., New York

OFFICIAL PROPOSALS

Bids: Mar. 14.

State Highway Work

Richmond, Va.

Sealed bids will be received at the offices of the State Highway Dept., 413 N. 10th St., Richmond, Va. until 10:30 a.m., Wednesday March 14th 1923 for the construction of:

1. Project S-155 RT. 2 Cunningham Creek-Coopers Store (not including Bridge over Raccoon Creek) 1.5 mi. of soil road in Fluvanna Co., approx. 0.3 Ac of Clear and Grub. 16,750 cu.yds. Excav., 35 cu.yds. "A" concrete, 4 cu.yds. "B" concrete, 132 lin.ft. V. C. pipe, 3,003 rein. steel, 1,050 lin.ft. Wood Gd Rail. Certified check for $750.

2. (a) Project S-209 RT. 19 Colombia-Fife 6.5 mi. soil in Fluvanna and Goochland Cos. approx. 10.4 Ac Clear and Grub. 58,534 cu.yds. excav. 776 lin.ft. V. C. pipe 584 lin.ft. C. I. pipe 89 cu.yds. "B" concrete 131 cu.yds. "A" concrete 6,948 lbs. reinforced steel 4,196 lin.ft. Wood Gd. Rail. Certified check $4,000.

2. (b) Project S-209 RT. 19 Bridge over Bird Creek 153 ft. long approx. 58,000 lbs. structural steel 137 cu.yds. "A" concrete 191 cu.yds. "B" concrete, 19,822 lbs. reinforced steel. Certified check $500.

3. Project E-160 B & C RT. 5 Franklin-Suffolk 9.7 mi. 18 ft. 8-6-8 inch. concrete road in Isle of Wight and Nansemond Cos. approx. 10 Ac Clear and Grub. 29,144 cu.yds. excav. 118,977 cu.yds. borrow., 328 lin.ft. V. C. or C. I. pipe 414 lin.ft. C. I. pipe, 222 cu.yds. "A" concrete 138 cu.yds. "B" concrete, 13,768 lbs. reinforced steel, 5,300 lin.ft. Wood Gd Rail. Certified check $5,000.

3. (b) Bridge over Kingsale Swamp, 38 ft. long approx. 49 cu.yds. "A" concrete 77 cu.yds. "B" concrete 9,285 lbs. reinforced steel. Certified check $500.

4. Project S-265 RT. 11-X Grundy-Hanger 5.5 mi. 16 ft.-8 in. Bit Mac in Buchanan Co. approx. 6 ac Clear and Grub. 68,975 cu.yds. excav. 2,000 cu.yds. borrow. Certified check $4,500.

5. Project S-287 RT 11-Z Donkey-Dickenson Co. Line (not including Bridge over Pound River, 4.8 mi. 16 ft.-8 in. Bit Mac road in Wise Co. approx. 15 Ac Clear and Grub. 1,572 lin.ft. V. C. pipe 708 lin.ft. C. I. pipe 63 cu.yds. "A" concrete, 122,013 cu. yds. excav. 6,587 lbs. reinforced steel, 4,990 cu.yds. rubble masonry, 12,090 lin.ft. Gd. Rail. Certified check $5,000.

6. (a) Project S-2 14 RT. 2 Coopers Store-Fork Union 6.6 mi. soilroad in Fluvanna Co. approx. 6 Ac Clear and Grub. 38,105 cu.yds. excav. 1,280 cu.yds. borrow, 808 lin.ft. V. C. pipe 208 lin.ft. C. I. pipe 39 cu.yds. "B" concrete, 630 lin.ft. Gd. Rail. Certified check $5,000.

6. (b) Project S-214 Bridge RT. 2-Bridges over Carys Branch Station. 170 Three 30 ft. beams spans approx. 152 cu. yds. "A" concrete 28,680 lbs. reinforced steel. Certified check $500.

7. Project F-157 RT. 9 Toano-Diascund Creek 4.3 mi. 18 ft.-8-6-8 inch. concrete road in James City Co. approx. 17 Ac Clear and Grub. 61,146 cu.yds. excav. 3,745 cu.yds. borrow 480 lin.ft. V. C. pipe 234 lin.ft. C. I. pipe 497 cu.yds. "A" concrete 23 cu.yds. "B" concrete, 34,967 lbs. reinforced steel. Certified check $5,000.

8. Project F-271 RT. 11 Claypoole Hill-Rosedale 5.08 mi. of surface treated mac. in Tazewell and Russel Cos. (not including Special Design Bridges). Certified check $5,000.

9. Project F-178 Bridge RT. 1 Bridge over Grassy Creek lgt. 122 ft. in Mecklenburg Co., 84,000 lbs. Structural Steel, 2,410 lbs. reinforced steel, 51.7 cu.yds. "A" concrete, 12,420 ft. BM lumber 24.4 lin.ft. Gd fence 40 cu.yds. rip-rap. Certified check $900.

Bid bond 20% in excess of check required.

Plans and specifications are on file at the office of the State Highway Dept. Richmond and District Offices as follows: S-155 and S-214 Culpeper S-209 and F-178 Richmond F-160 B & C and F-157 Suffolk S-265, S-287 and S-271, Bristol.

Plans for bidders can be obtained upon receipt of $5 payable to H. G. Shirley. $2.50 will be refunded if the plans are returned in good condition within 2 weeks after bids are opened. Bridge plans on Special Design Bridges from W. F. Hobart, 805½ E. Franklin St., Richmond, at 54c. each.

Engineers will show prospective bidders over projects as follows: F-178 Clarksville Hotel Clarksville 10:30 a.m., Friday Feb. 23, P-S-155 and S-214 Palmyra 10:30 a.m., Tuesday March 6th, P-S-209 Fife 9:30 a.m., Wednesday March 7th, P-F-157 Providence Forge 9:30, Monday March 12, F-160 B & C Dist. Office Suffolk 10:00 a.m., Friday March 9th, Pr. S-265 Stinson Hotel, Grundy Noon Tuesday March 6th, S-287 Wrights Store, Donkey Noon Thursday, March 8th, F-271 Pounding Mill Station 11:00 a.m., Thursday March 1st.

Plans and proposals on the projects will not be available until February 26th.

The State Highway Commission reserves the right to reject any or all bids.

C. S. MULLEN,
Acting Comr.
H. G. SHIRLEY,
Chairman.

February 20, 1923.

OFFICIAL PROPOSALS

Bids: March 13.

Pavements and Sewers

Wallingford, Conn.

Notice is hereby given that sealed proposals will be received by the Warden and Court of Burgesses, at the Borough Clerk's Office up to eight o'clock p.m. of the 13th day of March, 1923, for the furnishing of all labor, materials, tools, machinery (except the steam roller which will be furnished by the Borough free of charge without operator or fuel) teams, or auto trucks for the complete construction of the following pavements and sewers.

PAVEMENTS

1,710 sq.yd. of concrete pavement, 4,040 sq.yd. of Bituminous bound Macadam and a short section of water bound Macadam, together with about 4,320 lin.ft. of combined concrete curb and gutters.

SEWERS

2,283 lin.ft. of 10 in. to 18 in. Vitrified tile sewers and manholes on Simpson Ave. and Ward St., 750 lin.ft. of 12 in. vitrified tile sewer and manholes on Pomeroy Ave. and Ward St. and 600 lin.ft. of 18 in. vitrified tile sewers, manholes and catch basins on So. Orchard St., together with appurtenances.

All bids must be submitted on blanks furnished by the Borough, for the pavements and sewers on the various streets as shown by the approximate estimates.

Each proposal must be accompanied by a certified check or Surety Co.'s contractor bidding bond, for five (5%) per cent of the tendered bid and made payable to the Treasurer of the Borough of Wallingford, Conn.

The Warden and Court of Burgesses reserve the right to require of the successful bidder a satisfactory Surety Co. bond for 50% of the total contract awarded.

The Court of Burgesses reserves the right to reject any or all bids or to accept any bid or bids for either sewers or pavements which may appear in their judgment to be to the best interest of the Borough so to do.

BOROUGH OF WALLINGFORD, CONN.
JOHN P. BRIDGETT, Warden.
WM. A. MACKENZIE, C. E.

Bids: Mar. 12.

Electric Lighting and Power Wiring, Pumping Station and Filtration Plant

Bay City, Mich.

Sealed proposals for furnishing and installing electric lighting systems and power wiring in pumping station and filtration plant will be received at the office of the City Manager, City Hall, Bay City, Michigan, until ten o'clock A M., Eastern Standard Time, on March 12, 1923.

Bids must be accompanied by proposal bond or certified check for $1,000.00.

Plans, proposal forms, contract and specifications may be obtained at the office of the City Manager, City Hall, Bay City, Michigan, and also from The Frazier-Ellms-Sheal Company, Engineers, B. F. Keith Building, Cleveland, Ohio, upon deposit of ten dollars, to be refunded upon return of plans and specifications in good condition.

The City reserves the right to accept any bid or to reject any and all bids.

WM. H. REID,
City Manager.

Knowing how to do a thing, and then really doing it is the exact reason—Swart service differs from the ordinary sort.
HARMON V. SWART
Contract Bonds
Compensation Insurance
92 William St., New York

OFFICIAL PROPOSALS

Bids: March 20.

Park Slope and Fort Hamilton Conduits

CONTRACT 197

New York, N. Y.

Sealed Bids will be received by the Board of Water Supply, at its offices, twenty-second floor, Municipal Building, Park Row, Centre and Chambers Streets, New York City, until 11 a.m., Eastern Standard time, on Tuesday, March 20, 1923, for Contract 197, for the construction of the Park Slope and Fort Hamilton conduits, portions of the City conduits of the Catskill aqueduct, extending from Shaft 23 of the City tunnel at Schermerhorn street and Third avenue along Third avenue, Dean street, Fourth avenue, Douglass street, St. Johns place, Eighth, Prospect, Tenth and Gravesend Avenues, Fort Hamilton parkway and 86th street to Shore road and along Shore road to 79th street, in the Borough of Brooklyn, New York City.

The conduits will consist of about 39,290 linear feet of 72-inch and 2,140 linear feet of 66-inch steel pipe, about 310 tons of cast-iron pipe and special castings of various sizes, a Venturi meter, valves and other appurtenances, all of which will have to be maintained for one year.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders, forms of bid and contract, specifications, contract drawings, etc., can be obtained at the office of the Secretary at the above address, by depositing the sum of ten dollars ($10) in cash or its equivalent for each pamphlet. For further particulars apply to the office of the Chief Engineer at the above address.

GEORGE J. GILLESPIE,
President.
JAMES P. SINNOTT,
PHILIP F. DONOHUE,
Commissioners, Board of Water Supply.
BENJ. F. EINBIGLER,
Secretary.

Bids: Mar. 12.

Heating for Pumping Station and Filtration Plant

Bay City, Mich.

Sealed proposals for furnishing and installing heating for Pumping Station and Filtration Plant will be received at the office of the City Manager, City Hall, Bay City, Michigan, until ten o'clock A.M., Eastern Standard Time, on March 12, 1923.

All bids must be made upon blank proposal forms furnished by the City, and each bid must be accompanied by a proposal bond or certified check for $2,000.00.

Plans, proposal forms, contract and specifications may be obtained at the office of the City Manager, City Hall, Bay City, Michigan, and also from The Frazier-Ellms-Sheal Company, Engineers, B. F. Keith Building, Cleveland, Ohio, upon deposit of twenty-five dollars, which deposit will be refunded upon return of plans and specifications in good condition.

The City reserves the right to accept any bid or to reject any and all bids.

WM. H. REID,
City Manager.

Bids: Mar. 21.

Sewer System, Disposal Plant and Pumping Station

Tonawanda, N. Y.

Notice is hereby given that sealed proposals will be received and considered by the Town Board of the Town of Tonawanda, New York, Wednesday, March 21st, 1923, at eight o'clock p.m., at the Village Hall, Kenmore, N. Y., for furnishing all necessary labor and material for the construction of a sewer system, disposal plant and pumping station in acordance with the proposed contract, maps, plans, specifications and estimates of the Town Engineer as approved by the said Town Board of the Town of Tonawanda, N. Y., for Sewer District No. 2 of said Township.

The proposed contract, maps, plans and specifications and estimates may be seen and examined, and further information may be obtained at the office of George C. Diehl, Town Engineer, No. 575 Ellicott Square, Buffalo, N. Y., or at the office of the undersigned, the Town Clerk of the Town of Tonawanda, N. Y., at No. 2852 Delaware Avenue, Kenmore, N. Y.

All bids must be accompanied by a certified check, payable to the order of J. Fred Moore, Supervisor of the Town of Tonawanda, N. Y., for the sum of five per centum of the Engineer's estimated expense of the improvement, or a bond with sufficient sureties to be approved by the said J. Fred Moore, Supervisor of said Town, conditioned in a penalty equal to five per centum of the estimated expense of the improvement, that if the work is awarded to the bidder, he will enter into the contract for the same, and that he will execute further security as may be required for the faithful performance of the contract, in the event of the proposal being accepted for the execution of the work.

The Town Board reserves the right to reject any or all bids should it deem it to the best interest of the District so to do.

Dated Kenmore, N. Y., February 17, 1923.

ELMER W. JOHNSTON,
Town Clerk, Town of Tonawanda,
2852 Delaware Avenue.
Kenmore, N. Y.

Bids: Mar. 13.

Reinforced Concrete Bridge

Media, Pa.

Sealed proposals will be received at the Controller's Office, Media, Pa., on Tuesday, March 13th, 1923, until 11 a.m., for furnishing all equipment, tools, machinery, and labor necessary to properly construct a two span reinforced concerte bridge, known as the Plush Mill Bridge No. 107, situate on Baltimore Pike over Crum Creek, between Springffield and Nether Providence Townships. The bridge is to be of the open spandrel type, two 120 ft. clear spans, 346 feet over all, with 30 ft. 6 in. roadway and two 5 ft. sidewalks.

Bids from other than those engaged or established in business for which proposals are asked will not be entertained and no bids will be entertained unless made out on printed blank forms furnished by the County Commissioners.

Each bid must be accompanied by a Certified Check of Fifteen Thousand ($15,000.00) dollars drawn to the order of the Commissioners of Delaware County.

Plans and specifications can be had by applying at the office of the County Controller, Media, Pa. All bidders desiring a set of plans and specifications shall deposit Twenty-five ($25.00) dollars with the County Controller, which amount will be refunded if palns and specifications are returned within one (1) week after the opening of bids.

No plans or specifications given out after Saturday, March 10th, 1923.

The Commissioners reserve the right to reject any or all bids.

GEORGE T. WADAS,
County Controller.

Bids: Mar. 9.

Bridges

Normal, Ill.

Sealed bids will be received for the construction of three (3) Portland cement reinforced steel concrete bridges by the Board of Local Improvements of the Town of Normal, Illinois, until Friday the 9th day of March, 1923, at the hour of 3 o'clock p.m., in its office in the Town Hall of said Town. It is estimated that there will be:

Adelaide Street bridge, 215.4 cubic yards of concrete and 26,260 pounds of steel.

University Street bridge, 129.3 cubic yards of concrete and 10,660 pounds of steel.

Glenn Avenue bridge, 122.6 cubic yards of concrete and 11,270 pounds of steel.

A certified check of 10% of bid.

E. A. TOBIAS, Clerk.

Hauling Contracts Wanted

Road work, Material Handling, etc. Have several fleets of trucks ready for service anywhere. No job too large. Special equipment for any kind of dump truck hauling or unloading. Unlimited references. Glad to estimate.

HAMBRIDGE CONTRACTING CO.
68th and Greenway Ave., Philadelphia, Pa.

WANTED

Desire to sublet unloading 15,000 tons of **Stone**; 7,000 tons **Sand** from cars to hopper. Work begins April 15th, end about Oct. 15th. Derrick, hoist and clam shell bucket will be necessary. Location Eastern Shore, Va.

Roberts-Williams Construction Co.
Clara, Maryland

ATTENTION CONTRACTORS

Sublet wanted on Sewers, Water Line and Drainages. We have complete equipment for this class of work. Our equipment consists of two **Trenching Machines, Backfiller Team and Truck**, 5½ tons and **Dragline specifications** of **Trenching Machine.**
DEPTH—8, 10, 14, 20 ft.
WIDTH—16, 20, 24, 32, 45, 48, 52, 78
Will accept any work in Central States
CHAS. MALLOY & CO., Bensenville, Ill.

OFFICIAL PROPOSALS

Bids: Mar. 27.

Bridge

Wilkes-Barre, Pa.

Sealed proposals will be received at the office of the City Clerk, City Hall, Wilkes-Barre, Pa., until twelve o'clock noon, Tuesday, March 27, 1923, for the construction of the South Street Bridge in the City of Wilkes-Barre, Pa., in accordance with the plans and specifications on file in the office of the City Engineer.

The bridge will cross the Pennsylvania, Lehigh Valley and Central Railroad of New Jersey's tracks, extend along the north side of South Street, from Washington Street to Park Avenue, be composed of steel trusses over the railroad tracks and reinforced concrete arches and retaining wall approaches thereto. The total length is about 1,735 feet.

Instructions to bidders, plans, specifications, proposal and contract forms may be seen in the office of J. E. Greiner & Company, Consulting Engineers, Lexington Building, Baltimore, Md., and Union Arcade Building, Pittsburgh, Pa., and can be obtained at the office of the City Engineer on and after Tuesday, Macrh 6, 1923, for a deposit of $10.00 for each set, which deposit will be refunded on the day of the letting to those submitting bids, provided the sets are returned complete and in good condition.

Each proposal must be accompanied by a certified check on a solvent bank or trust company in the sum of Five Thousand ($5,000.00) Dollars, made payable without reservations to the Treasurer of the City of Wilkes-Barre, Pa., as a guarantee that if the proposal be accepted a contract will be entered into.

Proposals must be made so as to conform with the instructions to bidders in every respect. Must be endorsed "Proposals for South Street Bridge" and addressed to Fred H. Gates, City Clerk. The City reserves the right to reject any or all bids and to award the contract as may be deemed to the best interests of the City.

MARTIN C. MURRAY,
Superintendent of Streets & Public Improvements.

Bids: Mar. 28.

Waterworks Improvements

Wheeling, W. Va.

Intake Pier; Intake Line; Substructures and Superstructures for a 20 Million Gallon Filtration Plant and Pumping Station; Heating Plant; Filter Equipment; Sluice Gates; Distributing Mains; Valves; Cast Iron Pipe; 30" Steel and Cast Iron Force Mains; Five One Million Gallon Storage Tanks; and Appurtenances.

Sealed proposals for the construction of 2 20 Million Gallon Filtration Plant and Pumping Station, Steel Reservoirs, Force Mains, Distribution System Piping and Appurtenances as outlined above will be received by the City of Wheeling, W. Va., until 12 o'clock noon, Eastern Standard Time, on the 28th day of March, 1923, and will then be publicly opened and read.

Official Proposal Blanks, Instructions to Bidders, Specifications, Form of Contract and Bond may be seen at the office of the City Clerk, Wheeling, W. Va., or two (2) copies of each may be obtained by bona fide bidders upon application to The J. N. Chester Engineers, Union Bldg., Pittsburgh, Pa., or to the City of Wheeling, W. Va., and deposit of Twenty-five Dollars ($25.00) which amount will be refunded to bidders on receipt of a bona fide bid or upon the return within 30 days after receipt of bids of both copies in good order.

The right is reserved to reject any or all bids.

C. H. DOWLER,
City Manager.

Attest:
W. H. EVANS,
City Clerk.
February 24th, 1923.

U. S. GOVERNMENT

TREASURY DEPARTMENT, office of the Supervising Architect, Washington, D. C., February 23, 1923. Sealed Proposals will be opened in this office at 3 p.m., March 26, 1923, for Extension No. 3, including Mechanical Equipment, for the United States Post Office and Court House at Kansas City, Mo. Drawings and specifications may be obtained from the Custodian, Kansas City, Mo., or at this office, in the discretion of the Supervising Architect. Jas A. Wetmore, Acting Supervising Architect.

OFFICIAL PROPOSALS

Bids: Mar. 19.

Power Plant Machinery and Electric Line Material

Jacksonville, Fla.

Sealed proposals will be received by the City Commission of the City of Jacksonville, Florida, until 3:00 o'clock p.m., Monday, March 19th, 1923, for the following equipment, in accordance with plans and specifications on file in the office of the City Commission and in the office of the Scofield Engineering Company of Philadelphia, Pa., Consulting Engineers.

1. 1—12,000 K.W. Turbo Generator.
2. Surface Condensing Equipment.
3. Improvements for surface condensing equipment.
4. Admiralty Condenser Tubes.
5. Switchboard additions and improvements, for Generating and Sub-stations.
6. Constant Current Transformers.
7. Power Transformers.
8. Reactors and Transformer rewinding material.
9. Improvements for boilers and superheaters.
10. Oil burners and furnace material.
11. Force draft fans.
12. Centrifugal boiler feed pump.
13. Centrifugal sump pumps.
14. Synchronous motors.
15. 2 storage batteries.
16. Machine shop equipment.
17. Lead covered cable and jointing material.
18. Copper wire.

Bids shall state the time in which the bidder guarantees to make shipment and complete the work as specified to the satisfaction and acceptance of the Consulting Engineers. Bids shall be subject to acceptance within two weeks. Form of contract is on file in the offices of the City Commissibon and Scofield Engineering Company, Consulting Engineers, Philadelphia, Pa., and further information may be obtained from said engineers or by applying to Frank H. Owen, Commissioner Public Utilities, City Hall, Jacksonville, Florida. Each bid must be accompanied by a certified check on a Jacksonville bank or on some National bank for five per cent (5%) of the amount bid as a guarantee that the bidder will, if awarded the contract, promptly enter into agreement for the work and furnish a surety bond acceptance to the Commission to an amount equal to twenty-five (25%) per cent of the contract price. Each bid should be addressed to the City Commission, be marked as a bid for Plant Machinery and Electric Line Material and be delivered through mail or otherwise at the office of the Secretary, Room 13, City Hall. The Commission reserves the right to reject any or all bids, to waive informalities or to accept any bid in whole or in part.

March 1, 1923.

W. A. EVANS,
Chairman.

Attest:
E. P. OWEN, JR.,
Secretary.

Bids: Mar. 13.

Street Paving

South Bend, Ind.

Notice is hereby given that sealed proposals will be received by the Department of Public Works of the City of South Bend, Ind., up to 10:00 o'clock a.m., of the 13th day of March, 1923, for the execution of the following work:

Pavement on the following streets.

Leer Street	4,505.0	sq.yds.
Fassnacht Ave.	6,949.0	" "
Harper Ct.	674.0	" "
Marine St.	2,217.0	" "
Golden Avenue	1,793.0	" "
Harrison Avenue	6,615.0	" "
Poland St.	1,542.0	" "
Carroll St.	970.0	" "

Complete drawings and specifications of said work are now on file in the office of the Department of Public Works in the City Hall, of South Bend, Indiana. The Board reserves the right to reject any or all bids.

BOARD OF PUBLIC WORKS.
L. B. SLAUGHTER.
L. P. HARDY.
ALBERT F. HONER.
VERONICA C. SWEENEY,
Clerk of Board.

OFFICIAL PROPOSALS

Bids: March 20.

System of Water Mains

Mt. Greenwood, Cook Co., Ill.

Sealed Proposals, endorsed "Proposals for Water Main," will be received by the Board of Local Improvements of the Village of Mt. Greenwood, Illinois, in the Village Hall in said Village, until eight o'clock p.m., March 20, 1923, for furnishing all labor, tools, machinery, equipment and materials and constructing and completing a system of cast iron water mains in various streets in said Village, as designated by and in accordance with an Ordinance duly passed, and in accordance with a special assessment proceeding in the County Court of Cook County, designated as Special Assessment Number Two, of the Village of Mt. Greenwood, Illinois, and in accordance with the following estimated quantities:

4,044.78 Lin.Ft. of (12") internal diameter cast iron water main, average depth (5½').

33,198.49 Lin.Ft. of (6") internal diameter cast iron water main, average depth (5½').

(12) 12" standard iron, parallel seat, double gate valves, with brick valve chambers and cast iron covers.

(57) 6" standard iron, parallel seat, double gate valves, with brick valve chambers and cast iron covers.

(99) 6" standard fire hydrants, with iron body, fitted with (2), (2½") hose and (1) steamer connection, with (5") valve opening and a (7") inside diameter working barrel and fitted with auxiliary valves.

(11) 12" x 12" x 6" x 6" cast iron cross connections, 512 lbs. each.

(24) 6" x 6" x 6" x 6" cast iron cross connections, 257 lbs. each.

(3) 12" x 12" x 6" cast iron tee connections, 458 lbs. each.

(104) 6" x 6" x 6" cast iron tee connections, 200 lbs. each.

(8) 6" cast iron, ⅛, 45 degree bends, 105 lbs. each.

All proposals must be submitted on the Proposal Blanks furnished by the Board of Local Improvements of said Village; and shall be accompanied by cash or certified check made payable to M. L. Cusack, President of the Board of Local Improvements, in an amount equal to ten (10%) per cent of the total proposal.

A construction bond, satisfactory to the Board of Local Improvements, in an amount equal to one-third of the total proposal will be required of the successful bidder.

Payment for the above work will be made by the Board of Local Improvements of said Village, in Special Assessment Bonds, issued against Special Assessment Number Two of the Village of Mt. Greenwood, Illinois, bearing interest at the rate of six (6) per cent per annum, with a maximum maturity date of ten (10) years.

Plans, specifications, and proposal blanks may be obtained at the office of the Village Clerk, of said Village; and from Allen L. Fox, engineer for said Board of Local Improvements, at his office in the Commercial Bank Building, Chicago Heights, Illinois; and in the office of F. K. Root, 14th Floor Conway Building, Chicago, Illinois.

The Board of Local Improvements reserves the right to reject any or all Proposals.

BOARD OF LOCAL IMPROVEMENTS.
M. L. CUSACK,
President.
A. JOHNSON,
WILLIAM BURGOYNE,
Clerk.

Bids: Mar. 14.

Tank Trailers

Hackensack, N. J.

Sealed proposals will be received by the Road Committee of the Board of Chosen Freeholders of the County of Bergen at the office of the Clerk of the Board in the Court House, Hackensack, N. J., on March 14th, 1923, at 2 p.m., for the furnishing of two (2) one thousand (1,000) gallons capacity tank trailers for transporting asphaltum.

For specifications and other detailed information, communicate with the Supervisor of Roads, Court House, Hackensack, N. J.

JOHN A. W. DONALDSON,
Chairman of Road Committee.

OFFICIAL PROPOSALS

Bids: Mar. 27.

Barge Canal Terminal

Albany, N. Y.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Tuesday, March 27th, 1923, at which place and hour they will be publicly opened and read, for the construction of Barge Canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, and amendatory laws, as follows:

TERMINAL CONTRACT NO. 237.

For constructing a terminal freighthouse at Oswego. Contract plans, sheets 1 to 9, inclusive.

Plans may be seen and detailed specifications, engineer's estimates of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y.; at the office of the Assistant Superintendent of Public Works for the Western Division, at Rochester, N. Y.; at the offices of the Superintendent of Public Works, Erie Basin Terminal, Buffalo, N. Y., and Terminal Warehouse, Pier 6, East River, New York City.

Blueprint copies of plans will be furnished by the State Engineer and Surveyor upon the receipt at his office in the Telephone Building, Albany, N. Y., of payment at the rate of fifteen cents (15c.) per sheet. Refund will not be made for any blueprints which may be returned.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank or trust company in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of the contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent) of the estimated cost of the work, according to the contract price, and an additional bond known as the labor bond, in the sum of ten per centum (10 per cent) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y.; and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the state for doing the work and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

EDWARD S. WALSH.
Superintendent of Public Work
February 21st, 1923.

OFFICIAL PROPOSALS

Bids: Mar. 30.

Moose Temple Building

Clearfield, Penna.

Sealed proposals for furnishing material and construction of the Moose Temple Building for the Loyal Order of Moose, Clearfield, Penna., as per plans and specifications as prepared by W. V. Justus of Punxsutawney, Pa., will be received by the Board of Trustees of Clearfield, Penna., at their present lodge room on 315 Market Street, until six p.m., Eastern time, March 30, 1923.

Each proposal must be accompanied with a certified check of five per cent of their bid, a bond of one hundred per cent of the contract price will be required.

This building is 70 x 100, three stories and basement, fireproof construction and steel skeleton frame.

Copies of plans and specifications can be obtained at the office of the Architect at 329 East Mahoning Street, Punxsutawney, Penna., upon deposit of the sum of twenty dollars with the Architect, ten dollars of which will be refunded upon the return of all prints in good condition, the remainder to be retained to cover printing, mailing, etc., etc.

The right is reserved to reject any and all bids.

Plumbing, Heating and Electrical Wiring are not included in the General Contract; to be advertised later.

LOYAL ORDER OF MOOSE NO. 97.
(Signed) D. D. GUPPY,
D. B. McCARTY,
Trustees.

Bids: Mar. 13.

Reinforced Concrete Bridge

Media, Pa.

Sealed proposals will be received at the Controller's Office, Media, Pa., on Tuesday, March 13th, 1923, until 11 a.m., for furnishing all equipment, tools, machinery, and labor necessary to properly construct a two span reinforced concerte bridge, known as the Plush Mill Bridge No. 107, situate on Baltimore Pike over Crum Creek, between Springffield and Nether Providence Townships. The bridge is to be of the open spandrel type, two 120 ft. clear spans, 346 feet over all, with 30 ft. 6 in. roadway and two 5 ft. sidewalks.

Bids from other than those engaged or established in business for which proposals are asked will not be entertained and no bids will be entertained unless made out on printed blank forms furnished by the County Commissioners.

Each bid must be accompanied by a Certified Check of Fifteen Thousand ($15,000.00) dollars drawn to the order of the Commissioners of Delaware County.

Plans and specifications can be had by applying at the office of the County Controller, Media, Pa. All bidders desiring a set of plans and specifications shall deposit Twenty-five ($25.00) dollars with the County Controller, which amount will be refunded if palns and specifications are returned within one (1) week after the opening of bids.

No plans or specifications given out after Saturday, March 10th, 1923.

The Commissioners reserve the right to reject any or all bids.

GEORGE T. WADAS,
County Controller.

Bids: March 22.

Steel Framing

New Orleans, La.

Sealed proposals will be received by the Board of Commissioners of the Port of New Orleans at their offices, Suite 200, New Court Building, until 3:00 p.m., March 22, 1923, and then publicly opened for furnishing, erecting and painting of the steel framing required for the wharf structure at Poland Street Landing.

A deposit of $2,000 in cash or certified check is required with each proposal.

A bond to the amount of 50 per cent of the sum bid is required with notarial contract.

Specifications and proposal forms are on file in the office of the Supervisor of Purchases, at No. 1 Canal Street, New Orleans, Louisiana. Complete sets will be furnished to prospective bidders on deposit of $5, which will be refunded to depositors who submit proposals, or return sets in good condition.

The right is reserved to reject any or all bids and to waive informalities.

J. H. WALSH,
General Manager.

OFFICIAL PROPOSALS

Bids: April 26.

Water Tube Boilers

New Orleans, La.

Sealed proposals will be received by the Sewerage and Water Board of New Orleans up to 12 o'clock noon, Thursday, April 26th, 1923, for furnishing 1,500-1,800 hp. Water Tube Boilers.

Specifications and blank forms of proposals may be obtained at Room 303, No. 526 Carondelet Street, New Orleans.

The right is reserved to reject any or all bids.

GEO. G. EARL,
General Superintendent.

A. G. MOFFAT,
Secretary.

A Bonding Company's Suggestion to Official Proposal Advertisers

"A large part of our contract bond business is submitted to us by wire, and I am a constant reader of the Official Proposals in order to find out the size and nature of the work that is referred to in the bond application. Very frequently I am unable to get any clear idea of what the advertisers are asking bids on, and of course the prospective bidder or contractor is also at a loss to know what kind of a job is being advertised.

"Traveling expenses are heavy at the present time, and contractors pay out considerable sums during the course of a year in investigating prospective contracts. This of course is a large charge that the owners eventually pay, and anything that will reduce the general overhead of contract work will eventually be to the advantage of the owner.

"One way to reduce this overhead is to word the advertisement so that the contractor sitting in his office will know whether or not he should investigate and prepare a bid on the proposed work."

Bids: March 20.

Pipe Sewers

South Bend, Ind.

Notice is hereby given that sealed proposals will be recevied by the Department of Public Works of the City of South Bend, Ind., up to 10:00 o'clock a.m., of the 20th day of March, 1923, for the execution of the following work:

Pipe sewers on the following streets:	
William Street	1,200 lin.ft.
Brookfield Street	1,460 lin.ft.
Calvert Street	1,155 lin.ft.
Kinyon Street, Keller and Medora Streets	1,713 lin.ft.
Victoria Street	1,400 lin.ft.
Indiana Avenue and Clyde Street	900 lin.ft.
Fairview Avenue	1,422 lin.ft.
Lafayette Street and Parkovash.	991 lin.ft.
Oak Part Court	600 lin.ft.
Marietta Street	233 lin.ft.

Complete drawing and specifications of said work are now on file in the office of the Department of Public Works in the City Hall, of South Bend, Indiana. The Board reserves the right to reject any or all bids.

L. B. SLAUGHTER,
L. P. HARDY,
ALBERT F. HONER,
Board of Public Works.

VERONICA C. SWEENEY,
Clerk of the Board.

Date of publication: March 8 and 15, 1923.

OFFICIAL PROPOSALS

Bids: Mar. 20.

Narrows Siphon No. 2 Contract 198

New York, N. Y.

Sealed bids will be received by the Board of Water Supply, at its offices, twenty-second floor, Municipal Building, Park Row, Centre and Chambers Streets, New York City, until 11 a.m., Eastern Standard time on Tuesday, March 20, 1923, for Contract 198, for the construction of Narrows Siphon No. 2, a 42-inch, flexible-jointed, cast-iron submarine pipe-line about 8,800 feet long, with shore connections of 42-inch and 48-inch bell-and-spigot cast-iron pipes about 560 feet in length. This siphon is a portion of the Catskill aqueduct and will extend across the Narrows of New York harbor from 86th Street and Shore Road, Bay Ridge, Brooklyn, to Vanderbilt Avenue and Bay Street, Clifton, Staten Island.

The work consists principally of furnishing approximately 4,650 tons of submarine pipes, dredging a trench in which the pipe-line will be laid across the Narrows, including the shore ends, and refilling over the pipe-line. The land work is to include furnishing and laying about 330 tons of cast-iron pipe and special castings of various sizes, furnishing and setting two large meters, building chambers and manholes and doing other incidental work.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders, forms of bid and contract, specifications, contract drawings, etc., can be obtained at the office of the Secretary at the above address, by depositing the sum of ten dollars ($10) in cash or its equivalent for each pamphlet. For further particulars apply to the office of the Chief Engineer at the above address.

GEORGE J. GILLESPIE,
President.
JAMES P. SINNOTT,
PHILIP F. DONOHUE,
Commissioners, Board of Water Supply.
BENJ. F. EINBIGLER, Secretary.

Bids: March 26.

Oregon Road Bridge

Bowling Green, Ohio.

Sealed proposals will be received by the Board of County Commissioners of Wood County, Ohio, at the office of the County Auditor, Bowling Green, Ohio, until 1:00 o'clock p.m., Monday, March 26, 1923, and opened immediately thereafter, for the furnishing of all materials, tools, machinery, appliances and labor required for the construction of two abutments and one pier, providing the drainage, and grading 22,000 cu.yd. of approaches, also the erecting of two 152-ft. bridge spans with 20-ft. roadway, at the following location, viz.:

Oregon Road Bridge over the crossing of the Toledo and Cincinnati Railroad Company's (B. & O.) tracks in River Tract 85, Ross Township, Wood County, Ohio.

Said improvement to be made in accordance with plans, specifications and estimates now on file in the office of the County Auditor of Wood County, Ohio, and open to inspection during business hours of each day.

Each bid for the improvement must be accompanied by a certified check upon some solvent bank of Wood County, surety bond or cash in the sum equal to five (5) per cent of the price bid, as a guaranty that if the work is awarded to the bidder he will within seven days from the date of such award, enter into proper and acceptable contract and bond conditioned for the faithful performance of his work, otherwise said amount accompanying his bid will be forfeited to Wood County as liquidated damages.

Bids for the above described work shall be made on blanks to be furnished by the County Surveyor of Wood County.

The Board of County Commissioners of Wood County reserves the right to reject any or all bids.

By order of the Board of Commissioners of Wood County, Ohio.

E. E. CORIELL,
County Auditor.

Bowling Green, Ohio, Feb. 21, 1923.

Compensation Insurance

Some contractors "give" this insurance to a friend, either personal or political. How many, we wonder, "engage" the services of a specialist to advise them right in the intricate problems that arise in this business.

Alfred S. Hamilton
110 William St., New York

OFFICIAL PROPOSALS

Bids: March 22.

Sewage Disposal Works

Mamaroneck, N. Y.

Sealed proposals for the completion of Sewage Disposal Works will be received by the Clerk of the Village of Mamaroneck until 8 o'clock p.m., on Thursday, the 22nd day of March, 1923.

The work includes about 2,600 cubic yards of earth excavation; 1,630 cubic yards of concrete masonry; the completion of the machinery building; the furnishing and erection of compressors, cast-iron and wrought-iron piping, valves, diffuser blocks, electrical equipment and other work necessary for completion. Certain materials and apparatus will be furnished on the ground by the Village and the plant and equipment now on the ground may be used without cost by the Contractor.

A certified check or cash to the amount of $2,000 is required with each proposal and a performance bond to the amount of $50,000 required for the faithful performance of the work.

Notice to Bidders, Forms of Proposal and Contract, Specifications and Plans may be examined at the office of Fuller & McClintock, 170 Broadway, New York, and James M. Duffy, Village Engineer, Mamaroneck, N. Y. They may be obtained at these offices upon a deposit of $20 of which $15 will be refunded upon the return of the plans and specifications in good condition.

Proposals from responsible and qualified Contractors only are requested and the Village reserves the right to reject any or all bids.

By order of the Board of Trustees,
Dated Mamaroneck, N. Y., March 2, 1923.

JOHN F. HUNTER, MD.,
President.
EDGAR L. HOWE,
Village Clerk.

Bids: March 12.

Bulkhead and Filling

Mineola, N. Y.

Sealed proposals will be received by the Board of Supervisors of Nassau County in its Chambers in the Court House at Mineola, New York, on

Monday, March 12, 1923, at 11 a.m., for the improvement of the Long Beach Road, between Barnum Island Creek and the Upland, by the construction of a bulk head and filling.

Plans and specifications may be seen at the office of the County Engineer at Mineola, Long Island.

Each bid must be accompanied by a certified check on a solvent bank in the sum of Three per cent of the amount of the total contract, made payable to the County of Nassau.

The Board of Supervisors reserves the right to reject any or all bids, waive any informality in the bids, and to accept the bid which it deems most favorable to the interest of the County.

By order of the Board of Supervisors,
JESSE MERRITT,
Clerk.

Dated at Mineola, Long Island,
Feb. 26, 1923.

Bids: Mar. 28.

Sheet Asphalt Paving Top

Kalamazoo, Mich.

Bids will be received until 5 p.m., Wednesday, March 28, 1923, on approximately 28,000 square yards of Sheet Asphalt Paving Top. Specifications furnished upon application. Bids must be accompanied by certified check of five (5%) per cent of the total sum bid. The City reserves the right to reject any or all bids or to award the business where it appears to be to the best advantage.

Call or address,
HAROLD A. BLAND,
City Purchasing Agent, Kalamozoo, Mich.

OFFICIAL PROPOSALS

Bids: Mar. 24.

Street Improvement

Charlottesville, Va.

Sealed proposals will be received by the City Manager of the City of Charlottesville, Va., until 12 o'clock, noon, on March 24, 1923, for Street Improvement; consisting of grading, curbing, paving and resurfacing.

Alternate proposals will be received for various types of surfaces. Estimated square yardage for this proposal 120,200. The City Manager reserves the right to increase or decrease this quantity.

Plans and specifications are on file in the office of the Engineer. Copies of the specifications and proposal blanks may be obtained from the City Manager.

Each proposal must be accompanied by a certified check for ten thousand dollars ($10,000) payable to the Treasurer of the City of Charlottesville, Va.; to be returned in case the proposal is rejected or to be forfeited in case the bidder should refuse to enter into a contract in accordance with his proposal and the specifications.

The right is reserved to reject any or all bids.

BOYD A. BENNETT,
City Manager,
Charlottesville, Va.

Maximum Competition Is Assured

these advertisers through *Engineering News-Record's* large NATIONAL circulation, reaching almost every worthwhile contractor, dealer, and manufacturer in the country interested in bidding on public work contracts. It is the DOMINANT MEDIUM for advertising contracts for work, material, and supplies for towns, cities, counties, state and government departments, and private organizations.

Bids: Mar. 27.

Drainage Ditch and Structures

Lamar, Colo.

Sealed proposals will be received at the office of the Granada Drainage District, located at Room No. 3, Markham Building, Lamar, Colorado, until two o'clock p.m. of the 27th day of March, 1923, and a contract will be let to the lowest responsible bidder for the construction of any or all parts of the drainage system of the said Granada Drainage District, as follows:

(a)—Open drainage canal.
(b)—Bridges and other necessary structures.

This work involves the excavation of about 350,000 Cubic Yards, of material in open cut, and structures as follows:

Flumes—approximately	20
Road Bridges—approximately	9
Farm Bridges—approximately	10
State Highway Bridges	2
Drain Inlets—approximately	20
Flush Gates	2
Wolf Creek Inlet	2

Said sealed proposals will be opened in public at the hour of two o'clock p.m. on said 27th day of March, 1923, at said Room No. 3, Markham Building, Lamar, Colorado.

Plans and specifications may be seen at the office of the George H. Russell Engineering Company, Engineers for the District, Room No. 3, Markham Building, Lamar, Colorado.

For further particulars address the Granada Drainage District, Lamar, Colorado.

E. H. GERECKE,
Secretary of the Granada Drainage District, Lamar, Colorado.
Feb. 19, 1923.

OFFICIAL PROPOSALS

Bids: Mar. 22.

Madison Street Bridge

Eau Claire, Wis.

Sealed proposals will be received by the Wisconsin Highway Commission at the office of the Division Engineer, at 213 So. Barstow Street, Eau Claire, Wisconsin, until 2:00 o'clock p.m., Thursday, March 22nd, 1923, for furnishing materials an the performance of all construction work in connection with the following described bridge.

The bridge is known as the Madison Street Bridge over the Chippewa River, located on State Trunk Highway No. 12 in the city of Eau Claire, Eau Claire county. The bridge has a total over all length of about 700 feet, and is of the reinforced concrete arch type. The roadway is 36 feet with two 8-ft. sidewalks. There is one span 130 feet long; two spans each 120 feet long, and two spans each 115 feet long. Stream bed consists of sand and gravel. All substructure units are to be supported on timber piles.

An approximate estimate of the total quantities involved is as follows:

Concrete—Class "A," 6,149 cu.yds.; concrete—class "C," 4,408 cu.yds.; concrete balusters, 1,092; reinforcing steel, 670,050 lbs.; structural steel, 11,730 lbs.; wire mesh, 3,100 lbs.; pipe, ¾-in. diameter, 1-ft. long, 40 required; pipe ¾-in. diameter, 1-ft., 11-in. long, 20 required; pipe, 1½-in. 0-in. long, 408 required; wood piles 18-ft. 0-in. long, 1,232 required; drains complete, diameter, 1,530 lin.ft.; wood piles, 24-ft. 12 required; fillers for expansion joints; concrete vases, 28 required; metal lamp standards, 12 required.

The last two items are to be furnished by the Wisconsin Highway Commission.

The above estimate of quantities is approximate and its accuracy is not guaranteed. Bidders should make their own estimate of quantities and costs and submit bids thereon after examining the plans, the specifications and the bridge site.

Cement is to be furnished to the contractor by the Wisconsin Highway Commission, f.o.b. Eau Claire.

Bids are to be a lump proposal, exclusive of cement, but are to include the cost of handling, etc., of the cement.

Plans and specifications for this work may be seen at the offices of the Wisconsin Highway Commission at 206 Stephenson Bldg., Milwaukee, Wisconsin, and at 213 So. Barstow St., Eau Claire, Wisconsin, and in the State Capitol Annex at Madison. They will also be on file with Mr. J. T. Hurd, City Engineer, at Eau Claire, and also with the County Clerk in the Court House at Eau Claire.

Bidders desiring copies of the plans and specifications for their own use, may secure them from the Wisconsin Blue Print Company, Madison, Wisconsin, at the cost of $5.50 a set. Plans will be mailed first class and there will be no refund for return of plans.

Each proposal must be accompanied by cash, a certified check, a liberty bond, or a bidder's bond for a sum equal to at least 5 per cent of the bid, made payable to the Treasurer of the State of Wisconsin as a guarantee that the successful bidder will enter into a contract with the State to furnish the material, bid on and perform all of the construction work necessary for the proper completion of this structure in accordance with the standard plans and specifications for such structure. Bidders should state prices in writing and in figures.

All bids will be publicly opened by an authorized representative of the Wisconsin Highway Commission. The Commission reserves the right to reject any or all proposals and to accept any bid which may be most advantageous to the State.

WISCONSIN HIGHWAY COMMISSION,
By W. C. Buetow, Bridge Engineer.

Swart Service really serves—
A choice assortment of words pregnant with profit for you.
HARMON V. SWART
Contract Bonds
Compensation Insurance
92 William St., New York

THE CITY OF HAPPINESS ÆTNA IS IN THE STATE OF MIND

CONTRACT BONDS FOR RESPONSIBLE CONTRACTORS

Aetna stands for the highest quality of insurance and surety bonds.

ÆTNA CASUALTY AND SURETY COMPANY

HARTFORD, CONN. AGENTS EVERYWHERE

THE CITY OF HAPPINESS ÆTNA IS IN THE STATE OF MIND

Wanted—Correspondents

for Engineering News-Record

If you want to earn some extra money and are a resident in one of the cities named below;

If you can spare an hour or two a day *during business hours* for calling upon architects, contractors, engineers and city departments;

Then write me concerning your qualifications and present connection, if you live in

ARIZONA
Bisbee
Globe
Tuscon

ARKANSAS
Little Rock

CONNECTICUT
Hartford

DELAWARE
Wilmington

INDIANA
Evansville
South Bend

IOWA
Dubuque

KANSAS
Leavenworth

KENTUCKY
Louisville

MASSACHUSETTS
Fall River

NEVADA
Carson City

OHIO
Toledo
Youngstown

OREGON
Astoria
Medford
Salem

SOUTH CAROLINA
Except Columbia

SOUTH DAKOTA
Sioux Falls

WASHINGTON
Tacoma
Walla Walla

ALBERTA
Calgary

MANITOBA
Winnipeg

QUEBEC
Quebec

ALDEN W. WELCH, Engineering News-Record, Tenth Ave. at 36th St., New York

Engineering News-Record

(Circulation over 30,000 weekly)

prints more than twice as many announcements advertising contracts to be let than appear in any other one publication

Practically every form of public work and the furnishing of material and supplies wer printed in the Official Proposal Columns of *Engineering News-Record* last year. They include calls for bids on:

Boilers
Bridges
Building Alterations
Canal Construction
Cast Iron Pipe
Dams
Drainage
Dredging
Engines
Excavation
Filling
Filtration Plants
Generators
Heating and Ventilating
Highway Construction
Paving
Pumps
Pumping Plants
River and Harbor Improvements
Road Oil
Road Building Equipment
Schools and Public Buildings
Sewage Disposal Plants
Sewers
Street Improvements
Street Lighting Systems
Supplies and Material
Water Works
Well Drilling, Etc.

THIS wide use of *Engineering News-Record's* Official Proposal Columns and the rapidly growing recognition of this paper's value as an advertising medium is due to RESULTS—keen competition, lower bids, better work—and savings.

For more than 40 years contractors, manufacturers, and dealers everywhere have consulted the Official Proposal Columns of *Engineering News-Record* and its predecessors for opportunities for business. Today, many of those interested in bidding on contracts for work, material, and supplies depend entirely upon the advertisements that appear in this dominant paper and would be unlikely to see those printed elsewhere.

The Dominant Proposal Medium

OFFICIAL PROPOSALS

Bids: Mar. 22.

Madison Street Bridge

Eau Claire, Wis.

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The last two items are to be furnished by the Wisconsin Highway Commission.

The above estimate of quantities is approximate and its accuracy is not guaranteed. Bidders should make their own estimate of quantities and costs and submit bids thereon after examining the plans, the specifications and the bridge site.

Cement is to be furnished to the contractor by the Wisconsin Highway Commission, f.o.b. Eau Claire.

Bids are to be a lump proposal, exclusive of cement, but are to include the cost of handling, etc., of the cement.

Plans and specifications for this work may be seen at the offices of the Wisconsin Highway Commission at 206 Stephenson Bldg., Milwaukee, Wisconsin, and at 213 So. Barstow St., Eau Claire, Wisconsin, and in the State Capitol Annex at Madison. They will also be on file with Mr. J. T. Hurd, City Engineer, at Eau Claire, and also with the County Clerk in the Court House at Eau Claire.

Bidders desiring copies of the plans and specifications for their own use, may secure them from the Wisconsin Blue Print Company, Madison, Wisconsin, at the cost of $5.50 a set. Plans will be mailed first class and there will be no refund for return of plans.

Each proposal must be accompanied by cash, a certified check, a liberty bond, or a bidder's bond for a sum equal to at least 5 per cent of the bid, made payable to the Treasurer of the State of Wisconsin as a guarantee that the successful bidder will enter into a contract with the State to furnish the material, bid on and perform all of the construction work necessary for the proper completion of this structure in accordance with the standard plans and specifications for such structure. Bidders should state prices in writing and in figures.

All bids will be publicly opened by an authorized representative of the Wisconsin Highway Commission. The Commission reserves the right to reject any or all proposals and to accept any bid which may be most advantageous to the State.

WISCONSIN HIGHWAY COMMISSION.
By W. C. Buetow, Bridge Engineer.

Bids: April 26.

Water Tube Boilers

New Orleans, La.

Sealed proposals will be received by the Sewerage and Water Board of New Orleans up to 12 o'clock noon, Thursday, April 26th, 1923, for furnishing 1,500-1,800 hp. Water Tube Boilers.

Specifications and blank forms of proposals may be obtained at Room 303, No. 526 Carondelet Street, New Orleans.

The right is reserved to reject any or all bids.

GEO. G. EARL,
General Superintendent.

A. G. MOFFAT,
Secretary.

OFFICIAL PROPOSALS

Bids: April 10.

Intercepting Sewer

Toledo, Ohio.

Sealed proposals will be received by the Director of Public Service, Toledo, Ohio, until twelve o'clock noon, eastern standard time, on the 10th day of April, 1923, and then publicly opened and read for the construction of Contract No. 6 of the Intercepting Sewer System, consisting of

2,295 feet of 78-inch circular sewer.
2,155 feet of 72-inch circular sewer.
4,940 feet of 69-inch circular sewer.
1,970 feet of 66-inch circular sewer.
4,575 feet of 51-inch circular sewer.
1,500 feet of 39-inch circular sewer.

all of which will be built in tunnel, together with two inverted siphons, special and standard manholes and appurtenances.

Bidders are invited to submit prices on monolithic concrete, vitrified segment block and brick.

Plans, specifications, contract and bond forms can be secured at the office of the Director of Public Service upon deposit of Twenty dollars ($20.00) for each set, which will be refunded provided they are returned in good order on or before May 15, 1923.

Information regarding the work can be obtained through the following offices of our consulting engineers, Fuller & McClintock, 170 Broadway, New York, 319 Summit-Cherry Bldg., Toledo, 421 Produce Exchange Building, Kansas City, Mo., 879 North Parkway, Memphis, Tenn., and 1001 Chestnut Street, Philadelphia, Pa.

Each proposal must be accompanied by a bond executed by the bidder and a surety company satisfactory to the Director of Public Service in the sum of Ten Per Cent (10%) of the amount of the bid, or in lieu of a bond the bidder may deposit with the Director of Public Service, a certified check on a solvent bank, payable to the order of the Director of Public Service, in amount equal to such bond, said bond or certified check being required as a guarantee that if the bid be accepted, a contract will be entered into and its performance properly secured.

The contract bond will be Fifty Per Cent (50%) of the amount of the contract. Labor and material bids mut be separately stated with the price therefor.

The Director of Public Service reserves the right to reject any or all bids or to accept any bid which he may deem advantageous to the City of Toledo.

W. T. JACKSON,
Director of Public Service.

GEORGE E. LASKA,
Secretary.

Bids: March 22.

Sewage Disposal Works

Mamaroneck, N. Y.

Sealed proposals for the completion of Sewage Disposal Works will be received by the Clerk of the Village of Mamaroneck until 8 o'clock p.m., on Thursday, the 22nd day of March, 1923.

The work includes about 2,600 cubic yards of earth excavation; 1,630 cubic yards of concrete masonry; the completion of the machinery building; the furnishing and erection of compressors, cast-iron and wrought-iron piping, valves, diffuser blocks, electrical equipment and other work necessary for completion. Certain materials and apparatus will be furnished on the ground by the Village and the plant and equipment now on the ground may be used without cost by the Contractor.

A certified check or cash to the amount of $2,000 is required with each proposal and a performance bond to the amount of $50,000 required for the faithful performance of the work.

Notice to Bidders, Forms of Proposal and Contract, Specifications and Plans may be examined at the office of Fuller & McClintock, 170 Broadway, New York, and James M. Duffy, Village Engineer, Mamaroneck, N. Y. They may be obtained at these offices upon a deposit of $20 of which $15 will be refunded upon the return of the plans and specifications in good condition.

Proposals from responsible and qualified Contractors only are requested and the Village reserves the right to reject any or all bids.

By order of the Board of Trustees.
Dated Mamaroneck, N. Y., March 2, 1923.

JOHN F. HUNTER, MD.,
President.

EDGAR L. HOWE,
Village Clerk.

OFFICIAL PROPOSALS

Bids: Mar. 27.

Barge Canal Terminal

Albany, N. Y.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Tuesday, March 27th, 1923, at which place and hour they will be publicly opened and read, for the construction of Barge Canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, and amendatory laws, as follows:

TERMINAL CONTRACT NO. 237.

For constructing a terminal freighthouse at Oswego. Contract plans, sheets 1 to 9, inclusive.

Plans may be seen and detailed specifications, engineer's estimates of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y.; at the office of the Assistant Superintendent of Public Works for the Western Division, at Rochester, N. Y.; at the offices of the Superintendent of Public Works, Erie Basin Terminal, Buffalo, N. Y., and Terminal Warehouse, Pier 6, East River, New York City.

Blueprint copies of plans will be furnished by the State Engineer and Surveyor upon the receipt at his office in the Telephone Building, Albany, N. Y., of payment at the rate of fifteen cents (15c.) per sheet. Refund will not be made for any blueprints which may be returned.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank or trust company in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of the contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent) of the estimated cost of the work, according to the contract price, and an additional bond known as the labor bond, in the sum of ten per centum (10 per cent) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y.; and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the state for doing the work and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

EDWARD S. WALSH.
Superintendent of Public Works.
February 21st, 1923.

OFFICIAL PROPOSALS

Bids: April 2

Storage Reservoir

West Chester, Penna.

Sealed proposals will be received by the Council of the Borough of West Chester, Chester County, Pa., at the Borough Hall on the 2nd day of April, 1923, until 12:00 o'clock noon, for the construction of a Storage Reservoir. The bids received will be publicly opened at 2:00 p.m., of the same day. The work includes a concrete and earth fill dam and the excavation of the reservoir site. Approximately 1,565 cubic yards of concrete, 1,400 square yards of stone rip rap, and 25,000 cubic yards of earth excavation will be required, together with the furnishing and installing of 16 inch and 24 inch C. I. pipe, valves and sluice gates.

Each proposal must be accompanied by a certified check, made payable to the Borough of West Chester, for the sum of $1,000.00. A bond for 50 per cent of the contract price will be required.

Plans and specifications will be on file and may be seen at the Borough Hall, West Chester, Chester County, Pa., or at the office of the Borough Engineer, T. G. Colesworthy, Court House, West Chester, Pa., or the Consulting Engineers, Remington & Vosbury, 601 Market Street, Camden N. J. Complete sets of the plans and specifications may be had upon application to either of the engineers upon deposit of $10.00. This deposit will be refunded only to those submitting a bonafide bid upon the work and returning the plans in good condition.

The right is reserved to reject any or all bids.

M. M. DAVIS,
Secretary of Council.

Bids: March 20.

System of Water Mains

Mt. Greenwood, Cook Co., Ill.

Sealed Proposals, endorsed "Proposals for Water Main," will be received by the Board of Local Improvements of the Village of Mt. Greenwood, Illinois, in the Village Hall in said Village, until eight o'clock p.m., March 20, 1923, for furnishing all labor, tools, machinery, equipment and materials and constructing and completing a system of cast iron water mains in various streets in said Village, as designated by and in accordance with an Ordinance duly passed, and in accordance with a special assessment proceeding in the County Court of Cook County, designated as Special Assessment Number Two, of the Village of Mt. Greenwood, Illinois, and in accordance with the following estimated quantities:

4,041.78 Lin.Ft. of (12") internal diameter cast iron water main, average depth (5½').

33,198.49 Lin.Ft. of (6") internal diameter cast iron water main, average depth (5½').

(12) 12" standard iron, parallel seat, double gate valves, with brick valve chambers and cast iron covers.

(57) 6" standard iron, parallel seat, double gate valves, with brick valve chambers and cast iron covers.

(99) 6" standard fire hydrants, with iron body, fitted with (2), (2½") hose and (1) steamer connection, with (5") valve opening and a (7") inside diameter working barrel and fitted with auxiliary valves.

(11) 12" x 12" x 6" x 6" cast iron cross connections, 512 lbs. each.

(24) 6" x 6" x 6" x 6" cast iron cross connections, 257 lbs. each.

(3) 12" x 12" x 6" cast iron tee connections, 458 lbs. each.

(104) 6" x 6" x 6" cast iron tee connections, 200 lbs. each.

(8) 6" cast iron, ½, 45 degree bends, 105 lbs. each.

All proposals must be submitted on the Proposal Blanks furnished by the Board of Local Improvements of said Village; and shall be accompanied by cash or certified check made payable to M. L. Cusack, President of the Board of Local Improvements, in an amount equal to ten (10%) per cent of the total proposal.

A construction bond, satisfactory to the Board of Local Improvements, in an amount equal to one-third of the total proposal will be required of the successful bidder.

Payment for the above work will be made by the Board of Local Improvements of said Village, in Special Assessment Bonds, issued against Special Assessment Number Two of the Village of Mt. Greenwood, Illinois, bearing interest at the rate of six (6) per cent per annum, with a maximum maturity date of ten (10) years.

Plans, specifications, and proposal blanks may be obtained at the office of the Village Clerk, of said Village; and from Allen L. Fox, engineer for said Board of Local Improvements, at his office in the Commercial Bank Building, Chicago Heights, Illinois; and in the office of F. K. Root, 14th Floor Conway Building, Chicago, Illinois.

The Board of Local Improvements reserves the right to reject any or all Proposals.

BOARD OF LOCAL IMPROVEMENTS.
M. L. CUSACK.

A Bonding Company's Suggestion to Official Proposal Advertisers

"A large part of our contract bond business is submitted to us by wire, and I am a constant reader of the Official Proposals in order to find out the size and nature of the work that is referred to in the bond application. Very frequently I am unable to get any clear idea of what the advertisers are asking bids on, and of course the prospective bidder or contractor is also at a loss to know what kind of a job is being advertised.

"Traveling expenses are heavy at the present time, and contractors pay out considerable sums during the course of a year in investigating prospective contracts. This of course is a large charge that the owners eventually pay, and anything that will reduce the general overhead of contract work will eventually be to the advantage of the owner.

"One way to reduce this overhead is to word the advertisement so that the contractor sitting in his office will know whether or not he should investigate and prepare a bid on the proposed work."

Bids: Mar. 26.

Paving

Elmira, N. Y.

Sealed proposals for the following work will be received by the undersigned at his office, City Hall, Elmira, N. Y., until 3:00 o'clock p.m., Monday, March 26, 1923.

NEW PAVING

East Miller St.—new brick track area 1,800 sq.yds. Reinforced concrete, 5,894 sq.yds.

College Ave.—Sheet asphalt or Warrenite-Bitulithic, 3,070 sq.yds.

REPAVING

Maple and Penna Aves.—Brick track area, 1,195 sq.yds. Sheet Asphalt, Warrenite-Bitulithic or brick, 1,163 sq.yds.

Railroad Ave. and W. 3rd St.—Brick track area, 975 sq.yds. Sheet Asphalt, Warrenite-Bitulithic or brick, 4,869 sq.yds.

RESURFACING

South Main St.—Brick track area, 3,182 sq.yds. Sheet Asphalt or Warrenite-Bitulithic top, 4,267 sq.yds.

Certified checks payable to "Mayor of Elmira, N. Y.," in amounts as below must be inclosed with the bids, the envelopes to be marked "Proposals for Paving."

E. Miller, $2,200; College Ave., $860; Maple and Penna Aves., $780; Railroad Ave. and W. 3rd St., $1,750; S. Main, $1,900.

The checks will be returned to bidders upon filing of contracts.

Plans and specifications are on file in the City Engineer's Office where also may be obtained the bidding sheets which must be used.

The Board of Public Works reserves the right to reject any or all bids.

G. W. JARCHOW, City Clerk.

Bids: April 2

Horizontal Water Tube Boiler

Norfolk, Va.

Sealed bids will be received at the office of the City Manager, City of Norfolk, Virginia, until 12:00 o'clock noon on the 2nd day of April, 1923, for one Horizontal Water Tube Boiler of approximately 225 h.p., complete with setting, on purchaser's foundation.

Instructions to Bidders, Form of Proposal, Specifications, Contract and Form of Bond may be inspected at the Office of the Director of Public Works, Norfolk, Virginia, or at the Office of the Consulting Engineer, Dabney H. Maury, 1445 Monadnock Block, Chicago, Ill., and a complete set of all the above papers may be obtained by intending bidders either from the Director of Public Works or from the Consulting Engineer, upon application accompanied by a check or Postal Order for ten ($10.00) dollars, payable to B. Gray Tunstall, City Treasurer, which amount will be refunded to the party depositing it on return of all of the foregoing papers in good order.

A certified check on an approved bank either in the City of Norfolk, or in the City of New York, or in the City of Chicago, in the sum of $300.00, and payable to B. Gray Tunstall, City Treasurer must accompany each bid, subject to the conditions expressed in the Instructions to Bidders and Form of Proposal.

The City of Norfolk reserves the right to reject any or all bids.

WALTER H. TAYLOR, 3rd.
Director of Public Works.

Bids: April 2.

Street Improvements

Stoneboro, Pa.

Sealed proposals will be received by Borough Secretary for the construction of pavements on Lake Street, and Walnut Street, until Monday April 2nd 1923, at 8 p.m., when they will be opened and read, publicly. The work in general consists of about,

1470 cu.yds. of Excavation.
6244 sq.yds. of One Course Reinforced Concrete Pavement.
560 Lineal ft. of 30 in. Vitrified Clay Pipe.
800 Lineal ft. of 24 in. Vitrified Clay Pipe.
550 Lineal ft. of 18 in. Vitrified Clay Pipe.
275 Lineal ft. of 15 in. Vitrified Clay Pipe.
250 Lineal ft. of 12 in. Vitrified Clay Pipe.
1300 Lineal ft. of 6 in. Vitrified Clay Pipe.
4040 Lineal ft. of Plain Cement Concrete Curb.

Proposal forms, Plans and Specifications may be obtained by sending $4.00 to T. F. Pattinson, Borough Engineer, Stoneboro, Pa.

The council reserves the right to reject any or all bids.

All proposals must be made on printed forms and accompanied by a certified check for $1,000 payable to the Borough of Stoneboro.

Proposals should be plainly marked "Bids for Street Improvements," on the outside of the envelope and mailed to E. E. Smith, Secretary, Borough Council Stoneboro, Pa.

Bids: April 3.

Highway Work

Harrisburg, Pa.

Pennsylvania State Highway Department, Harrisburg, Pa. Sealed proposals will be received at the State Capitol until 10 a.m., April 3, 1923, when bids will be publicly opened and scheduled and contract awarded as soon thereafter as possible for the reconstruction of 40 miles of either Bituminous Surface on a Concrete foundation or One Course Reinforced Concrete Pavement, 30 miles of One Course Reinforced Concrete Pavement and 3 miles of Bituminous Macadam Pavement. Bidding blanks and specifications may be obtained free, and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg. No refund for plans returned. They also can be seen at office of State Highway Department, Harrisburg, 1001 Chestnut Street, Philadelphia, and 119 Federal Street, N. S., Pittsburgh, Pa.

P. D. WRIGHT,
State Highway Commissioner.

OFFICIAL PROPOSALS

Bids: April 7.

Sewers

Pottstown, Penna.

Sealed proposals for the construction of sanitary sewers will be received until 2 p.m. Saturday, April 7, 1923, at the office of the Secretary of Council and will then be publicly opened and read.

Diameter	Length	Trenches		Cu.Yards
		Earth		
4 in.	25,000 ft.	0 ft.- 4 ft.	deep	18,740
6 in.	19,000 ft.	4 ft.- 8 ft.	"	8,794
8 in.	1,944 ft.	8 ft.-12 ft.	"	509
10 in.	330 ft.	12 ft.-16 ft.	"	28
12 in.	2,350 ft.			
15 in.	1,310 ft.	Rock		
18 in.	1,425 ft.	0 ft.- 4 ft.	deep	453
		4 ft.- 8 ft.	"	2,856
		8 ft.-12 ft.	"	494
		12 ft.-16 ft.	"	46

Test pits indicate clay, sand and rock.

Material of construction, Vitrified sewer pipe.

Certified check for $1,000.00 to accompany bids.

Right is reserved to reject any or all bids.

Plans and specifications will be furnished by the Secretary of the Council, or by Gannett, Seelye & Fleming, Incorporated, Engineers, upon deposit of $25.00, said money to be refunded upon return of same.

GEORGE A. WOHL,
Chairman of Sewer Committee,
Pottstown, Penna.
M. L. SEASHOLTZ,
Secretary of Council,
Pottstown, Penna.

Gannett, Seelye & Fleming, Inc.,
Engineers,
1 N. Market Square,
Harrisburg, Penna.

Bids: March 29.

Cast Iron Water Pipe, Valves and Hydrants

Waldwick, N. J.

Sealed proposals will be received by the Clerk of the Borough of Waldwick, N. J., at the Council Chamber, over the office of the Waldwick Coal and Lumber Co., until 8:00 o'clock p.m., March 29th, 1923, for furnishing 6.7 miles of Cast Iron Water Pipe and special Castings. Also Hydrants, Valves, etc.

Bids must be made on proposal forms furnished by the Clerk and must be accompanied by a certified check to the amount of $500.00 drawn payable to W. R. Evans, Jr., Clerk.

Proposals must be sealed and delivered to the Clerk, endorsed on envelope "Proposal for Pipe" or "Proposal for Valves and Hydrants" as the case may be.

Forms of Proposals, Contract and Specifications may be secured by addressing the Clerk at Waldwick, N. J.

The Borough Council reserves the right to reject any and all bids or to accept one other than the lowest.

By order of the Borough Council of the Borough of Waldwick, N. J., at regular meeting, March 8th, 1923.

B. B. VAN WAGONER,
Mayor,
E. D. HOOK,
Chairman of Water Comm.,
W. R. EVANS, JR.,
Clerk,
JOHN L. COLLINS,
Engineer.

Bids: April 2.

Road Work

White Plains, N. Y.

Sealed proposals will be received by the Board of Supervisors, Court House, White Plains, N. Y., until 10:30 a.m., April 2nd, 1923, for constructing the following roads with reinforced concrete:

Co. Road No. 4—Town of Mt. Pleasant, 1.02 miles.

Co. Road No. 12—Towns of Bedford and No. Castle, 3.63 miles.

Co. Road No. 13—Town of Yorktown, 2.96 miles.

Specifications, proposal sheets and all information relative to the above work may be secured at the office of the County Engineer, Court House, White Plains, N. Y. Deposit required for plans—Road No. 4, $3.00; Roads No. 12 and No. 13, $10.00 each.

BOARD OF SUPERVISORS,
FRED L. MERRITT, Clerk.
March 12, 1923.

OFFICIAL PROPOSALS

Bids: April 6.

Water Works and Sewerage Systems

Lyndonville, N. Y.

Sealed Proposals will be received by the Board of Trustees of the Village of Lyndonville, N. Y., until two o'clock p.m. on the 6th day of April, 1923, for the construction of a sewerage system and disposal works; and also for the construction of a water works system, the latter consisting of about five and one-third miles of cast iron mains, hydrants, valves, pump house, slow sand filter, water tower and accessories.

Plans may be seen and specifications obtained at the office of the Board at Lyndonville, or at the office of Hopkins & Field, Engineers, 349 Cutler Building, Rochester, N. Y.

The Board hereby reserves and has the right to reject any or all bids or to accept those that in its judgment will be for the best interests of the Village, and to waive any informality in the bidding.

A surety bond satisfactory to the Board in sufficiency of surety and in the amount of forty per cent of the bid will be required of the one to whom a contract may be awarded.

Bids will be received for the sewerage system and disposal works and separately for the water works pipe laying, pump house, filter, pure water reservoir and water tower foundations, cast iron pipe and special castings, valves, valve boxes and hydrants, water tower and pumping equipment.

A certified check made payable to the order of the Board of Trustees, Lyndonville, N. Y., to the amount of $1,000 must be deposited by each bidder and accompany his bid as a guarantee that in case the contract is awarded to him he will, within ten days thereafter, execute such contract and furnish his bond.

Bids must be sealed and addressed to the Board of Trustees, Lyndonville, N. Y., and marked on the outside of the enclosing envelope "Proposal for Sewerage (or Water Works) System."

RICHARD N. PARSONS,
President,
BENJAMIN J. WARD,
Trustee.
JAY W. BREED,
Trustee.

DONALD M. FRASER, Village Clerk.
Dated Lyndonville, N. Y., March 10, 1923.

Bids: March 20.

Pipe Sewers

South Bend, Ind.

Notice is hereby given that sealed proposals will be recevied by the Department of Public Works of the City of South Bend, Ind., up to 10:00 o'clock a.m., of the 20th day of March, 1923, for the execution of the following work:

Pipe sewers on the following streets:

William Street	1,200 lin.ft.
Brookfield Street	1,460 lin.ft.
Calvert Street	1,155 lin.ft.
Kinyon Street, Keller and Medora Streets	1,713 lin.ft.
Victoria Street	1,400 lin.ft.
Indiana Avenue and Clyde Street	900 lin.ft.
Fairview Avenue	1,422 lin.ft.
Lafayette Street and Parkovash.	991 lin.ft.
Oak Part Court	600 lin.ft.
Marietta Street	233 lin.ft.

Complete drawing and specifications of said work are now on file in the office of the Department of Public Works in the City Hall, of South Bend, Indiana. The Board reserves the right to reject any or all bids.

L. B. SLAUGHTER,
L. P. HARDY,
ALBERT F. HONER,
Board of Public Works.

VERONICA C. SWEENEY,
Clerk of the Board.
Date of publication: March 8 and 15, 1923.

If there is one thing above another we do do, it is Deliver a Service that Really Serves.

HARMON V. SWART
Contract Bonds
Compensation Insurance
92 William St., New York

OFFICIAL PROPOSALS

Bids: April 16.

Intercepting Sewers, Sewage Treatment Plant and Appurtenances

Urbana, Ill.

Sealed proposals endorsed "Proposal for Intercepting Sewers, Sewage Treatment Plant and Appurtenances" will be received by the Board of Trustees of the Urbana and Champaign Sanitary District, Urbana, Illinois, at its office in the Flat Iron Building, Urbana, until 10:30 o'clock a.m. on the 16th day of April, 1923, and will then be publicly opened and read.

The work for which proposals are invited includes the following divisions:

DIVISION A, SEWERS. This division includes about 25,000 feet of intercepting sewer 8 inches to 30 inches in diameter, one inverted siphon and all manholes and appurtenances to serve about 70,000 population.

DIVISION B, SEWAGE TREATMENT PLANT. This division includes the construction of a sewage pumping station, four primary settling tanks, sprinkling filters, conduits, buildings and appurtenances for a sewage treatment plant to serve about 45,000 population.

The work includes wet and dry excavation, the making of embankments, backfilling, disposal of surplus excavation, and the placing of concrete, brickwork, filter stone, iron castings, sheeting, bracing and other material as specified.

The work is located in streets and rights-of-way through Champaign and Urbana and on property owned or leased by the Sanitary District adjacent to the northeast part of Urbana, in the Township of Urbana, Champaign County, Illinois.

Each proposal must contain the full name of every person or company interested in the same and must be accompanied by cash or a certified check on a bank in Urbana or Champaign or on a State or National Bank in good standing, and made payable to the order of the President of the Urbana and Champaign Sanitary District, in the following amounts:

Division A—$3,500.00
B— 8,500.00
A and B—10,000.00

This sum is a guarantee that if the proposal is accepted, a contract will be entered into and its performance properly secured.

All proposals must be made upon blank forms furnished by the Sanitary District and in accordance with the "Requirements for Bidding and Instructions to Bidders" attached thereto.

Proposals may be made upon one division or both divisions complete, but not on any part of either division.

The Board of Trustees of the Sanitary District reserves the right to reject any or all bids, waive or not waive any informality in the bids received and to accept or reject such items and divisions of the work as it deems most favorable to the Urbana and Champaign Sanitary District.

Requirements for bidding, instructions to bidders, form of proposal, contract, specifications, form of bond and plans may be obtained from the District Manager of the Sanitary District or at the offices of Pearse, Greeley & Hansen, 39 West Adams Street, Chicago, Illinois, upon deposit of Fifteen Dollars ($15.00), which sum so deposited will be refunded if said plans, specifications, etc., are returned in good condition within thirty (30) days after the opening of bids.

Dated this 12th day of March, A. D. 1923.

URBANA AND CHAMPAIGN SANITARY DISTRICT, URBANA, ILLINOIS,
By P. W. WRIGHT, President,
Its Board of Trustees.

Attest: C. N. RILEY, Clerk.

Bids: April 13.

Transmission Line and Telephone Line

Seattle, Wash.

The City of Seattle, Washington, will call for bids for the construction of 100 miles of 165 K.V. Transmission Line and Telephone Line. Specifications will be complete March 30th and bids will be called for Friday, April the Thirteenth.

Intending bidders should familiarize themselves in the meantime with all details, so that bids can be made out at the proper time.

All necessary information can be obtained at the office of The Skagit River Development, 1400 Alaska Building, Seattle, Washington.

C. E. HIRDEN.

OFFICIAL PROPOSALS

Bids: April 10.

Water Filtration Plant

Toronto, Ohio.

The Board of Trustees of Public Affairs of the Village of Toronto, Ohio, will receive bids for the furnishing of materials, labor and equipment and the construction of a water filtration plant, until 12:00 o'clock noon, Eastern Standard Time, Tuesday, April 10th, 1923, at the Municipal offices in the Village of Toronto, Ohio.

The work consists of two 1,000,000 gallons per day mechanical filter units with the accompanying auxiliary works, one 2,000,000 gallons per day motor driven centrifugal high-lift pump, 1 2,000,000 gallons per day motor driven centrifugal low-lift pump, the necessary electrical installations, piping and other appurtenances, as per Plans and Specifications.

Any intending Bidder will be required to indicate to the satisfaction of the Engineers, or upon appeal to the satisfaction of the Board of Trustees of Public Affairs, that they have had experience in building work of this class, and to show their financial ability and give references as to past experience. Any Contractors inexperienced in the building of mechanical filtration plants or the structural work incidental thereto need not apply.

The work will be advertised under eight items, but the Contract may be let as one Contract, or divided among the eight parts depending upon the bids received.

Each bidder will be required to furnish a Banker's Certificate or a satisfactory Bidder's Bond in the amount of 10 per cent (10%) of the total amount of the bid, guaranteeing that he will enter into the Contract precisely as originally prepared, provided said Contract is awarded him.

The Contractor to whom the Contract will be awarded will be required to furnish a satisfactory Bond on a satisfactory Bonding Company, in the amount of one hundred per cent (100%) of the total bid, said Bond to guarantee the faithful performance of the Contract in all respects and the completion of said Contract within the time specified or any extensions which might be granted thereto.

Plans, Specifications and Bidding Blanks may be received from the Engineers, Hudson & Myron, 808 Wabash Building, Pittsburgh, Pa., upon proper application, and a deposit of $20.00 may be required of any Bidder, subject to the presentation and return of said Plans, Specifications, etc. In case a Contractor receiving Plans does not offer a bid and returns the Plans in good condition, then $10.00 of the $20.00 will be refunded to him, the other $10.00 being retained to cover the cost of excessive sets of Plans. In case any Contractor, however, receiving Plans and data and submitting a bid, and in case all data, with Plans, is returned to the office in good condition, then said Contractor will be refunded the entire amount of $20.00. In case any Contractor receiving Plans and data and not returning the same within two (2) weeks' time after the opening of bids, then said Contractor will forfeit the entire amount of the deposit of $20.00.

The Board of Trustees of Public Affairs reserves the right to reject any part or the total parts of any or all bids received.

SAMUEL McADOO,
President of the Board.
S. H. CAREY,
Secretary of the Board.
W. D. CAMPBELL,
Member of the Board.

Hudson & Myron, Engineers,
808 Wabash Building,
Pittsburgh, Pa.

Bids: March 22.

Dragline

Fond du Lac, Wis.

Sealed bids will be received at the office of the City Clerk up to three o'clock p.m., March 22nd, 1923, for furnishing one One Cubic Yard or Three-Quarters Cubic Yard Caterpillar Mounted Dragline for the City of Fond du Lac, Wisconsin, according to the plans and specifications on file in the City Clerk's office.

A certified check in the sum of 10% of the amount of the bid must accompany the proposal.

PARK BOARD,
A. M. HUNTER, Secretary.
Dated February 21, 1923.

OFFICIAL PROPOSALS

Bids: April 5.

Water Works and Sewerage Improvements

Fayetteville, N. C.

Sealed proposals will be received by the Public Works Commission of the City of Fayetteville, N. C., until 3:00 p.m., April 5th, 1923, for improvements to the City Water Works and Sewerage Systems.

The improvements consist of furnishing and laying approximately 1,600 tons of cast iron water pipe and special castings, sizes 6-inch to 12-inch inclusive, and furnishing valves and hydrants; the construction of a 300,000 gallon elevated tank, etc.; furnishing and laying approximately 87,000 feet of vitrified pipe sewers, sizes 8-inch to 18-inch inclusive; the construction of 293 manholes and 20 flush tanks; and miscellaneous improvements to the pumping and filter plants such as equipment of present filters with new manifold and strainer systems, rate controllers, loss of head and rate of flow gages; and the furnishing and installation of one chlorinator, one motor driven centrifugal pump, one Venturi meter, etc. The plant improvements also include the construction of various concrete structures.

Proposals must be marked "Proposals for Water Works and Sewerage Improvements for the City of Fayetteville, N. C." All bids must be submitted on blank forms to be provided in copies of the proposal, contract and specifications.

Each bid must be accompanied by a certified check for five (5) per cent of the amount of the bid, as evidence of good faith.

Plans, copies of the proposal, contract and specifications, etc., may be obtained on application to the Engineer or these may be seen at the office of the Secretary of the Public Works Commission in Fayetteville.

The Commission reserves the right to reject any or all bids and to award contracts which appear to be for the best interests of the City.

WILLIAM C. OLSEN,
Consulting Engineer.
H. J. McBUIE, Secy, Kinston, N. C.
Public Works Commission,
Fayetteville, N. C.

Bids: April 4 (date extended)

Water Works Improvements

Wheeling, W. Va.

Intake Pier; Intake Line; Substructures and Superstructures for a 20 Million Gallon Filtration Plant and Pumping Station; Heating Plant; Filter Equipment; Sluice Gates; Distributing Mains; Valves; Cast Iron Pipe; 30" Steel and Cast Iron Force Mains; Five One Million Gallon Storage Tanks; and Appurtenances.

Sealed proposals for the construction of 2 20 Million Gallon Filtration Plant and Pumping Station, Steel Reservoirs, Force Mains, Distribution System Piping and Appurtenances as outlined above will be received by the City of Wheeling, W. Va., until 12 o'clock noon, Eastern Standard Time, on the 4th day of April, 1923, and will then be publicly opened and read.

Official Proposal Blanks, Instructions to Bidders, Specifications, Form of Contract and Bond may be seen at the office of the City Clerk, Wheeling, W. Va., or two (2) copies of each may be obtained by bona fide bidders upon application to The J. N. Chester Engineers, Union Bldg., Pittsburgh, Pa., or to the City of Wheeling, W. Va., and deposit of Twenty-five Dollars ($25.00) which amount will be refunded to bidders on receipt of a bona fide bid or upon the return within 30 days after receipt of bids of both copies in good order.

The right is reserved to reject any or all bids.

C. H. DOWLER,
City Manager.

Attest:
W. H. EVANS,
City Clerk.
February 24th, 1923.

Compensation Insurance
Mr. Contractor, is your insurance a football which gets kicked around by any one who happens to be the friend of somebody who gave you the last job. Or is it handled solely and exclusively by a compensation specialist?
ALFRED S. HAMILTON
110 William St., New York

OFFICIAL PROPOSALS

Bids: March 24.

Sewer

Milwaukee, Wis.

Construction of a Main Sewer to be located in St. Francis Ave., First St., Elizabeth Ave., Pennsylvania Ave. and Thompson Ave. Published by authority of the Metropolitan Sewerage Commission of the County of Milwaukee.

Sealed proposals for the construction of extensions to the Intercepting Sewer System of the County of Milwaukee, State of Wisconsin, will be received by the Metropolitan Sewerage Commission of said County at its offices, 508 Market Street, Milwaukee, Wisconsin, until 2 o'clock p.m., the 24th day of March, 1923, at which time and place, during the session of the said Commission, the proposals will be publicly opened and read.

The work to be done embraces the building of the following approximate work:

9,060 lineal feet of 36" Concrete Sewer (in tunne)l

Together with all manholes and other appurtenances.

The time allowed for the completion of this contract shall be twelve (12) months from the date of the Engineer's notice to begin the work.

The liquidated damages for not completing the work within the time above stated shall, for each day in excess thereof, be Ten ($10.00) Dollars.

Each proposal submitted must be accompanied by a cash deposit of, or, in lieu thereof, by a certified check drawn upon a National or State Bank or Trust Company, and to the order of the "Metropolitan Sewerage Commission of the County of Milwaukee," to the amount of Twenty-five Hundred ($2,500.00) Dollars.

Specifications and blank forms of proposals can be obtained and detailed plans examined at the office of the Metropolitan Sewerage Commission, 508 Market Street, Milwaukee, Wis., and a full set of plans will be sent to any contractor upon receipt of five dollars ($5.00). This sum will be returned upon surrender of the plans in good condition, if returned within thirty days after the award of the contract.

The Metropolitan Sewerage Commission of the County of Milwaukee reserves the right to reject any and all bids submitted.

JOHN H. FOWLES,
Secretary.

Bids: Mar. 21.

Water Works Improvements

Roxboro, N. C.

Sealed proposals will be received by the Mayor and Board of Commissioners of the Town of Roxboro, North Carolina, until 2 o'clock p.m., Wednesday, March 21st, 1923, for developing a new source of water supply. The principal items entering into the work are as follows:

Laying 20,000 feet of 12-inch cast iron B & S water pipe.

Building concrete and brick filter plant; concrete and brick pumping station; concrete reservoir; and earth dam with masonry spillway.

Furnishing and erecting filter equipment.

Furnishing and installing one 500 GPM centrifugal pump with electric motor and one 500 GPM centrifugal pump with gas engine drive.

Clearing impounding reservoir site—60 acres.

Plans will be on file and may be seen at the office of The Ludlow Engineers at Winston-Salem, N. C., or at the office of the Mayor at Roxboro, N. C., after March 1st. After that date copies of the Specifications, Bid Blank, and Contract Form may be obtained from the Engineers.

For the convenience of prospective bidders the Engineers will furnish full set of blue print copies of the plans upon application accompanied by a check for $7.50 to cover the cost, or separate prints at $1.00 each.

Each bid must be accompanied by a certified check payable to the Treasurer of the Town of Roxboro, in the sum of $4,000 with complete bids, or approximately 5% of the amount of partial bids.

Proposals will be opened publicly with the usual rights reserved.

DR. W. A. BRADSHER.
G. W. KANE,
R. L. HARRIS,
Water Works Committee.

THE LUDLOW ENGINEERS,
Winston-Salem, N. C.
J. L. LUDLOW,
Consulting Engineer.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ADVERTISEMENTS ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE.

OFFICIAL PROPOSALS

Bids: April 9 (date extended)

Drainage Ditch and Structures

Lamar, Colo.

Sealed proposals will be received at the office of the Granada Drainage District, located at Room No. 3, Markham Building, Lamar, Colorado, until two o'clock p.m. of the 9th day of April, 1923, and a contract will be let to the lowest responsible bidder for the construction of any or all parts of the drainage system of the said Granada Drainage District, as follows:

(a)—Open drainage canal.

(b)—Bridges and other necessary structures.

This work involves the excavation of about 350,000 Cubic Yards, of material in open cut, and structures as follows:

Flumes—approximately	20
Road Bridges—approximately	9
Farm Bridges—approximately	10
State Highway Bridges	2
Drain Inlets—approximately	20
Flush Gates	2
Wolf Creek Inlet	2

Said sealed proposals will be opened in public at the hour of two o'clock p.m. on said 27th day of March, 1923, at said Room No. 3 Markham Building, Lamar, Colorado.

Plans and specifications may be seen at the office of the George H. Russell Engineering Company, Engineers for the District, Room No. 3, Markham Building, Lamar, Colorado.

For further particulars address the Granada Drainage District, Lamar, Colorado.

E. H. GERECKE,
Secretary of the Granada Drainage District, Lamar, Colorado

Feb. 19, 1923.

Bids: April 10.

Sanitary Sewer System

Hazard, Ky.

Sealed proposals for constructing a sanitary sewer system will be received by the City Clerk of Hazard, Ky., until 12 o'clock noon on Tuesday, April 10, 1923, and will then be opened and read publicly.

All bids shall be made upon the official proposal blank attached to the instructions to bidders, specifications, form of contract and bond, which may be seen at the office of the City Clerk, Hazard, Ky., or may be obtained by bona fide bidders upon application to the J. N. Chester Engineers, Union Bank Bldg., Pittsburgh, Pa., or Arline G. Taylor, City Clerk.

Each proposal shall be accompanied by a certified check, or an acceptable bidding bond may be offered in place of the certified check at the bidder's option, made payable to the order of J. W. Craft, Mayor of Hazard, Ky., of not less than three per cent (3%) of the total amount of the bid, but in no case shall this check be less than fifty dollars ($50.00). This check is to be conditioned that if bid is accepted, a contract will be entered into and performance of same secured within ten (10) days after notification of acceptance of the bid. In case bid is rejected, or contract entered into, check will be returned. Successful bidders will be required to furnish a corporate surety bond in an acceptable surety company in the full amount of the contract.

The right is reserved to reject any or all bids.

J. W. CRAFT, Mayor.

Attest:
ARLINE G. TAYLOR,
City Clerk.
March 10, 1923.

OFFICIAL PROPOSALS

Bids: April 7.

Sewers

Pottstown, Penna.

Sealed proposals for the construction of sanitary sewers will be received until 2 p.m. Saturday, April 7, 1923, at the office of the Secretary of Council and will then be publicly opened and read.

Diameter	Length	Trenches	Earth	Cu. Yards
4 in.	25,000 ft.	0 ft.- 4 ft.	deep	18,740
6 in.	19,000 ft.	4 ft.- 8 ft.	"	8,794
8 in.	1,944 ft.	8 ft.-12 ft.	"	509
10 in.	330 ft.	12 ft.-16 ft.	"	28
12 in.	2,350 ft.			
15 in.	1,310 ft.	Rock		
18 in.	1,425 ft.	0 ft.- 4 ft.	deep	453
		4 ft.- 8 ft.	"	2,856
		8 ft.-12 ft.	"	494
		12 ft.-16 ft.	"	46

Test pits indicate clay, sand and rock.

Material of construction, Vitrified sewer pipe.

Certified check for $1,000.00 to accompany bids.

Right is reserved to reject any or all bids.

Plans and specifications will be furnished by the Secretary of the Council, or by Gannett, Seelye & Fleming, Incorporated, Engineers, upon deposit of $25.00, said money to be refunded upon return of same.

GEORGE A. WOHL,
Chairman of Sewer Committee,
Pottstown, Penna.

M. L. SEASHOLTZ,
Secretary of Council,
Pottstown, Penna.

Gannett, Seelye & Fleming, Inc.,
Engineers,
1 N. Market Square,
Harrisburg, Penna.

Bids: March 29.

Coliseum

Syracuse, N. Y.

Sealed proposals for Construction, Sanitary and Electric Work—Coliseum—New York State Fair Grounds, Syracuse, N. Y., will be received by Hon. George R. Lunn, Lieutenant-Governor, President, State Fair Commission, Capitol, Albany, N. Y., until 3 o'clock p.m., Thursday, March 29, 1923, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a deposit, consisting of a certified check drawn upon some legally incorporated bank in this State and made payable to the State of New York, or money, equal to five per cent (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 4071, 4073 and 4074. The right is reserved to reject any or all bids. Drawings and specifications may be examined at the Office of the State Fair Commission, 428 South Salina St., Syracuse, N. Y.; at the New York Office of the Department of Architecture, Room 1058, 25 Broadway; and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, Sullivan W. Jones, Capitol, Albany, N. Y. Dated: March 8, 1923.

New York State Fair Commission
J. DAN ACKERMAN, Jr., Secy.

OFFICIAL PROPOSALS

Bids: April 10.

Water Filtration Plant

Toronto, Ohio.

The Board of Trustees of Public Affairs of the Village of Toronto, Ohio, will receive bids for the furnishing of materials, labor and equipment and the construction of a water filtration plant, until 12:00 o'clock noon, Eastern Standard Time, Tuesday, April 10th, 1923, at the Municipal offices in the Village of Toronto, Ohio.

The work consists of two 1,000,000 gallons per day mechanical filter units with the accompanying auxiliary works, one 2,000,000 gallons per day motor driven centrifugal high-lift pump, 1 2,000,000 gallons per day motor driven centrifugal low-lift pump, the necessary electrical installations, piping and other appurtenances, as per Plans and Specifications.

Any intending Bidder will be required to indicate to the satisfaction of the Engineers, or upon appeal to the satisfaction of the Board of Trustees of Public Affairs, that they have had experience in building work of this class, and to show their financial ability and give references as to past experience. Any Contractors inexperienced in the building of mechanical filtration plants or the structural work incidental thereto need not apply.

The work will be advertised under eight items, but the Contract may be let as one Contract, or divided among the eight parts depending upon the bids received.

Each bidder will be required to furnish a Banker's Certificate or a satisfactory Bidder's Bond in the amount of 10 per cent (10%) of the total amount of the bid, guaranteeing that he will enter into the Contract precisely as originally prepared, provided said Contract is awarded him.

The Contractor to whom the Contract will be awarded will be required to furnish a satisfactory Bond on a satisfactory Bonding Company, in the amount of one hundred per cent (100%) of the total bid, said Bond to guarantee the faithful performance of the Contract in all respects and the completion of said Contract within the time specified or any extensions which might be granted thereto.

Plans, Specifications and Bidding Blanks may be received from the Engineers, Hudson & Myron, 808 Wabash Building, Pittsburgh, Pa., upon proper application, and a deposit of $20.00 may be required of any Bidder, subject to the presentation and return of said Plans, Specifications, etc. In case a Contractor receiving Plans does not offer a bid and returns the Plans in good condition, then $10.00 of the $20.00 will be refunded to him, the other $10.00 being retained to cover the cost of excessive sets of Plans. In case any Contractor, however, receiving Plans and data and submitting a bid, and in case all data, with Plans, is returned to the office in good condition, then said Contractor will be refunded the entire amount of $20.00. In case any Contractor receiving Plans and data and not returning the same within two (2) weeks' time after the opening of bids, then said Contractor will forfeit the entire amount of the deposit of $20.00.

The Board of Trustees of Public Affairs reserves the right to reject any part or the total parts of any or all bids received.

SAMUEL McADOO,
President of the Board.

S. H. CAREY,
Secretary of the Board.

W. D. CAMPBELL,
Member of the Board.

Hudson & Myron, Engineers,
808 Wabash Building,
Pittsburgh, Pa.

OFFICIAL PROPOSALS

Bids: Mar. 27.

Barge Canal Terminal

Albany, N. Y.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Tuesday, March 27th, 1923, at which place and hour they will be publicly opened and read, for the construction of Barge Canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, and amendatory laws, as follows:

TERMINAL CONTRACT NO. 237.

For constructing a terminal freighthouse at Oswego. Contract plans, sheets 1 to 9, inclusive.

Plans may be seen and detailed specifications, engineer's estimates of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y.; at the office of the Assistant Superintendent of Public Works for the Western Division, at Rochester, N. Y.; at the offices of the Superintendent of Public Works, Erie Basin Terminal, Buffalo, N. Y., and Terminal Warehouse, Pier 6, East River, New York City.

Blueprint copies of plans will be furnished by the State Engineer and Surveyor upon the receipt at his office in the Telephone Building, Albany, N. Y., of payment at the rate of fifteen cents (15c.) per sheet. Refund will not be made for any blueprints which may be returned.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank or trust company in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of the contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent) of the estimated cost of the work, according to the contract price, and an additional bond known as the labor bond, in the sum of ten per centum (10 per cent) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y.; and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the state for doing the work and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

EDWARD S. WALSH.
Superintendent of Public Works.

February 21st, 1923.

OFFICIAL PROPOSALS

Bids: April 6.

Water Works and Sewerage Systems

Lyndonville, N. Y.

Sealed Proposals will be received by the Board of Trustees of the Village of Lyndonville, N. Y., until two o'clock p.m. on the 6th day of April, 1923, for the construction of a sewerage system and disposal works; and also for the construction of a water works system, the latter consisting of about five and one-third miles of cast iron mains, hydrants, valves, pump house, slow sand filter, water tower and accessories.

Plans may be seen and specifications obtained at the office of the Board at Lyndonville, or at the office of Hopkins & Field, Engineers, 349 Cutler Building, Rochester, N. Y.

The Board hereby reserves and has the right to reject any or all bids or to accept those that in its judgment will be for the best interests of the Village, and to waive any informality in the bidding.

A surety bond satisfactory to the Board in sufficiency of surety and in the amount of forty per cent of the bid will be required of the one to whom a contract may be awarded.

Bids will be received for the sewerage system and disposal works and separately for the water works pipe laying, pump house, filter, pure water reservoir and water tower foundations, cast iron pipe and special castings, valves, valve boxes and hydrants, water tower and pumping equipment.

A certified check made payable to the order of the Board of Trustees, Lyndonville, N. Y., to the amount of $1,000 must be deposited by each bidder and accompany his bid as a guarantee that in case the contract is awarded to him he will, within ten days thereafter, execute such contract and furnish his bond.

Bids must be sealed and addressed to the Board of Trustees, Lyndonville, N. Y., and marked on the outside of the enclosing envelope "Proposal for Sewerage (or Water Works) System."

RICHARD N. PARSONS,
President.
BENJAMIN J. WARD,
Trustee.
JAY W. BREED,
Trustee.

DONALD M. FRASER, Village Clerk.
Dated Lyndonville, N. Y., March 10, 1923.

Bids: April 26.

Water Tube Boilers

New Orleans, La.

Sealed proposals will be received by the Sewerage and Water Board of New Orleans up to 12 o'clock noon, Thursday, April 26th, 1923, for furnishing 1,500-1,800 hp. Water Tube Boilers.

Specifications and blank forms of proposals may be obtained at Room 303, No. 526 Carondelet Street, New Orleans.

The right is reserved to reject any or all bids.

GEO. G. EARL,
General Superintendent.

A. G. MOFFAT,
Secretary.

Bids: April 5.

Concrete Wharf, Chain Walls, etc.

New Orleans, La.

Sealed proposals will be received by the Board of Commissioners of the Port of New Orleans at their office, Suite 200, New Court Building, until 3:00 p.m., April 5, 1923, and then publicly opened for concrete wharf, chain walls and column footings for shed at Claiborne Avenue Landing.

A deposit of $10,000 in cash or certified check is required with each proposal.

A bond to the amount of 50% of the sum bid is required with notarial contract.

Specifications and proposal forms are on file in the office of the Supervisor of Purchases, at No. 1 Canal Street, New Orleans, Louisiana. Complete sets will be furnished to prospective bidders on deposit of $5, which will be refunded to depositors who submit proposals, or return sets in good condition.

The right is reserved to reject any or all bids and to waive informalities.

J. H. WALSH,
General Manager.

OFFICIAL PROPOSALS

Bids: April 10

Dredging

Baton Rouge, La.

Sealed Proposals will be received at the office of the LOUISIANA HIGHWAY COMMISSION, Reymond Building, Baton Rouge, Louisiana, up to time specified below, Tuesday, April 10th, 1923, at which time and place they will be publicly opened for constructing Section "A" of Federal Aid Project 127 Hammond-New Orleans Highway, as follows:

Section "A," Tangipahoa Parish. From a point 1.6 miles South of Ponchatoula to Pass Manchac, 8.834 miles.

Bids to be received up to 12 o'clock noon. Approximate quantities involved: 770,388 Cubic Yards of dredged borrow, 12,682 feet B. M. cresoted lumber, 2,240 feet creosoted piling, 397.49 Stations timber corduroy, 195 acres clearing and 80 acres grubbing.

Section "B," St. John, the Bapist Parish. From Pass Manchac to Frenier, 13.173 miles

Bids to be received up to 3 o'clock p.m. Approximate quantities involved: 853,682 Cubic Yards dredged borrow, 602,366 Stations timber corduroy, 316 acres clearing, and 125 acres grubbing.

Construction of both Sections consists of clearing, grubbing, and grading roadway embankment. A canal will be dredged parallel to the Highway and all suitable material taken therefrom will be used in constructing the roadway embankment. Said embankment to be placed on timber Corduroy where specified by the State Highway Engineer.

Information as to the location, character of work, extent and class of material, terms of payment, regulations governing manner of submitting proposals and executing contract, may on application, be obtained at the office of the Louisiana Highway Commission, Reymond Building, Baton Rouge, Louisiana. Plans and Specifications may be inspected at the office of the Commission in Baton Rouge, or will be furnished upon receipt of $5.00 as payment therefor not to be refunded.

J. M. FOURMY,
State Highway Engineer.

W. T. PETERMAN, Chairman,
Louisiana Highway Commission.

Bids: April 2.

Road Work

White Plains, N. Y.

Sealed proposals will be received by the Board of Supervisors, Court House, White Plains, N. Y., until 10:30 a.m., April 2nd, 1923, for constructing the following roads with reinforced concrete:

Co. Road No. 4—Town of Mt. Pleasant, 1.02 miles.

Co. Road No. 12—Towns of Bedford and No. Castle, 3.63 miles.

Co. Road No. 13—Town of Yorktown, 2.96 miles.

Specifications, proposal sheets and all information relative to the above work may be secured at the office of the County Engineer, Court House, White Plains, N. Y. Deposit required for plans—Road No. 4, $3.00; Roads No. 12 and No. 13, $10.00 each.

BOARD OF SUPERVISORS.
FRED L. MERRITT, Clerk.

March 12, 1923.

Bids: April 3.

Highway Work

Harrisburg, Pa.

Pennsylvania State Highway Department, Harrisburg, Pa. Sealed proposals will be received at the State Capitol until 10 a.m., April 3, 1923, when bids will be publicly opened and scheduled and contract awarded as soon thereafter as possible for the reconstruction of 40 miles of either Bituminous Surface on a Concrete foundation or One Course Reinforced Concrete Pavement, 30 miles of One Course Reinforced Concrete Pavement and 3 miles of Bituminous Macadam Pavement. Bidding blanks and specifications may be obtained free, and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg. No refund for plans returned. They also can be seen at office of State Highway Department, Harrisburg, 1001 Chestnut Street, Philadelphia, and 119 Federal Street, N. S., Pittsburgh, Pa.

P. D. WRIGHT.
State Highway Commissioner.

OFFICIAL PROPOSALS

Bids: April 3.

Highway Work

Albany, N. Y.

State Commission of Highways, Albany, N. Y.—Pursuant to Chapter 30, Laws of 1909, and amendments thereto, sealed proposals will be received by the undersigned at No. 55 Lancaster Street, Albany, N. Y., at 1 o'clock p.m., on Tuesday, the third day of April, 1923, for the furnishing and delivering bituminous material "A" f.o.b. railroad cars at destination for use by the State Highway Commission, in the maintenance and repair of improved state and county highways in all of the counties of the State, unless otherwise specified, for the following contracts:

B. M. Contract No. 1, Bituminous Material "A"—Cut Back for use in Divisions Nos. 1 & 5.

B. M. Contract No. 2, Bituminous Material "A"—Cut Back for use in Divisions Nos. 2, 3 & 4.

B. M. Contract No. 3, Bituminous Material "A"—Cut Back for use in Divisions Nos. 6, 7, 8 & 9.

Proposals will be for furnishing the specified material at any railroad delivery point within the divisions named in the proposal.

Table showing approximate quantities and anticipated railroad delivery points, specifications and proposals may be obtained at the office of the State Commission of Highways at Albany, N. Y.

Special attention of bidders is called to "General Information for Bidders" in the proposal, specifications and contract agreement. Proposal for each contract must be submitted in a separate sealed envelope with the name and number of the contract plainly endorsed on the outside of the envelope. Each proposal must be accompanied by cash, draft of certified check payable to the order of the State Commission of Highways for an amount equal to at least 3 per cent of the amount of the proposal. The retention and disposal of such cash, draft or check by the State Commission of Highways shall conform with Subdivision 3, Section 130 of the Highway Law, as amended by Chapter 623, Laws of 1919.

The successful bidder will be required to execute the contract and comply in all respects with Section 130 of the Highway Law as amended by Chapter 623.

The right is reserved to reject any or all bids.

FRED'K STUART GREENE
Commissioner

W. A. PATTON, Secretary.

Bids: April 18.

Mechanical Filter Plant

Richmond, Va.

Sealed proposals for the construction of a mechanical filter plant, consisting of Substructures, Contract No. 1; Equipment, Contract No. 2; and Superstructures, Contract No. 3, will be received at the office of the Director of Public Utilities, City Hall, Richmond, Va., until 12 o'clock, noon of Wednesday, April 18, 1923; and at that time publicly opened and read.

Contract No. 1 includes about 9,500 cu. yds. of reinforced concrete masonry and about 13,000 cu.yds. of excavation in connection with the construction of 10 filter tanks, a basin beneath them, two coagulating basins and other appurtenant work.

Contract No. 2 includes about 200 tons of cast-iron pipe and specials, over 60 gate valves and sluice gates, filter sand and gravel, and all filter equipment for a 30-million-gallon filter plant. It also includes six electrically-driven centrifugal pumps.

Contract No. 3 includes brick superstructures for the plant, comprising a one-story filter building about 110 ft. by 150 ft., and a two story head house about 50 ft. by 125 ft.

Copies of plans, specifications and forms of proposal covering all three contracts may be obtained at the office of the Department of Public Utilities, City Hall, Richmond, or at the office of Fuller and McClintock, Engineers, 170 Broadway, New York, on or after March 26, upon deposit of $25.00 for each set of plans and specifications furnished.

Certified checks are required in the sum of $15,000 for Contract No. 1, $10,000 for Contract No. 2 and $5,000 for Contract No. 3.

The right is reserved to reject any or all bids.

E. W. TRAFFORD,
Director of Public Utilities.

OFFICIAL PROPOSALS

Bids: April 13.

Transmission Line and Telephone Line

Seattle, Wash.

The City of Seattle, Washington, will call for bids for the construction of 100 miles of 165 K.V. Transmission Line and Telephone Line. Specifications will be complete March 30th and bids will be called for Friday, April the Thirteenth.

Intending bidders should familiarize themselves in the meantime with all details, so that bids can be made out at the proper time.

All necessary information can be obtained at the office of The Skagit River Development, 1400 Alaska Building, Seattle, Washington.

C. F. UHDEN.

A Bonding Company's Suggestion to Official Proposal Advertisers

"A large part of our contract bond business is submitted to us by wire, and I am a constant reader of the Official Proposals in order to find out the size and nature of the work that is referred to in the bond application. Very frequently I am unable to get any clear idea of what the advertisers are asking bids on, and of course the prospective bidder or contractor is also at a loss to know what kind of a job is being advertised.

"Traveling expenses are heavy at the present time, and contractors pay out considerable sums during the course of a year in investigating prospective contracts. This of course is a large charge that the owners eventually pay, and anything that will reduce the general overhead of contract work will eventually be to the advantage of the owner.

"One way to reduce this overhead is to word the advertisement so that the contractor sitting in his office will know whether or not he should investigate and prepare a bid on the proposed work."

Bids: April 2.

City Wharf

Norwalk, Conn.

Sealed proposals will be received by the undersigned at Room 7, City Hall, Norwalk, Conn., for alternate bids for the construction of about 200 lin.ft. of concrete and creosoted lumber wharf with appurtenances, until Monday, April 2, at 7 o'clock p.m., after which time they will be publicly opened and read by the Washington Street Bridge Construction Committee.

A certified check in the amount of $1,000, made payable to said Committee, must accompany each bid as an evidence of good faith to execute contract. Plans, specifications, proposal sheets and all information relative to same may be procured from the undersigned upon making a deposit of $5.

The right is reserved to reject all proposals and readvertise for the awarding of said work if, in the judgment of said Committee, the interests of the city will be enhanced thereby.

DOMINICK B. EULA,
Engineer in Charge.

JOHN H. McMAHON, Chairman.

OFFICIAL PROPOSALS

Bids: April 10.

Intercepting Sewer

Toledo, Ohio.

Sealed proposals will be received by the Director of Public Service, Toledo, Ohio, until twelve o'clock noon, eastern standard time, on the 10th day of April, 1923, and then publicly opened and read for the construction of Contract No. 6 of the Intercepting Sewer System, consisting of

2,295 feet of 78-inch circular sewer.
2,155 feet of 72-inch circular sewer.
4,940 feet of 69-inch circular sewer.
1,970 feet of 66-inch circular sewer.
4,575 feet of 51-inch circular sewer.
1,500 feet of 39-inch circular sewer.

all of which will be built in tunnel, together with two inverted siphons, special and standard manholes and appurtenances.

Bidders are invited to submit prices on monolithic concrete, vitrified segment block and brick.

Plans, specifications, contract and bond forms can be secured at the office of the Director of Public Service upon deposit of Twenty dollars ($20.00) for each set, which will be refunded provided they are returned in good order on or before May 15, 1923.

Information regarding the work can be obtained through the following offices of our consulting engineers, Fuller & McClintock, 170 Broadway, New York, 319 Summit-Cherry Bldg., Toledo, 421 Produce Exchange Building, Kansas City, Mo., 879 North Parkway, Memphis, Tenn., and 1001 Chestnut Street, Philadelphia, Pa.

Each proposal must be accompanied by a bond executed by the bidder and a surety company satisfactory to the Director of Public Service in the sum of Ten Per Cent (10%) of the amount of the bid, or in lieu of a bond the bidder may deposit with the Director of Public Service, a certified check on a solvent bank, payable to the order of the Director of Public Service, in amount equal to such bond, said bond or certified check being required as a guarantee that if the bid be accepted, a contract will be entered into and its performance properly secured.

The contract bond will be Fifty Per Cent (50%) of the amount of the contract. Labor and material bids mut be separately stated with the price therefor.

The Director of Public Service reserves the right to reject any or all bids or to accept any bid which he may deem advantageous to the City of Toledo.

W. T. JACKSON,
Director of Public Service.

GEORGE E. LASKA,
Secretary.

Bids: April 3

Dam Construction

Newburgh, N. Y.

Sealed proposals for the construction of dams will be received by the City Manager, Newburgh, N. Y., at his office in the City Hall until 12 o'clock, noon, on Tuesday, the 3rd day of April, 1923, and at that time will be publicly opened and read.

The work comprises the construction of two dams, an easterly earth dam with a concrete core wall and spillway, and alternate bids are asked for the construction of the second dam adjacent to the easterly dam, two alternatives providing for an earth dam with concrete core wall and the other for a reinforced concrete facing wall with earth backing. The work lies about two miles southerly of Newburgh at the point where the southerly branch of Silver Stream crosses under the New York City Aqueduct. While the bids are divided as between the east and west dam, the work will be let to a single contractor, the character of construction for the west dam being decided by economical construction as represented by the bids.

Each bid must be accompanied by a certified check upon an acceptable National Bank or Trust Company, made payable to the order of the city of Newburgh, or by cash to the amount of $5,000.

Copies of the plans and specifications may be examined at the office of the City Engineer of Newburgh, N. Y., and copies of plans, specifications, contract and form of proposal may be obtained at that office or at the office of the Engineers, Fuller & Harding, 170 Broadway, N. Y., upon the deposit of $15, of which $10 will be refunded if the said plans and specifications are returned in good condition.

W. JOHNSTON McKAY,
City Manager.

OFFICIAL PROPOSALS

Bids: April 4.

Bridge

Freehold, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Monmouth for the construction of Bridge No. Ma-6 Church St., Matawan; consisting of one thirty-six foot plate girder span encased in gunite and twenty-two roadway, and opened and read in public at the rooms of said board, Court House, Freehold, New Jersey on Wednesday, April 4th, 1923, at 11:00 a.m.

Drawings and specifications for the proposed work, prepared by George K. Allen, Jr., County Engineer, have been filed in the office of said Engineer at 60 Broad Street, Red Bank, New Jersey, and may be inspected by prospective bidders during business hours. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

Plans and specifications will be furnished to prospective bidders upon payment of ten dollars ($10.00), which amount will be refunded upon return of plans and specifications before the time specified for the opening of bids.

Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and name of proposed work on the outside, addressed to the Board of Chosen Freeholders of the County of Monmouth and must be accompanied by a certified check for a sum not less than ten (10) per cent of the amount bid on the work, payable to the order of the County Treasurer and a surety company certificate stating that said surety company will provide the bidder with the required bond, and must be delivered at the place and before the hour above named.

The Board of Chosen Freeholders of the County of Monmouth reserves the right to reject any or all bids if deemed to the best interests of the County so to do.

By order of the Board of Chosen Freeholders of the County of Monmouth.

BRYANT B. NEWCOMB,
Director

CHARLES E. COLE, Clerk.
Freehold, N. J., March 10th, 1923.

Bids: April 16.

Street Resurfacing and Storm Sewer Construction

Canonsburg, Pa.

Separate and sealed proposals will be received by the Borough Council of Canonsburg, Pa., until April 16th, 1923, at 7:30 p.m., for placing approximately 7,500 sq. yd. of street resurfacing with asphaltic concrete.

For unloading sewer pipe and construction of storm water sewers according to plans and specifications. Estimated quantities: 192 lin.ft. of 30 in. Reinforced Concrete Railroad Culvert Pipe; 950 lin.ft. of 30 in. Cement sewer Pipe; 290 lin.ft. of 27 in.; 530 lin.ft. of 24 in.; 270 lin.ft. of 20 in.; manholes and catch basins together with appurtenances.

Plans, specifications and estimates may be seen and examined and further information may be obtained at the office of H. M. Day, Borough Engineer, 35 W. Pike St., Canonsburg, Pa.

Each proposal must be accompanied by a certified check for 5 per cent of the tendered bid and made payable to the Treasurer of the Borough of Canonsburg. Bond shall be 50 per cent of total contract awarded. The Council reserves the right to reject any or all bids, or to accept any bid or bids for sewers or resurfacing which may appear, in their judgment, to be to the best interest of the Borough.

W. C. BLACK,
Borough Secretary.

March 16, 1923.

OFFICIAL PROPOSALS

Bids: April 5.

Reinforced Concrete and Brick Pavement

Burlington, Vt.

Sealed proposals will be received by the City of Burlington on April 5th at five p.m. o'clock, standard time, at the City Hall, Burlington, Vermont, for the improvement of sections of Church, Pearl, Winooski Avenue Bank and Battery Streets. The work will consist of approximately 11,500 square yards of reinforced concrete, 1,400 square yards brick pavement and 4,900 lin.ft. concrete curb.

All bids must be upon blanks provided in the proposal furnished to bidders.

Bids must be accompanied by a certified check for three per cent (3%) of the amount of the bid. Plans and specifications will be on file at the City Clerk's office, City Hall, Burlington, Vermont, and at the office of the Engineer, H. Eltinge Breed, Room 600, 507 Fifth Avenue, New York City.

Copies of the plans and specifications may be obtained as above for three dollars ($3.00) per set.

No refund for blanks returned. Bidding blanks will be furnished free.

The right is reserved to reject any or all bids.

EDWARD CORLEY,
City Clerk.

Bids: April 2.

Bridge Letting in Lake Co.

Waukegan, Ill.

Notice is hereby given that sealed proposals will be received at the office of the County Supt. of Highways in Waukegan, Illinois, on Monday, April 2, 1923, at 2 o'clock p.m., for the construction of 130 foot reinforced concrete bridge over the Des Plaines River at Gurnee, Illinois, in accordance with plans and specifications on file in said office and in the office of the Bridge Dept. of the Div. of Highways of Springfield, at which places they may be examined. Complete copies may be had upon a deposit of the sum of Ten Dollars which will be refunded upon the return of the plans from bona fide bidders.

Approximate quantities are:
473 cu.yds. Class "A" Concrete.
69,870 lbs. Reinforcing Steel.
162 Piles.
Misc. iron, etc.

A certified check for $500 shall accompany all proposals.

Right is reserved to reject any and all bids.

Dated at Waukegan, Illinois, this 10th day of March, 1923.

By order of Road and Bridge Committee and Highway Commissioner of Town of Warren.

CHARLES E. RUSSELL,
Co. Supt. of Highways.

OFFICIAL PROPOSALS

Bids: April 5.

Road Work

Richmond, Va.

Sealed bids will be received at the office of Virginia State Highway Commission, 411 N. 10th St., Richmond, Va., until 10:30 a.m., Thursday, April 5, 1923, for the construction of:

1—Proj. F246-Rt. 12Y—Franklin to N. C. Line, in Nansemond County, approx. 7.26 miles of 18 ft. one course concrete pavement. Alternate bids using concrete base and asphalt top. Approx. 10 A Clearing; 51,346 cu.yd. excava.; 1,078 lin.ft. c.i. pipe; 440 lin.ft. v.c. pipe encased in concrete; 75 cu.yd. A conc.; 70 cu.yd. B conc.; 4,071 lb. reinf. steel. Certified check, $5,000.

2—Proj. F178, Rt. 1—Clarksville-N. C. Line in Mecklenburg County, 6.13 mi. 18 ft. one course concrete,. Alternate bids on bit. mac.; alternate bids on concrete base asphalt top. Approx. 16 A Clearing; 43,400 cu.yd. excava.; 782 lin.ft. c.i. pipe; 654 lin. ft. v.c. pipe; 110 cu.yd. A conc.; 100 cu.yd. B Conc.; 9,100 lb. reinf. steel; 2,160 lin.ft. guard rail. Certified check, $5,000.

3—Proj. S208, Rt. 11—Bridge over Clinch River, Sta. 640/00; length 178 ft. Approx. 409.2 cu.yd. Class A conc.; 55.3 B conc.; 59,155 lb. reinf. steel. Certified check, $975.

Bridge over Pounding Mill Branch, station 701/90; length 38 ft. Approx. 44.6 cu.yd. A conc.; 138.8 cu.yd. B conc.; 9,405 lb. reinf. steel. Certified check $250.

Bid bond 20 per cent in excess of certified check required.

Engineers will show prospective bidders over projects as follows:

Project F246—Franklin Hotel, Franklin, Va., 10 a.m., Wednesday, March 21. Proj. F178—Grace Hotel, Clarksville, Va., 9:30 a.m., Thursday, March 22. Proj. 208—Pounding Mill Station, 11 a.m., Wednesday, March 28.

Plans and specifications are on file at the office of the State Highway Dept. Richmond, and District Engineer's office as follows: Proj. F178, Richmond; Proj. F246, Suffolk, and Proj. S208, Bristol.

Plans for bidders can be obtained at the office of the State Highway Commission upon receipt of $5, payable to H. G. Shirley, $2.50 will be refunded if the plans are returned in good condition within two weeks after bids are opened. Bridge plans on Proj. 208 from W. F. Hobart, 805½ E. Franklin St., Richmond, Va., at 72 cents per set.

The State Highway Commission reserves the right to reject any or all bids.

H. G. SHIRLEY, Chairman.

C. S. MULLEN,
Acting Commissioner.

Bids: Mar. 27.

Concrete Pavement

Belleplaine, Ia.

The City of Belleplaine, Iowa, will receive bids until 10.00 a.m., Tuesday, March 27, 1923, for the construction of approximately 15,000 square yards of concrete pavement.

E. N. BROWN,
City Clerk.
W. W. WINSLOW,
City Engineer.

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or
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OFFICIAL PROPOSALS

Bids: April 4.

Bridge

Freehold, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Monmouth for the construction of Bridge No. Ma-6 Church St., Matawan; consisting of one thirty-six foot plate girder span encased in gunite and twenty-two roadway, and opened and read in public at the rooms of said board, Court House, Freehpld, New Jersey on Wednesday, April 4th, 1923, at 11:00 a.m.

Drawings and specifications for the proposed work, prepared by George K. Allen, Jr., County Engineer, have been filed in the office of said Engineer at 60 Broad Street, Red Bank, New Jersey, and may be inspected by prospective bidders during business hours. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

Plans and specifications will be furnished to prospective bidders upon payment of ten dollars ($10.00), which amount will be refunded upon return of plans and specifications before the time specified for the opening of bids.

Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and name of proposed work on the outside, addressed to the Board of Chosen Freeholders of the County of Monmouth and must be accompanied by a certified check for a sum not less than ten (10) per cent of the amount bid on the work, payable to the order of the County Treasurer and a surety company certificate stating that said surety company will provide the bidder with the required bond, and must be delivered at the place and before the hour above named.

The Board of Chosen Freeholders of the County of Monmouth reserves the right to reject any or all bids if deemed to the best interests of the County so to do.

By order of the Board of Chosen Freeholders of the County of Monmouth.

BRYANT B. NEWCOMB,
Director

CHARLES E. COLE, Clerk.
Freehold, N. J., March 10th, 1923.

Bids: April 18.

Mechanical Filter Plant

Richmond, Va.

Sealed proposals for the construction of a mechanical filter plant, consisting of Substructures, Contract No. 1; Equipment, Contract No. 2; and Superstructures, Contract No. 3, will be received at the office of the Director of Public Utilities, City Hall, Richmond, Va., until 12 o'clock, noon of Wednesday, April 18, 1923; and at that time publicly opened and read.

Contract No. 1 includes about 9,500 cu. yds. of reinforced concrete masonry and about 13,000 cu.vds. of excavation in connection with the construction of 10 filter tanks, a basin beneath them, two coagulating basins and other appurtenant work.

Contract No. 2 includes about 200 tons of cast-iron pipe and specials, over 60 gate valves and sluice gates, filter sand and gravel, and all filter equipment for a 30-million-gallon filter plant. It also includes six electrically-driven centrifugal pumps.

Contract No. 3 includes brick superstructures for the plant, comprising a one-story filter building about 110 ft. by 150 ft., and a two story head house about 50 ft. by 125 ft.

Copies of plans, specifications and forms of proposal covering all three contracts may be obtained at the office of the Department of Public Utilities, City Hall, Richmond, or at the office of Fuller and McClintock, Engineers, 170 Broadway, New York, on or after March 26, upon deposit of $25.00 for each set of plans and specifications furnished.

Certified checks are required in the sum of $15,000 for Contract No. 1, $10,000 for Contract No. 2 and $5,000 for Contract No. 3.

The right is reserved to reject any or all bids.

E. W. TRAFFORD,
Director of Public Utilities.

OFFICIAL PROPOSALS

Bids: April 10.

Street Paving

Easley, S. C.

Sealed proposals will be received by the Paving Commission and the Town Council of Easley, S. C., at the Town Hall, two o'clock P.M., April 10th, 1923, for the furnishing of all labor, materials and equipment necessary for paving of certain streets and the laying of sidewalks.

The approximate amount of work to be done is as follows:

25,000 square yards hard surface pavement.

17,700 lineal feet of combination curb and gutter.

4,000 square yards of sidewalk.

8,000 cubic yards grading.

Proposals must be submitted on the forms which may be obtained at the office of the Town Clerk in Easley or the Engineer's office in Spartanburg. Plans may be seen at both places.

Each proposal must be accompanied by a cashier's check, on a South Carolina Bank, for $1,000.00 made payable to the Treasurer of Easley as evidence of good faith.

The right is reserved to reject any or all bids.

A. B. TAYLOR,
Chairman Paving Commission.

HARWOOD BEEBE,
Engineer,
Spartanburg, S. C.

National Publicity Offers a Two-Fold Advantage

Giving calls for bids National publicity opens the way for additional and possibly lower offers from outside bidders to whom work can be let, if desired.
Then too, local contractors, seeing your contracts advertised Nationally will figure closer, realizing that the field of competitors for the work is greatly enlarged.
An advertisement printed in the Official Proposal Columns of *Engineering News-Record* brings the contract to the attention of not only local bidders but, in addition, any others who might be interested.

Bids: April 10.

Sanitary Sewer System

Hazard, Ky.

Sealed proposals for constructing a sanitary sewer system will be received by the City Clerk of Hazard, Ky., until 12 o'clock noon on Tuesday, April 10, 1923, and will then be opened and read publicly.

All bids shall be made upon the official proposal blank attached to the instructions to bidders, specifications, form of contract and bond, which may be seen at the office of the City Clerk, Hazard, Ky., or may be obtained by bona fide bidders upon application to the J. N. Chester Engineers, Union Bank Bldg., Pittsburgh, Pa., or Arline G. Taylor, City Clerk.

Each proposal shall be accompanied by a certified check, or an acceptable bidding bond may be offered in place of the certified check at the bidder's option, made payable to the order of J. W. Craft, Mayor of Hazard, Ky., of not less than three per cent (3%) of the total amount of the bid, but in no case shall this check be less than fifty dollars ($50.00). This check is to be conditioned that if bid is accepted, a contract will be entered into and performance of same secured within ten (10) days after notification of acceptance of the bid. In case bid is rejected, or contract entered into, check will be returned. Successful bidders will be required to furnish a corporate surety bond in an acceptable surety company in the full amount of the contract.

The right is reserved to reject any or all bids.

J. W. CRAFT, Mayor.

Attest:
ARLINE G. TAYLOR,
City Clerk.
March 10, 1923.

OFFICIAL PROPOSALS

Bids: April 10.

Intercepting Sewer

Toledo, Ohio.

Sealed proposals will be received by the Director of Public Service, Toledo, Ohio, until twelve o'clock noon, eastern standard time, on the 10th day of April, 1923, and then publicly opened and read for the construction of Contract No. 6 of the Intercepting Sewer System, consisting of

2,295 feet of 78-inch circular sewer.
2,155 feet of 72-inch circular sewer.
4,940 feet of 69-inch circular sewer.
1,970 feet of 66-inch circular sewer.
4,575 feet of 51-inch circular sewer.
1,500 feet of 39-inch circular sewer.

all of which will be built in tunnel, together with two inverted siphons, special and standard manholes and appurtenances.

Bidders are invited to submit prices on monolithic concrete, vitrified segment block and brick.

Plans, specifications, contract and bond forms can be secured at the office of the Director of Public Service upon deposit of Twenty dollars ($20.00) for each set, which will be refunded provided they are returned in good order on or before May 15, 1923.

Information regarding the work can be obtained through the following offices of our consulting engineers, Fuller & McClintock, 170 Broadway, New York, 319 Summit-Cherry Bldg., Toledo, 421 Produce Exchange Building, Kansas City, Mo., 879 North Parkway, Memphis, Tenn., and 1001 Chestnut Street, Philadelphia, Pa.

Each proposal must be accompanied by a bond executed by the bidder and a surety company satisfactory to the Director of Public Service in the sum of Ten Per Cent (10%) of the amount of the bid, or in lieu of a bond the bidder may deposit with the Director of Public Service, a certified check on a solvent bank, payable to the order of the Director of Public Service, in amount equal to such bond, said bond or certified check being required as a guarantee that if the bid be accepted, a contract will be entered into and its performance properly secured.

The contract bond will be Fifty Per Cent (50%) of the amount of the contract. Labor and material bids mut be separately stated with the price therefor.

The Director of Public Service reserves the right to reject any or all bids or to accept any bid which he may deem advantageous to the City of Toledo.

W. T. JACKSON,
Director of Public Service.

GEORGE E. LASKA,
Secretary.

Bids: April 3.

Hauling Stone Chips

Baltimore, Md.

Sealed proposals for hauling approximately 16,463 tons of stone chips in three Districts as follows:

	Tons
Dist. No. 3—Montgomery and Prince George's Counties	3,245
" No. 5—Carroll, Howard, Frederick and Montgomery Counties	8,640
" No. 6—Allegany, Frederick, Garrett and Washington Counties	4,578
	16,463

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M., on the 3rd day of April, 1923, at which time and place they will be publicly opened and read.

Bids must be made in letter form. Blue prints, showing details, furnished by this Commission upon request.

No bid will be received unless accompanied by a certified check for the sum of One Hundred ($100.00) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 19th day of March, 1923.

JOHN N. MACKALL,
Chairman.

L. H. STEUART,
Secretary.

OFFICIAL PROPOSALS

Bids: April 11

Sea Bright-Highlands Road

Freehold, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Monmouth for the Reconstruction of the Sea Bright-Highlands Road, No. 54, with a Reinforced Concrete Pavement, for a distance of 2.27 miles, and opened and read in public at the rooms of said board, Court House, Freehold, New Jersey on Wednesday, April 11th at 11:00 a.m.

Drawings and specifications for the proposed work, prepared by George K. Allen, Jr., County Engineer, have been filed in the office of said Engineer at 60 Broad Street, Red Bank, New Jersey, and may be inspected by prospective bidders during business hours. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

Plans and specifications will be furnished to prospective bidders upon payment of ten dollars ($10.00), which amount will be refunded upon return of plans and specifications before the time specified for the opening of bids.

Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and name of proposed work on the outside, addressed to the Board of Chosen Freeholders of the County of Monmouth and must be accompanied by a certified check for a sum not less than ten (10) per cent of the amount bid on the work, payable to the order of the County Treasurer and a surety company certificate stating that said surety company will provide the bidder with the required bond, and must be delivered at the place and before the hour above named.

The Board of Chosen Freeholders of the County of Monmouth reserves the right to reject any or all bids if deemed to the best interests of the County so to do.

By order of the Board of Chosen Freeholders of the County of Monmouth.

BRYANT B. NEWCOMB,
Director.

Attest:
CHAS. E. COLE, Clerk.
Freehold, N. J. Feb. 7th, 1923.

Bids: April 11.

Highway Work

Dover, Del.

Sealed proposals will be received by the State Highway Department, at its office, Dover, Delaware, until 2 o'clock p.m., April 11, 1923, and at that place and time publicly opened, for the construction of State Highways, involving the following approximate quantities:

CONTRACT NO. 25, 3.58 MILES
THROUGH SMYRNA

23,000 Cu.Yds. Excavation
1,000 Cu.Yds. Borrow
80 Tons Broken Stone Base Course
7,025 Cu.Yds. Cement Concrete Pavement
120 Cu.Yds. Class A Concrete
4,000 Lbs. Reinforcement
600 Lin.Ft. 15 in. R. C. Pipe
262 Lin.Ft. 18 in. R. C. Pipe
42 Lin.Ft. 36 in. R. C. Pipe
500 Sq.Yds. Class A Concrete Gutter
2,860 Lin.Ft. Wire Cable Guard Rail
18,930 Lin.Ft. Long. Center Joint
3,500 Lin.Ft. Shoulder Curb

CONTRACT NO. 32, 3.455 MILES
BOYD'S CORNER TO ST. GEORGES

20,000 Cu.Yds. Excavation
3,800 Cu.Yds. Borrow
180 Tons Broken Stone Base Course
6,760 Cu.Yds. Cement Concrete Pavement
250 Cu.Yds. Class A Concrete
120 Cu.Yds. Class B Concrete
12,500 Lbs. Reinforcement
500 Lin.Ft. 15 in. R. C. Pipe
126 Lin.Ft. 18 in. R. C. Pipe
124 Lin.Ft. 24 in. R. C. Pipe
124 Lin.Ft. 30 in. R. C. Pipe
12 Lin.Ft. 36 in. R. C. Pipe
1,800 Lin.Ft. 4 in. Pipe Underdrain
2,400 Sq.Yds. Class A Concrete Gutter
2,200 Lin.Ft. Wire Cable Guard Rail
1,050 Lin.Ft. Timber Piling
18,250 Lin.Ft. Long. Center Joint
3,000 Lin.Ft. Shoulder Curb

CONTRACT NO. 37, 2.895 MILES
ODESSA TO BOYD'S CORNER

16,000 Cu.Yds. Excavation
500 Cu.Yds. Borrow
180 Tons Broken Stone Base Course

OFFICIAL PROPOSALS

5,680 Cu.Yds. Cement Concrete Pavement
90 Cu.Yds. Class A Concrete
1,600 Lbs. Reinforcement
360 Lin.Ft. 15 in. R. C. Pipe
278 Lin.Ft. 18 in. R. C. Pipe
76 Lin.Ft. 24 in. R. C. Pipe
38 Lin.Ft. 30 in. R. C. Pipe
160 Lin.Ft. Relaid Pipe
1,500 Lin.Ft. 4 in. Pipe Underdrain
800 Sq.Yds. Class A Concrete Gutter
1,100 Lin.Ft. Wire Cable Guard Rail
15,300 Lin.Ft. Long. Metal Joint
1,300 Lin.Ft. Shoulder Curb & Troughs

CONTRACT NO. 37A, 0.25 MILES
FILL AT DRAWYER'S CREEK

30,000 Cu.Yds. Borrow

B2 PLANTING TREES

150 White Oaks Between Tybout's Corner and Corbitt's Station.

Performance of contract shall commence within ten (10) days after execution of the contract and be completed during 1923 as specified.

Monthly payments will be made for 90 per cent of the construction completed each month.

Bidders must submit proposals upon forms provided by the Department.

Each proposal must be accompanied by a surety bond, certified check, or money to the amount of at least ten (10) per centum of the total amount of the proposal.

The envelope containing the proposal must be marked "Proposal for the Construction of State Highway Contract No. ....."

The Contract will be awarded or rejected within twenty (20) days from the date of opening proposals.

The right is reserved to reject any or all bids.

Detailed plans may be seen and index plans and specifications may be obtained upon deposit of ten dollars ($10.00) which amount will be refunded upon return of plans and specifications in good condition at the office of

STATE HIGHWAY DEPARTMENT,
Dover, Delaware.

Bids: April 24.

Storm Water Drain

Buffalo, N. Y.

The Commissioner of Public Works will receive sealed proposals at Room No. 3 Municipal Building, Buffalo, N. Y., until 11 o'clock a.m., April 24th, 1923, for the construction of a reinforced concrete storm water drain 33 feet 6 inches and 32 feet 6 inches inside width, vertical side walls seven feet in height with semi-eliptical arch roof of seven feet rise or fourteen feet high at center, length 7,154 feet, to care for the storm water of Scajaquada Creek.

Work consists of the following: Caring for dry weather and storm flow of the creek.

(Normal dry weather flow estimated at about five to twenty cubic feet per second.)

Removal of about 122,435 cu.yd. of earth.

Removal of about 89,684 cu.yds. of rock.

Removal of 9 bridges.

Removal of about 37,862 cu.yd. concrete.

Placing of about 3,464,674 lb. reinforcing steel.

Construction of syphon, overflow connection and side sewers.

Bid and contract will be on a lump sum basis.

No proposal will be considered unless it be accompanied by a certified check upon a National or State Bank drawn and made payable to the Cashier of the Department of Public Works of the city of Buffalo, N. Y., for one hundred thousand dollars ($100,000).

Plans and specifications, form of contract and proposal blanks may be had at the office of the City Engineer, Room No. 20 Municipal Building, Buffalo, N. Y., by depositing $25.00 for same. Said sum shall be returned to bidders submitting proposals. Ten dollars will be returned to those not submitting proposal upon return of plans and specifications in good condition.

The Commissioner of Public Works reserves the right to reject any and all bids and waive any informalities.

Formal advertisement will be found in the Buffalo Commercial Express and Enquirer, March 26th, 27th, April 2nd and 3rd, 1923.

This is not a formal advertisement.

OFFICIAL PROPOSALS

Bids: April 11

Freehold-Eatontown Road

Freehold, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Monmouth for the Reconstruction of the Freehold-Eatontown Road, No. 42, Section 1, with a Reinforced Concrete Pavement for a distance of 2.48 miles, and opened and read in public at the rooms of said board, Court House, Freehold, New Jersey on Wednesday, April 11th at 11:00 a.m.

Drawings and specifications for the proposed work, prepared by George K. Allen, Jr., County Engineer, have been filed in the office of said Engineer at 60 Broad Street, Red Bank, New Jersey, and may be inspected by prospective bidders during business hours. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

Plans and specifications will be furnished to prospective bidders upon payment of ten dollars ($10.00), which amount will be refunded upon return of plans and specifications before the time specified for the opening of bids.

Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and name of proposed work on the outside, addressed to the Board of Chosen Freeholders of the County of Monmouth and must be accompanied by a certified check for a sum not less than ten (10) per cent of the amount bid on the work, payable to the order of the County Treasurer and a surety company certificate stating that said surety company will provide the bidder with the required bond, and must be delivered at the place and before the hour above named.

The Board of Chosen Freeholders of the County of Monmouth reserves the right to reject any or all bids if deemed to the best interests of the County so to do.

By order of the Board of Chosen Freeholders of the County of Monmouth.

BRYANT B. NEWCOMB,
Director.

Attest:
CHARLES E. COLE, Clerk.
Freehold, N. J., Feb. 7th, 1923.

Bids: April 6.

State Highway Work

Providence, R. I.

Sealed proposals for the reconstruction under the provisions of the Federal Aid Road Act of the following sections of State Highway will be received by the State Board of Public Roads at its office State House, Providence, R. I., until 12 M. on Friday, April 6, 1923, at which time they will be opened and read in public.

Contract No. 2301 Federal Aid Project No. 15. Warren, Child Street, Handy Street to Mass. State Line 1.67 miles, bituminous macadam.

Contract No. 2302 Federal Aid Project No. 16. Glocester, Putnam Pike, in three sections. The first section begins three-quarters of a mile west of Harmony and extends westerly a distance of 1.44 miles; the second section begins two miles west of Chepachet and extends westerly a distance of 2.42 miles; the third section begins eight tenths of a mile west of the second section and extends westerly a distance of 1.61 miles to the Connecticut State Line. Overall length 10.8 miles. Length of construction—5.47 miles, bituminous concrete.

Bids must be made upon blank forms to be furnished by the Board.

No bids will be accepted unless accompanied by a certified check for the sum of $200.00 payable to the State of Rhode Island.

The Board reserves the right to reject any and all bids, and to give preference to towns or cities, in accordance with Section V of Chapter 84 of the General Laws.

Plans may be examined and specifications and bidding blanks may be obtained at the office of the State Board of Public Roads, State House, Providence, R. I., on and after Monday, March 26th, 1923, every week day (except holidays and Saturdays), between the hours of 9 a.m. and 5 p.m., Saturdays 9 a.m. to 12 m.

STATE BOARD OF PUBLIC ROADS.
ABRAM L. ATWOOD.
BENJAMIN F. ROBINSON.
FRANK COLE.
ALTON HEAD.
JOHN W. HANLEY.

OFFICIAL PROPOSALS

Bids: April 16.

Bridge

Johnstown, Pa.

Sealed proposals will be received at the office of the Superintendent of Streets and Public Improvements, City Hall, Johnstown, Pa., until 12 o'clock noon of Monday, April 16th, 1923, for the construction of the Coopersdale Bridge and the Woodvale Bridge in the City of Johnstown, Pa., in accordance with plans, contract and specifications on file in the office of the City Engineer.

The Coopersdale Bridge will cross the Conemaugh River at the foot of Laurel Avenue in the 20th ward, on the west, and Cooper Avenue in the 21st ward on the east. It will consist of three spans of through plate girders each about 92 ft. long, and concrete masonry. There will be a 36 ft. roadway with two lines of trolley tracks and an 8 ft. clear sidewalk.

The Woodvale Bridge will cross the Little Conemaugh at First Street in the 10th and 11th wards. It will consist of one bow string truss span 129 ft. long on existing masonry extended. It will have a 36 ft. roadway with two lines of trolley tracks and two 8 ft. sidewalks.

Plans, specifications, contract and proposals may be seen at the office of the Consulting Engineers, J. E. Greiner & Co., Baltimore, Md., and Pittsburgh, Pa., and can be obtained only at the office of the City Engineer on and after Monday, March 26th, 1923, for a deposit of Five Dollars ($5.00) for each set, which deposit will be refunded on the day of the letting to those submitting bids, provided the sets are returned complete and in good condition.

Each proposal must contain the full name of the party or parties presenting the same and all persons interested therein; and must be accompanied by a bond, duly and legally executed, for an amount that shall not be less than five per cent (5%) of the contract price, or a certified check for like amount on a solvent bank, doing business in the City of Johnstown, Pa., and made payable without reservation to the order of the Treasurer of the City of Johnstown, Pa., as a guarantee that if the proposal be accepted a contract will be entered into.

All proposals must be made on the blank forms furnished with specifications, as none other will be accepted, and they shall be enclosed in an envelope, bearing the name and address of the bidder, marked "Bridge Proposal," and addressed to the "Superintendent of Streets and Public Improvements."

The City reserves the right to reject any or all bids, and to award the contract as may be deemed to the best interests of the City.

M. LEE MASTERTON,
Supt. of Streets and Public Improvements.

Bids: April 11.

Prison Wall

Ossining, N. Y.

Sealed proposals for Construction—Steel Fence, (Prison Wall), Sing Sing Prison, Ossining, N. Y., will be received by Hon. Charles F. Rattigan, Superintendent of State Prisons, Capital, Albany, N. Y., until 12 o'clock noon, Wednesday, April 11, 1923, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a deposit, consisting of a certified check drawn upon some legally incorporated bank in this State and made payable to the State of New York, or money, equal to five per cent (5%) of the amount of the proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specification No. 4035. The right is reserved to reject any or all bids. Drawings and specifications may be examined at the Office of the Warden, Sing Sing Prison, Ossining, N. Y.; at the New York Office of the Department of Architecture, Room 1058, 25 Broadway, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, Sullivan W. Jones, Capitol, Albany, N. Y.

Dated: March 22, 1923.

OFFICIAL PROPOSALS

Bids: April 16.

Iron Water Pipe, Hydrants, etc.

Totowa, N. J.

Sealed proposals will be received by the Borough Council of the Borough of Totowa on Monday evening, April 16, 1923, at the Council Chambers in the Borough of Totowa at eight o'clock for the furnishing of approximately 3,000 feet of 6-in. cast iron water pipe, hydrants, gates and fittings, required for the extension of the water system of the Borough of Totowa, according to the specifications prepared by the Borough Engineer.

Certified check or cash in the sum of $100 must accompany bid and successful bidder will be required to enter into bond. The Borough Council reserves the right to reject any and all bids and will consider the responsibility of the bidder in awarding contract.

Name and address of the bidder must appear on the outside of the envelope in which bid is enclosed.

Proposal blanks and any further information may be had from Garwood Ferguson, Borough Engineer, Court House, Paterson, New Jersey, or Harold Dunkerly, Borough Clerk, Boyle Avenue, Borough of Totowa, New Jersey.

Largest Circulation of Any Technical Paper

Engineering News-Record's circulation—over 30,000 weekly—is the largest of any technical paper printed. It includes among its readers practically every worthwhile contractor, dealer, and manufacturer in the country who is interested in bidding on public works contracts—either local or outside of his immediate vicinity.

Bids: April 10.

Dredging

Baton Rouge, La.

Sealed proposals will be received at the office of the LOUISIANA HIGHWAY COMMISSION, Reymond Building, Baton Rouge, Louisiana, up to time specified below, Tuesday, April 10th, 1923, at which time and place they will be publicly opened for constructing Section "A" of Federal Aid Project 127 Hammond-New Orleans Highway, as follows:

Section "A," Tangiphoa Parish. From a point 1.6 miles South of Ponchatoula to Pass Manchac, 8.834 miles.

Bids to be received up to 12 o'clock noon. Approximate quantities involved: 770,388 Cubic Yards of dredged borrow, 12,662 feet B. M. creosoted lumber, 2,240 feet creosoted piling, 397.49 Stations timber corduroy, 195 acres clearing and 80 acres grubbing.

Section "B," St. John, the Baptist Parish. From Pass Manchac to Frenier, 13.173 miles.

Bids to be received up to 3 o'clock p.m. Approximate quantities involved: 853,663 Cubic Yards dredged borrow, 602.366 Stations timber corduroy, 316 acres clearing, and 125 acres grubbing.

Construction of both Sections consists of clearing, grubbing, and grading roadway embankment. A canal will be dredged parallel to the Highway and all suitable material taken therefrom will be used in constructing the roadway embankment. Said embankment to be placed on timber Corduroy where specified by the State Highway Engineer.

Information as to the location, character of work, extent and class of material, terms of payment, regulations governing manner of submitting proposals and executing contract, may on application, be obtained at the office of the Louisiana Highway Commission, Reymond Building, Baton Rouge, Louisiana. Plans and Specifications may be inspected at the office of the Commission in Baton Rouge, or will be furnished upon receipt of $5.00 as payment therefor not to be refunded.

J. M. FOURMY,
State Highway Engineer.
W. T. PETERMAN, Chairman,
Louisiana Highway Commission.

OFFICIAL PROPOSALS

Bids: April 6.

System of Water Mains

Mt. Greenwood, Ill.

Sealed proposals, endorsed "Proposals for Water Main," will be received by the Board of Local Improvements of the Village of Mt. Greenwood, Illinois, in the Village Hall in said Village, until eight o'clock p.m., April 6th, 1923, for furnishing all labor, tools, machinery, equipment and materials and constructing and completing a system of cast iron water mains in various Streets in said Village, as designated by and in accordance with an Ordinance duly passed, and in accordance with a special assessment proceeding in the County Court of Cook County, designated as Special Assessment Number Two, of the Village of Mt. Greenwood, Illinois, and in accordance with the following estimated quantities:

4 038.11	Lin.ft. of (12 inch) internal diameter cast iron water main, average depth (5½ feet).
33,198.49	Lin.ft. of (6 inch) internal diameter cast iron water main, average depth (5½ feet).
(12)	12 inch standard iron, parallel seat, double gate valves, with brick valve chambers and cast iron covers.
(57)	6 inch standard iron, parallel seat, double gate valves, with brick valve chambers and cast iron covers.
(99)	6 inch standard fire hydrants, with iron body, fitted with (2), (2½ inch) hose and (1) steamer connection, with (5 inch) valve opening and a (7 inch) inside diameter working barrel and fitted with auxiliary valves.
(11)	12 inch x 12 inch x 6 inch x 6 inch cast iron cross connections, 512 lbs. each.
(24)	6 inch x 6 inch x 6 inch x 6 inch cast iron cross connections, 257 lbs. each.
(3)	12 inch x 12 inch x 6 inch cast iron tee connections, 458 lbs. each.
(104)	6 inch x 6 inch x 6 inch cast iron tee connections, 200 lbs. each.
(8)	6 inch cast iron, ⅛, 45 degree bends, 105 lbs. each.

All proposals must be submitted on the Proposal Blanks, furnished by the Board of Local Improvements of said Village; and shall be accompanied by cash or certified check made payable to M. L. Cusack, President of the Board of Local Improvements, in an amount equal to ten (10%) per cent of the total proposal.

A construction bond, satisfactory to the Board of Local Improvements, in an amount equal to one-third of the total proposal will be required of the successful bidder.

Payment for the above work will be made by the Board of Local Improvements of said Village, in Special Assessment Bonds, issued against special Assessment Number Two of the Village of Mt. Greenwood, Illinois, bearing interest at the rate of six (6) per cent per annum with a maximum maturity date of ten (10) years.

Plans, specifications and proposal blanks may be obtained at the office of the Village Clerk of said Village; and from Allen L. Fox, engineer for said Board of Local Improvements, at his office in the Commercial Bank Building, Chicago Heights, Ill.; and in the office of F. K. Root, 14th Floor, Conway Building, Chicago, Illinois.

The Board of Local Improvements reserves the right to reect any or all Proposals.

Board of Local Improvements,
M. L. CUSACK,
President.

Bids: April 3.

Pavement

Geneva, N. Y.

Sealed proposals will be received by the Board of Public Works of the City of Geneva, N. Y., until 2.30 p.m., Tuesday, April 3, 1923, on about 21,000 sq.yd. of pavement. Types of pavement, on which proposals are invited, include brick, reinforced concrete, sheet asphalt, asphaltic concrete and bitulithic.

Specifications, blank proposals, plans, etc., may be had by depositing with the Superintendent of Public Works $5.00, which will be returned upon return of the plans, specifications, etc., in good condition.

The Board of Public Works reserves the right to reject any or all bids.

H. K. SEYBOLT,
Superintendent.

OFFICIAL PROPOSALS

Bids: April 12.

Reconstruction of Pumping Station

Poughkeepsie, N. Y.

Sealed proposals will be received by the Board of Public Works at its offices in Eastman Park Mansion, on or before 4 P.M., Thursday, April 12th, 1923, for the reconstruction of the City Pumping Station.

Plans, specifications, form of proposal, bond and contract may be obtained at the office of the Superintendent of Public Works, Poughkeepsie, N. Y., and at the office of Hazen & Whipple, Consulting Engineers, 30 East 42nd Street, New York City; upon the deposit of twenty-five ($25.00) dollars, which amount will be refunded upon the return of the plans and specifications in good condition.

Quantities of work to be done are approximately:

Item

1. Removing present wooden roof and walls.
2. Excavation of brick masonry, 2,500 cubic feet.
3. Excavation of concrete masonry, 300 cubic feet.
4. Excavation of earth.
5. Excavation of rock.
6. Brick masonry, 5,500 cubic feet.
7. Concrete in floors and foundations, without forms, 1,500 cubic feet.
8. All other concrete, 500 cubic feet.
9. Cement tile in roof, 6,792 square feet.
10. Waterproofing on roof, 6,592 square feet.
11. Structural steel, 57,000 pounds.
12. Reinforcing steel, 1,200 pounds.
13. Floor plates, 1,400 pounds.
14. Windows and doors.
15. Wainscoting, 1,450 square feet.
16. Tile floors, 2,200 square feet.
17. Plastering, 3,400 square feet.
18. Painting 10,000 square feet.
19. Crane.
20. Appurtenances: Roof catch basins and leaders, floor manhole castings, alum feed hoppers, I-beam track and trolley, wood partition and stairs, iron stairs and balcony, skylight.

The proposal shall be accompanied by a certified check drawn upon an incorporated State or National Bank or Trust Company in good credit, within this State, payable to the order of the City of Poughkeepsie for five per cent of the amount of the bid. The successful bidder will be required to give a satisfactory bond for the faithful performance of the agreement in amount equal to fifty per cent of the value of the contract.

The Board of Public Works reserves the right to reject any or all bids.

By order of the Board of Public Works.
THOMAS F. LAWLOR, Supt.

HAZEN & WHIPPLE,
Consulting Engineers,
30 East 42nd Street,
New York, N. Y.

Bids: April 9.

Street Improvement

Mineola, N. Y.

Sealed proposals will be received by the Board of Supervisors of Nassau County, in its chambers, in the Court House, at Mineola, Long Island, at 11 a.m. on Monday, April 9, 1923; at which time they will be publicly opened and read, and the contract awarded as soon thereafter as practicable, for the improvement of Park Street running from the easterly boundary line of Lido Country Club, easterly to the Town Park at Nassau by the Sea, Long Beach, in the Town of Hempstead, Nassau County, New York.

Plans and specifications may be seen at the office of W. Fred Starks, County Engineer, at Mineola, Long Island.

Each bid must be accompanied by a certified check on a solvent bank in the sum of three per cent of the amount of the total contract, made payable to the County of Nassau.

The Board of Supervisors reserves the rig t to reject any or all bids, waive any informality in the bids, and to accept the bid which it deems most favorable to the interest of the County.

By order of the Board of Supervisors.
By JESSE MERRITT,
Clerk.

Dated at Mineola, L. I., March 22, 1923.

OFFICIAL PROPOSALS

Bids: April 16.

Street Paving

Shenandoah, Pa.

Bids will be received by the Borough of Shenandoah, Penna., for paving West Coal Street between the West Curb of West Street and the West Side of Vine Street, approximately 5,103 square yards with a one course reinforced cement concrete pavement or with vitrified brick on a five or six inch cement concrete base, or with sheet asphalt on a six-inch base, according to State Highway Specifications of 1920, or with other bituminous pavement. Also for resetting nine inlets. Council reserves the right to reject any or all bids. Bids to be sealed and in the hands of the chairman of the Street Commission by noon, April 16th, 1923.

GEORGE FEIST,
Chairman Street Commission,
237 So. West Street,
Shenandoah, Pa.

A Bonding Company's Suggestion to Official Proposal Advertisers

"A large part of our contract bond business is submitted to us by wire, and I am a constant reader of the Official Proposals in order to find out the size and nature of the work that is referred to in the bond application. Very frequently I am unable to get any clear idea of what the advertisers are asking bids on, and of course the prospective bidder or contractor is also at a loss to know what kind of a job is being advertised.

"Traveling expenses are heavy at the present time, and contractors pay out considerable sums during the course of a year in investigating prospective contracts. This of course is a large charge that the owners eventually pay, and anything that will reduce the general overhead of contract work will eventually be to the advantage of the owner.

"One way to reduce this overhead is to word the advertisement so that the contractor sitting in his office will know whether or not he should investigate and prepare a bid on the proposed work."

Bids: April 3.

Road Work

Hartford, Conn.

Sealed proposals will be received by the State Highway Commissioner, 12 Washington Street, Hartford, Connecticut, until 2 p.m., Tuesday, April 3rd, 1923, for the following sections of State work, in accordance with plans and specifications on file in the office of the State Highway Commissioner and at the following places:

TOWN OF BRISTOL: About 2,180 linear feet of plain cement concrete pavement on School Street. NOTE: Portland cement for the above work will be furnished by the State. Plans and specifications at the office of R. W. Stevens, Division Engineer, 12 Washington Street, Hartford, Conn.

TOWNS OF EAST HARTFORD AND MANCHESTER: About 15,850 linear feet of 3 inch Bituminous Macadam over 5 inch stone base on Silver Lane. Plans and specifications at the office of R. W. Stevens, Division Engineer, 12 Washington Street, Hartford, Conn.

TOWNS OF NEW BRITAIN AND

OFFICIAL PROPOSALS

PLAINVILLE: About 15,965 linear feet of plain cement concrete pavement on 3 inch sheet asphalt over 6 inch concrete base on the New Britain-Plainville Road. NOTE: Portland cement for the above work will be furnished by the State. Specifications at the office of R. W. Stevens, Division Engineer, 12 Washington Street, Hartford, Conn.

TOWN OF STAFFORD: About 4,750 linear feet of 7 inch Waterbound Macadam, using either local stone or crushed gravel for the coarse aggregate, on Monson Street. Plans and specifications at the Town Clerk's office and at the office of R. W. Stevens, Division Engineer, 12 Washington Street, Hartford, Conn.

TOWN OF STRATFORD: About 6,865 linear feet of 3 inch sheet asphalt pavement over 6 inch concrete base on the Post Road. NOTE: Portland cement required for the above work will be furnished by the State. Specifications at the office of E. C. Welden, Division Engineer, 106 Elm Street, New Haven, Conn.

TOWN OF WEST HAVEN: About 5,372 linear feet of plain cement concrete pavement on Campbell Avenue. NOTE: Portland cement for the above work will be furnished by the State. Specifications at the office of Frank D. Alling, First Selectman, and at the office of E. C. Welden, Division Engineer, 106 Elm Street, New Haven, Conn.

All bids must be accompanied by a surety company bond or a certified check not less than one-third of the cost of the work. The State Highway Commission reserves the right to reject any and all bids.

Dated at Hartford, Connecticut, March 24, 1923.

C. J. BENNETT,
State Highway Commissioner.
12 Washington St., Hartford, Conn.

Bids: April 3.

State Highway Construction

Raleigh, N. C.

Sealed bids for the construction of the following projects will be received by the North Carolina State Highway Commission at Raleigh, N. C., until 10 a.m., on the 3rd day of April, 1923, when they will be opened and read:

Hard surface (concrete or asphaltic paving projects) including grading, reinforced concrete or cast iron pipe, structures, etc.

Project No.	County	Length (Miles)
115	Chowan	11.83
151-B	Hyde	4.39
213	Craven	10.43
293	Wilson	9.00
329	Columbus	12.89
408	Durham	0.47
578	Randolph	7.51
643	Iredell	8.57
713-A	Ashe	3.53
835	Henderson	6.84
944	Haywood	11.66

Topsoil, sand clay or gravel projects, including grading, drainage pipe, structures, etc.

146	Hertford	6.42
392	Robeson	1.15
437	Harnett	10.74
457-A	Orange	7.45
485-A	Wake	7.81
570	Moore	22.52
616	Cabarrus	8.59

MACADAM PROJECTS

Penetration or waterbound macadam projects, including drainage pipe, structures, etc.

723	Caldwell	3.54
802	Avery	5.67
930-A	Graham	2.92
961-A	Macon	9.27
971	Madison	6.70

BRIDGE PROJECTS

659-A	Mecklenburg—Bridges and culverts
804	Avery—Bridge over Horseshoe Creek
882-B	Rutherford—Overhead crossing over C., C. & O. R.R.

Specifications, proposal forms, etc., may be obtained from the State Highway Commission at Raleigh, N. C.

Plans may be seen in the Raleigh office, or in the offices of the District Engineer.

Bridge plans may be obtained from the State Highway Commission at Raleigh, N. C., upon payment of Five ($5.00) dollars per set.

The right is reserved to reject any or all bids.

By order of the North Carolina State Highway Commission.

OFFICIAL PROPOSALS

(Continued from preceding pages.)

Bids: April 20.

Highway Work

Albany, N. Y.

Office of State Commission of Highways—Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock p.m., on Friday, April 20, 1923, for the improvement of highways in the following counties:

Columbia.....(one highway: 2.52 miles)
Greene.....(one highway: 0.75 miles)
Orleans.....(one highway: 0.84 miles)
Schoharie.....(one highway: 0.78 miles)
Suffolk.....(one highway: 0.46 miles)

Also for the reconstruction of the following:

Broome.....(one contract: 1.86 miles)
Erie.....(one contract: 2.11 miles)
Fulton..(two contracts: 2.03 & 1.50 miles)
Greene.....(one contract: 3.88 miles)
Herkimer.....(one contract: 1.80 miles)
Oneida.....(one contract: 1.44 miles)
Ontario.....(one contract: 2.21 miles)
Onondaga.....(one contract: 2.00 miles)
Rockland.....(one contract: 1.26 miles)
Ulster.....(one contract: 3.14 miles)

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the division engineers in whose division the roads are to be improved or reconstructed. The addresses of the division engineers and the counties in which they are in charge will be furnished upon request.

The especial attention of bidders is called to "General Information for Bidders" in the itemized proposal, specifications and contract agreement.

FRED'K STUART GREENE,
Commissioner.

W. A. PATTON,
Secretary.

Bids: April 10.

Street Paving

Easley, S. C.

Sealed proposals will be received by the Paving Commission and the Town Council of Easley, S. C., at the Town Hall, two o'clock P.M., April 10th, 1923, for the furnishing of all labor, materials and equipment necessary for paving of certain streets and the laying of sidewalks.

The approximate amount of work to be done is as follows:

25,000 square yards hard surface pavement.
17,700 lineal feet of combination curb and gutter.
4,000 square yards of sidewalk.
8,000 cubic yards grading.

Proposals must be submitted on the forms which may be obtained at the office of the Town Clerk in Easley or the Engineer's office in Spartanburg. Plans may be seen at both places.

Each proposal must be accompanied by a cashier's check, on a South Carolina Bank, for $1,000.00 made payable to the Treasurer of Easley as evidence of good faith.

The right is reserved to reject any or all bids.

A. B. TAYLOR,
Chairman Paving Commission.
HARWOOD BEEBE,
Engineer,
Spartanburg, S. C.

Bids: April 23.

Sanitary Sewer

Marysville, Kansas.

The City of Marysville, Kansas, will receive bids until 5 P.M., Monday, April 23rd, 1923, for the construction of approximately 13,000 lineal feet of 8 inch sanitary sewer extensions, including manholes, flush tanks, galvanized pipe, etc.

H. E. CLARK,
City Clerk.
B. F. BOWMAN,
City Engineer.

Compensation Insurance
A contractor once dealt direct with an insurance company. Two years later we came along and proved to him he had overpaid. Through our efforts the insurance company made full restitution of many thousands of dollars. Mr. Contractor, it pays to employ a specialist who knows.
Alfred S. Hamilton
110 William St., New York

OFFICIAL PROPOSALS

Bids: April 13.

Highway Work

Albany, N. Y.

State Commission of Highways, Albany, N. Y.—Pursuant to Chapter 30, Laws of 1909, and amendments thereto, sealed proposals will be received by the undersigned at No. 55 Lancaster Street, Albany, N. Y., at 1 o'clock P.M., on Friday, April 13, 1923, for the furnishing and delivering bituminous material "A" and "T" f.o.b. railroad cars at destination for use by the State Highway Commission, in the maintenance and repair of improved state and county highways in all of the counties of the State, unless otherwise specified, for the following contracts:

B. M. Contract No. 4—Bituminous Material "A"—Penetration method for use in Divisions Nos. 1, 2, 3, 4 and 5.

B. M. Contract No. 5—Bituminous Material "A"—Penetration method for use in Divisions Nos. 6, 7, 8 and 9.

B. M. Contract No. 6—Bituminous Material "A"—Hot application for use in Divisions Nos. 2, 4 and 7.

B. M. Contract No. 7—Bituminous Material "T"—Cut back for use in Divisions Nos. 1, 4, 7 and 8.

B. M. Contract No. 8—Bituminous Material "T"—Cold application for use in all divisions.

B. M. Contract No. 9—Bituminous Material "A"—Emulsion for use in all divisions.

B. M. Contract No. 10—Bituminous Material "A"—Cut back for use in all divisions.

Proposals will be for furnishing the specified material at any railroad delivery point within the divisions named in the proposal.

Table showing approximate quantities and anticipated railroad delivery points, specifications and proposals may be obtained at the office of the State Commission of Highways at Albany, N. Y.

Special attention of bidders is called to "General Information for Bidders" in the proposal, specifications and contract agreement. Proposal for each contract must be submitted in a separate sealed envelope with the name and number of the contract plainly endorsed on the outside of the envelope. Each proposal must be accompanied by cash, draft or certified check payable to the order of the State Commission of Highways for an amount equal to at least three per cent of the amount of the proposal. The retention and disposal of such cash, draft or check by the State Commission of Highways shall conform with Subdivision 3, Section 130 of the Highway Law, as amended by Chapter 623 of the Laws of 1919.

The successful bidder will be required to execute the contract and comply in all respects with Section 130 of the Highway Law, as amended by Chapter 623.

The right is reserved to reject any or all bids.

FRED'K STUART GREENE,
Commissioner.

W. A. PATTON,
Secretary.

Bids: April 11

Freehold-Eatontown Road

Freehold, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Monmouth for the Reconstruction of the Freehold-Eatontown Road, No. 42, Section 1, with a Reinforced Concrete Pavement for a distance of 2.48 miles, and opened and read in public at the rooms of said board, Court House, Freehold, New Jersey on Wednesday, April 11th at 11:00 a.m.

Drawings and specifications for the proposed work, prepared by George K. Allen, Jr., County Engineer, have been filed in the office of said Engineer at 60 Broad Street, Red Bank, New Jersey, and may be inspected by prospective bidders during business hours. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

Plans and specifications will be furnished to prospective bidders upon payment of ten dollars ($10.00), which amount will be refunded upon return of plans and specifications before the time specified for the opening of bids.

Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and name of proposed work on the outside, addressed to the Board of Chosen Freeholders of the County of Monmouth and must be accompanied by a certified check for a sum not less than ten (10) per cent of the amount bid on the work, payable to the order of the County Treasurer and a surety company certificate stating that said surety company will provide the bidder with the required bond, and must be delivered at the place and before the hour above named.

The Board of Chosen Freeholders of the County of Monmouth reserves the right to reject any or all bids if deemed to the best interests of the County so to do.

By order of the Board of Chosen Freeholders of the County of Monmouth.

BRYANT B. NEWCOMB,
Director.

Attest:
CHARLES E. COLE, Clerk.
Freehold, N. J., Feb. 7th, 1923.

Bids: April 18.

Farmingdale-Manasquan Road

SECTION 3

Freehold, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Monmouth for the reconstruction of the Farmingdale-Manasquan Road No. 34, Sect. 3 with a reinforced concrete pavement for a distance of 1.44 miles, and opened and read in public at the rooms of said board, Court House, Freehold, New Jersey on April 18th, 1923, at 11:00 A.M.

Drawings and specifications for the proposed work, prepared by George D. Cooper, Engineer, have been filed in the office of said Engineer at 60 Broad Street, Red Bank, New Jersey, and may be inspected by prospective bidders during business hours. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

Plans and specifications will be furnished to prospective bidders upon payment of ten dollars ($10.00), which amount will be refunded upon return of plans and specifications before the time specified for the opening of bids.

Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and name of proposed work on the outside, addressed to the Board of Chosen Freeholders of the County of Monmouth and must be accompanied by a certified check for a sum not less than ten (10) per cent of the amount bid on the work, payable to the order of the County Treasurer and a surety company certificate stating that said surety company will provide the bidder with the required bond, and must be delivered at the place and before the hour above named.

The Board of Chosen Freeholders of the County of Monmouth reserves the right to reject any or all bids if deemed to the best interests of the County so to do.

By order of the Board of Chosen Freeholders of the County of Monmouth.

BRYANT B. NEWCOMB,
Director.

Attest:
CHARLES E. COLE, Clerk.
Freehold, N. J., March 21, 1923.

Bids: April 16.

Iron Water Pipe, Hydrants, etc.

Totowa, N. J.

Sealed proposals will be received by the Borough Council of the Borough of Totowa on Monday evening, April 16, 1923, at the Council Chambers in the Borough of Totowa at eight o'clock for the furnishing of approximately 3,000 feet of 6-in. cast iron water pipe, hydrants, gates and fittings, required for the extension of the water system of the Borough of Totowa, according to the specifications prepared by the Borough Engineer.

Certified check or cash in the sum of $100 must accompany bid and successful bidder will be required to enter into bond. The Borough Council reserves the right to reject any and all bids and will consider the responsibility of the bidder in awarding contract.

Name and address of the bidder must appear on the outside of the envelope in which bid is enclosed.

Proposal blanks and any further information may be had from Garwood Ferguson, Borough Engineer, Court House, Paterson, New Jersey, or Harold Dunkerly, Borough Clerk, Boyle Avenue, Borough of Totowa, New Jersey.

OFFICIAL PROPOSALS

Bids: April 12.

Reconstruction of Pumping Station

Poughkeepsie, N. Y.

Sealed proposals will be received by the Board of Public Works at its offices in Eastman Park Mansion, on or before 4 P.M., Thursday, April 12th, 1923, for the reconstruction of the City Pumping Station.

Plans, specifications, form of proposal, bond and contract may be obtained at the office of the Superintendent of Public Works, Poughkeepsie, N. Y., and at the office of **Hazen & Whipple, Consulting Engineers, 25 West 43rd Street, New York City; upon the** deposit of twenty-five ($25.00) dollars, which amount will be refunded upon the return of the plans and specifications in good condition.

Quantities of work to be done are approximately:

Item

1. Removing present wooden roof and walls.
2. Excavation of brick masonry, 2,500 cubic feet.
3. Excavation of concrete masonry, 300 cubic feet.
4. Excavation of earth.
5. Excavation of rock.
6. Brick masonry, 5,500 cubic feet.
7. Concrete in floors and foundations, without forms, 1,500 cubic feet.
8. All other concrete, 500 cubic feet.
9. Cement tile in roof, 6,792 square feet.
10. Waterproofing on roof, 6,592 square feet.
11. Structural steel, 57,000 pounds.
12. Reinforcing steel, 1,200 pounds.
13. Floor plates, 1,400 pounds.
14. Windows and doors.
15. Wainscoting, 1,450 square feet.
16. Tile floors, 2,200 square feet.
17. Plastering, 3,400 square feet.
18. Painting 10,000 square feet.
19. Crane.
20. Appurtenances: Roof catch basins and leaders, floor manhole castings, alum feed hoppers, I-beam track and trolley, wood partition and stairs, iron stairs and balcony, skylight.

The proposal shall be accompanied by a certified check drawn upon an incorporated State or National Bank or Trust Company in good credit, within this State, payable to the order of the City of Poughkeepsie for five per cent of the amount of the bid. The successful bidder will be required to give a satisfactory bond for the faithful performance of the agreement in amount equal to fifty per cent of the value of the contract.

The Board of Public Works reserves the right to reject any or all bids.

By order of the Board of Public Works.
THOMAS F. LAWLOR, Supt.

HAZEN & WHIPPLE,
Consulting Engineers,
25 West 43rd Street,
New York, N. Y.

Bids: April 16.

Street Resurfacing and Storm Sewer Construction

Canonsburg, Pa.

Separate and sealed proposals will be received by the Borough Council of Canonsburg, Pa., until April 16th, 1923, at 7:30 p.m., for placing approximately 7,500 sq. yd. of street resurfacing with asphaltic concrete.

For unloading sewer pipe and construction of storm water sewers according to plans and specifications. Estimated quantities; 192 lin.ft. of 30 in. Reinforced Concrete Railroad Culvert Pipe; 950 lin.ft. of 30 in. Cement sewer Pipe; 290 lin.ft. of 27 in.; 530 lin.ft. of 24 in.; 270 lin.ft. of 20 in.; manholes and catch basins together with appurtenances.

Plans, specifications and estimates may be seen and examined and further information may be obtained at the office of H. M. Day, Borough Engineer, 35 W. Pike St., Canonsburg, Pa.

Each proposal must be accompanied by a certified check for 5 per cent of the tendered bid and made payable to the Treasurer of the Borough of Canonsburg. Bond shall be 50 per cent of total contract awarded. The Council reserves the right to reject any or all bids, or to accept any bid or bids for sewers or resurfacing which may appear, in their judgment, to be to the best interest of the Borough.

W. C. BLACK,
Borough Secretary.

March 16, 1923.

OFFICIAL PROPOSALS

Bids: April 18.

Atlantic Highlands - Hendricksons Corner Road

Freehold, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Monmouth for the reconstruction of the Atlantic Highlands-Hendricksons Corner Road No. 58, Sect. 1 with a reinforced concrete pavement for a distance of 2.54 miles, and opened and read in public at the rooms of said board, Court House, Freehold, New Jersey, on April 18, 1923, at 11:00 A.M.

Drawings and specifications for the proposed work, prepared by George K. Allen, Jr., County Engineer, have been filed in the office of said Engineer at 60 Broad Street, Red Bank, New Jersey, and may be inspected by prospective bidders during business hours. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

Plans and specifications will be furnished to prospective bidders upon payment of ten dollars ($10.00), which amount will be refunded upon return of plans and specifications before the time specified for the opening of bids.

Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and addressed to the Board of Chosen Freeholders of the County of Monmouth and name of proposed work on the outside, must be accompanied by a certified check for a sum not less than ten (10) per cent of the amount bid on the work, payable to the order of the County Treasurer and a surety company certificate stating that said surety company will provide bidder with the required bond, and must be delivered at the place and before the hour above named.

The Board of Chosen Freeholders of the County of Monmouth reserves the right to reject any or all bids if deemed to the best interests of the County so to do.

By order of the Board of Chosen Freeholders of the County of Monmouth.
BRYANT B. NEWCOMB,
Director.

Attest:
CHARLES E. COLE, Clerk.
Freehold, N. J., March 21, 1923.

Bids: April 16.

South Park Boulevard Viaduct

OVER ILLINOIS CENTRAL RAILROAD COMPANY'S RIGHT OF WAY AT EAST TWENTY-THIRD STREET, CHICAGO

Chicago, Ill.

Proposals are invited by the South Park Commissioners for furnishing, fabricating and erecting the structural steel work for the "South Park Boulevard Viaduct" in accordance with the drawings and specifications prepared by Condron Company, Consulting Engineers, copies of which may be obtained at the office of the South Park Commissioners, or at the office of the Consulting Engineers, upon depositing therefor the sum of twenty-five dollars ($25.00). This deposit will be repaid to the depositor on the return of the plans and specifications.

Proposals should be addressed to and delivered to the office of the South Park Commissioners, 57th Street and Cottage Grove Avenue, Chicago, Ill., enclosed in an opaque sealed envelope marked, "Proposal" and bearing the title of the work and the name of the bidder, on or before twelve (12:00) o'clock noon, April 16, 1923.

The successful bidder will be required to enter into a contract and give a surety bond in the sum of 25 per cent of value of contract.

The right is reserved to reject any or all bids, or to accept any bid which in its judgment will be for the best interest of the public.

Each proposal must be accompanied by a certified check in the sum of twenty thousand dollars ($20,000), payable to the South Park Commissioners as a guarantee of the good faith of the bidder, which check will be returned to the bidder unless forfeited under the conditions stipulated in the proposal.

Proposals shall be made on the "Proposal Form" accompanying the specifications. It is desired that the date of the completion of the work be not later than May 1, 1924.

J. F. NEIL, Secretary.

OFFICIAL PROPOSALS

Bids: April 18.

Mechanical Filter Plant

Richmond, Va.

Sealed proposals for the construction of a mechanical filter plant, consisting of Substructures, Contract No. 1; Equipment, Contract No. 2; and Superstructures, Contract No. 3, will be received at the office of the Director of Public Utilities, City Hall, Richmond, Va., until 12 o'clock, noon of Wednesday, April 18, 1923; and at that time publicly opened and read.

Contract No. 1 includes about 9,500 cu. yds. of reinforced concrete masonry and about 13,000 cu.yds. of excavation in connection with the construction of 10 filter tanks, a basin beneath them, two coagulating basins and other appurtenant work.

Contract No. 2 includes about 200 tons of cast-iron pipe and specials, over 60 gate valves and sluice gates, filter sand and gravel, and all filter equipment for a 30-million-gallon filter plant. It also includes six electrically-driven centrifugal pumps.

Contract No. 3 includes brick superstructures for the plant, comprising a one-story filter building about 110 ft. by 150 ft. and a two story head house about 50 ft. by 125 ft.

Copies of plans, specifications and forms of proposal covering all three contracts may be obtained at the office of the Department of Public Utilities, City Hall, Richmond, or at the office of Fuller and McClintock, Engineers, 170 Broadway, New York, on or after March 26, upon deposit of $25.00 for each set of plans and specifications furnished.

Certified checks are required in the sum of $15,000 for Contract No. 1, $10,000 for Contract No. 2 and $5,000 for Contract No. 3.

The right is reserved to reject any or all bids.

E. W. TRAFFORD,
Director of Public Utilities.

Bid: April 10

Road Work

Baltimore, Md.

Sealed proposals for building seven sections of State Highway, as follows:

Frederick Co. Cont. F-63. One section of State Highway from Emmitsburg west to the Penna. State Line, a distance of 1.16 miles. (Concrete.)

Howard Co. Cont. HO 23. One section of State Highway from the end of the Folly Quarter Road to the Triadelphia Pike, a distance of 1.45 miles. (Concrete.)

Prince George's Co. Cont. P-44. One section of State Highway between Laurel and the Montgomery County Line, a distance of 0.7 mile. (Concrete).

Caroline Co. CO-32. One section of State Highway from Hillsboro toward Denton, for a distance of 1.45 miles. (Concrete).

Dorchester Co. Cont. D-31. One section of State Highway between Cambridge and Lloyds, for a distance of 1.0 mile. (Concrete).

Somerset Co. Cont. S-17. One section of State Highway between Princess Anne and Deals Island for a distance of 3.0 miles. (Concrete).

Queen Anne's Co. Cont. Q-25. One section of State Highway between Chester and the Kent Narrows, for a distance of 1.08 miles. (Concrete).

will be received by the State Roads Commission, at its offices, 691 Garrett Building, Baltimore, Maryland, until 12 m. on the 10th day of April 1923, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which with specifications and plans will be furnished by the Commission upon application and cash payment of $1.00, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of Five Hundred ($500) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 21st day of March 1923.

JOHN N. MACKALL,
Chairman.

L. H. STEUART, Secretary.

OFFICIAL PROPOSALS

Bids: April 24.

Sewage Disposal Plant Construction Division III, Section 5

SANITARY DISTRICT OF INDIANAPOLIS
Indianapolis, Ind.

Sealed proposals will be received by the Board of Sanitary Commissioners, Sanitary District of Indianapolis, at its office in the City Hall, Indianapolis, Indiana, until 10 A.M., April 24th, 1923, at which time bids will be publicly opened and scheduled and awards made as soon thereafter as practicable, for the construction of the Dehydration Building and furnishing Equipment of Section 5, Division III., for the Sewage Disposal Plant of the Sanitary District of Indianapolis, in accordance with plans and specifications on file at the office of the Board. This construction and equipment consists of the following items:

5—a. Dehydration Building.
5—b. Dryer Settings.
5—c. Electric Wiring.
5—d. Stokers.
5—e. Coal Storage and Handling Equipment.
1. Bunker.
2. Conveyors.
5—f. Sludge Dryers.
5—g. Fans and Motors.
5—h. Sludge Handling Equipment.
1. Sludge Conveyors.
2. Sludge Breakers.
3. Dry Sludge Screen.
5—i. Traveling Crane.
5—j. Cast Iron Pipe and Specials.
5—k. Special Sluice Gates.

Each bidder shall deposit with his bid a certified check in the amount as provided in said specifications and information to bidders, to secure the execution of the contract for which bid is made.

Copies of plans and specifications and general information may be obtained at the office of Charles H. Hurd, Consulting Engineer, 1405 Merchants Bank Building, Indianapolis, Indiana.

The board reserves the right to reject any and all bids.

BOARD OF SANITARY COMMISSIONERS.
JAY A. CRAVEN, President.
JOHN L. ELLIOTT, Vice-Pres.
LUCIUS B. SWIFT.

Bids: April 11

Farmingdale-Manasquan Road

Freehold, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Monmouth for the reconstruction of the Farmingdale-Manasquan Road, No. 34, (Section 1), with a reinforced concrete pavement for a distance of 1.91 miles and opened and read in public at the rooms of said board, Court House, Freehold, New Jersey on Wednesday, April 11th, at 11:00 a.m.

Drawings and specifications for the proposed work, prepared by George D. Cooper, Engineer, have been filed in the office of said Engineer at 60 Broad Street, Red Bank, New Jersey, and may be inspected by prospective bidders during business hours. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

Plans and specifications will be furnished to prospective bidders upon payment of ten dollors ($10.00), which amount will be refunded upon the return of plans and specifications before the time specified for the opening of bids.

Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and name of proposed work on the outside, addressed to the Board of Chosen Freeholders of the County of Monmouth and must be accompanied by a certified check for a sum not less than ten (10) per cent of the amount bid on the work, payable to the order of the County Treasurer and a surety company certificate that said surety company will provide the bidder with the required bond, and must be delivered at the place and before the hour above named.

The Board of Chosen Freeholders of the County of Monmouth reserves the right to reject any or all bids if deemed to the best interests of the County so to do.

By order of the Board of Chosen Freeholders of the County of Monmouth.

BRYANT B. NEWCOMB, Director.
Attest: CHAS E. COLE, Clerk.
Freehold, N. J., Feb. 7th, 1923.

OFFICIAL PROPOSALS

Bids: April 24.

Storm Water Drain

Buffalo, N. Y.

The Commissioner of Public Works will receive sealed proposals at Room No. 3 Municipal Building, Buffalo, N. Y., until 11 o'clock a.m., April 24th, 1923, for the construction of a reinforced concrete storm water drain 33 feet 6 inches and 32 feet 6 inches inside width, vertical side walls seven feet in height with semi-eliptical arch roof of seven feet rise or fourteen feet high at center, length 7,154 feet, to care for the storm water of Scajaquada Creek.

Work consists of the following: Caring for dry weather and storm flow of the creek.

(Normal dry weather flow estimated at about five to twenty cubic feet per second.)

Removal of about 122,435 cu.yd. of earth.

Removal of about 89,684 cu.yds. of rock.

Removal of 9 bridges.

Removal of about 37,862 cu.yd. concrete.

Placing of about 3,464,674 lb. reinforcing steel.

Construction of syphon, overflow connection and side sewers.

Bid and contract will be on a lump sum basis.

No proposal will be considered unless it be accompanied by a certified check upon a National or State Bank drawn and made payable to the Cashier of the Department of Public Works of the city of Buffalo, N. Y., for one hundred thousand dollars ($100,000).

Plans and specifications, form of contract and proposal blanks may be had at the office of the City Engineer, Room No. 20 Municipal Building, Buffalo, N. Y., by depositing $25.00 for same. Said sum shall be returned to bidders submitting proposals. Ten dollars will be returned to those not submitting proposal upon return of plans and specifications in good condition.

The Commissioner of Public Works reserves the right to reject any and all bids and waive any informalities.

Formal advertisement will be found in the Buffalo Commercial Express and Enquirer, March 26th, 27th, April 2nd and 3rd, 1923.

This is not a formal advertisement.

Bids: April 18.

Street Paving and Storm Sewer Construction

Bennington, Vt.

Sealed proposals will be received by the President and Trustees of the Village of Bennington, Vermont, at the Village Clerk's room in Bennington, Vermont, until 8 p.m. (Standard Time), April 18th, 1923, for street improvements and storm sewer line. The work will consist of about 10,800 square yards of reinforced cement concrete pavement, 4,000 linear feet of integral curb and gutter, and 4,200 linear feet vitrified clay or concrete storm sewer pipe 8 in. to 30 in. in size.

All bids must be upon blanks provided in the proposal furnished to bidders.

Bids must be accompanied by a certified check for three per cent (3%) of the amount of the bid. Plans and specifications will be on file at the Village Clerk's office in the Village of Bennington, and at the office of the engineer, 507 Fifth Avenue, New York City.

Copies of the plans and specifications may be obtained on and after April 10th, 1923, for three dollars, ($3.00), per set. No refund for blanks returned. Bidding blanks will be furnished free.

The right is reserved to reject any or all bids.

W. P. HOGAN, Village Clerk.
H. ELTINGE BREED, Engineer,
507 Fifth Avenue,
New York City.

OFFICIAL PROPOSALS

Bids: April 18.

Road Work

Dover, Del.

Sealed proposals will be received by the State Highway Department, at its office, Dover, Delaware, until 2 o'clock P.M., April 18, 1923, and at that place and time publicly opened, for the construction of State Highways, involving the following approximate quantities:

CONTRACT NO. CS18 4.43 MILES
HARBESON-SUNSHINE SCHOOL

15,000	Cu. Yds. Excavation
1,000	Cu.Yds. Borrow
80	Tons Broken Stone Base Course
7,710	Cu.Yds. Cement Concrete Pavement
100	Cu. Yds. Class A Concrete
1,800	Lbs. Reinforcement
1,000	Lin. Ft. 15 in. R.C. Pipe
68	Lin. Ft. 18 in. R.C. Pipe
44	Lin. Ft. 36 in. R.C. Pipe
300	Lin. Ft. Wire Cable Guard Rail
460	Lin. Ft. Shoulder Curb

CONTRACT NO. CS19 4.583 MILES
SUNSHINE SCHOOL-LEWES

13,500	Cu. Yds. Excavation
2,500	Cu. Yds. Borrow
60	Tons Broken Stone Base Course
7,975	Cu. Yds. Cement Concrete Pavement
120	Cu. Yds. Class A Concrete
820	Lin. Ft. 15 in. R.C. Pipe
1,500	Lbs. Reinforcement
102	Lin. Ft. 18 in. R.C. Pipe
40	Lin. Ft. 42 in. R.C. Pipe
400	Lin. Ft. Wire Cable Guard Rail
480	Lin. Ft. Toe Boards

CONTRACT NO. CS20 5.45 MILES
RELIANCE-SEAFORD

0.65	Acres Clearing
0.29	Acres Grubbing
23,500	Cu. Yds. Excavation
1,000	Cu. Yds. Borrow
120	Tons Broken Stone Base Course
8,625	Cu. Yds. Cement Concrete Pavement
280	Cu. Yds. Class A Concrete
10,000	Lbs. Reinforcement
860	Lin. Ft. 16 in. C.I. or R.C. Pipe
95	Lin. Ft. 18 in. C.I. or R.C. Pipe
30	Lin. Ft. 24 in. C.I. or R.C. Pipe
30	Lin. Ft. 30 in. C.I. or R.C. Pipe
1,750	Lin. Ft. Wire Cable Guard Rail
2,200	Lin. Ft. Shoulder Curb

Performance of contract shall commence within ten (10) days after execution of the contract and be completed during 1923 as specified.

Monthly payments will be made for 90 per cent of the construction completed each month.

Bidders must submit proposals upon forms provided by that Department.

Each proposal must be accompanied by a surety bond, certified check, or money to the amount of at least ten (10) per centum of the total amount of the proposal.

The envelope containing the proposal must be marked "Proposal for the Construction of State Highway Contract No....."

The Contract will be awarded or rejected within twenty (20) days from the date of opening proposals.

The right is reserved to reject any or all bids.

Detailed plans may be seen and index plans and specifications may be obtained upon deposit of ten dollars ($10.00), which amount will be refunded upon return of plans and specifications in good condition at the office of

STATE HIGHWAY DEPARTMENT,
Dover, Delaware.

How Do You Know You're Satisfied?

¶All things are comparable—your watch and mine; your house and your neighbor's and any number of other things including Swart Specialized Insurance Service as compared with the ordinary sort. ¶That expression that smacks of ease and contentment: "I'm satisfied; why change?" may be costing you a lot of money, the loss of which will never show up until you have something definite by which to compare it. ¶Friendship is one thing but passing out cold dollars for value received is something else. ¶To which let me add that the biggest and juciest profits are plugged leaks. ¶Without obligation we are ready to put our time against yours to take it over.

Swart Service Really Serves

HARMON V. SWART

Insurance Specialist
92 William Street, New York

OFFICIAL PROPOSALS

Bids: April 11

Sea Bright-Highlands Road

Freehold, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Monmouth for the Reconstruction of the Sea Bright-Highlands Road, No. 54, with a Reinforced Concrete Pavement, for a distance of 2.27 miles, and opened and read in public at the rooms of said board, Court House, Freehold, New Jersey on Wednesday, April 11th at 11:00 a.m.

Drawings and specifications for the proposed work, prepared by George K. Allen, Jr., County Engineer, have been filed in the office of said Engineer at 60 Broad Street, Red Bank, New Jersey, and may be inspected by prospective bidders during business hours. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

Plans and specifications will be furnished to prospective bidders upon payment of ten dollars ($10.00), which amount will be refunded upon return of plans and specifications before the time specified for the opening of bids.

Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and name of proposed work on the outside, addressed to the Board of Chosen Freeholders of the County of Monmouth and must be accompanied by a certified check for a sum not less than ten (10) per cent of the amount bid on the work, payable to the order of the County Treasurer and a surety company certificate stating that said surety company will provide the bidder with the required bond, and must be delivered at the place and before the hour above named.

The Board of Chosen Freeholders of the County of Monmouth reserves the right to reject any or all bids if deemed to the best interests of the County so to do.

By order of the Board of Chosen Freeholders of the County of Monmouth.

BRYANT B. NEWCOMB,
Director.

Attest:
CHAS. E. COLE, Clerk.
Freehold, N. J. Feb. 7th, 1923.

Bids: April 9

Movable Dam and Appurtenances

NOTICE TO CONTRACTORS

Fort Wayne, Ind.
March 28, 1923.

Department of Public Works,
Office of the Board,
Room 2, City Hall.

Notice is hereby given by the Board of Public Works, of the City of Fort Wayne, Indiana, that sealed proposals will be received by them at their office until Monday, April 9th, 1923, at 10:30 o'clock A. M., for the construction of a movable dam and appurtenances across the Maumee River, City of Fort Wayne, Indiana.

The principal items included in the proposed work are two (2) ninety-nine (99) feet steel rollers or drums ten (10) feet in diameter weighing approximately One Hundred and Twenty-Five (125) tons, erected, and hoisting machinery for same; gears; racks and stanchions about Twenty-Five (25) tons; Tainter Gate and Sluice Gates; Six Thousand Three Hundred and Fifty (6,350) cubic yards concrete; Six Hundred and Thirty-Seven (637) piles; Twenty-Two Thousand (22,000) square feet steel piling; Seventy (70) tons reinforcing steel; Five Thousand Twenty (5,020) cubic yards wet excavation; Two Thousand Two Hundred and Fifty (2,250) cubic yards dry excavation; Foot bridge over rollers.

The estimated cost of the proposed improvements is One Hundred and Eighty-Nine Thousand, Eight Hundred and Forty ($189,840.00) Dollars.

Bidding forms, non-collusion affidavit and envelopes must be obtained from the undersigned Board of Public Works.

OFFICIAL PROPOSALS

Properly executed non-collusion affidavit must accompany each bid.

All work done in the construction of the aforementioned dam shall be in accordance with the plans cross-sections, profiles and specifications therefor, which are now on file, and may be seen in the office of the Department of Public Works of said City, and also at the office of the Designing Engineers, **A. W. Grosvenor, 122 East** Washington Street, Fort Wayne, Indiana, and Charles Brossman, 1503 Merchants Benk Building, Indianapolis, Indiana.

The bidder in submitting his proposal for the construction of the aforementioned dam **must accompany his proposal with a certified check in the sum of Five Thousand ($5,000.00) Dollars, made payable to the City of Fort Wayne, Indiana, as an evidence** of good faith, that he will execute within five (5) days from the acceptance of his proposal a contract and bond signed by a surety company satisfactory to said Board of Public Works of the City of Fort Wayne, Indiana.

A failure of the successful bidder to enter into such a contract and bond upon the acceptance of his proposal, will forfeit the check and sum of money payable thereon to the City of Fort Wayne, Indiana, as agreed and liquidated damages for such failure.

The Board reserves the right to reject or accept any or all proposals submitted.

JOHN B. KOCKS
OTTO BANGS
JESSE BROSIUS,
Board of Public Works.

Bids: April 24.

Sewer Construction

LETTING NO. 8

Louisville, Ky.

Sealed proposals will be received by the Commissioners of Sewerage of Louisville until 12 o'clock noon, April 24, 1923, for the following sewer construction in Louisville, Ky.

This letting embraces the following:

PORTLAND RELIEF—775 lin.ft. of 54-in., 1,145 lin.ft. of 48-in., 533 lin.ft. of 45-in., 900 lin.ft. of 27-in., 44 lin.ft. of 24-in., 26 lin.ft of 18-in., and 91 lin.ft. of 15-in. Sewers.

THIRTY-FOURTH STREET SEWER—1,460 lin.ft. of 60-in., 987 lin.ft. of 54-in., 1,488 lin.ft. of 48-in., 484 lin.ft. of 45-in., 478 lin.ft. of 36-in. Sewers.

THIRTY-FOURTH STREET LATERALS—375 lin.ft. of 27-in., 2,450 lin.ft. of 24-in., 840 lin.ft. of 21-in., 350 lin.ft. of 15-in. Sewers.

Total principal quantities for the above pieces of work are approximately 44,000 cubic yards of excavation, 3,500 cubic yards of concrete, 155,000 pounds of reinforcement. Smaller items as pipe, etc., not listed.

Approximate amount of this work $250,000.00.

Drawings, form of proposal, contract and specifications may be had at the office of the Commission upon the deposit of ten dollars ($10.00) for each project, to secure the return of same in good condition within thirty days.

Each proposal must be inclosed in a sealed envelope addressed to the Commissioners of Sewerage, 417 West Main Street, Louisville, Ky., and accompanied by a certified check drawn upon a state or national bank or a trust company established in the city of Louisville or the city of New York, for an amount not less than seven (7) per cent of the total amount of the accompanying proposal, payable to the Commissioners of Sewerage of Louisville or the bond executed as set forth in the information for bidders.

The right to reject any and all bids is reserved.

COMMISSIONERS OF SEWERAGE OF LOUISVILLE.
By MATT H. CRAWFORD,
Chairman.
P. H. HOGE, JR.,
Sec. and Treas.

J. R. F. BREED,
Chief Engineer.

OFFICIAL PROPOSALS

Bids: April 6.

Water Works and Sewerage Systems

Lyndonville, N. Y.

Sealed Proposals will be received by the Board of Trustees of the Village of Lyndonville, N. Y., until two o'clock p.m. on the 6th day of April, 1923, for the construction of a sewerage system and disposal works; and also for the construction of a water works system, the latter consisting of about five and one-third miles of cast iron mains, hydrants, valves, pump house, slow sand filter, water tower and accessories.

Plans may be seen and specifications obtained at the office of the Board at Lyndonville, or at the office of Hopkins & Field, Engineers, 349 Cutler Building, Rochester, N. Y.

The Board hereby reserves and has the right to reject any or all bids or to accept those that in its judgment will be for the best interests of the Village, and to waive any informality in the bidding.

A surety bond satisfactory to the Board in sufficiency of surety and in the amount of forty per cent of the bid will be required of the one to whom a contract may be awarded.

Bids will be received for the sewerage system and disposal works and separately for the water works pipe laying, pump house, filter, pure water reservoir and water tower foundations, cast iron pipe and special castings, valves, valve boxes and hydrants, water tower and pumping equipment.

A certified check made payable to the order of the Board of Trustees, Lyndonville, N. Y., to the amount of $1,000 must be deposited by each bidder and accompany his bid as a guarantee that in case the contract is awarded to him he will, within ten days thereafter, execute such contract and furnish his bond.

Bids must be sealed and addressed to the Board of Trustees, Lyndonville, N. Y., and marked on the outside of the enclosing envelope "Proposal for Sewerage (or Water Works) System."

RICHARD N. PARSONS,
President.
BENJAMIN J. WARD,
Trustee.
JAY W. BREED,
Trustee.

DONALD M. FRASER, Village Clerk.
Dated Lyndonville, N. Y., March 10, 1923.

Bids: April 9.

Street Improvement

Mineola, N. Y.

Sealed proposals will be received by the Board of Supervisors of Nassau County, in its chambers, in the Court House, at Mineola, Long Island, at 11 a.m. on Monday, April 9, 1923; at which time they will be publicly opened and read, and the contract awarded as soon thereafter as practicable, for the improvement of Park Street running from the easterly boundary line of Lido Country Club, easterly to the Town Park at Nassau by the Sea, Long Beach, in the Town of Hempstead, Nassau County, New York.

Plans and specifications may be seen at the office of W. Fred Starks, County Engineer, at Mineola, Long Island.

Each bid must be accompanied by a certified check on a solvent bank in the sum of three per cent of the amount of the total contract, made payable to the County of Nassau.

The Board of Supervisors reserves the right to reject any or all bids, waive any informality in the bids, and to accept the bid which it deems most favorable to the interest of the County.

By order of the Board of Supervisors
By JESSE MERRITT
Clerk.

Dated at Mineola, L. I., March 22, 1923.

CONTRACT BONDS FOR RESPONSIBLE CONTRACTORS

The Government Service Bureau maintained by the Aetna in Washington provides prompt, timely and efficient bonding and insurance service free to Aetna clients.

ÆTNA CASUALTY AND SURETY COMPANY

HARTFORD, CONN. AGENTS EVERYWHERE

OFFICIAL PROPOSALS

Bids: May 1.

Paving Construction

Miami, Fla.

Sealed proposals will be received by "The Commission of the City of Miami, Florida," at the City Hall in Miami, Florida, until 9:30 a.m., at the regular meeting of the Commission, Tuesday, May 1, 1923, for the construction of Sheet Asphalt Paving.

The work will consist of approximately 75,887 sq.yd. of Sheet asphalt paving and will be divided into one contract. The bidder can bid on any or all of these contracts.

The improvements are to be constructed and payment, therefore, is to be made under Section 56 of the City Charter.

All bids must be upon blank forms provided in the proposal, specifications and contract.

Each bid must be accompanied by a certified check for 2½ per cent of the amount of the bid to insure the execution of the contract as provided by Section 56 of the City Charter.

The City reserves the right to reject any or all bids.

Plans and specifications will be on file at the City Hall in the office of the City Manager.

Copies of proposals, specifications and contract can be obtained from the office of Chas. W. Murray, Director of Public Service, on deposit of $10, which will be refunded to those who submit bona fide bids.

F. H. WHARTON, City Manager.

Bids: April 13.

Highway Work

Albany, N. Y.

State Commission of Highways, Albany, N. Y.—Pursuant to Chapter 30, Laws of 1909, and amendments thereto, sealed proposals will be received by the undersigned at No. 55 Lancaster Street, Albany, N. Y., at 1 o'clock P.M., on Friday, April 13, 1923, for the furnishing and delivering bituminous material "A" and "T" f.o.b. railroad cars at destination for use by the State Highway Commission, in the maintenance and repair of improved state and county highways in all of the counties of the State, unless otherwise specified, for the following contracts:

B. M. Contract No. 4—Bituminous Material "A"—Penetration method for use in Divisions Nos. 1, 2, 3, 4 and 5.

B. M. Contract No. 5—Bituminous Material "A"—Penetration method for use in Divisions Nos. 6, 7, 8 and 9.

B. M. Contract No. 6—Bituminous Material "A"—Hot application for use in Divisions Nos. 2, 4 and 7.

B. M. Contract No. 7—Bituminous Material "T"—Cut back for use in Divisions Nos. 1, 4, 7 and 8.

B. M. Contract No. 8—Bituminous Material "T"—Cold application for use in all divisions.

B. M. Contract No. 9—Bituminous Material "A"—Emulsion for use in all divisions.

B. M. Contract No. 10—Bituminous Material "A"—Cut back for use in all divisions.

Proposals will be for furnishing the specified material at any railroad delivery point within the divisions named in the proposal.

Table showing approximate quantities and anticipated railroad delivery points, specifications and proposals may be obtained at the office of the State Commission of Highways at Albany, N. Y.

Special attention of bidders is called to "General Information for Bidders" in the proposal, specifications and contract agreement. Proposal for each contract must be submitted in a separate sealed envelope with the name and number of the contract plainly endorsed on the outside of the envelope. Each proposal must be accompanied by cash, draft or certified check payable to the order of the State Commission of Highways for an amount equal to at least three per cent of the amount of the proposal. The retention and disposal of such cash, draft or check by the State Commission of Highways shall conform with Subdivision 3, Section 130 of the Highway Law, as amended by Chapter 623 of the Laws of 1919.

The successful bidder will be required to execute the contract and comply in all respects with Section 130 of the Highway Law, as amended by Chapter 623.

The right is reserved to reject any or all bids.

FRED'K STUART GREENE, Commissioner.

W. A. PATTON, Secretary.

OFFICIAL PROPOSALS

Bids: May 1.

Bridges and Road Work

Charleston, W. Va.

Sealed proposals will be received by the State Road Commission of West Virginia at its office in Charleston, W. Va., until 10 o'clock a.m. on the first day of May, 1923, and opened and read immediately thereafter at the Kanawha County Court House, Charleston, W. Va., for the construction of the following bridges, sections of state road and surface treatment:

Project 3178—Fayette County—6.8 miles of the Falls District Line to Ansted road for paving with bituminous macadam. Certified check for $6,000.

Project 3,178—Fayette County—6.8 miles of the Ansted-Hico Road for grading, draining and paving with bituminous macadam. Certified check for $10,000.

Project 3183—Fayette County—8.0 miles of the Ravenseye-Rainelle Road for grading and draining. Certified check for $4,000.

Project 127-B — Greenbrier County — 5.0 miles of the Clintonville-Alta Road for grading and draining. Certified check for $3,000.

Project 3270 — Greenbrier County — 1.25 miles of the Summers County Line-Alderson Road for grading and draining.

Project 3056—Summers County—4.75 miles of the Pence Springs-Greenbrier County line road for grading and draining.

(Note: Projects 3270 and 3056 will be let in one contract. Certified check, $3,600.)

Projects 3044, 3179, 3135 A and B—Kanawha County—8.7 miles of the Mile Branch to Cannelton Road for paving with rock asphalt, bituminous concrete or warrenite bitulithic. Certified check for $11,000.

Project 3231—Kanawha County—10 miles of the Clendenin-King Shoals Road for grading and draining. Certified check for $7,000.

Project 3206—Kanawha County—10 miles of the Elk River Road between Little Sandy Creek and Clendenin for grading and draining. Certified check, $4,000.

Project 3239—Raleigh County—6.4 miles of Craborchard-Slab Fork District Line road for grading, draining and paving with bituminous macadam. Certified check for $9,000.

Project 1067 A and B—Summers County—5.0 miles of the Hinton toward Jumping Branch Road for grading and paving with bituminous macadam. Certified check for $8,000.

Project 3271—Logan County—1.5 miles of the Pigeon-Creek Horsepen Creek Road for grading and draining.

Project 3120—Mingo County—6.9 miles of the Logan County Line-Horsepen Road for grading and draining.

(Note: Projects 3271 and 3120 will be let in one contract. Certified check, $6,000.)

Project 3230—McDowell County—7 miles of the Newhall-Virginia State Line Road for grading and draining. Certified check for $4,500.

Project 3189—Wayne County—5.8 miles of the Crum-Bull Creek Road for grading and draining. Certified check for $4,500.

Project 3188 — Wayne County — Jennies Creek Bridge No. 872 over Jennies Creek, 120-ft. steel through truss, ashlar masonry or concrete substructure. Separate proposals will be received for substructure, certified check, $500; and for superstructure, certified check, $500.

Project 3099 — Lincoln County — Midkiff Bridge No. 797 over Ten Mile Creek 160-ft. steel through truss. Superstructure only. Certified check, $600.

Project 3165—Calhoun County—1 mile Main Street of Grantsville for paving with rock asphalt. Certified check, $1,600.

Project 3132 A — Jackson County — 2.5 miles of the Ravenswood-Sandyville Road for grading and draining. Certified check, $2,500.

Project 3240—Roane County—3 miles of the Walton-Kanawha County Line road for paving with rock asphalt or warrenite bitulithic. Certified check, $3,500.

Project 3197-B—Tyler County—1.5 miles of the Sistersville-Middlebourne Road for grading, draining and paving with waterbound macadam. Certified check, $1,000.

Project 3252 — Pleasants County — 1.2 miles St. Marys-Ellenboro Road for grading, and gravel surfacing. Certified check, $500.

Projects 3254 and 3268—Pleasants County—0.35 miles of Barkwill Street and Third Street, St. Marys for grading, draining and paving with cement concrete or brick and gravel. Certified check, $500.

Project 3067—Wirt County—Moorehead Bridge No. 867 over Right Reedy Creek, 120-ft. steel through truss, ashlar masonry or concrete substructure. Separate proposals will be received for substructure, Certified check, $500; and superstructure, certified check, $500.

Project 3067—Wirt County—Lee Bridge No. 868 over Reedy Creek, 150-ft. steel through truss, reinforced concrete substructure. Separate proposals will be received for substructure. Certified check, $500; and for superstructure, certified check, $500.

Project 3067 — Wirt County — McClung Bridge No. 869 over Reedy Creek, 120-ft. steel through truss, ashlar masonry or concrete substructure. Separate proposals will be received for substructure. Certified check, $500; and for superstructure, certified check, $500.

Project 3077—Brooke County—Four concrete slab culverts, approximately 10-ft. span. Certified check, $500.

Project 124—Harrison County—2.5 miles of the Northwestern Turnpike between Bridgeport and the Taylor County line for grading, draining and paving with cement concrete, bituminous concrete or warrenite bitulithic.

Project 125—Taylor County—4.5 miles of the Northwestern Turnpike between Harrison County line and Project 3025 for grading, draining and paving with cement concrete, bituminous concrete or warrenite bitulithic.

(Note: Projects 124 and 125 will be let in one contract. Certified check, $15,000.)

Project 3225-B — Harrison County — 5 miles of the Sycamore Dale-Good Hope Road for grading, draining and paving with bituminous macadam. Certified check, $7,500.

Project 108-B — Braxton County — Salt Lick Bridge No. 685 over Salt Lick Creek, 70-ft. steel pony truss, ashlar masonry substructure. Separate proposals will be received for substructure. Certified check, $500; and for superstructure, certified check, $500.

Project 2114 — Harrison County — Limestone Run Bridge No. 871 over Limestone Run, 75-ft. concrete arch. Certified check, $600.

Project 3142 — Pendleton County — 5.0 miles of the Franklin-Brandywine Road for grading and draining. Certified check, $3,000.

Project 3218—Jefferson County—4.1 miles of the Charlestown-Virginia Line road for grading, draining and waterbound macadam. Certified check, $4,000.

Project 3148—Hardy County—Petersburg Gap Bridge No. 875 over South Branch Potomac, one 200-ft. steel through truss and one 80-ft. steel pony truss, ashlar masonry or concrete substructure. Separate proposals will be received for substructure. Certified check, $700; and for superstructure, certified check, $1,100.

Project 3014—Pendleton County—Upper Tract Bridge No. 876 over South Branch Potomac, 200-ft. steel through truss, ashlar masonry or concrete substructure. Separate proposals will be received for substructure. Certified check, $500; and superstructure certified check, $900.

Project 1027—Fayette County—6 miles of the Fayetteville-Oak Hill Road for cleaning and tar cold surface application including cover coat. Certified check, $500.

Projects 54, 2024, 2009, 1086, 2023, 2025 and 1111—Greenbrier County—16.4 miles for cleaning and tar cold and hot surface application including cover coat. Certified check, $600.

Projects 79-A and 1068 — Pocahontas County—3.5 miles for cleaning and tar cold surface application including cover coat. Certified check, $500.

Projects 34, 60 and 1065—Monroe County—4.8 miles for cleaning and tar cold surface application including cover coat. Certified check, $500.

Projects 42, 1037, 2021, 2022—Raleigh County—22.4 miles for cleaning and tar cold surface application including cover coat. Certified check, $600.

Proposals will be received only upon State Standard forms in accordance with plans, specifications and estimates of quantities therefor, which standard forms, plans, specifications and estimates of quantities may be obtained from the office of the Division Engineer, in whose territory the proposed construction is located or from the office of the State Road Commission at Charleston, W. Va.

Each proposal must be accompanied by a certified check for the amount noted.

The right is reserved to reject any and all proposals.

THE STATE ROAD COMMISSION
OF WEST VIRGINIA
E. B. CARSKADON, Secretary.

OFFICIAL PROPOSALS

Bids: April 18.

Atlantic Highlands - Hendricksons Corner Road

Freehold, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Monmouth for the reconstruction of the Atlantic Highlands-Hendricksons Corner Road No. 58, Sect. 1 with a reinforced concrete pavement for a distance of 2.54 miles, and opened and read in public at the rooms of said board, Court House, Freehold, New Jersey, on April 18, 1923, at 11:00 A.M.

Drawings and specifications for the proposed work, prepared by George K. Allen, Jr., County Engineer, have been filed in the office of said Engineer at 60 Broad Street, Red Bank, New Jersey, and may be inspected by prospective bidders during business hours. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

Plans and specifications will be furnished to prospective bidders upon payment of ten dollars ($10.00), which amount will be refunded upon return of plans and specifications before the time specified for the opening of bids.

Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and addressed to the Board of Chosen Freeholders of the County of Monmouth and name of proposed work on the outside, must be accompanied by a certified check for a sum not less than ten (10) per cent of the amount bid on the work, payable to the order of the County Treasurer and a surety company certificate stating that said surety company will provide bidder with the required bond, and must be delivered at the place and before the hour above named.

The Board of Chosen Freeholders of the County of Monmouth reserves the right to reject any or all bids if deemed to the best interests of the County so to do.

By order of the Board of Chosen Freeholders of the County of Monmouth.

BRYANT B. NEWCOMB,
Director.

Attest:
CHARLES E. COLE, Clerk.
Freehold, N. J., March 21, 1923.

Bids: April 16.

Sanitary Sewer Extensions Contracts Nos. 16, 17 and 18

Lebanon, Pa.

Sealed bids will be received by the Mayor and Council of the City of Lebanon, Pa., until 11 a.m., Monday, April 16, for the construction of extensions to the Sanitary Sewer System. They will be publicly opened at a regular meeting of Council that same evening.

Contract No. 16 contains approximately 930 lineal feet of 8-in., 475 lineal feet of 10-in., 350 lineal feet of 15-in., 850 lineal feet of 18-in. vitrified pipe together with about 400 lineal feet of house connections.

Contract No. 17 contains approximately 900 lineal feet of 8-in., 2,000 lineal feet of 10-in., 400 lineal feet of 12-in., and 1,100 lineal feet of 15-in. vitrified pipe together with about 2,500 lineal feet of house connections.

Contract No. 18 contains approximately 950 lineal feet of 8-in. vitrified pipe together with about 300 lineal feet of house connections.

Miscellaneous structures such as flush tanks, manholes, lampholes, etc., are included in these contracts. Excavations will be partly in stiff clay and partly in limestone rock.

Plans, specifications and complete information concerning contracts and manner of submitting bids can be obtained from the City Engineer of Lebanon. A deposit of five dollars ($5) is required for each set of plans and specifications.

A certified check of $1,000 is to accompany bids on Contract No. 16; $1,500 on Contract No. 17; and $250 on Contract No. 18.

Payment for the work is to be made at the completion of the contracts by short term bonds bearing 6 per cent interest and secured by assessments against the abutting properties as provided by an Act of Assembly.

The Mayor and Council reserve the right to reject any and all bids and to award the contract as is deemed to the best interest of the City of Lebanon, Pa.

Attest:
DAN M. SHARP, City Clerk.
WM. S. DAVIS, City Engineer.

OFFICIAL PROPOSALS

Bids: April 18.

Mechanical Filter Plant

Richmond, Va.

Sealed proposals for the construction of a mechanical filter plant, consisting of Substructures, Contract No. 1; Equipment, Contract No. 2; and Superstructures, Contract No. 3, will be received at the office of the Director of Public Utilities, City Hall, Richmond, Va., until 12 o'clock, noon of Wednesday, April 18, 1923; and at that time publicly opened and read.

Contract No. 1 includes about 9,500 cu. yds. of reinforced concrete masonry and about 13,000 cu.yds. of excavation in connection with the construction of 10 filter tanks, a basin beneath them, two coagulating basins and other appurtenant work.

Contract No. 2 includes about 200 tons of cast-iron pipe and specials, over 60 gate valves and sluice gates, filter sand and gravel, and all filter equipment for a 30-million-gallon filter plant. It also includes six electrically-driven centrifugal pumps.

Contract No. 3 includes brick superstructures for the plant, comprising a one-story filter building about 110 ft. by 150 ft., and a two story head house about 50 ft. by 125 ft.

Copies of plans, specifications and forms of proposal covering all three contracts may be obtained at the office of the Department of Public Utilities, City Hall, Richmond, or at the office of Fuller and McClintock, Engineers, 170 Broadway, New York, on or after March 26, upon deposit of $25.00 for each set of plans and specifications furnished.

Certified checks are required in the sum of $15,000 for Contract No. 1, $10,000 for Contract No. 2 and $5,000 for Contract No. 3.

The right is reserved to reject any or all bids.

E. W. TRAFFORD,
Director of Public Utilities.

Bids: April 24.

Sewer Construction

LETTING NO. 8

Louisville, Ky.

Sealed proposals will be received by the Commissioners of Sewerage of Louisville until 12 o'clock noon, April 24, 1923, for the following sewer construction in Louisville, Ky.

This letting embraces the following:

PORTLAND RELIEF—775 lin.ft. of 54-in., 1,145 lin.ft. of 48-in., 533 lin.ft. of 45-in., 900 lin.ft. of 27-in., 44 lin.ft. of 24-in., 26 lin.ft of 18-in., and 91 lin.ft. of 15-in. Sewers.

THIRTY-FOURTH STREET SEWER—1,460 lin.ft. of 60-in., 987 lin.ft. of 54-in., 1,488 lin.ft. of 48-in., 484 lin.ft. of 45-in., 478 lin.ft. of 36-in. Sewers.

THIRTY-FOURTH STREET LATERALS—375 lin.ft. of 27-in., 2,450 lin.ft. of 24-in., 840 lin.ft. of 21-in., 350 lin.ft. of 15-in. Sewers.

Total principal quantities for the above pieces of work are approximately 44,000 cubic yards of excavation, 3,500 cubic yards of concrete, 155,000 pounds of reinforcement. Smaller items as pipe, etc., not listed.

Approximate amount of this work $250,000.00.

Drawings, form of proposal, contract and specifications may be had at the office of the Commission upon the deposit of ten dollars ($10.00) for each project, to secure the return of same in good condition within thirty days.

Each proposal must be inclosed in a sealed envelope addressed to the Commissioners of Sewerage, 417 West Main Street, Louisville, Ky., and accompanied by a certified check drawn upon a state or national bank or a trust company established in the city of Louisville or the city of New York, for an amount not less than seven (7) per cent of the total amount of the accompanying proposal, payable to the Commissioners of Sewerage of Louisville or the bond executed as set forth in the information for bidders.

The right to reject any and all bids is reserved.

COMMISSIONERS OF SEWERAGE OF LOUISVILLE.
By MATT H. CRAWFORD,
Chairman.
P. H. HOGE, JR.,
Sec. and Treas.

J. B. F. BREED,
Chief Engineer.

OFFICIAL PROPOSALS

Bids: April 18.

Farmingdale-Manasquan Road

SECTION 3

Freehold, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Monmouth for the reconstruction of the Farmingdale-Manasquan Road No. 34, Sect. 3 with a reinforced concrete pavement for a distance of 1.44 miles, and opened and read in public at the rooms of said board, Court House, Freehold, New Jersey on April 18th, 1923, at 11:00 A.M.

Drawings and specifications for the proposed work, prepared by George D. Cooper, Engineer, have been filed in the office of said Engineer at 60 Broad Street, Red Bank, New Jersey, and may be inspected by prospective bidders during business hours. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

Plans and specifications will be furnished to prospective bidders upon payment of ten dollars ($10.00), which amount will be refunded upon return of plans and specifications before the time specified for the opening of bids.

Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and name of proposed work on the outside, addressed to the Board of Chosen Freeholders of the County of Monmouth and must be accompanied by a certified check for a sum not less than ten (10) per cent of the amount bid on the work, payable to the order of the County Treasurer and a surety company certificate stating that said surety company will provide the bidder with the required bond, and must be delivered at the place and before the hour above named.

The Board of Chosen Freeholders of the County of Monmouth reserves the right to reject any or all bids if deemed to the best interests of the County so to do.

By order of the Board of Chosen Freeholders of the County of Monmouth.

BRYANT B. NEWCOMB,
Director.

Attest:
CHARLES E. COLE, Clerk.
Freehold, N. J., March 21, 1923.

Bids: April 21.

Readvertisement of Tonawanda Sewer

Tonawanda, N. Y.

Notice is hereby given that sealed proposals will be received and considered by the Town Board of the Town of Tonawanda, New York, April 21st, 1923, at 8 o'clock p.m., at the Village Hall, Kenmore, N. Y. for furnishing all necessary labor and material, or certain specified portions thereof, for the construction of a sewer system, disposal plant and pumping station in accordance with the amended proposed contract, maps, plans, specifications and estimates of the Town Engineer as approved by the said Town Board of the Town of Tonawanda, N. Y., for Sewer District No. 2 of said Township.

The proposed contract, maps, plans and specifications and estimates may be seen and examined, and further information may be obtained at the office of George C. Diehl, Town Engineer, No. 575 Ellicott Square, Buffalo, N. Y., or at the office of the undersigned, the Town Clerk of the Town of Tonawanda, N. Y., at No. 2852 Delaware Avenue, Kenmore, N. Y.

All bids must be accompanied by a certified check payable to the order of J. Fred Moore, Supervisor of the Town of Tonawanda, N. Y., for the sum of five per centum of the Engineer's estimated expense of the improvement, or a bond with sufficient sureties to be approved by the said J. Fred Moore, Supervisor of said Town, conditioned in a penalty equal to five per centum of the estimated expense of the improvement, that if the work is awarded to the bidder, he will enter into the contract for the same, and that he will execute further security as may be required for the faithful performance of the contract, in the event of the proposal being accepted for the execution of the work.

The Town Board reserves the right to reject any or all bids should it deem it to be in the best interest of the Town so to do. Bids must be in conformity with the specifications or they will be rejected as informal, and cannot be considered.

Dated Kenmore, N. Y., April 2nd, 1923.

ELMER W. JOHNSON,
Town Clerk, Town of Tonawanda,
2852 Delaware Avenue, Kenmore, N. Y.

OFFICIAL PROPOSALS

Bids: April 24.

Sewage Disposal Plant Construction Division III, Section 5

SANITARY DISTRICT OF INDIANAPOLIS

Indianapolis, Ind.

Sealed proposals will be received by the Board of Sanitary Commissioners, Sanitary District of Indianapolis at its office in the City Hall, Indianapolis, Indiana, until 10 A.M., April 24th, 1923, at which time bids will be publicly opened and scheduled and awards made as soon thereafter as practicable, for the construction of the Dehydration Building and furnishing Equipment of Section 5, Division III., for the Sewage Disposal Plant of the Sanitary District of Indianapolis, in accordance with plans and specifications on file at the office of the Board. This construction and equipment consists of the following items:

5—a. Dehydration Building.
5—b. Dryer Settings.
5—c. Electric Wiring.
5—d. Stokers.
5—e. Coal Storage and Handling Equipment.
1. Bunker.
2. Conveyors.
5—f. Sludge Dryers.
5—g. Fans and Motors.
5—h. Sludge Handling Equipment.
1. Sludge Conveyors.
2. Sludge Breakers.
3. Dry Sludge Screen.
5—i. Traveling Crane.
5—j. Cast Iron Pipe and Specials.
5—k. Special Sluice Gates.

Each bidder shall deposit with his bid a certified check in the amount as provided in said specifications and information to bidders, to secure the execution of the contract for which bid is made.

Copies of plans and specifications and general information may be obtained at the office of Charles H. Hurd, Consulting Engineer, 1405 Merchants Bank Building, Indianapolis, Indiana.

The board reserves the right to reject any and all bids.

BOARD OF SANITARY COMMISSIONERS.
JAY A. CRAVEN, President.
JOHN L. ELLIOTT, Vice-Pres.
LUCIUS B. SWIFT.

Bids: April 24.

Road Repair

Trenton, N. J.

Proposals for furnishing and applying bituminous road materials.

The Board of Freeholders of Mercer County will receive separate bids on Tuesday, April 24, 1923, at 2:30 o'clock in the afternoon, at their regular place of meeting, Court House, Trenton, N. J., for: (1) Furnishing and applying asphaltic oil; (2) furnishing and applying tar. Said materials to be applied to various roads throughout the county.

The estimated amount of work under proposal No. 1 is as follows:

31,243 gallons of asphalt oil for surface treatment.
14,230 gallons of asphalt for penetration work.
1,630 tons of washed pebbles.
210 tons of dustless trap rock screenings.
175 tons of crushed slag.

The estimated amount of work under proposal No. 2 is as follows:

130,480 gallons of tar for surface treatment.
1,685 tons of crushed slag.
4,430 tons of pebbles.

Prospective bidders are referred to plans and specifications covering the above work prepared by Harry F. Harris, Mercer County Engineer, which plans and specifications are on file in his office at the Court House, Trenton, N. J. Copies of said plans and specifications may be obtained upon deposit of the sum of ten dollars, which will be refunded if the plans and specifications are returned in good condition within 48 hours after the bids are opened.

Each bid must be accompanied by a certified check in the amount of one thousand dollars ($1,000.00), payable to Edgar G. Weart, County Treasurer, also by a proposition from a surety company fulfilling the requirements of Section 507, Chapter 185, P. L., 1918.

The right is reserved to reject any or all bids and to waive any immaterial defect or informality in any bid should it be in the interest of the county to do so.

ARTHUR BRAY, JR.,
Director of Department of Road Repair.

OFFICIAL PROPOSALS

Bids: May 3.

Paving and Storm Sewers

Mobile, Ala.

Sealed bids will be received by the Commissioners of the City of Mobile, Alabama, until noon, Thursday, May 3, 1923, for the following:

ONE COURSE SIX INCHES IN DEPTH CONCRETE PAVING (including grading)
Approximately ..... 3,390 sq.yd.
5 x 18 inches concrete curbing.
Approximately ..... 1,827 lin.ft.
ASPHALTIC CONCRETE PAVING — One and one-half inch surface on four inches of concrete (including grading)
Approximately ..... 11,510 sq.yd.
5 x 18 inches concrete curbing.
Approximately ..... 4,720 lin.ft.
SHEET ASPHALT PAVEMENT—One and one-half inch surface on one and one-half inch binder upon four inches concrete base (including grading)
Approximately ..... 4,953 sq.yd.
5 x 18 inches concrete curbing.
Approximately ..... 3,553 lin.ft.

STORM SEWERS
Vitrified or Concrete Pipe

Approximately—	6-inch pipe....	300 lin.ft.
	10-inch pipe....	1,119 lin.ft.
	12-inch pipe....	3,037 lin.ft.
	15-inch pipe....	2,663 lin.ft.
	18-inch pipe....	1,932 lin.ft.
	21-inch pipe....	250 lin.ft.
	Manholes	26
	Inlets	75
	Special basins	19

Plans and specifications can be seen at the City Engineer's Office. The right is reserved to reject any or all bids.

R. V. TAYLOR, Mayor.
WRIGHT SMITH, City Engineer.

Bids: June 1.

Hall of Chemistry at West Virginia University

Morgantown, W. Va.

Sealed proposals will be received by the State Board of Control at its office in Charleston, West Virginia, until 3 p.m., Friday, June 1, 1923, for doing all work and furnishing all material necessary to complete the building described below, according to the plans and specifications prepared therefor by Paul A. Davis, 3rd, and Dunlap, architects, Philadelphia, Pa.

The building is to be 305'7" x 79'0", four stories, with basement and attic, with extension of one story and basement. Fireproof construction except main roof, which is steel, wood and slate. Exterior of face brick with granite base, Indiana limestone face first story, and Indiana limestone trimmings above. Interior brick finished walls. Concrete ceilings. Interior wood finish of oak. Interior partitions brick and tile. Stairs iron. Entrance vestibule marble and plaster. Floors of terrazzo, marble, tile, composition, cement and asphalt. Wrought iron railings. Electric elevator and lift.

Plans and specifications, blank form for bids and blank form of proposal bond will be mailed by the State Board of Control when request for plans is accompanied with check for $25, which amount will be refunded on receipt of bona-fide bid on or before time named above and proposal bond properly filled out and return of plans.

STATE BOARD OF CONTROL
BY JAMES S. LAKIN, President.
Charleston, W. Va.

Bids: April 20.

Paving

Richmond, Va.

Sealed proposals will be received at this office until 12 o'clock Noon, April 20th, 1923 for the following work which may be awarded in whole or in part:

Paving of various streets throughout the city with sheet asphalt, asphaltic concrete, bitulithic, Willite process, Durax block, vitrified brick, granite spall and cement concrete.

This work will cover an expenditure of approximately $400,000.

Forms of proposals can be obtained on application and a deposit of $10 will be required for each set delivered and will be returned a bona fide bid is made by bidder on opening date. A certified check for amount stated (.....) on proposals must accompany each bid as a guaranty of execution of contract. The Director of Public Works reserves the right to reject any and all bids.

ALLEN J. SAVILLE,
Director of Public Works.

OFFICIAL PROPOSALS

Bids: April 28.

Relief Trunk Sewers

Lima, Ohio.

Sealed proposals for the construction of Main Street and Public Square Relief Sewer, Contract No. 13, will be received at the office of the City Manager, Lima, Ohio, until 12 o'clock noon, Central Standard Time, April 28, 1923, and then will be publicly opened and read. The City reserves fifteen (15) days thereafter in which to act on bids.

The work included under the Contract consists of construction, with all appurtenances, of Relief Trunk Sewer as mentioned above, a general summary of quantities follows.

Total length of sewer about 4,320 lin.ft., varying in size from 15 to 36 inches, all of circular section.

Copy of plans, form of proposal, contract, bond and specifications may be inspected or obtained at the office of the Supervising Engineer, City Hall, Lima, Ohio. A charge of five ($5) dollars will be made for each set of plans and specifications. No charge will be made for proposal blanks; the above mentioned charge for plans and specifications is a sale and not a deposit, no refund will be made, nor will plans and specifications be delivered unless the order is accompanied by a remittance.

The City Manager reserves the right to reject any or all bids, to waive any informalities in the bids and to accept any bid which is deemed most favorable to the interest of the City of Lima, Ohio.

C. A. BINGHAM, City Manager.
B. F. DARLING, Supervising Engineer.
Dated: April 12, 1923.

Bids: April 17.

State Highway Work

Baltimore, Md.

SEALED PROPOSALS for building four sections of State Highway, as follows:

Howard County, Contract Ho-39. One section of State Highway between Laurel and Scaggsville, for a distance of 2.0 miles (gravel).

Montgomery County, Contract M-38. One section of State Highway between Dawsonville and Beallsville, for a distance of 2.0 miles (concrete).

Caroline County, Contract Co-27. One section of State Highway between Federalsburg and the Delaware State Line for a distance of 1.0 mile (concrete).

Wicomico County, Contract Wi-23. One section of State Highway between Salisbury and Nanticoke, for a distance of 1.3 miles (concrete).

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on the 17th day of April, 1923, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of $1.00, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of five hundred ($500) dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 2nd day of April, 1923.

L. H. STEUART, Secretary,
JOHN N. MACKALL,
Chairman.

Bids: April 26.

Paving

Plainfield, N. J.

Proposals will be received by the Common Council of the City of Plainfield, N. J., at the City Hall on Thursday, April 26, 1923, at 8:30 p.m., for sheet asphalt and granite block paving as follows:

15,500 sq.yd. sheet asphalt pavement.
700 sq.yd. recut granite block pavement.
9,100 lin.ft. armored concrete curbs.

Certified check required, $5,000.

Construction bond required, 100 per cent of cost of work.

Five year asphalt guarantee bond required, 25 per cent of cost of work.

Copies of plans, specifications and forms of proposals may be obtained at the office of the City Engineer, City Hall, Plainfield, N. J.

The Common Council reserves the right to reject any or all bids, to waive defects in bids or to accept any bid.

JOHN J. CARROLL, City Clerk.

OFFICIAL PROPOSALS

Bids: April 23.

Pumping Station

Springfield, Ill.

Sealed proposals will be received at the office of the Mayor, Springfield, Illinois, up to 2:30 o'clock p.m. on Monday, the 23rd day of April, 1923, for furnishing all tools, labor, materials and equipment for improvements to City pumping station.

Separate bids will be entertained as follows:

1. For furnishing and erecting complete one (1) ten million gallon per day steam turbine driven centrifugal pump. Certified check, $3,000.

2. For furnishing f.o.b. cars, Springfield, Ill. two (2) 3,500 gallon per minute motor-driven low service centrifugal pumps. Certified check, $500.

3. For furnishing all labor and material and constructing complete reinforced concrete settling basins. Certified check, $8,000.

Each bid must be accompanied by a certified check of the specified amount payable to the City Treasurer of Springfield, Ill. All material and equipment shall be furnished and work performed in accordance with the plans and specifications on file at the office of the City Clerk, Springfield, Ill., and at the office of the Engineers, Kansas City, Missouri.

Prospective bidders desiring extra copies of the plans and specifications on the settling basins for personel use may obtain the same from the Engineers by making a deposit of ten dollars ($10), half of which will be refunded upon the return of the plans and unsued specifications within ten days after the day of the letting. No charge shall be made for specifications for pumping equipment.

The Board reserves the right to reject any or all bids and readvertise the letting of the work.

ROBERT G. MOORE, City Clerk.
BURNS & McDONNELL ENGINEERING CO., 402 Interstate Building, Kansas City, Missouri.

Bids: April 18.

Street Paving and Storm Sewer Construction

Bennington, Vt.

Sealed proposals will be received by the President and Trustees of the Village of Bennington, Vermont, at the Village Clerk's room in Bennington, Vermont, until 8 p.m. (Standard Time), April 18th, 1923, for street improvements and storm sewer line. The work will consist of about 10,800 square yards of reinforced cement concrete pavement, 4,000 linear feet of integral curb and gutter, and 4,200 linear feet vitrified clay or concrete storm sewer pipe 8 in. to 30 in. in size.

All bids must be upon blanks provided in the proposal furnished to bidders.

Bids must be accompanied by a certified check for three per cent (3%) of the amount of the bid. Plans and specifications will be on file at the Village Clerk's office in the Village of Bennington, and at the office of the engineer, 507 Fifth Avenue, New York City.

Copies of the plans and specifications may be obtained on and after April 10th, 1923, for three dollars, ($3.00), per set. No refund for blanks returned. Bidding blanks will be furnished free.

The right is reserved to reject any or all bids.

W. P. HOGAN Village Clerk.
H. ELTINGE BREED, Engineer,
507 Fifth Avenue,
New York City.

Bids: May 1.

Highway Work

Harrisburg, Pa.

Pennsylvania State Highway Department, Harrisburg, Pa.—Sealed proposals will be received at the State Capitol until 10 a.m., May 1, 1923 when bids will be publicly opened and scheduled and contract awarded as soon thereafter as possible for the reconstruction of 20 miles of reinforced concrete pavement and 27 miles of either bituminous surface on a concrete foundation or reinforced concrete pavement; also for the fabrication and erection complete of a two span through plate girder bridge with reinforced concrete floor. Bidding blanks and specifications may be obtained free, and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg. No refund for plans returned. They also can be seen at office of State Highway Department, Harrisburg, 1001 Chestnut Street, Philadelphia, and 119 Federal Street, N. S. Pittsburgh, Pa. P. D. WRIGHT, State Highway Commissioner.

OFFICIAL PROPOSALS

Bids: April 19.

Grading, Paving and Curbing

Reynoldsville, Pa.

Sealed proposals will be received by the Council of the Borough of Reynoldsville, Jefferson County, Pa., until 8 o'clock p.m. on Thursday, April 19, 1923, for the grading, paving and curbing Tenth Street from Jackson Street to Main Street; also for the grading, curbing and paving of Jackson Street from near Bradford Street to Tenth Street; also for grading, curbing, and paving Bradford Street from Jackson Street to Winslow township line; also for the grading, curbing, and Paving Jackson Street from Fourth to Fifth Street; also for the grading, curbing and paving of Broad Street from near Pike Street to the township line.

A certified check for three per cent of the amount of the bid, payable to the Treasurer of Reynoldsville Borough, must accompany each and every proposal. All proposals must be sealed and addressed to E. E. Deible, clerk of Council, Reynoldsville, Pa., and have the words, "Street improvements and grading" marked on the outside of the envelope.

Plans and specifications may be seen and bidding blanks and all necessary information may be had at the office of the Borough Council at 10 South Fourth Street, Reynoldsville, Pa. Council reserves the right to reject any or all bids.

STREET COMMITTEE.

Bids: April 30.

Street Paving Construction

Warwick, N. Y.

Sealed proposals will be received by the President and Trustees of the Village of Warwick, New York, at the village office in Warwick, until 1:30 p.m., daylight time, Monday, April 30, 1923, for street paving and appertaining structures. The work will consist of about twenty-two thousand (22,000) square yards of reinforced cement concrete pavement, including excavation for the same.

All bids must be upon blanks provided in the proposal furnished to bidders. Evidence of suitable plant and ability to get materials must accompany each bid.

Bids must be accompanied by a certified check for three per cent of the amount of the bid. Plans and specifications will be on file at the Village Clerk's office in the Village of Warwick and at the office of the Engineer, 507 Fifth Avenue, New York City.

Copies of the plans and specifications may be obtained on or after April 19, 1923, for three dollars ($3) per set. No refund for blanks returned. Bidding blanks will be furnished free.

The right is reserved to reject any all bids.

JOHN M. DEMING, Jr., Village Clerk.
H. ELTINGE BREED, Engineer,
507 Fifth Avenue, New York City.

Bids: April 20.

Highway Work

Albany, N. Y.

Office of State Commission of Highways—Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock p.m., on Friday, April 20, 1923, for the improvement of highways in the following counties:

Columbia	(one highway:	2.52 miles)
Greene	(one highway:	0.75 miles)
Orleans	(one highway:	0.84 miles)
Schoharie	(one highway:	0.78 miles)
Suffolk	(one highway:	0.46 miles)

Also for the reconstruction of the following:

Broome	(one contract:	1.86 miles)
Erie	(one contract:	2.11 miles)
Fulton	(two contracts:	2.03 & 1.50 miles)
Greene	(one contract:	3.88 miles
Herkimer	(one contract:	1.80 miles)
Oneida	(one contract:	1.44 miles)
Ontario	(one contract:	2.21 miles)
Onondaga	(one contract:	2.00 miles)
Rockland	(one contract:	1.26 miles)
Ulster	(one contract:	3.14 miles)

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the division engineers in whose division the roads are to be improved or reconstructed. The addresses of the division engineers and the counties in which they are in charge will be furnished upon request.

The especial attention of bidders is called to "General Information for Bidders" in the itemized proposal, specifications and contract agreement.

FRED'K STUART GREENE,
Commissioner.
W. A. PATTON,
Secretary.

OFFICIAL PROPOSALS

Bids: April 27.

Pine Creek Bridge

Williamsport, Pa.

Sealed proposals for the construction of a three-span reinforced concrete arch bridge over Pine Creek, near Jersey Shore, Pa., will be received by the Commissioners of Lycoming and Clinton Counties, at the office of the Lycoming County Commissioners, Williamsport, Pa., until 10 o'clock, a.m., of April 27, 1923, at which time they will be publicly opened and read.

Plans and specifications are on file in the offices of the commissioners of both counties, and may be secured by prospective bidders from Mark C. Krause, Engineer, Susquehanna Trust Building, Williamsport, Pa., upon payment of $25, $10 of which will be refunded upon return of the same in good condition.

A certified check in the sum of $2,500, payable to the Commissioners of Lycoming County and subject to the usual rules of forfeiture, must accompany each proposal.

The right to reject any or all bids, or to accept any bid that may seem to be to the best interests of the joint counties, is hereby reserved.

R. D. SIMPSON,
JACOB F. WISE,
JOHN T. CUPPER,
Commissioners of Clinton County.
Attest:
C. J. MESSERLY, Clerk.
JOS. H. NICELY,
ROBERT SEITZER,
FRED R. APPLEGATE,
Commissioners of Lycoming County.
Attest:
L. O. BOWER, Clerk.

Bids: April 17.

Road Work

Baltimore, Md.

Sealed proposals for building one section of State Highway, as follows:

Baltimore City. Contract BC-44. One section of State Highway along Greenmount Ave. from Hillen Street to 42nd Street, for a distance of 2.92 miles. (Sheet asphalt).

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Md., until 12 m. on the 17th day of April, 1923, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of $1.00, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of Five hundred ($500.00) dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 5th day of April, 1923.

JOHN N. MACKALL,
Chairman.
L. H. STEUART,
Secretary.

Bids: April 26.

Water Tube Boilers

New Orleans, La.

Sealed proposals will be received by the Sewerage and Water Board of New Orleans up to 12 o'clock noon, Thursday, April 26th, 1923, for furnishing 1,500-1,800 hp. Water Tube Boilers.

Specifications and blank forms of proposals may be obtained at Room 303, No. 526 Carondelet Street, New Orleans.

The right is reserved to reject any or all bids.

GEO. G. EARL,
General Superintendent.
A. G. MOFFAT,
Secretary.

Bids: April 23.

Sanitary Sewer

Marysville, Kansas.

The City of Marysville, Kansas, will receive bids until 5 P.M., Monday, April 23rd, 1923, for the construction of approximately 13,000 lineal feet of 8 inch sanitary sewer extensions, including manholes, flush tanks, galvanized pipe, etc.

H. E. CLARK,
City Clerk.
B. F. BOWMAN,
City Engineer.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ADVERTISEMENTS ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE.

OFFICIAL PROPOSALS

Bids: May 1.

Paving Construction

Miami, Fla.

Sealed proposals will be received by "The Commission of the City of Miami, Florida," at the City Hall in Miami, Florida, until 9:30 a.m., at the regular meeting of the Commission, Tuesday, May 1, 1923, for the construction of bituminous macadam paving.

The work will consist of approximately 158,268 sq.yd. of bituminous macadam paving and will be divided into two contracts. The bidder can bid on any or all of these contracts.

The improvements are to be constructed and payment therefor is to be made under Section 56 of the City Charter.

All bids must be upon blank forms provided in the proposal, specifications and contract.

Each bid must be accompanied by a certified check for 2½ per cent of the amount of the bid to insure the execution of the contract as provided by Section 56 of the City Charter.

The City reserves the right to reject any or all bids.

Plans and specifications will be on file at the City Hall in the office of the City Manager.

Copies of proposals, specifications and contract can be obtained from the office of Chas. W. Murray, Director of Public Service, on deposit of $10, which will be refunded to those who submit bona fide bids.

F. H. WHARTON, City Manager.

Bids: May 1.

Pavilion, Open Air Pool and Bathing Group

Sea Girt, N. J.

Proposals will be received by the Borough Council of the Borough of Sea Girt, County of Monmouth and State of New Jersey on or before 7.00 p.m., standard time, Tuesday, May 1st, 1923, at the Municipal Building in the Borough of Sea Girt, on the "General Construction," "Plumbing," "Mechanical Installation," and "Electrical Work" of Pavilion, Open Air Pool and Bathing Group to be erected on the southwest corner of Ocean Avenue and Chicago Boulevard in the Borough of Sea Girt, N. J.

Separate proposals must be tendered on "General Construction," "Plumbing," "Mechanical Installation," and "Electrical Work." Plans and specifications are on file in the offices of Ernest A. Arend and K. M. Towner, associate architects, 105 West 40th Street, New York City, and Kinmouth Building, Asbury Park, N. J. Copies may be obtained from architects upon deposit of ten dollars ($10.00) which will be refunded upon return of same in good condition.

A certified check or Surety Co. bid bond for the sum of two per cent (2%) of bid will be required with all proposals. Checks to be drawn to the order of Leonard T. Newman, Treasurer, and to be forfeited if contractor refuses to sign contract when awarded.

All proposals must be in sealed envelopes, with designation of work covered by same and name of bidder on outside of envelope and to be mailed to Frank Durand, Jr., Borough Clerk, Sea Girt, New Jersey, or presented personally before the stated time.

The Borough Council reserves the right to reject any or all proposals and also reserves the right to hold any bid or bids together with the certified check or checks accompanying the same for fifteen days, before accepting or rejecting the same.

FRANK DURAND, JR.,
Borough Clerk.
Sea Girt, N. J.

OFFICIAL PROPOSALS

Bids: April 30.

Curbing, Grading and Paving

Norfolk, Va.

Sealed proposals will be received at the office of the Director of Public Works until 12 o'clock noon of the 30th day of April, 1923, for paving certain streets, or parts thereof, aggregating 1,630 lin.ft. granite curb reset, 7,665 ft. new granite curb furnished and set, 48 sets granite corners furnished and set, 18,400 lin.ft. combined concrete curb and gutter, 76 sets combined concrete corners and gutter, 2,217 lin.ft. concrete headers, 83,999 sq.yds. grade and concrete base, 83,999 sq.yds. asphalt surface including binder and top, and 1,220 sq.yds. concrete paving, together with all incidental work pertaining thereto.

A complete schedule of the work, specifications and proposal blanks can be had at the office of the Director of Public Works. Bids must be made on the proposal blank, sealed and addressed to Walter H. Taylor, 3rd, Director of Public Works, marked "Paving Proposals, Project No. 1, April 30, 1923."

A certified check on some local bank in the sum of Two Thousand Dollars ($2,000), payable to B. Gray Tunstall, City Treasurer, must accompany each bid upon the conditions expressed in the proposal.

The City of Norfolk especially reserves the right to award contracts by item as set out below, by combination of items, or for the items as a whole, or to reject any or all bids for any item, combination of items or for all of the items.

Item 1. Includes the resetting of granite curb, and the furnishing and setting of new granite curb and corners.

Item 2. Includes the combined concrete curb and gutter and the combined concrete corners and gutters.

Item 3. Includes the grading and concrete base.

Item 4. Includes the binder and asphalt top.

CHAS. E. ASHBURNER,
City Manager.
WALTER H. TAYLOR, 3RD,
Director of Public Works.

Bids: May 1.

Paving Construction

Miami, Fla.

Sealed proposals will be received by "The Commission of the City of Miami, Florida," at the City Hall in Miami, Florida, until 9:30 a.m., at the regular meeting of the Commission, Tuesday, May 1, 1923, for the construction of Sheet Asphalt Paving.

The work will consist of approximately 75,887 sq.yd. of Sheet asphalt paving and will be divided into one contract. The bidder can bid on any or all of these contracts.

The improvements are to be constructed and payment, therefore, is to be made under Section 56 of the City Charter.

All bids must be upon blank forms provided in the proposal, specifications and contract.

Each bid must be accompanied by a certified check for 2½ per cent of the amount of the bid to insure the execution of the contract as provided by Section 56 of the City Charter.

The City reserves the right to reject any or all bids.

Plans and specifications will be on file at the City Hall in the office of the City Manager.

Copies of proposals, specifications and contract can be obtained from the office of Chas. W. Murray, Director of Public Service, on deposit of $10, which will be refunded to those who submit bona fide bids.

F. H. WHARTON, City Manager.

OFFICIAL PROPOSALS

Bids: May1.

Trunk Sewer and Sewage Disposal Works

Jersey City, N. J.

Sealed proposals for furnishing materials and doing all work required for the construction of Section 1 of the trunk sewer from Dover to Boonton and the Sewage Disposal Works will be received by the Board of Commissioners, in the Assembly Chamber of the City Hall, Jersey City, N. J., Tuesday, May 1st, 1923, at 3 o'clock p.m. (daylight saving time), at which place they will be publicly opened.

Section 1 of the Trunk Sewer extends from Boonton to Powerville and includes approximately 3.2 miles of 24 to 39-inch sewer with manholes, appurtenances and other work incidental thereto.

Up to and including sewer of 27 inches in diameter, the material is to be salt-glazed vitrified terra cotta pipe. Alternate bids will be received on both segment block and monolithic reinforced concrete pipe with brick invert for the larger sizes.

The plant includes Settling Tanks, Sludge Digestion Tanks, Sludge Drying Beds, Contact Beds, Sand Filters, Disinfection Plant and auxiliary units.

Each bid must be accompanied by certified check for $100,000 payable to the City of Jersey City, as a guarantee that the Contractor will execute the contract n awarded, failing which said check shall be forfeited, and which said check shall be returned to the bidder on the execution of the contract. Check of unsuccessful bidders will be returned on the award of the contract. Proposals must also be accompanied by the consent in writing of a surety company authorized to do business according to the laws of the State of New Jersey, that, should the proposal be accepted, it will become surety in the full amount of the contract as provided in the specifications and in Chapter 75, P. L. 1918, forms of which is made part of the specifications.

Copies of the plans, proposal forms, specifications and forms of bond and contract can be seen at the office of Michael I. Fagen, Director, Department of Streets and Public Improvements, City Hall, Jersey City, N. J., or at the office of Clyde Potts, Consulting Engineer, 30 Church Street, New York City, or may be obtained by prospective bidders upon depositing twenty-five dollars ($25.00), which sum will be refunded to Contractors who submit bids, on return of the plans within ten days after the contract has been awarded, if the same are in good condition when returned.

The deposit will not be refunded to parties who take out plans and do not submit proposals.

The Board of Commissioners reserves the right to reject any and all proposals.

By order of The Board of Commissioners of Jersey City.

EDWARD J. HOLLAND,
City Clerk.

Dated City Clerk's Office,
Jersey City, April 6th, 1923.

Bids: April 26.

Water Tube Boilers

New Orleans, La.

Sealed proposals will be received by the Sewerage and Water Board of New Orleans up to 12 o'clock noon, Thursday, April 26th, 1923, for furnishing 1,500-1,800 hp. Water Tube Boilers.

Specifications and blank forms of proposals may be obtained at Room 303, No. 526 Carondelet Street, New Orleans.

The right is reserved to reject any or all bids.

GEO. G. EARL,
General Superintendent.

A. G. MOFFAT,
Secretary.

OFFICIAL PROPOSALS

Bids: May 1.

Trunk Sewer

SECTION 3

Jersey City, N. J.

Sealed proposals for furnishing materials and doing all work required for the construction of Section 3 of the Trunk Sewer from Dover to Boonton will be received by the Board of Commissioners in the Assembly Chamber, of the City Hall, Jersey City, N. J., Tuesday, May 1st, 1923, at 3 o'clock p.m. (daylight saving time), at which place and time they will be publicly opened.

The work includes approximately 2.7 miles of 10-inch to 33-inch sewer with manholes, appurtenances and other work incidental thereto. Section 3 is within and adjacent to the Town of Dover.

Up to and including sewer of 22 inches in diameter, the material is to be salt-glazed vitrified terra cotta pipe. Alternate bids will be received on both segment block and monolithic reinforced concrete pipe with brick invert for the 33-inch sewer.

Each bid must be accompanied by certified check for $10,000, payable to the City of Jersey City, as a guarantee that the Contractor will execute the contract if awarded, failing which said check shall be forfeited, and which said check shall be returned to the bidder on the execution of the contract. Checks of unsuccessful bidders will be returned on the award of the contract. Proposals must also be accompanied by the consent in writing of a surety company authorized to do business according to the laws of the State of New Jersey, that, should the proposal be accepted, it will become surety in the full amount of the contract as provided in the specifications and in Chapter 75, P. L. 1918, form of which consent is made part of the specifications.

Copies of plans, proposal forms, specifications and forms of bond and contract can be seen at the office of Michael I. Fagen, Director, Department of Streets and Public Improvements, City Hall, Jersey City, N. J., or at the office of Clyde Potts, Consulting Engineer, 30 Church Street, New York City, or may be obtained by prospective bidders upon depositing ten dollars ($10.00), which sum will be refunded to Contractors who submit bids, on return of the plans within ten days after the contract has been awarded, if the same are in good condition when returned.

The deposit will not be refunded to parties who take out plans and do not submit proposals.

The Board of Commissioners reserves the right to reject any and all proposals.

By order of The Board of Commissioners of Jersey City.

EDWARD J. HOLLAND,
City Clerk.

Dated City Clerk's Office,
Jersey City, April 6th, 1923.

Bids: April 20.

Highway Work

Albany, N. Y.

Office of State Commission of Highways—Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock p.m., on Friday, April 20, 1923, for the improvement of highways in the following counties:

Columbia.....(one highway: 2.52 miles)
Greene.....(one highway: 0.75 miles)
Orleans.....(one highway: 0.84 miles)
Schoharie.....(one highway: 0.78 miles)
Suffolk.....(one highway: 0.46 miles)

Also for the reconstruction of the following:

Broome.....(one contract: 1.86 miles)
Erie.....(one contract: 2.11 miles)
Fulton..(two contracts: 2.03 & 1.50 miles)
Greene.....(one contract: 3 88 miles
Herkimer.....(one contract: 1.80 miles)
Oneida.....(one contract: 1.44 miles)
Ontario.....(one contract: 2.21 miles)
Onondaga.....(one contract: 2.00 miles)
Rockland.....(one contract: 1.26 miles)
Ulster.....(one contract: 3.14 miles)

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the division engineers in whose division the roads are to be improved or reconstructed. The addresses of the division engineers and the counties in which they are in charge will be furnished upon request.

The especial attention of bidders is called to "General Information for Bidders" in the itemized proposal, specifications and contract agreement.

FRED'K STUART GREENE,
Commissioner.

W. A. PATTON,
Secretary.

OFFICIAL PROPOSALS

Bids: May 12.

Cast Iron, Steel and Vitrified Clay Pipe Lines

Memphis, Tenn.

Sealed proposals, addressed to the Board of Commissioners of the Memphis Artesian Water Department, and endorsed with the bidders' name and title of the bid, will be received at the office of the Memphis Artesian Water Dept., Memphis, Tenn., until 12 o'clock noon of the 12th day of May, 1923, and then publicly opened and read for:

Contract 14. The furnishing of all labor and materials, except the furnishing of cast iron pipe and fittings, necessary to construct at Memphis, Tennessee, approximately 18,000 lineal feet of 14", 20", 30", 36" and 42" cast iron pipe line, 27,000 lineal feet of 4", 6", 8" and 10" steel pipe line, and 9,500 lineal feet of 12" vitrified clay pipe line, all complete with valves and appurtenances.

Contract 15. The furnishing and delivering f.o.b. cars Memphis, Tenn., of approximately 3,100 tons of Class A, cast iron, bell and spigot water pipe and special castings, in sizes ranging from 14 inches to 42 inches diameter.

Bids may me made upon one or both contracts, but a bid upon either contract must include all the work under that contract.

Copies of bidding blanks, bonds, contracts, specifications and drawings may be obtained from the office of the engineers, Fuller & McClintock, 879 North Parkway, Memphis, Tenn., or may be inspected at any of the following offices:

Memphis Artesian Water Department, Memphis, Tenn.

Fuller & McClintock, 206 Walsix Bldg., Kansas City, Mo.

Fuller & McClintock, 170 Broadway, New York City.

Fuller & McClintock, 1001 Chestnut St., Philadelphia, Pa.

Fuller & McClintock, 319 Summit Cherry Bldg., Toledo, Ohio.

A charge of $20.00 will be made for each set of specifications, which charge will be refunded provided the specifications are returned within 30 days after bids are received.

The Water Commission reserves the right to reject any or all bids, to waive any informalities in the bids received, and to accept any bid or bids which they deem most favorable to the interests of the City of Memphis.

By order of the Board of Commissioners of the Memphis Artesian Water Department.

Bids: May 1.

Water Works System

Macedon, N. Y.

Sealed proposals will be received by the Board of Water Commissioners of the Village of Macedon, N. Y., until one o'clock p.m., on May 1st, 1923, for the construction of a system of Water Works, consisting of a cast iron piping system, pump well, pump house, pumping equipment, distributing reservoir, valves, hydrants and accessories.

Plans may be received and specifications obtained at the office of the Board at Macedon, N. Y., or at the office of Hopkins & Field, Engineers, 349 Cutler Building, Rochester, N. Y.

The Board hereby reserves and has the right to reject any or all bids, or to accept any that in its judgment will be for the best interest of the Village.

A surety bond satisfactory to the Board in form and amount, will be required of him to whom a contract may be awarded.

A certified check, payable to the order of the Board of Water Commissioners, of Macedon, N. Y., to the amount of $1,000.00 must be deposited by any contractor bidding on the piping system, pump well or reservoir, and accompany his bid as a guaranty, that in case the contract is awarded to him, he will within seven days thereafter, execute such contract.

Bids will be received separately for the pumping equipment, pipe and special castings, and for the valves, valve boxes, and hydrants, in lump or separately for the piping system, pump house, pump well and reservoir.

Bids must be sealed and addressed to the Board of Water Commissioners, Macedon, N. Y., and marked on the outside of the envelopes enclosing them, "Proposals for Macedon Water System," The Village of Macedon, N. Y.

DR. E. M. RODENBERGER,
Chairman.
EDWARD W. GRIDLEY,
JOHN CROWLEY,
Commissioners.

Dated Macedon, N. Y.
April 1, 1923.

OFFICIAL PROPOSALS

Bids: April 24.

Water Works System

Locust Valley, N. Y.

Sealed proposals will be received by the Board of Water Commissioners, Locust Valley, New York, until eight o'clock P.M. April 24th, 1923, then publicly opened and read in the Matinecock Neighborhood House, for the construction of a system of Water Works for the Locust Valley District, in accordance with plans and specifications prepared by Sidney B. Bowne, Engineer.

WORK INCLUDED IN CONTRACT

UNDER CONTRACT NO. 1

There will be furnished and laid about 18 miles of 6 in., 8 in., 10 in. and 12 in. cast iron mains, with about 150 hydrants and 110 valves.

UNDER CONTRACT NO. 2

There will be furnished and installed two (2) complete units consisting of driven well, motor driven well turbines, etc.

UNDER CONTRACT NO. 3

There will be constructed two brick pumping stations, one about 12 ft. x 12 ft. and the other about 12 ft. x 24 ft. in plan.

UNDER CONTRACT NO. 4

There will be built a Stand Pipe 42 ft. in diameter and 75 ft. high of 770,000 gal. capacity, with ornamental balcony and roof and surrounding an existing elevated tank.

Plans and specifications are on file and may be seen at the office of Sidney B. Bowne, Engineer, Post Office Building, Mineola, New York, and will be forwarded on receipt of five ($5.00) dollars. (Same not to be refunded.)

All inquiries must be addressed to the Engineer.

Each bidder must accompany his proposal with a certified check or its equivalent for five (5%) per cent of the amount of his proposal made payable to E. Mortimer Ward, Treasurer, which will be returned to the unsuccessful bidders immediately following the award of the contract.

The successful bidder will be required to enter into a contract for the performance of the work as may be awarded him or them with a bond of an approved Surety Company for not less than one-half (50%) of the total amount of the awarded contract price.

The right is reserved to reject any or all bids, or accept any bid, or bids, or any portion of any bid.

BOARD OF WATER COMMISSIONERS.
BENJ. W. DOWNING,
Chairman.
E. MORTIMER WARD,
Treasurer.
EDWIN A. SCHLOTZHAUER,
Secretary.
Engineer,
SIDNEY B. BOWNE.
Mineola, New York.

Bids: April 26.

Reinforced Cement Concrete Pavement

Lynbrook, N. Y.

Notice is hereby given that sealed bids will be received by the Board of Trustees of the Incorporated Village of Lynbrook, N. Y., for the construction of a reinforced cement concrete pavement on certain streets in the Village of Lynbrook until 8 p.m. on April 26, 1923.

The Engineer's estimate of the quantities is as follows:

CONTRACT NO. 1

59,000 sq.yds. Reinforced Cement Concrete Pavement.
6 Standard Drainage Basins.
30 lin.ft. Additional depth of Drainage Basin.
16 Catch Basins.
300 lin.ft. 8 inch Vitrified Pipe.
500 sq.ft. Concrete Sidewalk.
100 lin.ft. Concrete Curb.

CONTRACT NO. 2

950 lin.ft. 12 inch Vitrified Pipe.
6 Catch Basins.

CONTRACT NO. 3

650 lin.ft. 12 inch Vitrified Pipe.
2 Catch Basins.

Plans and specifications will be on file in the office of the Clerk, 23 Broadway, Lynbrook, N. Y., after April 16, 1923, and copies of same will be furnished to prospective bidders upon payment of Ten Dollars ($10.00), which amount will be refunded upon return of the plans and specifications in good condition before the time specified for the opening of bids. The Board of Trustees reserves the right to reject any or all bids and to waive any defect or informality in any bid, should it be deemed to the best interests of the Village so to do.

By order of the Board of Trustees.

PHILIP STAUDERMANN, President.
FRANK H. JOHNSON, Clerk.

Dated April 9, 1923.

OFFICIAL PROPOSALS

Bids: May 1.

Fuel Oil Engines, Pump, Compressors, Tanks, and Well Drilling

Freehold, N. J.

Notice is hereby given that sealed proposals will be received by the Mayor and Council of the Borough of Freehold, N. J., at the Freehold Municipal Building, on Tuesday, May 1st, 1923, at 1.30 p.m., for the following equipment.

CONTRACT A.

Furnishing and erection of fuel oil engines, pumps and compressors, with all small piping and appurtenances.

CONTRACT B.

Furnishing two 8,000 gallon fuel oil tanks.

CONTRACT C.

Deepening several existing wells at the Freehold Water Works.

Plans and specifications for the proposed work prepared by Charles A. Niles, Borough Engineer, may be obtained at the Municipal Building upon payment of $10.00, which amount will be refunded upon return of the plans and specifications before the time specified for receiving the bids.

All proposals must be submitted on blanks furnished by the Borough; placed in a sealed envelope, bearing the name and address of the bidder, the contract or contracts upon which bids are submitted and addressed to the Mayor and Council of the Borough of Freehold and accompanied by a certified check made payable to H. A. Sutphin, Borough Treasurer, in an amount of not less than 5% of the amount bid, and also accompanied by a Surety Company Certificate stating that the said Surety Company will provide the bidder with a bond to the full amount of the contract.

The Borough Council reserves the right to reject any or all bids and to award the work as may appear to be for the best interest of the Borough irrespective of price bid.

H. M. BURKE,
Boro. Clerk.

CHARLES A. NILES,
Boro. Engineer.

Bids: April 30.

Highway Maintenance Materials

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey for the following highway maintenance materials:

Crushed trap rock, limestone, dolomite or gneiss in the following approximate quantities:

49,624 tons of of 2½-in. stone.
375 tons of 1½-in. stone.
5,606 tons of ¾-in. stone.
21,125 tons of grade "A" screenings,
700 tons of grade "B" screenings.
7,192 tons of dustless screenings.

Bids will be received at the Assembly Chamber, State House, Trenton, N. J., on Monday, April 30, 1923, at 11 a.m., Standard Time, and opened and read immediately thereafter.

Points of delivery and other details will be furnished upon application to A. W. Muir, Superintendent of Maintenance, 517 Broad St. Bank Bldg., Trenton, N. J.

Specifications, form of bid, special addressed envelope, and conditions under which bids will be accepted for the above are on file in the office of A. W. Muir, Superintendent of Maintenance, 517 Broad St. Bank Bldg., Trenton, N. J., and may be obtained upon request. Bids must be made upon the proposal forms furnished, in the manner designated therein, and as required by the specifications, same to be enclosed in sealed special addressed envelopes which will be furnished each bidder with the bid blank, bearing the name and address of the bidder on the outside, and must be accompanied by a certified check drawn to the order of the Treasurer of the State of New Jersey for not less than ten per cent (10%) of the amount of the bid, provided that the said certified check shall not be less than $500 nor more than $20,000 and be delivered at the above place on or before the hour named. Bids not submitted on the standard proposal form or enclosed in other than the special envelope will be considered informal and will be rejected.

The State Highway Commission reserves the right to reject any or all bids.

By order of the State Highway Commission.

A. LEE GROVER, Chief Clerk.

OFFICIAL PROPOSALS

Bids: May 1.

Bridges and Road Work

Charleston, W. Va.

Sealed proposals will be received by the State Road Commission of West Virginia at its office in Charleston, W. Va., until 10 o'clock a.m. on the first day of May, 1923, and opened and read immediately thereafter at the Kanawha County Court House, Charleston, W. Va., for the construction of the following bridges, sections of state road and surface treatment:

Project 3178—Fayette County—6.8 miles of the Falls District Line to Ansted road for paving with bituminous macadam. Certified check for $6,000.

Project 3,178—Fayette County—6.8 miles of the Ansted-Hico Road for grading, draining and paving with bituminous macadam. Certified check for $10,000.

Project 3183—Fayette County—8.0 miles of the Ravenseye-Rainelle Road for grading and draining. Certified check for $4,000.

Project 127-B — Greenbrier County — 5.0 miles of the Clintonville-Alta Road for grading and draining. Certified check for $3,000.

Project 3270 — Greenbrier County — 1.25 miles of the Summers County Line-Alderson Road for grading and draining.

Project 3056—Summers County—4.75 miles of the Pence Springs-Greenbrier County line road for grading and draining.

(Note: Projects 3270 and 3056 will be let in one contract. Certified check. $3,600.)

Projects 3044, 3179, 3135 A and B—Kanawha County—8.7 miles of the Mile Branch to Cannelton Road for paving with rock asphalt, bituminous concrete or warrenite bitulithic. Certified check for $11,000.

Project 3231—Kanawha County—10 miles of the Clendenin-King Shoals Road for grading and draining. Certified check for $7,000.

Project 3206—Kanawha County—10 miles of the Elk River Road between Little Sandy Creek and Clendenin for grading and draining. Certified check, $4,000.

Project 3239—Raleigh County—6.4 miles of Craborchard-Slab Fork District Line road for grading, draining and paving with bituminous macadam. Certified check for $9,000.

Project 1067 A and B—Summers County —5.0 miles of the Hinton toward Jumping Branch Road for grading and paving with bituminous macadam. Certified check for $8,000.

Project 3271—Logan County—1.5 miles of the Pigeon-Creek Horsepen Creek Road for grading and draining.

Project 3120—Mingo County—6.9 miles of the Logan County Line-Horsepen Road for grading and draining.

(Note: Projects 3271 and 3120 will be let in one contract. Certified check, $6,000.)

Project 3230—McDowell County—7 miles of the Newhall-Virginia State Line Road for grading and draining. Certified check for $4,500.

Project 3189—Wayne County—5.8 miles of the Crum-Bull Creek Road for grading and draining. Certified check for $4,500.

Project 3188 — Wayne County — Jennies Creek Bridge No. 872 over Jennies Creek, 120-ft. steel through truss, ashlar masonry or concrete substructure. Separate proposals will be received for substructure, certified check, $500; and for superstructure, certified check, $500.

Project 3099 — Lincoln County — Midkiff Bridge No. 797 over Ten Mile Creek 160-ft. steel through truss. Superstructure only. Certified check, $600.

Project 3165—Calhoun County—1 mile Main Street of Grantsville for paving with rock asphalt. Certified check, $1,600.

Project 3132 A — Jackson County — 2.5 miles of the Ravenswood-Sandyville Road for grading and draining. Certified check, $2,500.

Project 3240—Roane County—3 miles of the Walton-Kanawha County Line road for paving with rock asphalt or warrenite bitulithic. Certified check, $3,500.

Project 3197-B—Tyler County—1.5 miles of the Sistersville-Middlebourne Road for grading, draining and paving with waterbound macadam. Certified check, $1,000.

Project 3252 — Pleasants County — 1.2 miles St. Marys-Ellenboro Road for grading, and gravel surfacing. Certified check, $500.

Projects 3254 and 3268—Pleasants County —0.35 miles of Barkwill Street and Third Street, St. Marys for grading, draining and paving with cement concrete or brick and gravel. Certified check, $500.

Project 3067—Wirt County—Moorehead Bridge No. 867 over Right Reedy Creek, 120-ft. steel through truss, ashlar masonry or concrete substructure. Separate proposals will be received for substructure. Certified check, $500; and superstructure, certified check, $500.

Project 3067—Wirt County—Lee Bridge No. 868 over Reedy Creek, 150-ft. steel through truss, reinforced concrete substructure. Separate proposals will be received for substructure. Certified check, $500; and for superstructure, certified check, $500.

Project 3067 — Wirt County — McClung Bridge No. 869 over Reedy Creek, 120-ft. steel through truss, ashlar masonry or concrete substructure. Separate proposals will be received for substructure. Certified check, $500; and for superstructure, certified check, $500.

Project 3077—Brooke County—Four concrete slab culverts, approximately 10-ft. span. Certified check, $500.

Project 124—Harrison County—2.5 miles of the Northwestern Turnpike between Bridgeport and the Taylor County line for grading, draining and paving with cement concrete, bituminous concrete or warrenite bitulithic.

Project 125—Taylor County—4.5 miles of the Northwestern Turnpike between Harrison County line and Project 3025 for grading, draining and paving with cement concrete, bituminous concrete or warrenite bitulithic.

(Note: Projects 124 and 125 will be let in one contract. Certified check, $15,000.)

Project 3225-B — Harrison County — 5 miles of the Sycamore Dale-Good Hope Road for grading, draining and paving with bituminous macadam. Certified check, $7,500.

Project 108-B — Braxton County — Salt Lick Bridge No. 685 over Salt Lick Creek, 70-ft. steel pony truss, ashlar masonry substructure. Separate proposals will be received for substructure. Certified check, $500; and for superstructure, certified check, $500.

Project 2114 — Harrison County — Limestone Run Bridge No. 871 over Limestone Run, 75-ft. concrete arch. Certified check, $600.

Project 3142 — Pendleton County — 5.0 miles of the Franklin-Brandywine Road for grading and draining. Certified check, $3,000.

Project 3218—Jefferson County—4.1 miles of the Charlestown-Virginia Line road for grading, draining and waterbound macadam. Certified check, $4,000.

Project 3148—Hardy County—Petersburg Gap Bridge No. 875 over South Branch Potomac, one 200-ft. steel through truss and one 80-ft. steel pony truss, ashlar masonry or concrete substructure. Separate proposals will be received for substructure. Certified check, $700; and for superstructure, certified check, $1,100.

Project 3014—Pendleton County—Upper Tract Bridge No. 876 over South Branch Potomac, 200-ft. steel through truss, ashlar masonry or concrete substructure. Separate proposals will be received for substructure. Certified check, $500; and superstructure certified check, $900.

Project 1027—Fayette County—6 miles of the Fayetteville-Oak Hill Road for cleaning and tar cold surface application including cover coat. Certified check, $500.

Projects 54, 2024, 2009, 1086, 2023, 2025 and 1111—Greenbrier County—16.4 miles for cleaning and tar cold and hot surface application including cover coat. Certified check, $600.

Projects 79-A and 1068 — Pocahontas County—3.5 miles for cleaning and tar cold surface application including cover coat. Certified check, $500.

Projects 34, 60 and 1065—Monroe County —4.8 miles for cleaning and tar cold surface application including cover coat. Certified check, $500.

Projects 42, 1037, 2021, 2022—Raleigh County—22.4 miles for cleaning and tar cold surface application including cover coat. Certified check, $600.

Proposals will be received only upon State Standard forms in accordance with plans, specifications and estimates of quantities therefor, which standard forms, plans, specifications and estimates of quantities may be obtained from the office of the Division Engineer, in whose territory the proposed construction is located or from the office of the State Road Commission at Charleston, W. Va.

Each proposal must be accompanied by a certified check for the amount noted.

The right is reserved to reject any and all proposals.

THE STATE ROAD COMMISSION
OF WEST VIRGINIA
E. B. CARSKADON, Secretary.

OFFICIAL PROPOSALS

Bids: May 9.

Road Fill

Ashland, R. I.

Sealed proposals for the construction of the Ashland Causeway, a fill about half a mile long with a maximum height of about 60 feet, to carry the Relocated Plainfield Pike across the proposed Scituate Reservoir at the village of Ashland in the Town of Scituate, R. I., about 10 miles west of the City of Providence, will be received at the office of the Water Supply Board, City Hall, Providence, R. I., until 1:30 p.m., Eastern Standard Time (2:30 p.m. Daylight Saving Time) on Wednesday, May 9, 1923, at which time and place they will be publicly opened and read.

The work will include the construction of a large concrete culvert, the placing of riprap and other appurtenant work but will not include road surfacing. The estimated quantities are: Excavation 7,000 cu.yd., borrow, 230,000 cu.yd. riprap, 28,000 cu.yd.; broken stone, 10,000 cu.yd., concrete, 3,000 cu.yd.; reinforcing steel 120,000 lb.

Pamphlets containing plans, information for bidders, form of proposal, contract and bond and specifications, may be obtained from the Secretary of the Board, City Hall, or from the Chief Engineer, 661 Westminster Street.

CITY OF PROVIDENCE
WATER SUPPLY BOARD
B. THOMAS POTTER, Chairman.
SAMUEL N. GRAMMONT, Secretary.
FRANK E. WINSOR, Chief Engineer.

Bids: June 1.

Hall of Chemistry at West Virginia University

Morgantown, W. Va.

Sealed proposals will be received by the State Board of Control at its office in Charleston, West Virginia, until 3 p.m., Friday, June 1, 1923, for doing all work and furnishing all material necessary to complete the building described below, according to the plans and specifications prepared therefor by Paul A. Davis, 3rd, and Dunlap, architects, Philadelphia, Pa.

The building is to be 305'7" x 79'0", four stories, with basement and attic, with extension of one story and basement. Fireproof construction except main roof, which is steel, wood and slate. Exterior of face brick with granite base, Indiana limestone face first story, and Indiana limestone trimmings above. Interior brick finished walls. Concrete ceilings. Interior wood finish of oak. Interior partitions brick and tile. Stairs iron. Entrance vestibule marble and plaster. Floors of terrazzo, marble, tile, composition, cement and asphalt. Wrought iron railings. Electric elevator and lift.

Plans and specifications, blank form for bids and blank form of proposal bond will be mailed by the State Board of Control when request for plans is accompanied with check for $25, which amount will be refunded on receipt of bona-fide bid on or before time named above and proposal bond properly filled out and return of plans.

STATE BOARD OF CONTROL
By JAMES S. LAKIN, President.
Charleston, W. Va.

Bids: April 20.

Street Paving Construction

Warwick, N. Y.

Sealed proposals will be received by the President and Trustees of the Village of Warwick, New York, at the village office in Warwick, until 1:30 p.m., daylight time, Monday, April 30, 1923, for street paving and appertaining structures. The work will consist of about twenty-two thousand (22,000) square yards of reinforced cement concrete pavement, including excavation for the same.

All bids must be upon blanks provided in the proposal furnished to bidders. Evidence of suitable plant and ability to get materials must accompany each bid.

Bids must be accompanied by a certified check for three per cent of the amount of the bid. Plans and specifications will be on file at the Village Clerk's office in the Village of Warwick and at the office of the Engineer, 507 Fifth Avenue, New York City.

Copies of the plans and specifications may be obtained on or after April 19, 1923, for three dollars ($3) per set. No refund for blanks returned. Bidding blanks will be furnished free.

The right is reserved to reject any all bids.

JOHN M. DEMING, Jr., Village Clerk.
H. ELTINGE BREED, Engineer,
507 Fifth Avenue, New York City.

OFFICIAL PROPOSALS

Bids: April 25.

Sprinkling System

Utica, N. Y.

Sealed proposals for Sanitary Work—Sprinkling System, Manufacturing Department, Utica State Hospital, Utica, N. Y., will be received by the State Hospital Commission, Capitol, Albany, N. Y., until 3 o'clock p.m., on Wednesday, April 25, 1923, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a deposit, consisting of a certified check drawn upon some legally incorporated bank in this State and made payable to the State of New York, or money, equal to five per cent (5 per cent) of the amount of the proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent (50 per cent) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specification No. 4054. The right is reserved to reject any or all bids. Drawings and specifications may be examined at the Utica State Hospital, Utica, N. Y.; at the New York office of the Department of Architecture, Room 1058, 25 Broadway, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, Sullivan W. Jones, Capitol, Albany, N. Y.

Dated: April 9, 1923.

Bids: April 30.

Construction of Water System and Driving Wells

Waldwick, N. J.

Sealed proposals will be received by the Clerk of the Borough of Waldwick, N. J., at the Council Chamber, over the office of the Waldwick Coal and Lumber Co., until 8 o'clock p.m. on Monday the 30th day of April, 1923, for laying 6.7 miles of water pipe and constructing concrete reservoir, dykes, dams and foundations for power house and pumping station, also for driving two or more artesian wells.

Bids must be made on proposal forms furnished by the clerk and must be accompanied by a certified check for the amount of five hundred ($500) drawn, payable to W. R. Evans, Jr., clerk.

Proposals must be sealed and delivered to the clerk, endorsed on the envelope "Proposal for Constructing Water System" or "Proposal for Driving Wells" as the case may be.

Plans may be seen at the office of the Waldwick Coal and Lumber Co., or at the office of the Engineer, Suite 707, 30 Church St., N. Y., and specifications, form of proposal and contract may be secured by addressing the clerk at Waldwick, N. J.

The Borough Council reserves the right to reject any and all bids or to accept one other than the lowest.

By order of the Borough Council of the Borough of Waldwick, N. J., at regular meeting, April 5th, 1923.

B. B. VAN WAGONER, Mayor.
E. D. HOOK, Chairman
W. R. EVANS, Jr., Borough Clerk.
of Water Committee.
JOHN L. COLLINS, Engineer.

Bids: May 1.

Highway Work

Harrisburg, Pa.

Pennsylvania State Highway Department, Harrisburg, Pa.—Sealed proposals will be received at the State Capitol until 10 a.m., May 1, 1923, when bids will be publicly opened and scheduled and contract awarded as soon thereafter as possible for the reconstruction of 20 miles of reinforced concrete pavement and 27 miles of either bituminous surface on a concrete foundation or reinforced concrete pavement; also for the fabrication and erection complete of a two span through plate girder bridge with reinforced concrete floor. Bidding blanks and specifications may be obtained free, and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg. No refund for plans returned. They also can be seen at office of State Highway Department, Harrisburg, 1001 Chestnut Street, Philadelphia, and 119 Federal Street, N. S. Pittsburgh, Pa. P. D. WRIGHT, State Highway Commissioner.

OFFICIAL PROPOSALS

Bids: May 3.

Paving and Storm Sewers

Mobile, Ala.

Sealed bids will be received by the Commissioners of the City of Mobile, Alabama, until noon, Thursday, May 3, 1923, for the following:

ONE COURSE SIX INCHES IN DEPTH CONCRETE PAVING (including grading)
Approximately ..... 3,390 sq.yd.
5 x 18 inches concrete curbing.
Approximately ..... 1,827 lin.ft.
ASPHALTIC CONCRETE PAVING—One and one-half inch surface on four inches of concrete (including grading)
Approximately ..... 11,510 sq.yd.
5 x 18 inches concrete curbing.
Approximately ..... 4,720 lin.ft.
SHEET ASPHALT PAVEMENT—One and one-half inch surface on one and one-half inch binder upon four inches concrete base (including grading)
Approximately ..... 4,953 sq.yd.
5 x 18 inches concrete curbing.
Approximately ..... 3,553 lin.ft.

STORM SEWERS
Vitrified or Concrete Pipe

Approximately—	6-inch pipe....	300 lin.ft.
	10-inch pipe....	1,119 lin.ft.
	12-inch pipe....	3,037 lin.ft.
	15-inch pipe....	2,663 lin.ft.
	18-inch pipe....	1,932 lin.ft.
	21-inch pipe....	250 lin.ft.
	Manholes	28
	Inlets	77
	Special basins	19

Plans and specifications can be seen at the City Engineer's Office. The right is reserved to reject any or all bids.

R. V. TAYLOR, Mayor.
WRIGHT SMITH, City Engineer.

Bids: April 26.

Paving

Plainfield, N. J.

Proposals will be received by the Common Council of the City of Plainfield, N. J., at the City Hall on Thursday, April 26, 1923, at 8:30 p.m., for sheet asphalt and granite block paving as follows:

15,500 sq.yd. sheet asphalt pavement.
700 sq.yd. recut granite block pavement.
9,100 lin.ft. armored concrete curbs.

Certified check required, $5,000.

Construction bond required, 100 per cent of cost of work.

Five year asphalt guarantee bond required, 25 per cent of cost of work.

Copies of plans, specifications and forms of proposals may be obtained at the office of the City Engineer, City Hall, Plainfield, N. J.

The Common Council reserves the right to reject any or all bids, to waive defects in bids or to accept any bid.

JOHN J. CARROLL, City Clerk.

Bids: April 28.

Relief Trunk Sewers

Lima, Ohio.

Sealed proposals for the construction of Main Street and Public Square Relief Sewer Contract No. 13, will be received at the office of the City Manager, Lima, Ohio, until 12 o'clock noon, Central Standard Time, April 28, 1923, and then will be publicly opened and read. The City reserves fifteen (15) days thereafter in which to act on bids.

The work included under the Contract consists of construction, with all appurtenances, of Relief Trunk Sewer as mentioned above, a general summary of quantities follows.

Total length of sewer about 4,320 lin.ft. varying in size from 15 to 36 inches, all of circular section.

Copy of plans, form of proposal, contract, bond and specifications may be inspected or obtained at the office of the Supervising Engineer, City Hall, Lima, Ohio. A charge of five ($5) dollars will be made for each set of plans and specifications. No charge will be made for proposal blanks; the above mentioned charge for plans and specifications is a sale and not a deposit, no refund will be made, nor will plans and specifications be delivered unless the order is accompanied by a remittance.

The City Manager reserves the right to reject any or all bids, to waive any informalities in the bids and to accept any bid which is deemed most favorable to the interest of the City of Lima, Ohio.

C. A. BINGHAM, City Manager.
B. F. DARLING, Supervising Engineer.
Dated: April 12, 1923.

OFFICIAL PROPOSALS

Bids: April 30.

Curbing, Grading and Paving

Norfolk, Va.

Sealed proposals will be received at the office of the Director of Public Works until 12 o'clock noon of the 30th day of April, 1923, for paving certain streets, or parts thereof, aggregating 1,630 lin.ft. granite curb reset, 7,665 ft. new granite curb furnished and set, 48 sets granite corners furnished and set, 18,400 lin.ft. combined concrete curb and gutter, 76 sets combined concrete corners and gutter, 2,217 lin.ft. concrete headers, 83,999 sq.yds. grade and concrete base, 83,999 sq.yds. asphalt surface including binder and top, and 1,220 sq.yds. concrete paving, together with all incidental work pertaining thereto.

A complete schedule of the work, specifications and proposal blanks can be had at the office of the Director of Public Works. Bids must be made on the proposal blank, sealed and addressed to Walter H. Taylor, 3rd, Director of Public Works, marked "Paving Proposals, Project No. 1, April 30, 1923."

A certified check on some local bank in the sum of Two Thousand Dollars ($2,000), payable to B. Gray Tunstall, City Treasurer, must accompany each bid upon the conditions expressed in the proposal.

The City of Norfolk especially reserves the right to award contracts by item as set out below, by combination of items, or for the items as a whole, or to reject any or all bids for any item, combination of items or for all of the items.

Item 1. Includes the resetting of granite curb, and the furnishing and setting of new granite curb and corners.

Item 2. Includes the combined concrete curb and gutter and the combined concrete corners and gutters.

Item 3. Includes the grading and concrete base.

Item 4. Includes the binder and asphalt top.

CHAS. E. ASHBURNER,
City Manager.

WALTER H. TAYLOR, 3RD,
Director of Public Works.

Bids: May 10.

Bridge

Haverhill, Mass.

Sealed proposals for rebuilding the Haverhill Lower Bridge over the Merrimack River in the City of Haverhill, Mass., will be received by the Haverhill Lower Bridge Rebuilding Commission at the County Commissioners' office in the Court House at Salem, Mass., until 11:00 o'clock a.m. of Thursday, May 10, 1923, and then and there will be publicly opened and read.

The proposed bridge is to be 804 feet long and 66 feet wide, consisting of five reinforced concrete arches of 80 feet clear span, one arch of 55 feet clear span, a double leaf steel bascule drawspan of 75 feet in the clear, and reinforced concrete approaches of beam and slab construction. The new bridge will occupy the site of the old bridge and extend downstream therefrom so that one-half of the new bridge is to be built clear of the old bridge which is then to be removed and the other half of the new bridge completed in its place.

Each proposal must be accompanied by a certified check for forty thousand dollars ($40,000). A bond in the sum of fifty per cent (50%) of the amount of the contract with an approved surety company as surety will be required for the faithful performance of the contract.

More detailed information is given in the plans, notice to contractors, specifications, and form of proposal, contract, and bond, copies of which may be inspected after April 25 at the office of the Commission, No. 14 Water Street, Haverhill, or may be obtained after that date at the office of the County Engineer in the Court House at Salem upon the deposit of fifty ($50.00) dollars, forty ($40.00) dollars of which will be refunded upon return of plans, specifications, etc., in good condition on or before the day herein set for the opening of proposals.

The right is reserved to reject any and all proposals.

ROBERT H. MITCHELL, Chairman,
CHARLES N. KELLY,
EDMUND C. WENTWORTH,
RAYMOND H. TREFRY,
FREDERICK BUTLER,
Haverhill Lower Bridge Rebuilding Commission.

ROBERT R. EVANS,
Engineer.

Haverhill, Mass., April 16, 1923.

OFFICIAL PROPOSALS

Bids: May 1.

Trunk Sewer and Sewage Disposal Works

Jersey City, N. J.

Sealed proposals for furnishing materials and doing all work required for the construction of Section 1 of the trunk sewer from Dover to Boonton and the Sewage Disposal Works will be received by the Board of Commissioners, in the Assembly Chamber of the City Hall, Jersey City, N. J., Tuesday, May 1st, 1923, at 3 o'clock p.m. (daylight saving time), at which place they will be publicly opened.

Section 1 of the Trunk Sewer extends from Boonton to Powerville and includes approximately 3.2 miles of 24 to 39-inch sewer with manholes, appurtenances and other work incidental thereto.

Up to and including sewer of 27 inches in diameter, the material is to be salt-glazed vitrified terra cotta pipe. Alternate bids will be received on both segment block and monolithic reinforced concrete pipe with brick invert for the larger sizes.

The plant includes Settling Tanks, Sludge Digestion Tanks, Sludge Drying Beds, Contact Beds, Sand Filters, Disinfection Plant and auxiliary units.

Each bid must be accompanied by certified check for $100,000 payable to the City of Jersey City, as a guarantee that the Contractor will execute the contract n awarded, failing which said check shall be forfeited, and which said check shall be returned to the bidder on the execution of the contract. Check of unsuccessful bidders will be returned on the award of the contract. Proposals must also be accompanied by the consent in writing of a surety company authorized to do business according to the laws of the State of New Jersey, that, should the proposal be accepted, it will become surety in the full amount of the contract as provided in the specifications and in Chapter 75, P. L. 1918, forms of which is made part of the specifications.

Copies of the plans, proposal forms, specifications and forms of bond and contract can be seen at the office of Michael I. Fagen, Director, Department of Streets and Public Improvements, City Hall, Jersey City, N. J., or at the office of Clyde Potts, Consulting Engineer, 30 Church Street, New York City, or may be obtained by prospective bidders upon depositing twenty-five dollars ($25.00), which sum will be refunded to Contractors who submit bids, on return of the plans within ten days after the contract has been awarded, if the same are in good condition when returned.

The deposit will not be refunded to parties who take out plans and do not submit proposals.

The Board of Commissioners reserves the right to reject any and all proposals.

By order of The Board of Commissioners of Jersey City.

EDWARD J. HOLLAND,
City Clerk.

Dated City Clerk's Office,
Jersey City, April 6th, 1923.

Bids: May 1.

Road Oil

Hartford, Conn.

Separate sealed proposals will be received by the Board of Contract and Supply of the City of Hartford at the Mayor's office, Municipal Building, until 11 o'clock a.m., Tuesday, May 1st, 1923, for furnishing and delivering to the Street Department f.o.b. Tank Cars, Hartford, Conn., 400,000 gallons more or less of road oil with about 45 per cent asphaltic base and 50,000 gallons more or less of road oil with about 65 per cent asphaltic base.

Bidders will quote prices on tank car lots and will submit quart samples of the road oil with the name and grade of oil plainly marked on each sample.

Proposals to be endorsed "Proposal for Road Oil" and addressed to the Board of Contract and Supply, Hartford, Conn. Each bid must be accompanied by a certified check for two hundred dollars ($200) made payable to the City Treasurer of Hartford. A satisfactory surety bond amounting to 25 per cent of the contract will be required of the successful bidder.

Specifications and blank forms for proposal can be obtained at the office of the Board of Street Commissioners, Municipal Building, Hartford, Connecticut.

Right is reserved to reject any or all bids not deemed to the advantage of the city.

BOARD OF CONTRACT AND SUPPLY,
WILLIAM F. O'NEIL, Secretary.

OFFICIAL PROPOSALS

Bids: May 1.

Trunk Sewer

SECTION 3

Jersey City, N. J.

Sealed proposals for furnishing materials and doing all work required for the construction of Section 3 of the Trunk Sewer from Dover to Boonton will be received by the Board of Commissioners in the Assembly Chamber, of the City Hall, Jersey City, N. J., Tuesday, May 1st, 1923, at 3 o'clock p.m. (daylight saving time), at which place and time they will be publicly opened.

The work includes approximately 2.7 miles of 10-inch to 33-inch sewer with manholes, appurtenances and other work incidental thereto. Section 3 is within and adjacent to the Town of Dover.

Up to and including sewer of 22 inches in diameter, the material is to be salt-glazed vitrified terra cotta pipe. Alternate bids will be received on both segment block and monolithic reinforced concrete pipe with brick invert for the 33-inch sewer.

Each bid must be accompanied by certified check for $10,000, payable to the City of Jersey City, as a guarantee that the Contractor will execute the contract if awarded, failing which said check shall be forfeited, and which said check shall be returned to the bidder on the execution of the contract. Checks of unsuccessful bidders will be returned on the award of the contract. Proposals must also be accompanied by the consent in writing of a surety company authorized to do business according to the laws of the State of New Jersey, that, should the proposal be accepted, it will become surety in the full amount of the contract as provided in the specifications and in Chapter 75, P. L. 1918, form of which consent is made part of the specifications.

Copies of plans, proposal forms, specifications and forms of bond and contract can be seen at the office of Michael I. Fagen, Director, Department of Streets and Public Improvements, City Hall, Jersey City, N. J., or at the office of Clyde Potts, Consulting Engineer, 30 Church Street, New York City, or may be obtained by prospective bidders upon depositing ten dollars ($10.00), which sum will be refunded to Contractors who submit bids, on return of the plans within ten days after the contract has been awarded, if the same are in good condition when returned.

The deposit will not be refunded to parties who take out plans and do not submit proposals.

The Board of Commissioners reserves the right to reject any and all proposals.

By order of The Board of Commissioners of Jersey City.

EDWARD J. HOLLAND,
City Clerk.

Dated City Clerk's Office,
Jersey City, April 6th, 1923.

Bids: May 9.

Road Fill

Ashland, R. I.

Sealed proposals for the construction of the Ashland Causeway, a fill about half a mile long with a maximum height of about 60 feet, to carry the Relocated Plainfield Pike across the proposed Scituate Reservoir at the village of Ashland in the Town of Scituate, R. I., about 10 miles west of the City of Providence, will be received at the office of the Water Supply Board, City Hall, Providence, R. I., until 1:30 p.m., Eastern Standard Time (2:30 p.m. Daylight Saving Time) on Wednesday, May 9, 1923, at which time and place they will be publicly opened and read.

The work will include the construction of a large concrete culvert, the placing of riprap and other appurtenant work but will not include road surfacing. The estimated quantities are: Excavation 7,000 cu.yd., borrow, 230,000 cu.yd. riprap, 28,000 cu.yd.; broken stone, 10,000 cu.yd., concrete, 3,000 cu.yd.; reinforcing steel 120,000 lb.

Pamphlets containing plans, information for bidders, form of proposal, contract and bond and specifications, may be obtained from the Secretary of the Board, City Hall, or from the Chief Engineer, 661 Westminster Street.

CITY OF PROVIDENCE
WATER SUPPLY BOARD
B. THOMAS POTTER, Chairman.
SAMUEL N. GRAMMONT, Secretary.
FRANK E. WINSOR, Chief Engineer.

OFFICIAL PROPOSALS

Bids: May 15.

Water Works Construction

Harrisburg, Pa.

Sealed proposals for building extension and improvements to Water Works of Harrisburg, Pa., will be received at the Council Chamber, 406 Dauphin Bldg., Harrisburg, Pa., until 1.00 p.m., May 15, at which time they will be publicly opened and read. The work will be done under two contracts, as follows:

CONTRACT E—Construction of a 30,000,000 gallon reservoir with slab roof, having **86,000** yards of excavation and 13,600 yards of concrete. This reservoir has a 125,000 square foot flat slab roof. Bids may be offered on the Contractor's own design of roof which must however, comply with the specifications in all particulars.

CONTRACTS F—Laying 4,000 feet of new 36 inch cast iron pipe, re-laying 2,000 feet of 30 inch cast iron pipe, miscellaneous smaller pipe, valves, gate house, etc.

Each contract will be awarded separately but both may be awarded to the same bidder. Proposals must be accompanied by a certified check equal to 10% of the total bid for each contract. A bond will be required for the amount of 25% of each contract.

The right is reserved to reject any or all bids.

Information for bidders, Form of Contract, Specifications, and Plans, will be available for inspection at the office of Dr. Samuel F. Hassler, Supt. Public Safety, Room 406 Dauphin Bldg., Harrisburg, Pa., or at the office of James H. Fuertes, consulting engineer, 140 Nassau Street, New York, and may be had upon deposit of $20.00, which will be returned to the prospective bidder upon the return of the drawings and specifications accompanied by a bona fide bid.

S. F. HASSLER,
Supt. Public Safety,
Harrisburg, Pa.

Bids: May 16.

Pipe Line

San Francisco, Calif.

OFFICE OF THE BOARD OF PUBLIC WORKS OF THE CITY AND COUNTY OF SANFRANCISCO, APRIL 13, 1923.

Sealed proposals will be received at this office between the hours of 2:00 o'clock p.m. and 3:00 o'clock p.m. Wednesday, the 16th day of May, 1923, for:

Construction of the Bay Crossing Pipe Line in the Bay Crossing Division of the Hetch Hetchy Aqueduct Contract No. 90, Hetch Hetchy Water Supply.

The pipe line will be located in the vicinity of Irvington and Redwood City, Calif., and will be 19.45 miles long. Alternative bids will be considered on 60 inch riveted steel pipe or 58 inch lock bar or welded steel pipe or equivalent diameters suited for nesting pipe for shipment. Provision is made for division into two contracts covering 9.2 miles and 10.25 miles respectively.

Specifications accompanied by proposal forms and official advertisement may be obtained from the office of M. M. O'Shaughnessy, City Engineer, City Hall, on deposit of $20.

By order of the Board of Public Works,
W. J. FITZGERALD,
Secretary.

Bids: May 1.

Highway Work

Harrisburg, Pa.

Pennsylvania State Highway Department, Harrisburg, Pa.—Sealed proposals will be received at the State Capitol until 10 a.m., May 1, 1923, when bids will be publicly opened and scheduled and contract awarded as soon thereafter as possible for the reconstruction of 20 miles of reinforced concrete pavement and 27 miles of either bituminous surface on a concrete foundation or reinforced concrete pavement: also for the fabrication and erection complete of a two span through plate girder bridge with reinforced concrete floor. Bidding blanks and specifications may be obtained free, and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg. No refund for plans returned. They also can be seen at office of State Highway Department, Harrisburg, 1001 Chestnut Street, Philadelphia, and 119 Federal Street, N. S. Pittsburgh, Pa. P. D. WRIGHT, State Highway Commissioner.

OFFICIAL PROPOSALS

Bids: May 1.

Fuel Oil Engines, Pump, Compressors, Tanks, and Well Drilling

Freehold, N. J.

Notice is hereby given that sealed proposals will be received by the Mayor and Council of the Borough of Freehold, N. J., at the Freehold Municipal Building, on Tuesday, May 1st, 1923, at 1.30 p.m., for the following equipment.

CONTRACT A.

Furnishing and erection of fuel oil engines, pumps and compressors, with all small piping and appurtenances.

CONTRACT B.

Furnishing two 8,000 gallon fuel oil tanks.

CONTRACT C.

Deepening several existing wells at the Freehold Water Works.

Plans and specifications for the proposed work prepared by Charles A. Niles, Borough Engineer, may be obtained at the Municipal Building upon payment of $10.00, which amount will be refunded upon return of the plans and specifications before the time specified for receiving the bids.

All proposals must be submitted on blanks furnished by the Borough; placed in a sealed envelope, bearing the name and address of the bidder, the contract or contracts upon which bids are submitted and addressed to the Mayor and Council of the Borough of Freehold and accompanied by a certified check made payable to H. A. Sutphin, Borough Treasurer, in an amount of not less than 5% of the amount bid, and also accompanied by a Surety Company Certificate stating that the said Surety Company will provide the bidder with a bond to the full amount of the contract.

The Borough Council reserves the right to reject any or all bids and to award the work as may appear to be for the best interest of the Borough irrespective of price bid.

H. M. BURKE,
Boro. Clerk.

CHARLES A. NILES,
Boro. Engineer.

Bids: May 1.

Paving Construction

Miami, Fla.

Sealed proposals will be received by "The Commission of the City of Miami, Florida," at the City Hall in Miami, Florida, until 9:30 a.m., at the regular meeting of the Commission, Tuesday, May 1, 1923, for the construction of bituminous macadam paving.

The work will consist of approximately 158,268 sq.yd. of bituminous macadam paving and will be divided into two contracts. The bidder can bid on any or all of these contracts.

The improvements are to be constructed and payment therefor is to be made under Section 56 of the City Charter.

All bids must be upon blank forms provided in the proposal, specifications and contract.

Each bid must be accompanied by a certified check for 2½ per cent of the amount of the bid to insure the execution of the contract as provided by Section 56 of the City Charter.

The City reserves the right to reject any or all bids.

Plans and specifications will be on file at the City Hall in the office of the City Manager.

Copies of proposals, specifications and contract can be obtained from the office of Chas. W. Murray, Director of Public Service, on deposit of $10, which will be refunded to those who submit bona fide bids.

F. H. WHARTON, City Manager.

Bids: May 4.

Street Improvement

Winchester, Ky.

The Board of Commissioners of the City of Winchester, Ky., will on May 4, 1923, at 2:00 p.m., in its Chamber at the City Hall, receive sealed bids for the improvement of about 15,000 square yards of streets, to be constructed of sheet asphalt, concrete, Kentucky rock asphalt or asphalt macadam, according to the plans and specifications therefor on file in the office of J. C. Lary, City Clerk.

The Commissioners reserve the right to reject any and all bids.

N. A. POWELL,
Commissioner of Public Works.

OFFICIAL PROPOSALS

Bids: May 1.

Highway Work

Baltimore, Md.

Sealed proposals for building five sections of State Highway, as follows:

Washington Co. Cont. W-24. One section of State Highway from Hagerstown to Smithburg, for a distance of 7.8 miles. (Macadam Reconst.)

Baltimore County. Cont. B-55. One section of State Highway from Mt. Carmel to Blackrock, for a distance of 2.2 miles. (Concrete.)

Baltimore City. Cont. BC-45. One section of State Highway along Madison Ave. from Madison Street to Druid Hill Park, for a distance of 1.52 miles. (Sheet Asphalt.)

Prince George Co. Cont. P-36. One section of State Highway from Oxen Hill toward Silesia, for a distance of 1.92 miles. (Gravel.)

Wicomico County. Cont. Wi-24. One section of State Highway along Church Street, Salisbury, and from Moores Corner to Fruitland, for a distance of 1.36 miles. (Concrete.)

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on the 1st day of May, 1923, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of $1.00, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of Five Hundred ($500) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 12th day of April, 1923.

JOHN N. MACKALL,
Chairman.

L. H. STEUART,
Secretary.

Bids: May 10.

Sanitary Sewers

Elizabeth, N. J.

Sealed proposals for building sewers along and under the Elizabeth River will be received by the Board of Public Works, Elizabeth, New Jersey, at 2 p.m., on Thursday, the 10th day of May, 1923. The work will consist of about 5,000 lineal feet of 8 in. to 24 in. vitrified and cast iron pipe sewers and will include three syphons under the Elizabeth River composed of 8 in.-10 in.-12 in. cast iron pipe.

Information for bidders, Form of proposal, Contract Specifications and Plans may be seen at the office of James H. Fuertes, Consulting Engineer, 140 Nassau Street, New York, and may be obtained at the office of the City Engineer, Elizabeth, New Jersey, upon making a deposit of Ten ($10) Dollars, which will be repaid upon the return of the plans and specifications in good condition.

All bids must be accompanied by a certified check or bid bond in the amount of 10 per cent of the amount bid.

The right is reserved to reject any and all bids.

THOMAS E. COLLINS,
City Engineer.

Bids: May 15.

Miscellaneous Materials

St. Petersburg, Fla.

Sealed proposals will be received by the Director of Finance of the City of St. Petersburg, Fla., until 7:30 p.m., May 15, 1923, for purchasing No. 1 brick for about 468,000 sq.yd. of pavements and No. 2 brick for about 37,000 sq.yd. of pavements or for furnishing asphalt block for about 466,000 sq.yd. of pavements and No. 1 brick for about 39,000 sq.yd. of pavements and for furnishing about 357,000 lin.ft. of concrete or granite curbing and headers and about 1,000,000 lb. of asphalt filler.

The City reserves the right to reject any and all bids.

Further information on application.

DIRECTOR OF FINANCE.
St. Petersburg, Fla.

OFFICIAL PROPOSALS

Bids: May 1.

Paving Construction

Miami, Fla.

Sealed proposals will be received by "The Commission of the City of Miami, Florida," at the City Hall in Miami, Florida, until 9:30 a.m., at the regular meeting of the Commission, Tuesday, May 1, 1923, for the construction of Sheet Asphalt Paving.

The work will consist of approximately 75,887 sq.yd. of Sheet asphalt paving and will be divided into one contract. The bidder can bid on any or all of these contracts.

The improvements are to be constructed and payment, therefore, is to be made under Section 56 of the City Charter.

All bids must be upon blank forms provided in the proposal, specifications and contract.

Each bid must be accompanied by a certified check for 2½ per cent of the amount of the bid to insure the execution of the contract as provided by Section 56 of the City Charter.

The City reserves the right to reject any or all bids.

Plans and specifications will be on file at the City Hall in the office of the City Manager.

Copies of proposals, specifications and contract can be obtained from the office of Chas. W. Murray, Director of Public Service, on deposit of $10, which will be refunded to those who submit bona fide bids.

F. H. WHARTON, City Manager.

OFFICIAL PROPOSALS

Bids: April 30.

Construction of Water System and Driving Wells

Waldwick, N. J.

Sealed proposals will be received by the Clerk of the Borough of Waldwick, N. J., at the Council Chamber, over the office of the Waldwick Coal and Lumber Co., until 8 o'clock p.m. on Monday the 30th day of April, 1923, for laying 6.7 miles of water pipe and constructing concrete reservoir, dykes, dams and foundations for power house and pumping station, also for driving two or more artesian wells.

Bids must be made on proposal forms furnished by the clerk and must be accompanied by a certified check for the amount of five hundred ($500) drawn, payable to W. R. Evans, Jr., clerk.

Proposals must be sealed and delivered to the clerk, endorsed on the envelope "Proposal for Constructing Water System" or "Proposal for Driving Wells" as the case may be.

Plans may be seen at the office of the Waldwick Coal and Lumber Co., or at the office of the Engineer, Suite 707, 30 Church St., N. Y., and specifications, form of proposal and contract may be secured by addressing the clerk at Waldwick, N. J.

The Borough Council reserves the right to reject any and all bids or to accept one other than the lowest.

By order of the Borough Council of the Borough of Waldwick, N. J., at regular meeting, April 5th, 1923.

B. B. VAN WAGONER, Mayor.
E. D. HOOK, Chairman
W. R. EVANS, Jr., Borough Clerk.
of Water Committee.
JOHN L. COLLINS, Engineer.

OFFICIAL PROPOSALS

Bids: May 3.

Highway Maintenance Materials

Albany, N. Y.

State Commission of Highways, Albany, N. Y.—Pursuant to Chapter 30, Laws of 1909, and amendments thereto, sealed proposals will be received by the undersigned at No. 56 Lancaster Street, Albany, N. Y., on Thursday, May 3, 1923, at one o'clock p.m. advanced standard time, which is twelve o'clock noon eastern standard time, for the furnishing and delivering bituminous material A, Emulsion, in bbls., carload lot, known as Bituminous Material Contract No. 11, f.o.b. railroad cars at destination for use by the State Highway Commission, in the maintenance and repair of improved state and county highways in all the counties of the State, unless otherwise specified.

Proposals will be for furnishing the specified material at any railroad delivery point within the divisions named in the proposal.

Table showing approximate quantities and anticipated railroad delivery points, specifications and proposals may be obtained at the office of the State Commission of Highways at Albany, N. Y.

Special attention of Bidders is called to "General Information for Bidders" in the proposal, specifications and contract agreement. Proposal for this contract must be submitted in a separate sealed envelope with the name and number of the contract plainly endorsed on the outside of the envelope. Each proposal must be accompanied by cash, draft or certified check payable to the order of the State Commission of Highways for an amount equal to at least three per cent of the amount of the proposal. The retention and disposal of such cash, draft or check by the State Commission of Highways shall conform with Subdivision 3, Section 130 of the Highway Law, as amended by Chapter 623, Laws of 1919.

The successful bidder will be required to execute the contract and comply in all respects with Section 130 of the Highway Law, as amended by Chapter 623.

The right is reserved to reject any or all bids.

FRED'K STUART GREENE,
W. A. PATTON, Commissioner.
Secretary.

Bids: May 22.

Lake Intake Pipe—Tunnel—Conduit

Portland, Maine.

Sealed proposals will be received by the Trustees of the Portland Water District at their office, 16 Casco Street, Portland, Maine, up to 2 p.m., Eastern Standard time, on Tuesday, May 22, 1923, for four contracts as follows:

1. For furnishing about 3,500 linear feet 54-inch reinforced concrete, or steel water pipe.
2. For laying about 1,600 linear feet of 54-inch lake intake pipe of reinforced concrete, or steel (Section I of the New Conduit at Sebago Lake).
3. For building about 2,100 feet of tunnel (almost wholly through rock), 7 feet in diameter of excavation, and 5 feet in diameter of lined section (Section II of the New Conduit at Sebago Lake).
4. For laying about 1,900 linear feet of 54-inch reinforced concrete, or steel conduit from the tunnel to connect with the existing mains. (Section III of the New Conduit at Sebago Lake.)

Said proposals will be publicly opened and read at the above stated time and place.

All bids must be upon the blank form of proposal furnished by the Trustees and must be accompanied by the required certified check. Bonds will be required for the faithful performance of the contracts.

The printed forms of "Information for Bidders, Form of Proposal, Contract and Bond, and Specifications, and Contract Drawings," will be available at the office of the Trustees.

The samples of wash and core drill borings taken over the area traversed by the tunnel, may also be examined at the office of the Trustees.

The site of the work may be examined at the convenience of the bidders.

A deposit of Ten Dollars ($10.00) will be required for contract drawings.

The right is reserved to reject any or all bids.

THE TRUSTEES,
Portland Water District.

HARRY U. FULLER,
Chief Engineer, Portland Water District.
METCALF & EDDY,
Consulting Engineers,
14 Beacon Street, Boston, 9, Mass.

Sealed Bids will be Received by the

BOARD OF ESTIMATE AND APPORTIONMENT
CITY OF NEW YORK

at its meeting room in the Council Chamber, Room 16, City Hall, Borough of Manhattan, until 12 o'clock noon on

FRIDAY, MAY 18, 1923

For the Construction of the South Street Shaft at St. George, in the Borough of Richmond for a Freight and Passenger Railroad Tunnel to be Built in the Boroughs of Brooklyn and Richmond and Under New York Bay, New York City.

A statement of the quantities of the various items of work and further information are given in the invitation to bid forming part of the contract. At the above place and time the bids will be publicly opened and read. The award of the contract, if awarded, will be made by the Board as soon thereafter as practicable. The Board reserves the right to reject any and all bids.

A bond in the sum of two hundred thousand dollars ($200,000) will be required for the faithful performance of the contract.

No bid will be received or considered unless accompanied by a certified check upon a National or State Bank, or Trust Company of The City of New York, or a check of such bank or trust company signed by a duly authorized officer thereof, drawn to the order of the Comptroller of The City of New York to the amount of ten thousand dollars ($10,000).

The time allowed for the completion of the work is twelve months after notification of the endorsement of the Comptroller's certificate as to the appropriation of funds upon the executed contract.

Pamphlets containing forms of invitation to bid, contract and specifications and plans, etc., can be obtained at the office of the Chief Engineer of the Board of Estimate and Apportionment, Room 2700, Municipal Building, Manhattan, for the sum of $5.00 per set which will be refunded upon their return in good condition within thirty (30) days from the date of receipt of bids.

For further particulars apply to the office of the Chief Engineer at the above address.

BOARD OF ESTIMATE AND APPORTIONMENT,
JOHN F. HYLAN, Mayor, *Chairman.*

OFFICIAL PROPOSALS

Bids: May 7.

Highway Work

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey for the construction of the following:

Route No. 6, Section No. 15, Broadway in the City of Gloucester, Camden County; estimated amount of ten inch (10") two line reinforced concrete pavement, 5,494 square yards.

Route No. 5, Section No. 7, Mine Hill, Morris County; estimated amount of eight inch (8") two line reinforced concrete pavement 2,665 square yards; estimated amount of Granite Block pavement on a six inch (6") concrete base, 6,836 square yards.

Bids will be received at the Assembly Chamber, State House, Trenton, New Jersey, on Monday, May 7th, 1923, at 11:00 A.M., Standard Time, and opened and read immediately thereafter.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of the State Highway Department, Trenton, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on deposit of Ten Dollars ($10.00) upon application to the State Highway Department, 9th floor Broad Street Bank Building, Trenton, New Jersey. Bids must be made on the standard proposal forms in the manner designated therein, and as required by the 1922 specifications, same to be enclosed in sealed special addressed envelopes bearing the name and address of bidder and the name and section of the route on the outside, and must be accompanied by a certified check drawn to the order of the Treasurer of the State of New Jersey for not less than ten per cent (10%) of the amount of the bid, provided that the said certified check shall not be less than $500.00 or more than $20,000.00, and be delivered at the above place on or before the hour named. Copies of the standard proposal form and special addressed envelope will be furnished on application. Bids not enclosed in special envelopes will be considered informal and will not be opened.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provisions of the said specifications, conditioned for the faithful performance of the provisions of the contract and specifications. Each bidder must also accompany his bid with a Statement of Equipment properly filled out.

By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

Bids: May 7.

Sewers

Butler, N. J.

Pursuant to a resolution adopted the 16th day of April, 1923, the Council of the Borough of Butler, N. J., will receive at its meeting, to be held on the 7th day of May, 1923, at 7:30 P.M. (standard time) at the Municipal Building in the Borough, sealed proposals for furnishing materials and doing all other work required for the construction of sewers left unfinished by the abandonment of a previous contract.

The work includes approximately 5,000 feet of vitrified tile sewers from ten (10) to twenty (20) inches in diameter and 60 feet of four (4) and six (6) inch siphon lines, with manholes, siphon manholes and appurtenances complete.

Plans may be seen and specifications and forms of proposals obtained at the office of the Borough Clerk at Butler, N. J., or at the office of Clyde Potts, 30 Church Street, New York City.

Plans and specifications may be taken away upon the payment of ten dollars ($10.00), the same to be returned if the plans are returned within twenty (20) days, in good condition.

Each bid must be accompanied by a certified check on a solvent bank for $2,000.

The Borough Council reserves the right to reject any and all proposals and to waive any informality in the proposals received, and to accept any proposals which they deem to be most favorable to the interests of the Borough.

D. D. SMITHYMAN,
Chairman, Sewer Committee.
JOHN F. BORMUTH,
Borough Clerk.

OFFICIAL PROPOSALS

Bids: May 7.

Highway Maintenance Materials

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey for the following highway maintenance materials:

Tar, Asphalt, Bituminous Concrete, Sheet Asphalt, and Crushed Slag, Dustless Screenings, in the following approximate quantities:

364,625	gallons of Tar, Grade "B" or "UB"
36,052	gallons of Asphalt, Grade "HHO"
10,705	gallons of Tar, Grade "X" or "U3"
6,317.5	tons of Bituminous Concrete, Type "FABC-1"
64	tons of Sheet Asphalt, Type "SA"
8,645	tons of Crushed Slag, Dustless Screenings.

Bids will be received at the Assembly Chamber, State House, Trenton, New Jersey, on Monday, May 7th, 1923, at 11 A.M., Standard Time, and opened and read immediately thereafter.

Points of delivery and other details will be furnished upon application to A. W. Muir, Superintendent of Maintenance, 517 Broad Street Bank Bldg., Trenton, New Jersey.

Specifications, form of bid, special addressed envelope, and conditions under which bids will be accepted for the above are on file in the office of A. W. Muir, Superintendent of Maintenance, 517 Broad St., Bank Bldg., Trenton, N. J., and may be obtained upon request. Bids must be made upon the proposal forms furnished, in the manner designated therein, and as required by the specifications, same to be enclosed in sealed special addressed envelopes which will be furnished each bidder with the bid blank, bearing the name and address of the bidder on the outside, and must be accompanied by a certified check drawn to the order of the Treasurer of the State of New Jersey for not less than ten per cent (10%) of the amount of the bid, provided that the said certified check shall not be less than $500.00 nor more than $20,000.00, and be delivered at the above place on or before the hour named. Bids not submitted on the standard proposal form or enclosed in other than the special envelope will be considered informal and will be rejected.

The State Highway Commission reserves the right to reject any or all bids.

By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

Bids: May 15.

Paving

St. Petersburg, Fla.

Sealed proposals will be received by the Director of Finance of the City of St. Petersburg, Fla., until 7:30 p.m., May 15, 1923, for building about 468,000 sq.yd. of No. 1 brick pavements and 37,000 sq.yd. of No. 2 brick pavements or 466,000 sq.yd. of asphalt block, asphaltic concrete, sheet asphalt or Willite process pavements and 39,000 sq.yd. of No. 1 brick pavements with about 357,000 lin.ft. of granite or concrete curbing and 103,000 cu.yd. of excavation.

The City reserves the right to reject any and all bids.

Further information on application.

DIRECTOR OF FINANCE,
St. Petersburg, Fla.

OFFICIAL PROPOSALS

Bids: May 7.

Public School Building

Bergenfield, N. J.

Sealed proposals will be received by the Board of Education of the Borough of Bergenfield, County of Bergen, New Jersey, at 8:30 o'clock p.m., daylight saving time, May 7th, 1923, in the Board of Education Room, Washington School at Summit and Taylor Avenues, Bergenfield, New Jersey, for the complete construction of a new Public School Building, at which time the bids will be opened publicly. Bids shall be based on the plans and specifications on file with the architect.

Bids for the general construction, for the Heating and Ventilating, for the Plumbing and for the Electrical Work, will be taken separately.

Bidders shall make the following deposits by certified check payable to the Board of Education of the Borough of Bergenfield in the County of Bergen:

Two Thousand ($2,000) dollars for general construction;

One thousand ($1,000) dollars for heating and ventilating;

Five hundred ($500) dollars for plumbing.

Two hundred ($200) dollars for electrical work.

If the bidder or bidders who receive the award shall not execute the contract and furnish the required bond within ten days after the acceptance of such bid or bids, the said sum so deposited shall be forfeited to the Board of Education and shall be liquidated damages for such forfeiture.

Contracts will be awarded to the lowest responsible bidders. The Board of Education reserves the right to reject any or all bids, or to waive defects or informalities in any bid it it be deemed to the interest of the Board of Education so to do.

Copies of the plans and specifications may be obtained by prospective bidders from Ernest Sibley, Architect, L. C. Licht, Hacker & Hacker Associated, Edgewood Lane and Bluff Road, Palisade, New Jersey, on deposit of ten ($10) dollars. Deposits will be forfeited unless plans and specifications are returned to the architect within ten days after bids are opened.

Signed
E. L. SCHWEIGER,
District Clerk.

For the Board of Education, Borough of Bergenfield, New Jersey.
Dated April 17, 1923.

Bids: May 11.

Street Improvement

Westfield, N. Y.

Sealed proposals will be received by the Board of Trustees of the Village of Westfield, N. Y., until 8 p.m., May 11, 1923, for the improvement of the following streets:

Paving of Union Street from the south line of Main Street to the south line of Second Street with reinforced concrete or brick pavement, with concrete base, with 2,940 lineal feet of curb, 5,275 square yards.

Paving of Pearl Street from the north line of Main Street to the south line of Jefferson Street with 18 feet wide reinforced concrete pavement, without curb, 2,490 square yards.

Plans and specifications are on file in the office of John Riley, Clerk of the Village, Westfield, New York, and at the North East Pa. office of Hill and Hill, Engineers.

A certified check of 5% of the amount of the bid must accompany each proposal. The right is reserved to reject any or all bids.

J. A. RILEY,
Per J. C. H. Village Clerk.

You think you are covered but—are you?

¶An analysis of a Contractor's Payroll Insurance Policy showed that only one paymaster was covered. He had several jobs and a paymaster on each one. ¶In another policy the term "premises" was defined as the main office. Thus the risk of paying off out on the job was not covered. ¶Swart Specialized Service is in itself insurance against such lose handling. ¶Swart will be glad to personally analyse your policy at no cost whatever and in the event it does not cover, will render a specialized service on which you can depend at no increase in cost over the inadequate sort. ¶More advertisements will appear under this heading—watch for them. They may save you money.

HARMON V. SWART
Insurance Advisor *Rate Specialist*
92 WILLIAM ST., NEW YORK CITY

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ADVERTISEMENTS ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE.

OFFICIAL PROPOSALS

Bids: May 14.

Extension to Water Works Distributing System

Liberty, N. Y.

Sealed proposals for the installation of Cast Iron Water Pipe and Specials, required for a new water Main and for Extensions to the Distributing System of the Water Works of the Village of Liberty, New York, will be received by the Board of Water Commissioners, at the office of the Village Clerk until 8 o'clock p.m., Standard Time, on May 14th, 1923, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the Village Clerk, sealed and addressed, and shall be accompanied by a certified check in the sum of 5 per cent of the amount of the proposal. The contractor to whom the award is made will be required to furnish Surety Company bond in the sum of 50 per cent of the amount of the contract within thirty days after official notice of award of contract and in accordance with the terms of the specifications.

The work consists in installing about 9 miles of 8" Pipe, etc.

The right is reserved to reject any or all bids, and to let the work in one or two parts.

The Engineer plans to be in Liberty on April 30th and May 7th at 12 o'clock noon, for the purpose of going over the route of the pipe lines with prospective bidders and supplying additional information desired.

Plans and specifications may be seen at the office of the Village Clerk, Liberty, N. Y., or at the office of the Engineer, Henry W. Taylor, 149 Broadway, New York City, and specifications and blank forms of proposal may be obtained at the office of the Village Clerk in his discretion. Plans will be sent to prospective bidders by the Clerk or Engineer upon receipt of $5.00.

Dated April 23, 1923.

Signed by THEO. S. KESSLER,
Village Clerk.

Bids: May 16.

Pipe Line

San Francisco, Calif.

OFFICE OF THE BOARD OF PUBLIC WORKS OF THE CITY AND COUNTY OF SANFRANCISCO, APRIL 13, 1923.

Sealed proposals will be received at this office between the hours of 2:00 o'clock p.m. and 3:00 o'clock p.m. Wednesday, the 16th day of May, 1923, for:

Construction of the Bay Crossing Pipe Line in the Bay Crossing Division of the Hetch Hetchy Aqueduct Contract No. 90, Hetch Hetchy Water Supply.

The pipe line will be located in the vicinity of Irvington and Redwood City, Calif., and will be 19.45 miles long. Alternative bids will be considered on 60 inch riveted steel pipe or 58 inch lock bar or welded steel pipe or equivalent diameters suited for nesting pipe for shipment. Provision is made for division into two contracts covering 9.2 miles and 10.25 miles respectively.

Specifications accompanied by proposal forms and official advertisement may be obtained from the office of M. M. O'Shaughnessy, City Engineer, City Hall, on deposit of $20.

By order of the Board of Public Works.

W. J. FITZGERALD,
Secretary.

OFFICIAL PROPOSALS

Bids: May 7.

Highway Maintenance Materials

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey for the following highway maintenance materials:

Tar, Asphalt, Bituminous Concrete, Sheet Asphalt, and Crushed Slag, Dustless Screenings, in the following approximate quantities:

364,625	gallons of Tar, Grade "B" or "UB"
36,052	gallons of Asphalt, Grade "HHO"
10,705	gallons of Tar, Grade "X" or "U3"
6,317.5	tons of Bituminous Concrete, Type "FABC-1"
64	tons of Sheet Asphalt, Type "SA"
8,645	tons of Crushed Slag, Dustless Screenings.

Bids will be received at the Assembly Chamber, State House, Trenton, New Jersey, on Monday, May 7th, 1923, at 11 A.M., Standard Time, and opened and read immediately thereafter.

Points of delivery and other details will be furnished upon application to A. W. Muir, Superintendent of Maintenance, 517 Broad Street Bank Bldg., Trenton, New Jersey.

Specifications, form of bid, special addressed envelope, and conditions under which bids will be accepted for the above are on file in the office of A. W. Muir, Superintendent of Maintenance, 517 Broad St., Bank Bldg., Trenton, N. J., and may be obtained upon request. Bids must be made upon the proposal forms furnished, in the manner designated therein, and as required by the specifications, same to be enclosed in sealed special addressed envelopes which will be furnished each bidder with the bid blank, bearing the name and address of the bidder on the outside, and must be accompanied by a certified check drawn to the order of the Treasurer of the State of New Jersey for not less than ten per cent (10%) of the amount of the bid, provided that the said certified check shall not be less than $500.00 nor more than $20,000.00, and be delivered at the above place on or before the hour named. Bids not submitted on the standard proposal form or enclosed in other than the special envelope will be considered informal and will be rejected.

The State Highway Commission reserves the right to reject any or all bids.

By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

Bids: May 15.

Paving

St. Petersburg, Fla.

Sealed proposals will be received by the Director of Finance of the City of St. Petersburg, Fla., until 7:30 p.m., May 15, 1923, for building about 468,000 sq.yd. of No. 1 brick pavements and 37,000 sq.yd. of No. 2 brick pavements or 466,000 sq.yd. of asphalt block, asphaltic concrete, sheet asphalt or Willite process pavements and 39,000 sq.yd. of No. 1 brick pavements with about 357,000 lin.ft. of granite or concrete curbing and 103,000 cu.yd. of excavation.

The City reserves the right to reject any and all bids.

Further information on application.

DIRECTOR OF FINANCE,
St. Petersburg, Fla.

OFFICIAL PROPOSALS

Bids: May 7.

Highway Work

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey for the construction of the following:

Route No. 6, Section No. 15, Broadway in the City of Gloucester, Camden County; estimated amount of ten inch (10") two line reinforced concrete pavement, 5,494 square yards.

Route No. 5, Section No. 7, Mine Hill, Morris County; estimated amount of eight inch (8") two line reinforced concrete pavement 2,665 square yards; estimated amount of Granite Block pavement on a six inch (6") concrete base, 6,836 square yards.

Bids will be received at the Assembly Chamber, State House, Trenton, New Jersey, on Monday, May 7th, 1923, at 11:00 A.M., Standard Time, and opened and read immediately thereafter.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of the State Highway Department, Trenton, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on deposit of Ten Dollars ($10.00) upon application to the State Highway Department, 9th floor Broad Street Bank Building, Trenton, New Jersey. Bids must be made on the standard proposal forms in the manner designated therein, and as required by the 1922 specifications, same to be enclosed in sealed special addressed envelopes bearing the name and address of bidder and the name and section of the route on the outside, and must be accompanied by a certified check drawn to the order of the Treasurer of the State of New Jersey for not less than ten per cent (10%) of the amount of the bid, provided that the said certified check shall not be less than $500.00 or more than $20,000.00, and be delivered at the above place on or before the hour named. Copies of the standard proposal form and special addressed envelope will be furnished on application. Bids not enclosed in special envelopes will be considered informal and will not be opened.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provisions of the said specifications, conditioned for the faithful performance of the provisions of the contract and specifications. Each bidder must also accompany his bid with a Statement of Equipment properly filled out.

By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

Bids: June 1.

Pier

Charleston, S. C.

Sealed proposals will be received by the Port Utilities Commission of Charleston, S. C., at its office Room 712 Peoples Building until noon June 1, 1923, and then publicly opened for constructing a pier (exclusive of earth fill) on Town Creek, Charleston Harbor.

Specifications and proposal forms will be furnished to prospective bidders on deposit of $5, which will be refunded to depositors who submit proposals or return sets in good condition. Further information on application.

H. M. GALLAGHER,
General Manager.

OFFICIAL PROPOSALS

Bids: May 15.

Highway Work

Baltimore, Md.

Sealed proposals for building 10 sections of State Highway, as follows:

Garrett Co. Cont. G-25: One section of State Highway between Gortner and Red House for a distance of 2.0 miles. (Concrete.)

Washington Co. Cont. W-25: One section of State Highway between Hagerstown and Leitersburg, a distanc of 5.3 miles. (Mac. Recon.)

Montgomery Co. Cont. M-41: One section of State Highway from Clarksburg toward Hyattstown for a distance of a 1.0 mile. (Concrete.)

Montgomery Co. Cont. M-37: One section of State Highway from Dawsonville toward Seneca for a distance of 1.0 mile. (Concrete.)

Montgomery Co. Cont. M-25-A: One section of State Highway along the Rockville Pike from the Dist. Line to Bethesda, a distance of 3.0 miles. (Concrete Shoulders.)

Howard Co. Cont. Ho-33: One section of State Highway from West Friendship toward Ivory for a distance of 1.4 miles. (Concrete.)

Anne Arundel Co. Cont. AA-32: One section of State Highway between the Defense Highway and Iglehart, a distance of 1.0 mile. (Concrete.)

Kent Co. Cont. K-22: One section of State Highway from Chestertown toward Pomona for a distance of 2.0 miles. (Concrete.)

Cecil Co. Cont. Ce-44: One section of State Highway through Port Deposit for a distance of 1.4 miles. (Concrete.)

Cecil Co. Cont. Ce-46: One section of State Highway along the Glascow Road from Elkton to the Delaware Line, a distance of 2.0 miles. (Concrete.)

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on the 15th day of May, 1923, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of $1.00, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of five hundred ($500) dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 26th day of April, 1923.

JOHN N. MACKALL, Chairman.
L. H. STEUART, Secretary.

Bids: May 7.

Sewers

Pottstown, Penna.

Sealed proposals for the construction of sanitary sewers will be received until 2 p.m. Monday, May 7, 1923, at the office of the Secretary of Council and will then be publicly opened and read.

Diameter	Length	Trenches Earth	Cu. Yards
4 in.	25,000 ft.	0 ft.- 4 ft. deep	18,740
6 in.	19,000 ft.	4 ft.- 8 ft. "	8,794
8 in.	1,944 ft.	8 ft.-12 ft. "	509
10 in.	330 ft.	12 ft.-16 ft. "	28
12 in.	2,350 ft.		
15 in.	1,310 ft.	Rock	
18 in.	1,425 ft.	0 ft.- 4 ft. deep	453
		4 ft.- 8 ft. "	2,856
		8 ft.-12 ft. "	494
		12 ft.-16 ft. "	46

Test pits indicate clay, sand and rock.

Material of construction, Vitrified sewer pipe.

Certified check for $5,000 to accompany bids.

Right is reserved to reject any or all bids.

Plans and specifications will be furnished by the Secretary of the Council, or by Gannett, Seelye & Fleming, Incorporated, Engineers, upon deposit of $25.00, said money to be refunded upon return of same.

GEORGE A. WOHL,
Chairman of Sewer Committee,
Pottstown, Penna.
M. L. SEASHOLTZ,
Secretary of Council,
Pottstown, Penna.
Gannett, Seelye & Fleming, Inc.,
Engineers,
1 N. Market Square,
Harrisburg, Penna.

OFFICIAL PROPOSALS

Bids: May 16.

Highway Work

OFFICE OF STATE COMMISSION OF HIGHWAYS

Albany, N. Y.

Sealed proposals will be received by the undersigned at their office No. 55 Lancaster Street, Albany, N. Y., at one o'clock p.m., advanced standard time, which is 12 o'clock noon Eastern Standard Time on Wednesday, May 16, 1923, for the improvement of highways in the following counties:

Cayuga .....(One highway: 3.28 miles)
Columbia .....(One highway: 2.52 miles)
Jefferson .....(One highway, 3.38 miles)
Montgomery ....(One highway: 0.92 miles)
Warren .....(One highway: 3.94 miles)
Wayne .....(One highway: 4.90 miles)

Also for the reconstruction of the following:

Jefferson .....(One contract: 2.95 miles)
Oneida .....(One contract: 1.44 miles)
Schuyler .....(One contract: 1.35 miles)
St. Lawrence ....(One contract: 3.83 miles)
Sullivan .....(One contract: 4.82 miles)
Ulster .....(One contract: 3.14 miles)

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the Division Engineers in whose division the roads are to be improved or reconstructed. The addresses of the Division Engineers and the counties in which they are in charge will be furnished upon request.

The especial attention of bidders is called to "General Information for Bidders" in the itemized proposal, specifications and contract agreement.

FREDERICK STUART GREENE
Commissioner.
W. A. PATTON, Secretary.

Bids: May 7.

Sewers

Butler, N. J.

Pursuant to a resolution adopted the 16th day of April, 1923, the Council of the Borough of Butler, N. J., will receive at its meeting, to be held on the 7th day of May, 1923, at 7:30 P.M. (standard time) at the Municipal Building in the Borough, sealed proposals for furnishing materials and doing all other work required for the construction of sewers left unfinished by the abandonment of a previous contract.

The work includes approximately 5,000 feet of vitrified tile sewers from ten (10) to twenty (20) inches in diameter and 60 feet of four (4) and six (6) inch siphon lines, with manholes, siphon manholes and appurtenances complete.

Plans may be seen and specifications and forms of proposals obtained at the office of the Borough Clerk at Butler, N. J., or at the office of Clyde Potts, 30 Church Street, New York City.

Plans and specifications may be taken away upon the payment of ten dollars ($10.00), the same to be returned if the plans are returned within twenty (20) days, in good condition.

Each bid must be accompanied by a certified check on a solvent bank for $2,000.

The Borough Council reserves the right to reject any and all proposals and to waive any informality in the proposals received, and to accept any proposals which they deem to be most favorable to the interests of the Borough.

D. D. SMITHYMAN,
Chairman, Sewer Committee.
JOHN F. BORMUTH,
Borough Clerk.

Bids: May 15.

Miscellaneous Materials

St. Petersburg, Fla.

Sealed proposals will be received by the Director of Finance of the City of St. Petersburg, Fla., until 7:30 p.m., May 15, 1923, for purchasing No. 1 brick for about 468,000 sq.yd. of pavements and No. 2 brick for about 37,000 sq.yd. of pavements or for furnishing asphalt block for about 466,000 sq.yd. of pavements and No. 1 brick for about 39,000 sq.yd. of pavements and for furnishing about 357,000 lin.ft. of concrete or granite curbing and headers and about 1,000,000 lb. of asphalt filler.

The City reserves the right to reject any and all bids.

Further information on application.

DIRECTOR OF FINANCE,
St. Petersburg, Fla.

OFFICIAL PROPOSALS

Bids: May 22.

Lake Intake Pipe—Tunnel—Conduit

Portland, Maine

Sealed proposals will be received by the Trustees of the Portland Water District at their office, 16 Casco Street, Portland, Maine, up to 2 p.m., Eastern Standard time, on Tuesday, May 22, 1923, for four contracts as follows:

1. For furnishing about 3,500 linear feet 54-inch reinforced concrete, or steel water pipe.

2. For laying about 1,600 linear feet of 54-inch lake intake pipe of reinforced concrete, or steel (Section I of the New Conduit at Sebago Lake).

3. For building about 2,100 feet of tunnel (almost wholly through rock), 7 feet in diameter of excavation, and 5 feet in diameter of lined section (Section II of the New Conduit at Sebago Lake).

4. For laying about 1,900 linear feet of 54-inch reinforced concrete, or steel conduit from the tunnel to connect with the existing mains. (Section III of the New Conduit at Sebago Lake.)

Said proposals will be publicly opened and read at the above stated time and place.

All bids must be upon the blank form of proposal furnished by the Trustees and must be accompanied by the required certified check. Bonds will be required for the faithful performance of the contracts.

The printed forms of "Information for Bidders, Form of Proposal, Contract and Bond, and Specifications, and Contract Drawings," will be available at the office of the Trustees.

The samples of wash and core drill borings taken over the area traversed by the tunnel, may also be examined at the office of the Trustees.

The site of the work may be examined at the convenience of the bidders.

A deposit of Ten Dollars ($10.00) will be required for contract drawings.

The right is reserved to reject any or all bids.

THE TRUSTEES,
Portland Water District.
HARRY U. FULLER,
Chief Engineer, Portland Water District.
METCALF & EDDY,
Consulting Engineers,
14 Beacon Street, Boston, 9, Mass.

Bids: May 21.

Paving Construction

St. Paul, Minn.

Sealed proposals will be received by the County Board, Ramsey County, at the office of the County Auditor, until 10 a.m., May 21, 1923, for the construction of pavements, grading, and the necessary accessories for project number (23-02) (23-55), approximately sixty thousand (60,000) square yards of paving. Bids must be accompanied by certified check or bidder's bond of 10% of the total bid price. Plans and specifications can be procured at the office of the County Engineer of Ramsey County, St. Paul, Minnesota. This project is the first one to be let in connection with the six million ($6,000,000) dollar road program.

PAUL N. COATES, County Engineer.

Bids: May 17.

Paving

Poughkeepsie, N. Y.

Sealed proposals will be received by the Board of Public Works until 4:00 p.m. May 17, 1923, at Eastman Park Mansion in the City of Poughkeepsie for the following approximate items:

38,000 square yards Asphalt Pavement on concrete foundation.
10,000 square yards Granite Block Pavement on concrete foundation.
100 square yards Brick Pavement adjusted.
3,000 lineal feet New Blue-stone Curb set in concrete.
10,000 lineal feet of Old Blue-stone Curb re-set in concrete.

A certified check for five (5) per cent of the amount of the bid must accompany each proposal.

Specifications may be examined at the office of the Board of Public Works or will be forwarded on receipt of five dollars, which amount will be refunded when the specifications are returned in good condition. The Board reserves the right to reject any or all bids.

By ORDER OF THE BOARD
OF PUBLIC WORKS
THOMAS F. LAWLOR, Superintendent.
April 28, 1923.

OFFICIAL PROPOSALS

Bids: May 10.

Street Paving Construction

Ellwood City, Pa.

Sealed proposals will be received by the Borough Council of Ellwood City, Pa., at the office of the Borough Clerk, 228 Sixth Street, until 7:30 o'clock p.m., eastern standard time, Thursday, May 10, 1923, for grading, curbing and paving Line Avenue from Gregg Street to the east Borough Line near Johnson's Run, joining with the improved State Road leading from New Castle.

The work will consist of about 7,000 cubic yards of excavating, 8,000 lineal feet of concrete curb and gutter, 13,000 square yards of block paving with concrete foundation, 9 storm water inlets and 300 lineal feet of storm sewer.

All bids must be made upon blanks provided in the proposals furnished to bidders. Evidence of suitable equipment and ability to get material must accompany each bid.

Bids must be accompanied by a certified check made payable to the Borough of Ellwood City for the sum of $1,000 to insure the good faith of the bidder.

Plans, specifications and bidding blanks may be obtained at the office of Alex Main, Borough Engineer, 228 Sixth Street, upon payment of $5.00, which sum will be returned to the bidder if a bona-fide bid is submitted upon the above date and the plans are returned in good condition.

The right to reject any or all bids is reserved and the right to waive any immaterial defect or irregularity in the bids if it should be in the interest of the Borough to do so.

By Order of Borough Council.

GEO. A. REUFF,
F. E. MOORE,
CARL C. DAVIDSON,
Street Committee.

Bids: May 11.

Street Improvement

Westfield, N. Y.

Sealed proposals will be received by the Board of Trustees of the Village of Westfield, N. Y., until 8 p.m., May 11, 1923, for the improvement of the following streets:

Paving of Union Street from the south line of Main Street to the south line of Second Street with reinforced concrete or brick pavement, with concrete base, with 2,940 lineal feet of curb, 5,275 square yards.

Paving of Pearl Street from the north line of Main Street to the south line of Jefferson Street with 18 feet wide reinforced concrete pavement, without curb, 2,490 square yards.

Plans and specifications are on file in the office of John Riley, Clerk of the Village, Westfield, New York, and at the North East Pa. office of Hill and Hill, Engineers.

A certified check of 5% of the amount of the bid must accompany each proposal. The right is reserved to reject any or all bids.

J. A. RILEY,
Per J. C. H. Village Clerk.

Bids: May 25.

Constructing Coagulation Basins

CONTRACT 44
BALDWIN-FAIRMOUNT PROJECT

Cleveland, Ohio.

Sealed proposals will be received at the office of the commissioner of purchases and supplies, room 219, City Hall, until 12:00 o'clock noon, official Cleveland time, Friday, May 25, 1923, for constructing coagulation basins, for the division of water, and will be opened and read in the council chamber immediately thereafter.

Each bid must be accompanied by a certified check on a solvent bank for thirty thousand ($30,000) dollars, drawn payable to the city of Cleveland, as surety for the acceptance of the contract.

Each bid must be made in accordance with the plans and specifications which may be obtained at the division of water drafting room, 213 City Hall, upon the deposit of fifty dollars ($50.00) per set, said deposit to be redeemed upon the return of said plans and specifications in good condition.

No proposal will be entertained unless made on the blank forms furnished by the division of water, and delivered at the office of the commissioner of purchases and supplies, previous to 12:00 o'clock noon on the day above specified.

The city reserves the right to reject any or all bids.

This contract includes 40,000 cubic yards of concrete, 2,500,000 pounds of reinforcing steel, sluice gates, mud valves, pipe, castings and miscellaneous items.

A. V. RUGGLES,
Commissioner of Water.

OFFICIAL PROPOSALS

Bids: May 9.

Subway Construction

Rochester, N. Y.

Sealed proposals will be received at the office of the Board of Contract and Supply, 37 City Hall, Rochester, N. Y., until 11 a.m., May 9, 1923, for subway construction, Contract No. 2, from Court Street to the crossing of the Rochester & Eastern Rapid Railroad, a distance of about five miles; pursuant to the provisions of Ordinance No. 6162, adopted by the Common Council January 23, 1923.

The work will consist of excavation in the abandoned Erie Canal and the construction of a rapid transit railway therein, including the necessary tracks, sidings, stations, bridges and incidental work.

All proposals must be made upon the blank form of proposal which, together with the plans, specifications, engineer's estimates of quantities and other information, will be furnished at the office of the City Engineer, 52 City Hall, after April 25, 1923.

A deposit of twenty dollars ($20) will be required by the City Engineer for copies of plans and specifications furnished to prospective bidders, which deposit will be returned only to bidders submitting proposals, upon the return of said plans and specifications.

A certified check for one hundred thousand dollars ($100,000) payable to the City of Rochester, must accompany the proposal as an earnest of good faith, and the successful bidder or bidders will be required to execute to the City a Surety Company bond in the sum of one million dollars ($1,000,000) for the faithful performance of the contract and the payment of all laborers' wages.

Each proposal must be enclosed in a sealed envelope addressed to the Board of Contract and Supply, and must be indorsed on the envelope with the title of the work for which the proposal is made.

The Board reserves the right to reject all bids if it shall deem it for the best interests of the City.

HIRAM I. DAVIS,
Secretary.

Bids: May 23.

Steel Penstocks and Accessories

San Francisco, Calif.

OFFICE OF THE BOARD OF PUBLIC WORKS OF THE CITY AND COUNTY OF SAN FRANCISCO, APRIL 13, 1923.

Sealed proposals will be received at this office between the hours of 2:00 o'clock p.m. and 3:00 o'clock p.m. on Wednesday, the 23rd day of May, 1923 for:

Furnishing, delivering and installing steel penstocks and accessories for the Moccasin Creek Power Plant Contract No. 91, Hetch Hetchy Water Supply.

The work will be located near Groveland, Tuolumne County, Calif. Approximately 7,900 tons of riveted steel pipe or 6,000 tons of welded steel are required. Provision is made for division into two contracts for about 18 and 82 per cent of the whole respectively.

Specifications accompanied by proposal forms and official advertisement may be obtained from the office of M. M. O'Shaughnessy, City Engineer, City Hall, on deposit of $20.

By order of the Board of Public Works,

W. J. FITZGERALD,
Secretary.

Bids: May 8.

Improvement of Streets

Henderson, Ky.

Sealed proposals will be received by the Commissioner of Public Works of Henderson, Kentucky, until twelve o'clock noon standard time on the 8th day of May, 1923, for the improvement of the following streets in the city of Henderson, Henderson County, Kentucky. Main street from the south margin of Fourth Street to the north margin of First Street; Elm Street, from the south margin of Third to the north margin of First; Green Street, from the south margin of Third to the north margin of First; to consist of paved carriage ways extending the full width of the street, wood curb and relaying gutters.

Requirements for bidding and Instructions to Bidders, Form of Proposal, Contract, Specifications, Form of Bond, and Plans may be obtained from the Commissioner of Public Works of the City of Henderson upon receipt of fifteen dollars ($15), which sum so deposited will be refunded if said plans, specifications, etc., are returned in good condition within thirty days after the opening of bids.

CITY COMMISSION OF HENDERSON, KENTUCKY

OFFICIAL PROPOSALS

Bids: May 16.

Highway Work

Dover, Del.

Sealed proposals will be received by the State Highway Department, at its office, Dover, Delaware, until 2 o'clock p.m., May 16, 1923, and at that place and time publicly opened, for the construction of State Highways, involving the following approximate quantities:

CONTRACT NO. CN-7, 2.21 MILES
MARSH ROAD

9,500 cu.yd. excavation.
4,000 cu.yd. borrow.
500 cu.yd. rock excavation.
200 tons sub-base.
100 tons broken stone base course.
3,875 cu.yd. cement concrete pavement.
80 cu.yd. Class A concrete.
2,000 lb. reinforcement.
300 lin.ft. 15-in. R. C. pipe.
28 lin.ft. 18-in. R. C. pipe.
102 lin.ft. 24-in. R. C. pipe.
70 lin.ft. 30-in. R. C. pipe.
60 lin.ft. 36-in. R. C. pipe.
200 lin.ft. relaid pipe.
1,800 lin.ft. 4-in. pipe underdrain.
2,000 sq.yd. Class A concrete gutter.
600 lin.ft. wire cable guard rail.

CONTRACT CN-10, 2.746 MILES
BEAR-STATE ROAD

14,000 cu.yd. excavation.
120 tons broken stone base course.
4,800 cu.yd. cement concrete pavement.
150 cu.yd. Class A concrete.
4,200 lb. reinforcement.
350 lin.ft. 15-in. R. C. pipe.
65 lin.ft. 18-in. R. C. pipe.
30 lin.ft. 24-in. R. C. pipe.
34 lin.ft. 36-in. R. C. pipe.
62 lin.ft. 48-in. R. C. pipe.
120 lin.ft. relaid pipe.
1,000 lin.ft. 4-in. pipe underdrain.
1,800 sq.yd. Class A concrete gutter.
600 lin.ft. wire cable guard rail.
800 lin.ft. shoulder curb.

CONTRACT NO. CN-11, 4.35 MILES
TOWNSEND-COLDWELL

½ acre clearing.
½ acre grubbing.
20,000 cu.yd. excavation.
1,500 cu.yd. borrow.
120 tons broken stone base course.
7,610 cu.yd. cement concrete pavement.
210 cu.yd. Class A concrete.
7,500 lb. reinforcement.
675 lin.ft. 15-in. R. C. pipe.
150 lin.ft. 18-in. R. C. pipe.
30 lin.ft. 24-in. R. C. pipe.
30 lin.ft. 30-in. R. C. pipe.
180 lin.ft. relaid pipe.
1,200 sq.yd. Class A concrete gutter.
400 lin.ft. wire cable guard rail.
1,200 lin.ft. shoulder curb.

CONTRACT NO. 48-C
FILL AT APPOQUINIMINK

3,000 cu.yd. borrow.

CONTRACT NO. CK-8A
HIGHWAY DRAINAGE SEWER
IN CAMDEN

4 catch basins.
1 outlet.
4 manholes.
1,600 lb. castings.
1,700 lin.ft. 15-in. vit. clay pipe (including excavation).

Performance of contract shall commence within ten (10) days after execution of the contract and be completed during 1923 as specified.

Monthly payments will be made for 90 per cent of the construction completed each month.

Bidders must submit proposals upon forms provided by the Department.

Each proposal must be accompanied by a surety bond, certified check, or money to the amount of at least ten (10) per centum of the total amount of the proposal.

The envelope containing the proposal must be marked "Proposal for the Construction of State Highway Contract No. . . . . ."

The Contract will be awarded or rejected within twenty (20) days from the date of opening proposals.

The right is reserved to reject any or all bids.

Detailed plans may be seen and index plans and specifications may be obtained upon deposit of ten dollars ($10), which amount will be refunded upon return of plans and specifications in good condition at the office of

STATE HIGHWAY DEPARTMENT,
Dover, Delaware.

OFFICIAL PROPOSALS

Bids: May 10.

Sewerage System and Disposal

Cuba, N. Y.

Sealed proposals will be received by the Board of Trustees of the Village of Cuba, N. Y., until 2 o'clock p.m., on the 10th day of May, 1923, for the construction of a sewerage system and sewage disposal works.

Plans may be seen and specifications obtained at the office of the Board at Cuba, N. Y., or at the office of Hopkins & Field, Engineers, 349 Cutler Building, Rochester, N. Y.

The Board hereby reserves and has the right to reject any or all bids or to accept the one that in its judgment will be for the best interests of the Village.

A surety bond satisfactory to the Board and in amount of $25,000 will be required of the one to whom the contract may be awarded.

A certified check, made payable to the order of the Board of Trustees, Cuba, N. Y., to the amount of $2,000 must be deposited by each bidder and accompany his bid as a guarantee that in case the contract is awarded to him, he will, within ten days thereafter, execute such contract and furnish his bond.

Bids must be sealed and addressed to the Board of Trustees, Cuba, N. Y., and marked on the outside of the envelopes, "Proposal for Sewerage System and Disposal Works."

H. W. EVANS,
President.
A. O. RENWICK,
Trustee,
H. J. DEMCEY,
Trustee.

H. M. SETCHEL, Village Clerk.
Dated Cuba, N. Y., Apr. 16, 1923.

Bids: May 17.

Timber Bulkhead and Culvert

Newark, N. J.

Sealed proposals will be received from 10 to 10:15 a.m., on Thursday, May 17, 1923, at the office of the Director of the Department of Streets and Public Improvements, on the second floor of the City Hall, and publicly opened and read for the construction of a timber bulkhead and culvert at Port Newark Terminal.

Bids must be made upon blanks to be furnished by the department.

Plans and specifications and proposal blanks may be obtained at the office of the Bureau of Docks, room 205, City Hall.

Terms of proposal and surety required are fixed by the specifications.

The contract will be awarded to the lowest responsible bidder, the right being reserved to reject any and all bids or waive informalities therein, and to award contracts for the whole or any part thereof.

By direction of the Board of Commissioners of the City of Newark.

THOMAS L. RAYMOND,
Director, Department of Streets and Public Improvements.

Bids: May 14.

150-Foot Chimney

Norfolk, Va.

Sealed proposals will be received at the Office of the Director of Public Works, City of Norfolk, Virginia, until 12 o'clock noon on the 14th day of May, 1923, for one chimney 150 feet high and 5 feet inside diameter.

Instructions to Bidders, Form of Proposal, Specifications, Contract and Form of Bond may be inspected at the Office of the Director of Public Works, Norfolk, Virginia, or at the Office of the Consulting Engineer, Dabney H. Maury, 1445 Monadnock Block, Chicago, Ill., and a complete set of all of the above papers may be obtained by intending bidders either from the Director of Public Works or from the Consulting Engineer, upon application accompanied by a check or Postal Order for Ten Dollars ($10), payable to B. Gray Tunstall, City Treasurer, which amount will be refunded to the party depositing it on the return of all of the foregoing papers in good order.

A certified check on an approved bank either in the City of Norfolk, or in the City of New York or in the City of Chicago, in the sum of $300.00, and payable to B. Gray Tunstall, City Treasurer, must accompany each bid, subject to the conditions expressed in the Instructions to Bidders and Form of Proposal.

The City of Norfolk reserves the right to reject any or all bids.

WALTER H. TAYLOR, 3rd,
Director of Public Works.

OFFICIAL PROPOSALS

Bids: May 24.

Bridge Substructure

Chicago, Ill.

Sealed proposals for the construction of the substructure of a double leaf trunnion bascule bridge (Strauss type) over the main drainage channel of the sanitary district of Chicago, on the line of South California Avenue extended across said main drainage channel in the City of Chicago, County of Cook, State of Illinois, will be received by the clerk at the office of said sanitary district, Suite 700, 910 South Michigan Avenue, Chicago, Illinois, until 12 m., Standard Time, on Thursday, May 24, 1923, and will be publicly opened by the Board of Trustees of said sanitary district at a meeting to be held on that day or at the first meeting thereafter.

All proposals must be made upon blank forms of proposal furnished by the sanitary district, and bearing the personal signature of the chief engineer of said sanitary district and shall be made in accordance with and to conform to the terms and conditions set forth in "Requirements for Bidding and Instruction to Bidders," attached thereto.

Said proposals shall be enclosed in an envelope furnished by the said sanitary district, bearing the printed endorsement, "Proposal for Substructure, California Avenue Bridge" and the name and address of the bidder.

Forms of proposal, specifications and plans may be obtained upon deposit of twenty-five dollars ($25.00) at the office of said sanitary district, which sum, so deposited, will be refunded if said forms of proposal, plans and specifications are returned in good condition within thirty days following the opening of bids.

The Board of Trustees reserves the right to reject any or all proposals.

THE SANITARY DISTRICT OF
CHICAGO,
By Willis O. Nance, Chairman of its Committee on Finance.
Attest:
HARRY E. WALLACE, Clerk.
Chicago, April 23, 1923.

Bids: May 15.

Storm Water Drains

St. Petersburg, Fla.

Sealed proposals for the construction of storm water drains will be received at the office of the Director of Finance of the City of St. Petersburg, Fla., until 7:30 p.m., May 15, 1923.

Approximately 67,939 feet of 10-inch to 84-inch pipe and all inlets, manholes and special structures.

Plans and specifications may be obtained from the Director of Finance upon the deposit of ten dollars ($10.00) to secure the return of same in good condition within thirty days.

Bidders must accompany their proposal with a certified check, payable to the Director of Finance, for not less than 5 per cent of their bid price.

The City reserves the right to reject any or all bids and to waive any or all technicalities in awarding contract.

H. T. DAVIS, Director of Finance.

Bids: May 9.

Light and Water Works Material

Granbury, Texas.

Sealed proposals will be received by the Mayor and City Council of the City of Granbury, Texas, at their regular meeting place until 10 o'clock a.m., May 9, 1923, for the following:

Two crude oil engines, directly connected to alternators, two motor-driven centrifugal pumps, motor-driven air compressor, switchboard, cast iron pipe, steel tank and tower, hydrants, valves, etc.

All proposals must be addressed to Mrs. Neil Hiner, City Secretary and marked, "Proposals for Light and Water Works Material."

Copies of the specifications may be obtained of the Engineers, Municipal Engineering Co., Dallas, Texas, or from the City Secretary, Granbury, Texas.

The right is reserved to reject any or all bids.

A. T. KEITH, Mayor.
MRS. NEIL HINER, City Secy.
Engineers:
MUNICIPAL ENGINEERING CO.,
715-16 Praetorian Bldg.,
Dallas, Texas.

OFFICIAL PROPOSALS

Bids: Nov. 30, 1923.

Sydney Harbour Bridge Tenders —Extension of Time

DEPARTMENT OF PUBLIC WORKS
Sydney, Australia,
January 31st, 1923.

Tenders are invited by the Government of New South Wales for the Construction of the Superstructure and substructure of a Cantilever Bridge across Sydney Harbour from Dawes Point to Milson's Point, embracing a main span of 1,600 feet in the clear, centre to centre of main piers, and a length of main bridge 2,600 feet centre to centre of anchor piers. The total length of main bridge and approach spans included in tender is 3,810 feet; also an Alternative Tender for the Construction of the Superstructure and Substructure of an Arch Bridge across Sydney Harbour from Dawes Point to Milson's Point, embracing a main span of 1,650 feet in the clear centre to centre of bearings. The total length of main bridge and approach spans included in tender is 3,770 feet. Either bridge is to provide for four lines of railway, six lines of vehicular traffic, and footway accommodation.

Copies of Specification, including Plans, General Conditions, and Tender Forms, may be obtained by bona fide tenderers on application to the Official Secretary, Australian Commissioner's Office, 44 Whitehall Street, New York City.

Tenders, the time for which has been extended, must reach the Under Secretary for Public Works, Sydney, New South Wales, not later than 30th November, 1923.

R. T. BALL,
Minister for Public Works and Railways.

Bids: May 16.

Concrete Retaining Walls

Freehold, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Monmouth for the construction of reinforced concrete retaining walls at Bridge No. W-43 between Avon and Belmar and opened and read in public at the rooms of said board, Court House, Freehold, New Jersey, on May 16, 1923, at 11:00 a.m., Daylight Saving Time.

Drawings and specifications for the proposed work, prepared by George K. Allen, Jr., County Engineer, have been filed in the office of said engineer at 60 Broad Street, Red Bank, New Jersey, and may be inspected by prospective bidders during business hours. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the engineer.

Plans and specifications will be furnished to prospective bidders upon payment of ten dollars ($10.00), which amount will be refunded upon return of plans and specifications before the time specified for the opening of bids.

Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and name of proposed work on the outside, addressed to the Board of Chosen Freeholders of the County of Monmouth and must be accompanied by a certified check for a sum not less than ten (10) per cent of the amount bid on the work, payable to the order of the County Treasurer and a surety company certificate stating that said surety company will provide the bidder with the required bond, and must be delivered at the place and before the hour above named.

The Board of Chosen Freeholders of the County of Monmouth reserves the right to reject any or all bids if deemed to the best interests of the county so to do.

By order of the Board of Chosen Freeholders of the County of Monmouth.

BRYANT B. NEWCOMB, Director.
Attest:
CHARLES E. COLE, Clerk.
Freehold, N. J., April 18, 1923.

Bids: May 15.

Sewer Materials

Hartford, Conn.

Bids will be received by the Board of Contract and Supply up to 10 a.m. standard time, May 15 for furnishing sewer materials as follows: (1) 6,738 feet of reinforced concrete pipe, 24" to 45" in diameter; (2) 3,026 feet of vitrified segment block 30" to 45" in diameter, and 3,712 feet of 24" tile pipe. Certified check for $200 required and a cash deposit of $5.00 for specifications. Further information on application to City Engineer.

WILLIAM F. O'NEIL, Secretary.
R. N. CLARK, City Engineer.

OFFICIAL PROPOSALS

Bids: May 21.

Sanitary Sewers

Pontiac, Mich.

Sealed proposals will be received at the office of the City Clerk, City Hall, Pontiac, Michigan, until 2:00 o'clock p.m., Eastern Standard Time, Monday, May 21, 1923, for the construction of sanitary sewers as follows:

Job No. 223—Anderson & Elm Streets.

322 feet of 10 inch vitrified tile.
2,145 feet of 8 inch vitrified tile.
1,680 feet of 6 inch vitrified tile.
8 standard manholes.

Job No. 224—Voorheis Road District

1,626 feet 24 inch double strength vitrified tile.
2,955 feet 15 inch double strength vitrified tile.
100 feet 10 inch single strength vitrified tile.
5,747 feet 8 inch single strength vitrified tile.
5,225 feet 6 inch single strength vitrified tile.
37 standard manholes.
3 drop manholes.

Job No. 225—Ferry Farm District.

2,838 feet 15 inch double strength vitrified tile.
715 feet 12 inch single strength vitrified tile.
10,738 feet 8 inch single strength vitrified tile.
9,280 feet 6 inch single strength vitrified tile.
43 standard manholes.
4 drop manholes.

Job No. 226—West Huron Street.

330 feet of 10 inch vitrified tile.
1,520 feet of 8 inch vitrified tile.
75 feet of 6 inch vitrified tile.
6 standard manholes.

All work to be done in accordance with plans and specifications on file in the office of the City Engineer. Certified check of 5 per cent of bid shall accompany each bid submitted as a guarantee of good faith on the part of the bidder or to be forfeited to the City of Pontiac as liquidated damages in case of failure of contractor to enter into contract within ten days after bid is accepted. The city reserves the right to reject any or all bids.

H. A. MAURER, City Clerk.
Dated, Pontiac, Michigan, May 8, 1923.

Bids: May 25.

Hydraulic Electric Power Development

Watertown, N. Y.

Sealed proposal will be received at the office of the City Manager, until twelve o'clock noon, on the twenty-fifth day of May, for doing all work required for the construction of a Hydraulic Electric Plant in the City of Watertown, N. Y.

The work includes 18,000 cubic yards of rock excavation in tail-race, 6,200 cubic yards of concrete in power house substructure, and scroll cases, and the placing of all machinery and appliances in power house. The furnishing and constructing of a power house structure 40 x 115 feet of tapestry brick; the building of a diversion dam containing approximately 3,500 yards of concrete.

Plans and Specifications may be procured of Paul B. Sutton, City Engineer, on a deposit of $25.00, which will be refunded on return of plans.

Proposal must be accompanied by certified check of 5% of amount of bid. Construction bond from a Surety Company of 50% of the contract price will be required.

The City reserves the right to reject any or all bids.

WALTER ACKERMAN,
City Manager.
Dated, May 5th, 1923.

Compensation Insurance

For twenty years my office has been handling employers liability and compensation insurance for contractors. Does not this record in itself suggest the value our services might be to you?

ALFRED S. HAMILTON
110 William St., New York

OFFICIAL PROPOSALS

Bids: May 22.

Highway Construction

Baltimore, Md.

Sealed proposals for building nine sections of State Highway, as follows:

Washington Co. Contract W-26. One section of State Highway from Hagerstown to Cearfoss, a distance of 3.4 miles. (Macadam Reconstr.).

Montgomery Co. Contract 45-A. One section of State Highway along the Old Georgetown Road from Bethesda one mile north. (Concrete Shoulders).

Montgomery Co. Contract M-39. One section of State Highway through Laytonsville, for a distance of 1 mile. (Concrete).

Baltimore Co. Contract B-54. One section of State Highway along Eastern Ave. from Chase 1.5 miles toward the Baltimore City Line. (Concrete).

Baltimore City. Contract BC-43. One section of State Highway along Hillen St. between Harford Ave. and 33rd St. a distance of 0.4 mile. (Sheet-Asphalt).

Charles Co. Contract Ch-25. One section of State Highway between Pomonkey and the Prince George County line, a distance of 3.4 miles. (Gravel).

St. Mary's Co. Contract SM-23. One section of State Highway between Valley Lee and Piney Point for a distance of 4.4 miles. (Gravel).

Dorchester Co. Contract D-33. One section of State Highway between Gum Swamp and Golden Hill for a distance of 2.5 miles. (Concrete).

Worcester Co. Contract Wo.-28. One section of State Highway between Snow Hill and Public Landing for a distance of 1 mile. ((Concrete).

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on the 22nd day of May, 1923, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of $1.00, as hereafter no changes will be permitted.

No bids will be received unless accompanied by a certified check for the sum of Five Hundred ($500) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 3rd day of May, 1923.

L. H. STEUART, Secretary,
JOHN N. MACKALL, Chairman.

Bids: May 16.

State Hospital Work

Albany, N. Y.

Sealed proposals for Electric Freight Elevator—Kitchen and Dining Room Building, at the Central Islip State Hospital, Central Islip, N. Y., will be received by the State Hospital Commission, Capitol, Albany, N. Y., until 2 o'clock p.m. (Standard Time) on Wednesday, May 16, 1923, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a deposit, consisting of a certified check drawn upon some legally incorporated bank in this State and made payable to the State of New York, or money, equal to five per cent (5%) of the amount of the proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specification No. 4076. The right is reserved to reject any or all bids. Drawings and specifications may be examined at the Central Islip State Hospital, Central Islip, N. Y.; at the New York Office of the Department of Architecture, Room 1058, 25 Broadway, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, Sullivan W. Jones, Capitol, Albany, N. Y.

Dated: April 23, 1923.

OFFICIAL PROPOSALS

Bids: June 5.

Swing Bridge

STEEL SUPERSTRUCTURE,
MACHINERY AND FLOOR
Bridge File No. 701,302
Spring Lake Township, Ottawa County,
Michigan.

Sealed proposals will be received at the office of the City Manager, City Hall, Grand Haven, Michigan, until 1:30 o'clock p.m., Central Standard Time, Tuesday, June 5th, 1923, jointly by Frank F. Rogers, State Highway Commissioner and the City of Grand Haven, for the superstructure, machinery, floor, backwalls, and electrical work for a 212 ft. 6 in. Swing Bridge with three 100 ft. Deck Truss Approach spans, located on T. L. Route No. 11 on T. L. project No. 11-33, crossing Grand River in Section 21, Town 8 N. Range 16 W, in Spring Lake Township, Ottawa County, this structure joining the City of Grand Haven with the Village of Ferrysburg on a new location on a line which is the continuation of Pine St. in Ferrysburg, being bridge file Number 701,302.

Description: The general nature of the work to be done is as follows.

Substructure is now under contract. North rest pier and footings for North and South abutments now complete and about ready to cast footing for Pivot pier.

Superstructure consists of one 212 ft. 6 in. Swing Span with three 100 ft. Deck truss spans. The bridge carries a 24 ft. clear roadway and two 5 ft. cantilever walks and involves approximately 1,259,000 pounds of structural steel and approximately 93,000 pounds of machinery.

Floor. The roadway section and backwall notches are of reinforced concrete throughout and involves about 255.5 cu. yds. of concrete and 70,950 pounds of reinforcing steel. Cantilevered sidewalks and curb are of creosoted lumber and involve about 20.2 M. B. M. lumber.

Electrical Work. The swing span is designed for both Electrical and Hand Power operation and Electrical Equipment is to be provided in this contract. Boulevard lights on Standard Cast Iron Posts are to be provided.

Erection. The Swing Span is to be erected on the Timber protection work at the pivot pier. This work will probably be complete by Aug. 1st. Completion dates called for on part of Substructure Contractor are as follows: Abut. A, July 15th; Abut. B, July 15th; Pier No. 1, Now Ready; Pivot Pier, July 15th; Pier No. 3, Oct. 1st; Pier No. 4, Sept. 1st, however, the Department does not guarantee these dates. Deck spans can be probably be floated to place. However if falsework is used, piles will be required as the bottom is sand.

Plans, instructions to bidders, specifications and proposal blanks may be obtained at the office of the State Highway Department, Lansing, Michigan. Plans will be furnished by the undersigned upon receipt of a deposit of Twenty-Five ($25.00) Dollars, which will be refunded upon their safe return. Only bids from fabricating companies will be considered.

A certified check in the sum of One Thousand ($1,000.00) Dollars, made payable to Frank F. Rogers, State Highway Commissioner, must accompany each proposal. The right is reserved to reject any or all proposals.

FRANK F. ROGERS,
State Highway Commissioner.
Lansing, Michigan, May 3rd, 1923.

Bids: June 5.

Drainage Work

Rolling Fork, Miss.

Sealed bids for the construction of Improvements in the Ottar Bayou Drainage District of Sharkey, Washington & Issaquena Counties, Mississippi, of approximately 3,392,000 cubic yards of drainage channels will be received by the Board of Commissioners for said District at their office in the Town of Rolling Fork, Mississippi, until 12 m., of the 5th day of June, 1923, and publicly opened and considered. Work to be done according to Plans and Specifications on file. A certified check for three per cent of bid, or, bidder's bond to accompany each proposal. The right is reserved to reject any and all bids.

Prospective bidders are invited to make inquiry of C. H. West, Engineer, Greenville, Mississippi, for further information. They will also upon payment of the sum of $2.00 be furnished with Map, Specifications and other detailed information.

President of Board.

OFFICIAL PROPOSALS

Bids: May 22.

Lake Intake Pipe—Tunnel—Conduit

Portland, Maine.

Sealed proposals will be received by the Trustees of the Portland Water District at their office, 16 Casco Street, Portland, Maine, up to 2 p.m., Eastern Standard time, on Tuesday, May 22, 1923, for four contracts as follows:

1. For furnishing about 3,500 linear feet 54-inch reinforced concrete, or steel water pipe.
2. For laying about 1,600 linear feet of 54-inch lake intake pipe of reinforced concrete, or steel (Section I of the New Conduit at Sebago Lake).
3. For building about 2,100 feet of tunnel (almost wholly through rock), 7 feet in diameter of excavation, and 5 feet in diameter of lined section (Section II of the New Conduit at Sebago Lake).
4. For laying about 1,900 linear feet of 54-inch reinforced concrete, or steel conduit from the tunnel to connect with the existing mains. (Section III of the New Conduit at Sebago Lake.)

Said proposals will be publicly opened and read at the above stated time and place.

All bids must be upon the blank form of proposal furnished by the Trustees and must be accompanied by the required certified check. Bonds will be required for the faithful performance of the contracts.

The printed forms of "Information for Bidders, Form of Proposal, Contract and Bond, and Specifications, and Contract Drawings," will be available at the office of the Trustees.

The samples of wash and core drill borings taken over the area traversed by the tunnel, may also be examined at the office of the Trustees.

The site of the work may be examined at the convenience of the bidders.

A deposit of Ten Dollars ($10.00) will be required for contract drawings.

The right is reserved to reject any or all bids.

THE TRUSTEES,
Portland Water District.

HARRY U. FULLER,
Chief Engineer, Portland Water District.
METCALF & EDDY,
Consulting Engineers,
14 Beacon Street, Boston, 9, Mass.

Bids: May 14.

Sewage Disposal Works

Mamaroneck, N. Y.

Sealed proposals for the completion of sewage disposal works will be received by the clerk of the village of Mamaroneck until 8:30 o'clock p.m., Monday, the 14th day of May, 1923.

The work includes about 2,600 cubic yards of earth work; 1,630 cubic yards of concrete masonry; the completion of the machinery building; the furnishing and erection of compressors, cast-iron and wrought iron pipe, valves, diffuser blocks, electrical equipment and other work and materials required for completing the work in accordance with the plans and specifications; certain materials and apparatus will be furnished on the ground by the village and alternate proposals are asked for the work, one including the use of the plant and equipment now on the ground, and the other based on the contractor furnishing his own plant and equipment.

A certified check or cash to the amount of $2,000 is required with each proposal and a performance bond to the amount of $50,000 for the faithful performance of the work.

Notice to bidders, forms of proposals, contract, specifications and plans may be examined at the office of Fuller & McClintock, 170 Broadway, New York, and James M. Duffy, Village Engineer, Mamaroneck, N. Y. They may be obtained at these offices upon a deposit of $20 of which $15 will be refunded upon the return of plans and specifications in good condition.

Proposals from responsible and qualified contractors only are requested and the village reserves the right to reject any or all bids.

By order of the Board of Trustees.
JOHN F. HUNTER, M.D.,
President.
EDGAR L. HOWE,
Village Clerk.
Dated, Mamaroneck, N. Y., April 30, 1923.

OFFICIAL PROPOSALS

Bids: June 1.

Pier

Charleston, S. C.

Sealed proposals will be received by the Port Utilities Commission of Charleston, S. C., at its office Room 712 Peoples Building until noon June 1, 1923, and then publicly opened for constructing a pier (exclusive of earth fill) on Town Creek, Charleston Harbor.

Specifications and proposal forms will be furnished to prospective bidders on deposit of $5, which will be refunded to depositors who submit proposals or return sets in good condition. Further information on application.

H. M. GALLAGHER,
General Manager.

National Publicity Offers a Two-Fold Advantage

Giving calls for bids National publicity opens the way for additional and possibly lower offers from outside bidders to whom work can be let, if desired.

Then too, local contractors, seeing your contracts advertised Nationally will figure closer, realizing that the field of competitors for the work is greatly enlarged.

An advertisement printed in the Official Proposal Columns of *Engineering News-Record* brings the contract to the attention of not only local bidders but, in addition, any others who might be interested.

Bids: June 5.

Sewage Disposal System

Hightstown, N. J.

SEALED PROPOSALS for the construction of alterations and additions to the sewage disposal system of the Borough of Hightstown, New Jersey, will be received until 8 P.M., Daylight Saving Time, on the 5th day of June, 1923, at the office of the Borough Clerk, Hightstown, and then and there will be publicly opened and read by him.

The proposed work consists principally of the construction of sewage tanks, sludge beds, and one acre of sand filter beds.

The work is to be completed by September 15th, 1923.

Plans, specifications and blank forms of proposal may be obtained at the office of the Borough Clerk. A deposit of $10.00 is required on plans and specifications furnished, and will be refunded on their return.

The proposal must be made on one of the blank forms provided and must be accompanied by a certified check for $1,000.

The amount of bond for faithful performance, to be furnished when the contract is executed, will be the amount of the contract.

The Borough Council reserves the right to reject any or all bids.

Hightstown, N. J., May 8, 1923.
By order of the Borough Council.
GEORGE P. DENNIS, Borough Clerk.

Mr. Contractor, were you the lowest bidder on that excavating job? If so let Crooks dig in and dig it out.

Heavy and light excavating, sewer and water pipe, trench work taken by contract or machines rented with crews.

THOS. H. CROOKS

Elmer Street, Hollis, Long Island, N. Y.

Phone Jamaica 2451-J.

OFFICIAL PROPOSALS

Bids: May 16.

Concrete Retaining Walls

Freehold, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Monmouth for the construction of reinforced concrete retaining walls at Bridge No. W-43 between Avon and Belmar and opened and read in public at the rooms of said board, Court House, Freehold, New Jersey, on May 16, 1923, at 11:00 a.m., Daylight Saving Time.

Drawings and specifications for the proposed work, prepared by George K. Allen, Jr., County Engineer, have been filed in the office of said engineer at 60 Broad Street, Red Bank, New Jersey, and may be inspected by prospective bidders during business hours. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the engineer.

Plans and specifications will be furnished to prospective bidders upon payment of ten dollars ($10.00), which amount will be refunded upon return of plans and specifications before the time specified for the opening of bids.

Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and name of proposed work on the outside, addressed to the Board of Chosen Freeholders of the County of Monmouth and must be accompanied by a certified check for a sum not less than ten (10) per cent of the amount bid on the work, payable to the order of the County Treasurer and a surety company certificate stating that said surety company will provide the bidder with the required bond, and must be delivered at the place and before the hour above named.

The Board of Chosen Freeholders of the County of Monmouth reserves the right to reject any or all bids if deemed to the best interests of the county so to do.

By order of the Board of Chosen Freeholders of the County of Monmouth.
BRYANT B. NEWCOMB, Director.

Attest:
CHARLES E. COLE, Clerk.
Freehold, N. J., April 18, 1923.

Bids: May 31.

Water Works System Extensions

Easton, Md.

Sealed proposals for laying extensions to the Water Works System of the Town of Easton, Md., will be received and opened by the Mayor of Easton at the Council Chamber in Easton, Maryland, at 12.30 o'clock p.m., on the thirty-first day of May, 1923.

The work to be done comprises the furnishing, laying and complete installation of approximately 3,900 feet of 6" to 8" mains, 16 valves, 9 fire hydrants, and special fittings.

Contract, Proposal Forms and Plans may be seen at the office of the Town Clerk or of the Town Engineer, Easton, Md. Plans will be furnished upon payment of $1.00 for each set.

Each proposal for the work must be accompanied by a certified check drawn to the order of the Mayor and Council of Easton in the sum of $500.00.

JOHN C. NORTH,
Town Clerk.

E. G. KASTENHUBER, JR.,
Town Engineer.

Contracts Wanted

ROCK DRILLING and BLASTING

work done by newly developed electrical unit at great saving.

LAND CLEARING

Clearing and grubbing done by modern machine methods at about 50% less cost,

Personal Service in Connection With Use of Explosives.

P. D. SOUTHWORTH

Chippewa Falls, Wis.

OFFICIAL PROPOSALS

Bids: May 17.

Road Construction

Newton, N. J.

Notice is hereby given that sealed bids will be received by the County of Sussex for the construction of the Lafayette Township Road, No. 1, in the Township of Lafayette, County of Sussex, with a gravel surface, estimated amount of excavation required is 5,885 cu.yd. and estimated amount of gravel pavement required is 16,778 sq.yd. and for Hampton Township Road, No. 1, in the Township of Hampton, County of Sussex, with a gravel surface, estimated amount of excavation required is 4,731 cu.yd. and estimated amount of gravel pavement required is 11,945 sq.yd. and opened and read in public at the Freeholders' Office, Newton, N. J., on May 17, 1923, at 11:30 a.m.

"Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by Harvey Snook, County Engineer, are on file in the office of the said engineer at Newton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to the Board of Chosen Freeholders, County of Sussex, Newton, N. J., and must be accompanied by a certified check for not less than 10 per cent of the amount bid and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the engineer.

"By order of the Board of Chosen Freeholders."

(Signed) WM. S. VOUGHT, Clerk.

Bids: May 22.

Street Paving

Kendallville, Ind.

TO WHOM IT MAY CONCERN:

Notice is hereby given by the Common Council of the City of Kendallville, Indiana, that sealed proposals will be received by the City Clerk of said City until 5:00 p.m., Tuesday, May 22nd, 1923, for Street Paving.

The work will consist of approximately 18,600 square yards of pavement and 11,800 lineal feet of curbing, bids to be received on the following items:

One and two course reinforced concrete with combined or separate curb, asphalt block with combined curb and gutter, three inch vertical fiber brick with combined curb and gutter (the brick having an asphaltic filler), and creosoted wood block with combined curb and gutter.

Plans and specifications can be obtained from the City Engineer or City Clerk by depositing the sum of $5.00, which sum will be returned upon the return of the plans and specifications in good condition.

Bids must be accompanied by a certified check for 5 per cent of the amount of the bid. Bids must be upon blanks provided by the City of Kendallville. Evidence of suitable equipment and ability must accompany each bid.

The Council reserves the right to reject any and all bids.

HARRY H. MORTORFF,
City Engineer.

CARL F. ORSTADT,
City Clerk.
May 2, 1923.

OFFICIAL PROPOSALS

Bids: May 31.

Sewerage System Extensions

Easton, Md.

Sealed Proposals for the construction of certain extensions to the Sewerage System of Easton, Md., will be received and opened by the Mayor of Easton at the Council Chamber in Easton, Maryland, at 12.30 o'clock p.m., on the thirty-first day of May, 1923.

The work to be done comprises the complete construction of about one mile of 8" to 12" pipe sewer, 1,000 feet of House Connections, small pumping station and 4" force main.

Contract, Proposal Forms and Plans may be seen at the office of the Town Clerk or of the Town Engineer, Easton, Md. Plans will be furnished upon payment of $5.00 for each set.

Each Proposal for the work must be accompanied by a certified check drawn to the order of the Mayor & Council of Easton in the sum of $500.00.

JOHN C. NORTH,
Town Clerk.

E. G. KASTENHUBER, JR.,
Town Engineer.

A Bonding Company's Suggestion to Official Proposal Advertisers

"A large part of our contract bond business is submitted to us by wire, and I am a constant reader of the Official Proposals in order to find out the size and nature of the work that is referred to in the bond application. Very frequently I am unable to get any clear idea of what the advertisers are asking bids on, and of course the prospective bidder or contractor is also at a loss to know what kind of a job is being advertised.

"Traveling expenses are heavy at the present time, and contractors pay out considerable sums during the course of a year in investigating prospective contracts. This of course is a large charge that the owners eventually pay, and anything that will reduce the general overhead of contract work will eventually be to the advantage of the owner.

"One way to reduce this overhead is to word the advertisement so that the contractor sitting in his office will know whether or not he should investigate and prepare a bid on the proposed work."

OFFICIAL PROPOSALS

Bids: May 23.

Disposal Plant

Tonawanda, N. Y.

Notice is hereby given that sealed proposals will be received and considered by the Town Board of the Town of Tonawanda, New York, May 23, 1923, at 8 o'clock P.M. at the Village Hall, Kenmore, N. Y. for furnishing all necessary labor and material, for the construction of a disposal plant in accordance with the amended proposed contract, maps, plans, specifications and estimates of the Town Engineer as approved by the said Town Board of the Town of Tonawanda, N. Y., for Sewer District No. 2 of said Township.

The proposed contract, maps, plans and specifications and estimates may be seen and examined, and further information may be obtained at the office of George C. Diehl, Town Engineer, No. 575 Ellicott Square, Buffalo, N. Y., or at the office of the undersigned, the Town Clerk of the Town of Tonawanda, N. Y., at No. 2852 Delaware Avenue, Kenmore, N. Y.

All bids must be accompanied by a certified check payable to the order of J. Fred Moore, Supervisor of the Town of Tonawanda, N. Y., for the sum of five per centum of the Engineer's estimated expense of the improvement, or a bond with sufficient sureties to be approved by the said J. Fred Moore, Supervisor of said Town, conditioned in a penalty equal to five per centum of the estimated expense of the improvement, that if the work is awarded to the bidder, he will enter into the contract for the same, and that he will execute further security as may be required for the faithful performance of the contract, in the event of the proposal being accepted for the execution of the work.

The Town Board reserves the right to reject any or all bids should it deem it to be in the best interest of the Town so to do. Bids must be in conformity with the specifications or they will be rejected as informal, and cannot be considered.

Dated Kenmore, N. Y., May 7th, 1923.

ELMER W. JOHNSON,
Town Clerk, Town of Tonawanda,
2852 Delaware Avenue,
Kenmore, N. Y.

Bids: June 4.

Water Supply Systems

Talladega, Alabama.

Sealed proposals for furnishing material and constructing a Water Supply System for the City of Talladega, Alabama, will be received by the Commissioners at the City Hall, until Two (2) p.m., Monday, June 4, 1923.

The Water Supply System will consist of a 10 ft. reinforced concrete intake dam, 16" c.i. intake, pumping station, 2,000,000 gallon service reservoir, coagulating basin, three 500,000 gallon concrete filters, 200,000 gallon clear water reservoir, and approximately 19,000 feet of 16 inch c.i. supply main.

Each proposal must be accompanied by a certified check, payable to the City of Talladega, Alabama, to an amount equal to five (5) per cent of the bid, as a guarantee that the contract will be entered into if awarded. A bond of one hundred per cent (100%) of the contract price will be required. Payments will be made on monthly estimates.

Plans and specifications are on file in the office of the City Clerk, at Talladega, Alabama, and with Paul H. Norcross, Consulting Engineer, 1404 Candler Building, Atlanta, Georgia.

Bidders may obtain copies from the Engineer, by enclosing certified check for twenty-five ($25.00) dollars, payable to the City of Talladega. If blue prints are desired they may be had at the cost of printing. If the plans, specifications, and blue prints are returned within thirty days after opening bids, the check for twenty-five dollars will be returned.

H. H. THORNTON,
City Commissioner.
J. F. HANKS,
Light & Water Commissioner.
D. M. REMSON,
City Clerk.

PAUL H. NORCROSS,
Consulting Engineer,
1404 Candler Building,
Atlanta, Georgia.

You think you are covered but—are you?

¶There is a time-honored philosophy that does not fit modern conditions. Resting complacently on the thought that "Where ignorance is bliss 'tis folly to be wise", would cost real money and lots of it if applied to a contractor's insurance where the policy reads that no work covered by it shall be sublet. Many such policies exist and practically every contractor sublets a considerable portion of his work. ¶Swart will examine your policies without charge and change the philosophy to read "Where ignorance is bliss 'tis safer to be wise".

HARMON V. SWART
Insurance Advisor *Rate Specialist*
92 WILLIAM ST., NEW YORK CITY

OFFICIAL PROPOSALS

Bids: May 15.

Water Works Construction

Harrisburg, Pa.

Sealed proposals for building extension and improvements to Water Works of Harrisburg, Pa., will be received at the Council Chamber, 406 Dauphin Bldg., Harrisburg, Pa., until 1.00 p.m., May 15, at which time they will be publicly opened and read. The work will be done under two contracts, as follows:

CONTRACT E—Construction of a 30,000,000 gallon reservoir with slab roof, having 86,000 yards of excavation and 13,600 yards of concrete. This reservoir has a 125,000 square foot flat slab roof. Bids may be offered on the Contractor's own design of roof which must however, comply with the specifications in all particulars.

CONTRACTS F—Laying 4,000 feet of new 36 inch cast iron pipe, re-laying 2,000 feet of 30 inch cast iron pipe, miscellaneous smaller pipe, valves, gate house, etc.

Each contract will be awarded separately but both may be awarded to the same bidder. Proposals must be accompanied by a certified check equal to 10% of the total bid for each contract. A bond will be required for the amount of 25% of each contract.

The right is reserved to reject any or all bids.

Information for bidders, Form of Contract, Specifications, and Plans, will be available for inspection at the office of Dr. Samuel F. Hassler, Supt. Public Safety, Room 406 Dauphin Bldg., Harrisburg, Pa., or at the office of James H. Fuertes, consulting engineer, 140 Nassau Street, New York, and may be had upon deposit of $20.00, which will be returned to the prospective bidder upon the return of the drawings and specifications accompanied by a bona fide bid.

S. F. HASSLER,
Supt. Public Safety,
Harrisburg, Pa.

Bids: May 21.

Paving Construction

St. Paul, Minn.

Sealed proposals will be received by the County Board, Ramsey County, at the office of the County Auditor, until 10 a.m., May 21, 1923, for the construction of pavements, grading, and the necessary accessories for project number (23-02) (23-55), approximately sixty thousand (60,000) square yards of paving. Bids must be accompanied by certified check or bidder's bond of 10% of the total bid price. Plans and specifications can be procured at the office of the County Engineer of Ramsey County, St. Paul, Minnesota. This project is the first one to be let in connection with the six million ($6,000,000) dollar road program.

PAUL N. COATES, County Engineer.

U. S. GOVERNMENT

U. S. ENGINEER OFFICE, 616 Army Building, New York City. Sealed proposals will be received here until 12 o'clock noon, eastern standard time, June 11, 1923, and then opened, for the construction of a timber dike about 3,400 feet in length north of Shooters Island, N. Y. and N. J. Further information on application.

COMMISSIONERS, D. C., Washington, May 4, 1923. Sealed proposals for constructing about 4,535 linear feet of sewer will be received at Room 509 District Building until 2 o'clock P.M., May 29, 1923. For detailed information, apply at Room 427 District Building.

U. S. ENGR. OFFICE, WILMINGTON, DEL. Sealed proposals will be received here until 11 A.M., standard time, June 5, 1923, and then opened, for dredging Wilmington Harbor, Del. Further information on application.

SEALED PROPOSALS will be received at the U. S. Engineer Office, 329 Custom House, New Orleans, La., until 9 a.m., June 5, 1923, and then opened for Dredging in the Calcasieu-Sabine Section of the Intracoastal Waterway. Further information on application.

U. S. GOVERNMENT

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., May 7, 1923.—SEALED PROPOSALS will be opened in this office at 3 p.m., June 4, 1923, for the construction, including Mechanical equipment, of the United States Post Office at Leesburg, Va. Drawings and specifications may be obtained from the Custodian of the site at Leesburg, Va., or at this office in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

Thank You, Mr. Ferguson

"We just let contracts for approximately 25 miles of road construction yesterday and I attribute to a great extent the large number of bidders we had to the Publicity we received through the *News-Record*."

Very truly yours,
Angus Ferguson, Ch. Engr.,
Traylor County Road Department
Grafton, W. Va.

OFFICE MISSISSIPPI RIVER COMMISSION, THIRD DISTRICT, P. O. Box 404, Vicksburg, Miss. Sealed proposals will be received here until 11 a.m., May 22, 1923, and then opened, for furnishing one steel motor-launch hull. Further information on application.

U. S. ENGINEER OFFICE, P. O. Box 72, Louisville, Ky. Sealed proposals will be received here until 2 p.m., central time, May 25, 1923, and then opened, for one steel maneuver boat hull and two steel needle flats. Further information on application.

UNITED STATES ENGINEER OFFICE, 537 South Dearborn Street, Chicago, Illinois. Sealed proposals will be received here until 10 a.m., May 24, 1923, and then opened, for dredging and pier removal in Calumet Harbor and River, Ill. and Ind. Further information on application.

U. S. ENGR. OFFICE, WILMINGTON, DEL. Sealed proposals will be received here until 11 a.m., May 14, 1923, and then opened, for dredging Tuckerton Creek, N. J. Further information on application.

U. S. ENGR. OFFICE, WILMINGTON, DEL. Sealed proposals will be received here until 11 a.m., standard time, May 21, 1923, and then opened, for constructing and delivering two wooden dump scows. Further information on application.

U. S. GOVERNMENT

SEALED PROPOSALS will be received and opened by the Director U. S. Veterans Bureau in the office of the Quartermaster General, 2306 Munitions Building, Washington, D. C., at 11 a.m., May 31, 1923, for additional construction work to U. S. Veterans Hospital at Rutland, Mass. The work will include the construction of ten new buildings of reinforced concrete and tile with necessary grading and roads, central heating plant with distribution main, and necessary extensions to water, sewer and light lines. Plans and specifications may be obtained after May 7, 1923, from the Quartermaster General, Room 2306 Munitions Building, Washington, D. C., upon deposit of $100. One set of plans and specifications will be on exhibition at each of following stations: Constructing Quartermasters at 39 Whitehall Street, New York City, and Army Supply Base, Boston 9, Mass., and Quartermaster Supply Officer, 1819 West Pershing Road, Chicago, Ill.

SEALED PROPOSALS will be received at the U. S. Engineer Office, 329 Custom House, New Orleans, La., until 9 a.m., June 1, 1923, and then opened for jetty construction at South Pass, Mississippi River. Further information on application.

U. S. ENGINEER OFFICE, 815 Witherspoon Bldg., Philadelphia, Pa. Bids are wanted until June 8, 1923, for dredging in Delaware River, in Philadelphia Harbor. Information on application.

U. S. ENGINEER OFFICE, Providence, R. I. Sealed proposals will be received here until 12 o'clock, noon, Eastern Standard Time, May 31, 1923, and then opened, for dredging in Duck Island Harbor, Conn. Further information on application.

UNITED STATES ENGINEER OFFICE, Wilmington, N. C.—Sealed proposals will be received here until 12 m., June 4, 1923, and then opened, for constructing one 60-foot by 22-foot by 4-foot steel barge, two 80-foot by 26-foot by 5-foot steel barges and 25 steel catamarans. Further information on application.

U. S. ENGINEER OFFICE, Milwaukee, Wis.—Sealed proposals will be received here until 3 p.m., May 31, 1923, and then opened, for dredging at Green Bay, Wis. Further information on application.

DEPARTMENT OF THE INTERIOR RECLAMATION SERVICE, Washington, D. C., May 7, 1923. Sealed proposals will be received at the office of the Reclamation Service, Denver, Colorado, until 2 o'clock p.m., June 6, 1923, and will at that hour be opened, for furnishing metal spillway gates for the Black Canyon Dam, Boise Project, Idaho, and the Tieton Dam, Yakima Project, Washington. The material to be furnished will require about 1,200,000 pounds of metal work. For particulars, address the Reclamation Service, Washington, D. C., or Denver, Colorado.

F. E. WEYMOUTH,
Acting Director.

WANTED—CORRESPONDENTS

for Engineering News-Record

If you want to earn some extra money and are a resident in one of the cities named below;

If you can spare an hour or two a day *during business hours* for calling upon architects, contractors, engineers and city departments;

Then write me concerning your qualifications and present connection, if you live in

ARIZONA
Bisbee
Globe
Tuscon

ARKANSAS
Little Rock

CALIFORNIA
Sacramento

INDIANA
Evansville

IOWA
Dubuque

KANSAS
Leavenworth

MAINE
Augusta
Portland

MASSACHUSETTS
Fall River
Worcester

NEBRASKA
Omaha

NEVADA
Carson City

NEW HAMPSHIRE
Concord

NEW YORK
Rochester

OHIO
Youngstown

OREGON
Medford
Salem

PENNSYLVANIA
Scranton

RHODE ISLAND
Providence

SOUTH CAROLINA
Except Columbia

WASHINGTON
Spokane
Tacoma
Walla Walla

ALBERTA
Calgary

MANITOBA
Winnipeg

ALDEN W. WELCH, Engineering News-Record, Tenth Ave. at 36th St., New York.

OFFICIAL PROPOSALS

Bids: May 31.

Sanitary Sewer System

New York Mills, N. Y.

The village of New York Mills, Oneida County, N. Y., will receive proposals for furnishing material for and the construction of a sanitary sewer system for said village, under the following conditions:

Bids may be submitted either upon the sewers alone, the disposal plant alone or for both.

Plans and specifications can be secured, either by personal application or by mail from W. G. Stone & Son, engineers, 24-31 Mann Building, Utica, N. Y., or from W. S. Thomas, Village Clerk, New York Mills, N. Y. Specifications will be furnished, free of charge. Plans can be secured upon the deposit of $10.00, which will be reimbursed upon the return of same, uninjured.

Proposals must be submitted upon the printed bidding sheet, be enclosed in plain envelopes, bearing no business card or other means of identification, be securely sealed, endorsed either "Proposal for Sewers," "Proposal for Disposal Plant" or "Proposal for Sewers and Disposal Plant" as the case may be, addressed to W. S. Thomas, Village Clerk, New York Mills, N. Y., and must be in the custody of said Clerk, on or before 8 o'clock p.m. of May 31, 1923 (daylight saving time).

On the above date and at the time specified, such proposals as have been submitted in the manner and form above set forth, will be publicly opened and read at the office of the Board of Trustees, of and in, said village. The Board reserves the right to reject any or all bids received and will make its award of contract, if made, at such time as may suit its convenience and not at the time of opening the bids.

Each bid must be accompanied with cash or certified check, made payable to "The Treasurer of the village of New York Mills" in the sum of One Thousand Dollars ($1,000.00), which sum shall be retained as the liquidated damages of said village if the contractor to whom the contract is awarded, fails to enter into a valid contract with said village to furnish material, labor and services for the construction of said sewer system, under and pursuant to the plans and specifications therefor, within 15 days from the award of said contract. The above clause refers to those bidding upon both sewers and disposal plant. Bidders upon disposal plant alone will be required to deposit the sum of Five Hundred Dollars ($500.00). Bidders upon the sewers alone will be required to deposit the sum of Five Hundred Dollars ($500.00), both subject to the same conditions as to liquidated damages as above stated but in the sum of Five Hundred Dollars ($500.00). The Board reserves the right to separate joint bids and award the sewer contract to one person and the disposal plant contract to another.

Coincidentally with the signing of the contract the contractor will be required to furnish a bond, with such sureties and in such manner and form and so conditioned as may be demanded by the village, in the sum of fifty per cent (50%) of the sum total of his bid.

ROBERT J. HEALEY, President.
W. S. WINCHESTER, Trustee.
W. S. BAKER, Trustee.
HARDCASTLE BARNES, Trustee.
New York Mills, N. Y.
W. S. Thomas, Village Clerk,
New York Mills, N. Y.
W. S. Mackie, Village Attorney,
City Bank Building, Utica, N. Y.
W. G. Stone & Son, Engineers,
24-31 Mann Building, Utica, N. Y.

Bids: May 28.

Heating System

Rahway, N. J.

Proposals for the furnishing of a grate to be installed in the heating system of the Rahway High School, suitable for the combustion of No. 3 Buckwheat coal, will be received by the Board of Education of Rahway, N. J., at the office of the Business Manager, High School Building, on or before May 28, 1923, at 8 p.m. All bids must be accompanied either by a description or cuts of the grate on which the bid is made.

The Board reserves the right to reject any or all bids, and to select the grate best adapted for use.

By order of the Board of Education.
G. M. HOWARD,
Business Manager.

OFFICIAL PROPOSALS

Bids: May 22.

State Highway Work

Hartford, Conn.

Sealed proposals will be received by the State Highway Commissioner, 12 Washington Street, Hartford, Conn., until 1:00 p.m., Standard Time, Tuesday, May 22, 1923, for the following sections of State work, in accordance with plans and specifications on file in the office of the State Highway Commissioner and at the following places:

TOWN OF BERLIN: About 800 lineal feet of plain cement concrete pavement on the cross road from the Berlin Turnpike to the Beach Swamp Road. NOTE: Cement for the above work will be furnished by the State. Specifications at the Town Clerk's office, Berlin, and at the office of R. W. Stevens, Division Engineer, 12 Washington St., Hartford, Conn.

TOWN OF WEST HARTFORD: About 2,000 linear feet of plain cement concrete pavement on Quaker Lane. NOTE: Cement for the above work will be furnished by the State. Specifications at the Town Manager's office and at the office of R. W. Stevens, Division Engineer, 12 Washington Street, Hartford, Conn.

TOWN OF GROTON: About 4,700 linear feet of 7 inch Native Stone Macadam on the Center Groton Road. Plans and specifications at the Town Clerk's office and at the office of A. W. Bushell, Division Engineer, Thayer Bldg., Norwich, Conn.

TOWN OF GROTON: About 2,600 linear feet of plain cement concrete pavement on Baptist Hill, Village of Mystic. NOTE: Cement for this work will be furnished by the State. Plans and specifications at the office of A. W. Bushell, Division Engineer, Thayer Building, Norwich, Conn.

TOWN OF WATERFORD: About 2,400 linear feet of 3 inch bituminous macadam over 5 inch base on Willetts Avenue. Plans and specifications at the First Selectman's office and at the office of A. W. Bushell, Division Engineer, Thayer Building, Norwich, Conn.

TOWN OF DANBURY: About 7,000 linear feet of 7 inch native stone macadam on the Padanaram Road. Plans and specifications at the office of G. E. Smith, Divison Engineer, New Milford, Conn.

TOWN OF WINCHESTER: About 1,766 linear feet of plain cement concrete pavement on South Main Street, Winsted. NOTE: Cement for the above work will be furnished by the State. Plans and specifications at the office of D. C. Loewe, Division Engineer, Winsted, Conn.

All bids must be accompanied by a surety company bond or a certified check not less than one-third of the cost of the work. The State Highway Commissioner reserves the right to reject any and all bids.

Dated at Hartford, Conn., May 8, 1923.
C. J. BENNETT,
State Highway Commissioner.
12 Washington St., Hartford, Conn.

Bids: May 29.

Water System Improvements

Belmar, N. J.

Sealed bids will be received by the Mayor and Council of the Borough of Belmar up to 8:45 p.m., Tuesday evening, May 29th, for the following improvements to the Water System, separate bids to be submitted on the four items given below.

ITEM NO. 1.

The enlargement of an existing six inch well for its upper 150 feet or more to a diameter of 17 inches, including the casing and the sealing of the larger section to the lower section.

ITEM NO. 2.

The boring or driving of a new well having its upper 150 feet of 17 or 18 inches in diameter with the balance of the well 10 inches in diameter. The total length of the well to extend to the waterbearing stratum at approximately 650 feet deep. This bid will include the necessary casing and screen.

ITEM NO. 3.

The furnishing and delivery in place, connected up, ready to run of a multi stage vertical shaft centrifugal pump of 400 gallons capacity, to be located in the well referred to in Item No. 1.

ITEM NO. 4.

The furnishing and delivery in place, connected up, ready to run, of a multi stage vertical shaft centrifugal pump to be located in the well referred to in Item No. 2.

Plans and specifications may be obtained from the Borough Clerk. The Council reserves the right to reject any and all bids.

FRED V. THOMPSON,
Borough Clerk.

OFFICIAL PROPOSALS

Bids: June 1.

School Building

Haworth, N. J.

Sealed proposals will be received by the Board of Education of the Borough of Haworth, County of Bergen, N. J., at 8 p.m. (daylight saving time), June 1, 1923, in the Borough Hall, Terrace Street, Haworth, N. J., for the complete construction of a new public school building, at which time the bids will be opened publicly. Bids shall be based on the plans and specifications on file with the architect.

Bids for the general construction, for the heating and ventilating, for the plumbing, and the electric work will be taken separately.

Bids shall be accompanied by the deposit of certified checks payable to the Board of Education of the Borough of Haworth, in the County of Bergen, as follows:

With general construction bid	$1,000
With heating and ventilating bid	500
With plumbing bid	300
With electric bid	100

If the bidder or bidders who receive the award shall not execute the contract and furnish the required bond for the full amount of the contract within ten days after the acceptance of such bid or bids the said sum so deposited shall be forfeited to the Board of Education and shall be liquidated damages for such default.

Contracts will be awarded to the lowest responsible bidders. The Board of Education reserves the right to reject any or all bids or to waive defects or informalities in any bid if it be deemed in the interest of the Board of Education so to do.

Copies of the plans and specifications may be obtained by prospective bidders from A. C. Pauli at his residence, on Myrtle Street, Haworth, N. J., or at the office of F. Markoe Robertson and A. C. Pauli, architects, 247 Park Avenue, 14th floor, New York City, on deposit of Ten Dollars. The deposit of Ten Dollars will be forfeited unless plans and specifications are returned in good condition to the architect ten days after bids are opened. Plans and specifications may be inspected at the above addresses without deposit.

For the Board of Education of the Borough of Haworth, Westervelt Mount, District Clerk.

Dated May 10, 1923.

Bids: June 4.

Water Supply Systems

Talladega, Alabama.

Sealed proposals for furnishing material and constructing a Water Supply System for the City of Talladega, Alabama, will be received by the Commissioners at the City Hall, until Two (2) p.m., Monday, June 4, 1923.

The Water Supply System will consist of a 10 ft. reinforced concrete intake dam, 16" c.i. intake, pumping station, 2,000,000 gallon service reservoir, coagulating basin, three 500,000 gallon concrete filters, 200,000 gallon clear water reservoir, and approximately 19,000 feet of 16 inch c.i. supply main.

Each proposal must be accompanied by a certified check, payable to the City of Talladega, Alabama, to an amount equal to five (5) per cent of the bid, as a guarantee that the contract will be entered into if awarded. A bond of one hundred per cent (100%) of the contract price will be required. Payments will be made on monthly estimates.

Plans and specifications are on file in the office of the City Clerk, at Talladega, Alabama, and with Paul H. Norcross, Consulting Engineer, 1404 Candler Building, Atlanta, Georgia.

Bidders may obtain copies from the Engineer, by enclosing certified check for twenty-five ($25.00) dollars, payable to the City of Talladega. If blue prints are desired they may be had at the cost of printing. If the plans, specifications, and blue prints are returned within thirty days after opening bids, the check for twenty-five dollars will be returned.

H. H. THORNTON,
City Commissioner.
J. F. HANKS,
Light & Water Commissioner.
D. M. REMSON,
City Clerk.

PAUL H. NORCROSS,
Consulting Engineer,
1404 Candler Building,
Atlanta, Georgia.

OFFICIAL PROPOSALS

Bids: May 22.

Highway Construction

Baltimore, Md.

Sealed proposals for building nine sections of State Highway, as follows:

Washington Co. Contract W-26. One section of State Highway from Hagerstown to Cearfoss, a distance of 3.4 miles. (Macadam Reconstr.).

Montgomery Co. Contract 45-A. One section of State Highway along the Old Georgetown Road from Bethesda one mile north. (Concrete Shoulders).

Montgomery Co. Contract M-39. One section of State Highway through Laytonsville, for a distance of 1 mile. (Concrete).

Baltimore Co. Contract B-54. One section of State Highway along Eastern Ave. from Chase 1.5 miles toward the Baltimore City Line. (Concrete).

Baltimore City. Contract BC-43. One section of State Highway along Hillen St. between Harford Ave. and 33rd St. a distance of 0.4 mile. (Sheet-Asphalt).

Charles Co. Contract Ch-25. One section of State Highway between Pomonkey and the Prince George County line, a distance of 3.4 miles. (Gravel).

St. Mary's Co. Contract SM-23. One section of State Highway between Valley Lee and Piney Point for a distance of 4.4 miles. (Gravel).

Dorchester Co. Contract D-33. One section of State Highway between Gum Swamp and Golden Hill for a distance of 2.5 miles. (Concrete).

Worcester Co. Contract Wo.-28. One section of State Highway between Snow Hill and Public Landing for a distance of 1 mile. ((Concrete).

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on the 22nd day of May, 1923, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of $1.00, as hereafter no changes will be permitted.

No bids will be received unless accompanied by a certified check for the sum of Five Hundred ($500) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 3rd day of May, 1923.

L. H. STEUART, Secretary,
JOHN N. MACKALL, Chairman.

Bids: May 22.

Street Paving

Kendallville, Ind.

TO WHOM IT MAY CONCERN:

Notice is hereby given by the Common Council of the City of Kendallville, Indiana, that sealed proposals will be received by the City Clerk of said City until 5:00 p.m., Tuesday, May 22nd, 1923, for Street Paving.

The work will consist of approximately 18,600 square yards of pavement and 11,800 lineal feet of curbing, bids to be received on the following items:

One and two course reinforced concrete with combined or separate curb, asphalt block with combined curb and gutter, three inch vertical fiber brick with combined curb and gutter (the brick having an asphaltic filler), and creosoted wood block with combined curb and gutter.

Plans and specifications can be obtained from the City Engineer or City Clerk by depositing the sum of $5.00, which sum will be returned upon the return of the plans and specifications in good condition.

Bids must be accompanied by a certified check for 5 per cent of the amount of the bid. Bids must be upon blanks provided by the City of Kendallville. Evidence of suitable equipment and ability must accompany each bid.

The Council reserves the right to reject any and all bids.

HARRY H. MORTORFF,
City Engineer.

CARL F. ORSTADT,
City Clerk.
May 2, 1923.

OFFICIAL PROPOSALS

Bids: May 21.

Reinforced Concrete Pavement

Red Bank, N. J.

Notice is hereby given that sealed bids will be received by the Mayor and Council of the Borough of Red Bank for the reconstruction of Bergen Place, Beach Street, Irving Place and Wharf Avenue, with a reinforced concrete pavement, and opened and read in public at the rooms of said Council, Borough Hall, Red Bank, New Jersey, on Monday, May 21, 1923, at 8.00 p.m., Daylight Saving Time.

Drawings and specifications for the proposed work, prepared by George D. Cooper, Civil Engineer, have been filed in the office of said Engineer at 60 Broad Street, Red Bank, New Jersey, and may be inspected by prospective bidders during business hours. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

Plans and specifications will be furnished to prospective bidders upon payment of ten dollars ($10.00), which amount will be refunded upon return of plans and specifications before the time specified for the opening of bids.

Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and name of proposed work on the outside, addressed to the Mayor and Council of the Borough of Red Bank, New Jersey, and must be accompanied by a certified check for a sum not less than ten (10) per cent of the amount bid on the work, payable to the order of the Borough of Red Bank and a surety company certificate stating that said surety company will provide the bidder with the required bond, and must be delivered at the place and before the hour above named.

The Mayor and Council of the Borough of Red Bank reserves the right to reject any or all bids if deemed to the best interests of the Borough so to do.

By order of the Mayor and Council of the Borough of Red Bank, New Jersey.

A. L. MILLER, Mayor.

Attest:
A. E. OLSEN, Clerk.
Red Bank, N. J., May 7, 1923.

Bids: May 28.

Bridge

Norwich, N. Y.

Construction of a bridge over Canasawacta Creek at South Broad Street, Norwich, N. Y.

Sealed bids addressed to Stuart C. Nelson, Jr., clerk of the joint bodies, town board of the town of Norwich and the Common Council of the City of Norwich, N. Y., City Hall, Norwich, N. Y., and endorsed "Proposal for South Broad Street Bridge" will be received by the joint boards on Monday, May 28th, 1923, at 7:30 p.m., in the council chambers in the City Hall at Norwich, N. Y., and at that time and place will be publicly opened and read for the construction of a bridge over the Canasawacta Creek on South Broad Street, Norwich, N. Y.

Bids will embrace the construction of a concrete steel girder bridge, also a reinforced concrete bridge.

Contractors will be permitted to submit plans and specifications for a reinforced concrete structure which will have the same carrying capacity, water way, clearance and depth of roadway as the concrete steel girder bridge. Such plans and specifications must have the approval of the department of highways of the state of New York and will be considered by the joint boards in making awards.

The right is expressly reserved to reject any and all bids.

Plans and specifications of the concrete steel girder bridge may be obtained from the City Engineer or the City Chamberlain at the City Hall, Norwich, N. Y. Such plans and specifications will be sent for two dollars.

STUART C. NELSON, JR.,
Clerk of the Joint Boards of the
Town and City of Norwich, N. Y.
E. F. MUSSON, City Engineer.

Dated at Norwich, N. Y.
May 9th, 1923.

OFFICIAL PROPOSALS

Bids: June 4.

Road Work

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey for the construction of the following:

Route No. 4, Section No. 19, Sea Girt-Belmar, in the County of Monmouth. Estimated 10,793 cubic yards of excavation, and 38,613 square yards of one line eight inch (8 in.) reinforced concrete pavement.

Route No. 5, Section No. 2A, Hackettstown-Drakestown, in the Counties of Morris and Warren. Estimated 5,744 cubic yards of earth excavation, and 44,673 square yards of eight inch (8 in.) two line reinforced concrete pavement.

Route No. 9, Section No. 10, Bound Brook to Lincoln Avenue, in the County of Middlesex. Estimated 8,471 cubic yards of excavation, and 28,690 square yards of eight inch (8 in.) two line reinforced concrete pavement.

Route No. 16, Section No. 6, Passaic River to Morris Township Line, in the County of Morris. Estimated 14,727 cubic yards of earth excavation, 39,180 square yards of eight inch (8 in.) two line reinforced concrete pavement.

Bids will be received at the Assembly Chamber, State House, Trenton, New Jersey, on Monday, June 4th, 1923, at 11:00 a.m., Standard Time, and opened and read immediately thereafter.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of the State Highway Department, Trenton, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on deposit of Ten Dollars, ($10.00) upon application to the State Highway Department, 9th floor, Broad St. Bank Building, Trenton, New Jersey. Bids must be made on the standard proposal forms in the manner designated therein, and as required by the 1922 specifications, same to be enclosed in sealed special addressed envelopes bearing the name and address of bidder and the name and section of the route on the outside, and must be accompanied by a certified check drawn to the order of the Treasurer of the State of New Jersey for not less than ten per cent (10%) of the amount of the bid, provided that the said certified check shall not be less than $500.00 nor more than $20,000.00, and be delivered at the above place on or before the hour named. Copies of the standard proposal form and special addressed envelope will be furnished on application. Bids not enclosed in special envelope will be considered informal and will not be opened.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provisions of the said specifications, conditioned for the faithful performance of the provisions of the contract and specifications. Each bidder must also accompany his bid with a Statement of Equipment properly filled out.

By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

Bids: May 31.

Sewerage System Extensions

Easton, Md.

Sealed Proposals for the construction of certain extensions to the Sewerage System of Easton, Md., will be received and opened by the Mayor of Easton at the Council Chamber in Easton, Maryland, at 12.30 o'clock p.m., on the thirty-first day of May, 1923.

The work to be done comprises the complete construction of about one mile of 8" to 12" pipe sewer, 1,000 feet of House Connections, small pumping station and 4" force main.

Contract, Proposal Forms and Plans may be seen at the office of the Town Clerk or of the Town Engineer, Easton, Md. Plans will be furnished upon payment of $5.00 for each set.

Each Proposal for the work must be accompanied by a certified check drawn to the order of the Mayor & Council of Easton in the sum of $500.00.

JOHN C. NORTH,
Town Clerk.

E. G. KASTENHUBER, JR.,
Town Engineer.

OFFICIAL PROPOSALS

Bids: May 22.

Street Paving

Audubon, N. J.

Notice is hereby given that sealed bids will be received by the Commissioners of the Borough of Audubon, N. J., for the construction of the following concrete streets:

Elm Ave. from Walnut St. to Washington Terrace, approximately 1,707 sq.yds. of concrete and 138 cu.yds. of excavation.

Creston Ave. from Audubon Ave. to Nicholson Road, approximately 2,770 sq.yds. of concrete and 53 cu.yds. of excavation.

Vassar Road from E. Atlantic Ave. to Amherst Road, approximately 4,300 sq.yds. of concrete and 275 cu.yds. of excavation.

Spruce St. from W. Atlantic Ave. to Wyoming Ave., approximately 5,681 sq.yds. of concrete and 476 cu.yds. of excavation.

Chestnut St. from White Horse Pike to Cedarcroft Ave., approximately 10,498 sq. yds. of concrete and 725 cu.yds. of excavation.

Oswego Ave. from Nicholson Road to Audubon Ave., approximately 2,903 sq.yds. of concrete and 146 cu.yds. of excavation.

Mansion Ave. from Virginia Ave. to Edgewood Ave., approximately 7,366 sq.yds. of concrete and 659 cu.yds. of excavation.

Central Ave. from Audubon Ave. to Nicholson Road, approximately 1,964 sq.yds. of concrete and 193 cu.yds. of excavation.

Merchant St. from Cedarcroft Ave. to Payson Ave., approximately 1,149 sq.yds. of concrete and 139 cu.yds. of excavation.

Payson Ave. from Merchant St. to Nicholson Road, approximately 2,427 sq.yds. of concrete and 181 cu.yds. of excavation.

Walnut St. from W. Atlantic Ave. to Cedarcroft Ave., approximately 8,532 sq. yds. of concrete and 1,183 cu.yds. of excavation.

Haviland Ave. from Cuthbert Road to Pine St., approximately 7,798 sq.yds. of concrete and 1,023 cu.yds. of excavation and 5,271 lineal feet of gutter.

Barrett Ave. from P. R.R. cut-off to Pine St., approximately 3,524 sq.yds. of concrete and 459 cu.yds. of excavation and 2,440 lineal feet of gutter.

Graisberry Ave. from E. Atlantic Ave. to Hopkins Ave., approximately 7,353 sq.yds. of concrete and 1,006 cu.yds. of excavation and 3,908 lineal feet of gutter.

Hood Ave. from Cuthbert Road to P. R.R. cut-off, approximately 4,741 sq.yds. of concrete and 593 cu.yds. of excavation and 2,800 lineal feet of curb and gutter.

Logan Ave. from Cuthbert Road to P. R.R. cut-off, approximately 2,540 sq.yds. of concrete and 163 cu.yds. of excavation and 1,692 lineal feet of gutter.

Beloit Ave. from Audubon Ave. to Merchant St., approximately 797 sq.yds. of concrete and 63 cu.yds. of excavation and 276 lineal feet of curb and gutter.

Audubon Ave. from Edgewood Ave. to Oswego Ave., approximately 4,319 sq.yds. of concrete and 351 cu.yds. of excavation and 879 lineal feet of curb and gutter.

Davis Ave. from Cuthbert Road to Pine St., approximately 7,293 sq.yds. of concrete and 1,437 cu.yds. of excavation and 810 lineal feet of curb and gutter.

Taylor Ave. from E. Atlantic Ave. to White Horse Pike, approximately 1,088 sq. yds. of concrete and 45 cu.yds. of concrete and 753 lineal feet of gutter.

Third Ave. from Oak St. to Kings Highway, approximately 1,645 sq.yds. of concrete and 285 cu.yds. of excavation.

Carlyle Road from Amherst Road to Hopkins Ave., approximately 4,120 sq.yds. of concrete and 64 cu.yds. of excavation.

Barrett Ave. from Cuthbert Road to Merchant St., approximately 3,892 sq.yds. of concrete and 747 cu.yds. of excavation and 2,600 lineal feet of curb and gutter.

East Atlantic Ave. from Nicholson Road to Chestnut St., approximately 4,989 sq.yds. of concrete and 122 cu.yds. of excavation.

Plans and specifications for the proposed work are on file with H. K. Lawrence, Borough Clerk, Audubon, N. J., and with J. J. Albertson, Borough Engineer, Court House, Camden, N. J., and may be inspected by prospective bidders, or will be furnished on deposit of ten dollars ($10.00) upon application to Borough Clerk or Borough Engineer.

Bids must be in accordance with specifications and the same enclosed in a sealed envelope bearing the name and address of the bidder, and must be accompanied by a certified check in the amount and under the terms and conditions mentioned in said specifications. Bidders must satisfy the Borough Engineer and Commissioners as to the adequacy of equipment to be used and all work must be completed by November 15th, 1923.

OFFICIAL PROPOSALS

Bids will be received at the Commissioners' Chambers, School House No. 2, Wyoming and Mansion Aves., Audubon, N. J., on Tuesday, May 22, 1923, at 8.30 p.m. (daylight saving time) and opened and read immediately thereafter. No bids will be received previous to the hour designated in this notice and none will be received thereafter. The Commissioners reserve the right to reject any or all bids and to waive any defects or informality in any bid, should it be deemed to the best interests of the Borough so to do.

Address bids to John W. Zanger, Director of Highways.

CONWAY BENNETT,
FRANK A. FOGEL,
JOHN W. ZANGER,
Commissioners.

Dated May 9, 1923.

Bids: June 5.

School Building

Mount Morris, N. Y.

The Board of Education of Mount Morris Union Free School District, Town of Mount Morris, New York, will receive proposals for construction of new school building, for repairing of present school building, including heating and ventilating, for plumbing, and for electrical work, on June 5, 1923, at 7:30 o'clock p.m., or at any time prior thereto, at school house building in said school district.

Bidders may bid for the entire work or any branch of same. Plans and specifications may be obtained from Clarence A. Foote & Son, Architects, Mount Morris, New York, on deposit of the sum of Ten ($10.00) dollars, certified check or draft, same to be forfeited unless plans and specifications are returned within ten days after bids are opened.

Board of Education, Mount Morris Union Free School District, Mount Morris, New York.

WILLIAM H. POVALL,
President.
TIFFANY E. BARNARD,
Clerk.

Bids: May 25.

Hydraulic Electric Power Development

Watertown, N. Y.

Sealed proposal will be received at the office of the City Manager, until twelve o'clock noon, on the twenty-fifth day of May, for doing all work required for the construction of a Hydraulic Electric Plant in the City of Watertown, N. Y.

The work includes 18,000 cubic yards of rock excavation in tail-race, 6,200 cubic yards of concrete in power house substructure, and scroll cases, and the placing of all machinery and appliances in power house. The furnishing and constructing of a power house structure 40 x 115 feet of tapestry brick; the building of a diversion dam containing approximately 3,500 yards of concrete.

Plans and Specifications may be procured of Paul B. Sutton, City Engineer, on a deposit of $25.00, which will be refunded on return of plans.

Proposal must be accompanied by certified check of 5% of amount of bid. Construction bond from a Surety Company of 50% of the contract price will be required.

The City reserves the right to reject any or all bids.

WALTER ACKERMAN,
City Manager.

Dated, May 5th, 1923.

Bids: June 1.

Pier

Charleston, S. C.

Sealed proposals will be received by the Port Utilities Commission of Charleston, S. C., at its office Room 712 Peoples Building until noon June 1, 1923, and then publicly opened for constructing a pier (exclusive of earth fill) on Town Creek, Charleston Harbor.

Specifications and proposal forms will be furnished to prospective bidders on deposit of $5, which will be refunded to depositors who submit proposals or return sets in good condition. Further information on application.

H. M. GALLAGHER,
General Manager.

OFFICIAL PROPOSALS

Bids: May 22.

Sewers

Erie, Pa.

Sealed proposals will be received by City Council of Erie, Penna., in the Council Chambers on Tuesday, May 22nd, 1923, at 10:00 o'clock a.m., Standard Time, for the construction of the following named improvements:

Project No. 1—A main intercepting sewer Mill Creek Tube to Fourth and Cranberry Streets.

Approximate Quantities

65 lineal feet 60" Reinforced Concrete Sewer.
3,150 lineal feet 56" Reinforced Concrete Sewer.
1,170 lineal feet 44" Reinforced Concrete Sewer.
1,995 lineal feet 42" Reinforced Concrete Sewer.
4,510 lineal feet 24" Reinforced Concrete Sewer.
275 lineal feet 18" Double Strength Tile Sewer.
25 lineal feet 12" Single Strength Tile Sewer.
200 lineal feet 8" Single Strength Tile Sewer.

Project No. 2—Canal Sewer Extension, from Front St. Interceptor south One thousand one hundred sixty (1,160) feet, more or less.

Approximate Quantities

1,160 lineal feet 52" Reinforced Concrete Sewer.
410 lineal feet 24" Double Strength Tile Sewer.
340 lineal feet 22" Double Strength Tile Sewer.
215 lineal feet 18" Single Strength Tile Sewer.
48 lineal feet 6" Cast Iron Pipe.
2 Manholes.
30 cubic yards Concrete.

Project No. 3—Canal Sewer, Front Street South 596 feet, more or less.

200 lineal feet 20" Reinforced Concrete Sewer.
396 lineal feet 18" Reinforced Concrete Sewer.
2 Manholes.

Project No. 4—Little Cascade Valley, Front Street south 680 feet, more or less.

Approximate Quantities

665 lineal feet of 36" Reinforced Concrete Pipe.
100 lineal feet of 9" Tile Sewer.
3 Manholes.
5 cubic yards Concrete.

Project No. 5—Western Intercepting Sewer Extension.

Approximate Quantities

2,085 lineal feet 33" Reinforced Concrete Sewer.
3,810 lineal feet 30" Reinforced Concrete Sewer.
690 lineal feet 24" Reinforced Concrete Sewer.

Together with all necessary manholes, overflow weirs, connections to existing sewers and other appurtenances.

Proposals for Projects Nos. 1, 2, 3, 4 and 5 shall be received separately and a separate contract shall be entered into for each Project.

Plans and specifications may be procured from this office upon a deposit of Twenty-five ($25.00) Dollars, said money to be refunded upon the return of same in good condition. Blank proposals can be procured in this office.

A certified check or certificate of deposit payable to the order of the City Treasurer, or cash to the amount of 10% of the proposal, must accompany each proposal, conditioned upon a contract being made and work started within a certified time. The right is reserved to reject any or all bids, also to waive defect in form.

FAULKNER G. LYNCH,
City Engineer.

Bids: June 5.

Viaduct

St. Louis, Mo.

Bids will be received by the Board of Public Service of the City of St. Louis, Missouri, room 208, City Hall, until 12 M. on June 5, 1923, for the construction of a reinforced concrete viaduct on Fourteenth Street from Poplar Street to Chouteau Avenue.

Plans, specifications, form of contract and other information can be had at the office of the President, Board of Public Service, room 304, City Hall, St. Louis, Mo.

OFFICIAL PROPOSALS

Bids: June 4.

Road Work

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey for the construction of the following:

Route No. 4, Section No. 19, Sea Girt-Belmar, in the County of Monmouth. Estimated 10,793 cubic yards of excavation, and 38,613 square yards of one line eight inch (8 in.) reinforced concrete pavement.

Route No. 5, Section No. 2A, Hackettstown-Drakestown, in the Counties of Morris and Warren. Estimated 5,744 cubic yards of earth excavation, and 44,673 square yards of eight inch (8 in.) two line reinforced concrete pavement.

Route No. 9, Section No. 10, Bound Brook to Lincoln Avenue, in the County of Middlesex. Estimated 8,471 cubic yards of excavation, and 28,690 square yards of eight inch (8 in.) two line reinforced concrete pavement.

Route No. 16, Section No. 6, Passaic River to Morris Township Line, in the County of Morris. Estimated 14,727 cubic yards of earth excavation, 39,180 square yards of eight inch (8 in.) two line reinforced concrete pavement.

Bids will be received at the Assembly Chamber, State House, Trenton, New Jersey, on Monday, June 4th, 1923, at 11:00 a.m., Standard Time, and opened and read immediately thereafter.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of the State Highway Department, Trenton, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on deposit of Ten Dollars, ($10.00) upon application to the State Highway Department, 9th floor, Broad St. Bank Building, Trenton, New Jersey. Bids must be made on the standard proposal forms in the manner designated therein, and as required by the 1922 specifications, same to be enclosed in sealed special addressed envelopes bearing the name and address of bidder and the name and section of the route on the outside, and must be accompanied by a certified check drawn to the order of the Treasurer of the State of New Jersey for not less than ten per cent (10%) of the amount of the bid, provided that the said certified check shall not be less than $500.00 nor more than $20,000.00, and be delivered at the above place on or before the hour named. Copies of the standard proposal form and special addressed envelope will be furnished on application. Bids not enclosed in special envelope will be considered informal and will not be opened.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provisions of the said specifications, conditioned for the faithful performance of the provisions of the contract and specifications. Each bidder must also accompany his bid with a Statement of Equipment properly filled out.

By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk

Bids: June 12.

Paving

Pottsville, Pa.

Sealed proposals will be received by the City Council of Pottsville, Pa., up to 7:30 o'clock p.m. Standard Time of Tuesday, June 12, 1923, for paving and improving portions of several streets of the City.

The work proposed consists of laying approximately thirty-five thousand (35,000) square yards of street paving on a concrete base with necessary grading, adjustment of curbs, etc.

Bidders may examine the plans and obtain a printed copy of the Specifications on application to the City Engineer and depositing five dollars ($5.00). The deposit will be returned on the return of the specifications in good condition with a bona fide proposal for the work contemplated.

The City Council reserves the right to reject any or all bids or parts of bids or to accept any bid considered the best for the City interests.

JOHN H. STRAUCH,
City Engineer.

OFFICIAL PROPOSALS

Bids: June 6.

Highway Work

Dover, Del.

Sealed proposals will be received by the State Highway Department, at its office, Dover, Delaware, until 2 o'clock p.m. June 6, 1923, and at that place and time publicly opened, for the construction of State Aid Highways, involving the following approximate quantities:

CONTRACT NO. CK-5. 3.557 MILES
HARTLY-PEARSONS

12,000 Cu. Yds. Excavation
5,500 Cu. Yds. Borrow
160 Tons Broken Stone Base Course
5,525 Cu. Yds. Cement Concrete Pavement
110 Cu. Yds. Class A Concrete
2,000 Lbs. Reinforcement
500 Lin. Ft. 15 in. R. C. Pipe
210 Lin. Ft. 18 in. R. C. Pipe
30 Lin. Ft. 24 in. R. C. Pipe
30 Lin. Ft. 36 in. R. C. Pipe
36 Lin. Ft. 42 in. R. C. Pipe
200 Lin. Ft. Relaid Pipe, 18 in. and under

CONTRACT NO. CK-7. 5.59 MILES
KENTON-SMYRNA

33,000 Cu. Yds. Excavation
1,200 Cu. Yds. Borrow
200 Tons Sub-base
9,725 Cu. Yds. Cement Concerte Pavement
375 Cu. Yds. Class A. Concrete
13,000 Lbs. Reinforcement
1,000 Lin. Ft. 15 in. R. C. Pipe
188 Lin. Ft. 18 in. R. C. Pipe
154 Lin. Ft. 24 in. R. C. Pipe
30 Lin. Ft. 42 in. R. C. Pipe
200 Lin. Ft. Relaid Pipe, 18 in. and under
2,000 Lin. Ft. Wire Cable Guard Rail
3,000 Lin. Ft. Wood Shoulder Curb

CONTRACT NO. CK-12. 0.738 MILES
VIOLA-CANTERBURY

5,500 Cu. Yds. Excavation
1,175 Cu. Yds. Cement Concrete Pavement
Or 1,175 Cu. Yds. Slag Cement Concrete Pavement
30 Cu. Yds. Class A Concrete
500 Lbs. Reinforcement
240 Lin. Ft. 15 in. R. C. Pipe
50 Lin. Ft. 42 in. R. C. Pipe
400 Lin. Ft. Wire Cable Guard Rail
600 Lin. Ft. Wood Shoulder Curb

CONTRACT NO. CK-15. 6.30 MILES
LEIPSIC-SMYRNA

1.5 Acres Clearing
1.5 Acres Grubbing
28,000 Cu. Yds. Excavation
4,000 Cu. Yds. Borrow
200 Tons Broken Stone Base Course
9,760 Cu. Yds. Cement Concrete Pavement
200 Cu. Yds. Class A Concrete
4,200 Lbs. Reinforcement
900 Lin. Ft. 15 in. R. C. Pipe
100 Lin. Ft. 18 in. R. C. Pipe
30 Lin. Ft. 24 in. R. C. Pipe
120 Lin. Ft. 30 in. R. C. Pipe
30 Lin. Ft. 36 in. R. C. Pipe
200 Lin. Ft. Relaid Pipe 18 in. and under
250 Lin. Ft. Wire Cable Guard Rail
500 Lin. Ft. Wood Shoulder Curb

AUTO REPAIR SHOP
AT DOVER

40 ft. x 60 ft. frame, Roof trusses of 40 ft. span, concrete and wood floor.

Alternate bids will be received for standard steel building of approximately the same dimensions with clear floor space and trusses designed to sustain a 3-ton load at center of span.

Performance of contract shall commence within ten (10) days after execution of the contract and be completed during 1923 as specified.

Monthly payments will be made for 90 per cent of the construction completed each month.

Bidders must submit proposals upon forms provided by the Department.

Each proposal must be accompanied by a surety bond, certified check, or money to the amount of at least ten (10) per centum of the total amount of the proposal.

The envelope containing the proposal must be marked "Proposal for the Construction of State Highway Contract No. ....."

The Contract will be awarded or rejected within twenty (20) days from the date of opening proposals.

The right is reserved to reject any or all bids.

Detailed plans may be seen and index plans and specifications may be obtained upon deposit of ten dollars ($10.00), which amount will be refunded upon return of plans and specifications in good condition at the office of

STATE HIGHWAY DEPARTMENT,
Dover, Delaware.

OFFICIAL PROPOSALS

Bids: June 4.

Sewers and Pumping Equipment

Hackensack, N. J.

The Hackensack Improvement Commission, the governing body of the City of Hackensack, Bergen County, New Jersey, requests proposals for the following works, to wit:

Contract No. 5—For the construction of about 27,000 linear feet of eight (8) inch vitrified pipe sewers, about 6,600 linear feet of ten (10) inch, and twelve (12) inch vitrified pipe sewers, about 4,400 linear feet of fifteen (15) inch, twenty (20) inch and twenty-two (22) inch vitrified pipe sewers, about 3,600 linear feet of six (6) inch, eight (8) inch, ten (10) inch, twelve (12) inch and twenty (20) inch cast iron sewers and force mains; and three (3) electrically operated sewage pumping stations, together with pumping equipment, manholes, and other works and equipment appurtenant thereto. Pumping equipment shall consist of A. B. Wood patent trash pumps. Motors and switch boards shall be of General Electric or other approved make.

Contract No. 6—For the construction of about 8,400 linear feet of eight (8) inch vitrified pipe sewers, chiefly an extension of existing sewers, together with manholes and other works appurtenant thereto.

The foregoing works are more particularly described and set forth in the plans and specifications, on file with Lemuel Lozier, Engineer of the Commission, and with the Clerk of the Commission.

The plans and specifications, information for bidders, forms of proposals and contracts, forms of bonds required and other information can be seen at the office of Lemuel Lozier, Engineer of the Commission, Room 3, Bank Building, Main and Mercer Streets, Hackensack, New Jersey; copies of such plans and specifications may be obtained by bidders of making a deposit of ($25.00) which deposit will be refunded upon the return of the plans and specifications in good condition.

Bidders may submit proposals upon one or more of the aforesaid contracts.

Each contract will be let separately to the lowest responsible bidder, subject to the right of the Commission to reject any or all bids.

All bids must be made upon a form of proposal to be obtained from the Engineer of the Commission, and must give the prices both in writing and figures, and must give such other information and be signed in the manner indicated on the form of proposal. Each bid for Contract No. 5 shall be accompanied by a certified check for $10,000, payable to the "HACKENSACK IMPROVEMENT COMMISSION." Each bid submitted for Contract No. (6) shall be accompanied by a certified check for $2,000, payable to the "Hackensack Improvement Commission."

Checks of the unsuccessful bidders will be returned immediately upon the award of each of the respective contracts. The check of the successful bidders will be returned to the bidder upon the execution of the contract an the furnishing of the bonds required, within ten days after the date of the award thereof, or within such extended time as may be determined by the Commission. In case of failure to execute the required contract or contracts, and furnish the required bonds within such time, such check or checks shall be forfeited to the Hackensack Improvement Commission as liquidated damages.

The proposals herein required for Contracts 5 and 6 shall be presented to the Hackensack Improvement Commission, at the Municipal Building, 346 State Street, Hackensack, Bergen County, New Jersey, on Monday, the 4th day of June, 1923, at 8 P.M. daylight saving time, 7 P.M. Standard Time.

No bids will be received prior to said hour, and none thereafter. The proposals shall be submitted in sealed envelopes or packages (in case one bidder bids upon two contracts, he shall present two separate proposals).

The proposals shall be endorsed respectively as follows:

1—"Proposal for sewers and pumping stations Contract No. 5."

2—"Proposal for sewers, Contract No. 6."

HACKENSACK IMPROVEMENT
COMMISSION.
By SPENCER D. BALDWIN,
Mayor.

WILLIAM SCHAAF, Clerk.

OFFICIAL PROPOSALS

Bids: June 2.

Sanitary Sewer Construction

Columbus, Ohio.

Sealed proposals will be received at the office of the Board of County Commissioners of Franklin County, Ohio, until ten o'clock a.m., central standard time, of Saturday, June 2, 1923, and the same will be publicly opened at the same hour and at the said office for all labor and material necessary and required to construct, build and complete the sewers hereinafter described.

The plans, profiles, specifications and estimates of quantities for doing this work are on file in the office of the Board of County Commissioners and the office of the County Sanitary Engineer, 406½ South High Street, Columbus, Ohio, for inspection by all persons interested in the same. All proposals shall be made on the standard bidding blanks furnished by the County Sanitary Engineer and shall be addressed to the Board of County Commissioners and endorsed as hereinafter specified. Each bid shall contain the full name and address of each person or company interested in the same and shall be accompanied by a bond or certified check, made payable to the Board of County Commissioners of Franklin County, Ohio, said check being on a solvent bank within Franklin County, Ohio, in amount Five Hundred Dollars ($500.00), conditioned that if the bid is accepted a contract will be entered into within one week, and its performance properly secured. Prices for labor and material shall be stated separately. A bond in the sum of 50 per cent of the total contract price, conditioned according to law, will be required as security for the fulfillment of the contract when the contract is executed. A deposit of $10 will be required for plans and specifications taken from the office, which amount will be refunded on return of the plans within one week after receiving bids.

Contract No. 3—Sewer District Franklin No. 1, Joint Intercepting Sewer

Includes 16,049 ft. of segment block or concrete pipe sewer, 30-inch, 33-inch and 39-inch and 4,675 ft. vitrified or concrete pipe sewer, 24-inch.

Also 68 manholes and other accessories.

Indorsement. "Proposal for construction of sewers in Sewer District Franklin No. 1. Contract No. 3."

The Board of County Commissioners reserves the right to reject any or all bids.

By order of the Board of County Commissioners of Franklin County, Ohio.

RALPH W. SMITH,
Clerk of the Board.

Bids: June 4.

Street Pavement

Babylon, N. Y.

Sealed proposals will be received by the Board of Trustees of the Village of Babylon for the construction of approximately 29,000 square yards of concrete pavement, and will be opened and read in public at the Village Board Room, Babylon, Long Island, N. Y., on Monday, June 4, 1923, at 8 p.m.

Plans and specifications may be seen at the office of the Engineer, George H. Walbridge, Main Street, Babylon, N. Y., on and after Thursday, May 24, 1923. Copies of same may be obtained by prospective bidders upon payment of twenty ($20) dollars, which amount will be refunded upon return of plans and specifications in good condition within five days after the date of opening bids.

Each bidder must use the proposal blank attached to and forming a part of the specifications.

A certified check for 5 per cent of the gross amount of the bid shall be deposited with each proposal as a guarantee that the bidder will execute the contract at the price bid.

A satisfactory bond will be required for the faithful performance of the specified work for an amount equal to 50 per cent of the gross amount bid.

The Board of Trustees reserves the right to reject any or all bids.

CHESTER O. KETCHAM,
President.
JAMES O'SHEA,
GUSTAVE FISHEL,
JOSEPH KEENAN,
WILLIAM E. SPRAGUE,
Trustees.
JAMES B. COOPER, Clerk.
Dated: Babylon, N. Y., May 17, 1923.

OFFICIAL PROPOSALS

Bids: June 4.

Branch Ave. Paving

Red Bank, N. J.

Notice is hereby given that sealed bids will be received by the Council of Borough of Red Bank for the Construction of a Concrete Pavement on Branch Avenue in the Borough of Red Bank, N. J., and opened and read in public at the rooms of said Council, Borough Hall, Red Bank, New Jersey, on June 4th, 1923, 8.00 p.m., daylight saving time.

Drawings and specifications for the proposed work prepared by George K. Allen, Jr., Borough Engineer, have been filed in the office of said Engineer at 60 Broad Street, Red Bank, New Jersey, and may be inspected by prospective bidders during business hours. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

Plans and specifications will be furnished to prospective bidders upon payment of ten dollars ($10.00), which amount will be refunded upon return of plans and specifications before the time specified for the opening of bids.

Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and name of proposed work on the outside, addressed to the Council of Borough of Red Bank and must be accompanied by a certified check for a sum not less than ten (10) per cent of the amount bid on the work, payable to the order of the Borough Collector and a surety company certificate stating that said surety company will provide the bidder with the required bond, and must be delivered at the place and before the hour above named.

The Council of Borough of Red Bank reserves the right to reject any or all bids if deemed to the best interests of the Borough so to do.

By order of the Council of Borough of Red Bank.

A. L. MILLER,
Mayor.

ATTEST:
A. E. OLSEN, Clerk.
Red Bank, N. J., May 7th, 1923.

Bids: May 28.

Bridge

Norwich, N. Y.

Construction of a bridge over Canasawacta Creek at South Broad Street, Norwich, N. Y.

Sealed bids addressed to Stuart C. Nelson, Jr., clerk of the joint bodies, town board of the town of Norwich and the Common Council of the City of Norwich, N. Y., City Hall, Norwich, N. Y., and endorsed "Proposal for South Broad Street Bridge" will be received by the joint boards on Monday, May 28th, 1923, at 7:30 p.m., in the council chambers in the City Hall at Norwich, N. Y., and at that time and place will be publicly opened and read for the construction of a bridge over the Canasawacta Creek on South Broad Street, Norwich, N. Y.

Bids will embrace the construction of a concrete steel girder bridge, also a reinforced concrete bridge.

Contractors will be permitted to submit plans and specifications for a reinforced concrete structure which will have the same carrying capacity, water way, clearance and depth of roadway as the concrete steel girder bridge. Such plans and specifications must have the approval of the department of highways of the state of New York and will be considered by the joint boards in making awards.

The right is expressly reserved to reject any and all bids.

Plans and specifications of the concrete steel girder bridge may be obtained from the City Engineer or the City Chamberlain at the City Hall, Norwich, N. Y. Such plans and specifications will be sent for two dollars.

STUART C. NELSON, JR.,
Clerk of the Joint Boards of the Town and City of Norwich, N. Y.
E. F. MUSSON,
City Engineer.

Dated at Norwich, N. Y.
May 9th, 1923.

OFFICIAL PROPOSALS

Bids June 5.

Bridges

Fine, N. Y.

Sealed proposals will be received at the office of the Town Clerk of the Town of Fine, St. Lawrence County, New York, until Tuesday, the 5th day of June, 1923, at 1:00 P.M. for the building of two concrete-steel arch bridges, as follows:

1. Scott's Bridge, across the Oswegatchie River about four miles north of the Village of Oswegatchie.

2. A bridge across the Little River about three-quarters of a mile north of the Village of Oswegatchie.

Both located on Fine-Star Lake Highway.

Plans, specifications may be seen at office of

1. Mr. F. H. Kelly, Town Clerk of Fine, at the Village of Oswegatchie, St. Lawrence Co., N. Y.

2. Concrete-Steel Engineering Company, Park Row Bldg., New York, N. Y.

Copies of the plans and specifications including form of proposal may be obtained from the Concrete-Steel Engineering Company upon making a deposit of $20.00, which will be refunded upon the return of the plans and specifications in good order.

Each proposal must be accompanied by an unconditional certified check on a Natonal Bank for five per cent (5%) of the contract price, made payable to the order of the "Supervisor of the Town of Fine" as evidence of good faith, and to be forfeited to the Town as liquidated damages in case of failure on the part of the bidder to enter into a contract for the execution of the work, and to furnish a satisfactory surety bond as hereinafter stipulated. Bidders' certified checks will be returned after consideration of the bids, and the check of the successful bidder will be returned as soon as the contract is signed.

Successful bidder will be required to furnish bond acceptable to Town of Fine in sum equal to 50% amount of contract.

Proposals will be entertained only from parties who have at their command the necessary capital, plant and experience for properly doing such work.

Contract for one or both bridges may be awarded to one party. The party or parties to whom a contract may be awarded will be required to execute the contract with surety within ten days from the date of service of notice to that effect; and in case of failure or neglect to do so, he or they will be considered as having abandoned it.

The right is reserved by the Town to accept any proposal or to reject any or all proposals.

TOWN OF FINE
By E. H. BACKUS, Town Superintendent.

Bids: June 4.

Building Alterations and Repairs

New York, N. Y.

Sealed proposals for Alterations, Repairs, Etc., To Office Buildings, Department of Labor, 124 East 28th St., New York City, will be received by Hon. Bernard L. Shientag, Industrial Commissioner, 124 East 28th St., New York City, until 1 o'clock p.m. (Standard Time), Monday, June 4, 1923, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a deposit, consisting of a certain check drawn upon some legally incorporated bank in this State and made payable to the State of New York, or money, equal to five per cent (5%) of the amount of the proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specification No. 4099. The right is reserved to reject any or all bids. Drawings and specifications may be examined at the office of the Department of Labor, 124 East 28th St., New York City at the New York Office of the Department of Architecture, 18th Floor, Fuller Building, Broadway and 23rd St.; and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, SULLIVAN W. JONES, Capitol, Albany, N. Y.

Dated: May 17, 1923.

OFFICIAL PROPOSALS

Bids: June 1.

School Building

Haworth, N. J.

Sealed proposals will be received by the Board of Education of the Borough of Haworth, County of Bergen, N. J., at 8 p.m. (daylight saving time), June 1, 1923, in the Borough Hall, Terrace Street, Haworth, N. J., for the complete construction of a new public school building, at which time the bids will be opened publicly. Bids shall be based on the plans and specifications on file with the architect.

Bids for the general construction, for the heating and ventilating, for the plumbing, and the electric work will be taken separately.

Bids shall be accompanied by the deposit of certified checks payable to the Board of Education of the Borough of Haworth, in the County of Bergen, as follows:

With general construction bid....	$1,000
With heating and ventilating bid..	500
With plumbing bid.....	300
With electric bid.....	100

If the bidder or bidders who receive the award shall not execute the contract and furnish the required bond for the full amount of the contract within ten days after the acceptance of such bid or bids the said sum so deposited shall be forfeited to the Board of Education and shall be liquidated damages for such default.

Contracts will be awarded to the lowest responsible bidders. The Board of Education reserves the right to reject any or all bids or to waive defects or informalities in any bid if it be deemed in the interest of the Board of Education so to do.

Copies of the plans and specifications may be obtained by prospective bidders from A. C. Paull at his residence, on Myrtle Street, Haworth, N. J., or at the office of F. Markoe Robertson and A. C. Paull, architects, 247 Park Avenue, 14th floor, New York City, on deposit of Ten Dollars. The deposit of Ten Dollars will be forfeited unless plans and specifications are returned in good condition to the architect ten days after bids are opened. Plans and specifications may be inspected at the above addresses without deposit.

For the Board of Education of the Borough of Haworth, Westervelt Mount, District Clerk.

Dated May 10, 1923.

BIDS: June 6

State Road Work

Providence, R. I.

Sealed proposals, for the construction under the provisions of the Federal Aid Road Act of a section of State Highway in the towns of North Providence and Lincoln, beginning at a point on the Louisquisset Pike, 1,500 feet northerly from Mineral Spring Avenue in North Providence and extending northerly on the Louisquisset Pike a distance of 3.13 miles, will be received by the State Board of Public Roads at its office, State House, Providence, R. I., until 12 M. (Daylight Saving) (11 A.M. Eastern Standard) on Wednesday, June 6, 1923, at which time they will be opened and read in Public.

The principal estimated quantities are as follows:

Contract 2304 Federal Aid Project No. 17 (Division A)

Excavation (earth & ledge)	16,000 cu. yds.
Gravel Foundation	4,000 cu. yds.
Pipe Culverts	1,200 lin. ft.
Concrete Masonry	140 cu. yds.
Wooden Guard Rail	4,300 lin. ft.
Reinforced Cement Concrete Pavement	7,342 cu. yds.
Cement for Concrete Pavement	13,360 bbls.
Galvanized steel Fabric for Pavement	166,600 lbs.
Steel Bars for Pavement	18,500 lbs.

Bids must be made upon blank forms to be furnished by the Board. No bids will be accepted unless accompanied by a certified check for the sum of $200.00 payable to the State of Rhode Island.

The Board reserves the right to reject any and all bids, and to give preference to towns or cities, in accordance with Section V of Chapter 84 of the General Laws.

Plans may be examined and specifications and bidding blanks may be obtained at the office of the State Board of Public Roads, State House, Providence, R. I., on and after Wednesday, May 23rd, 1923, every week day (except holidays and Saturdays), between the hours of 9 a.m. and 5 p.m., Saturdays 9 a.m. to 12 m.

State Board of Public Roads
ABRAM L. ATWOOD
BENJAMIN F. ROBINSON
FRANK COLE
ALTON HEAD
JOHN W. HANLEY

OFFICIAL PROPOSALS

Bids: June 12.

Roads and Bridges

Charleston, W. Va.

Sealed proposals will be received by the State Road Commission of West Virginia at its office in Charleston, W. Va., until ten o'clock a.m. on the 12th day of June, 1923, and opened and read immediately thereafter at the Kanawha County Court House, Charleston, W. Va., for the construction of the following bridges, sections of state road and surface treatment:

Projects 3104 and 3205-B—Boone County—12 miles of the Racine-Whitesville road for grading and draining. Certified check $6,000.00.

Project 3151-C and 48—Boone County—2 miles of the Madison to Danville road for grading, draining and paving with Bituminous Macadam. Certified check $2,400.00.

Projects 3261 and 50—Clay County—1.9 miles South end Clay Court House to Two Mile Run, for grading, draining and paving with Bituminous Macadam. Certified check $3,000.00.

Project 3038—Fayette County—5.3 miles of the Falls District Line to Ansted Road for paving with Bituminous Macadam. Certified check $6,000.00.

Project 3259—Kanawha County—6 miles of the Pocatalico to Jackson County line road for grading and draining. Certified check $4,000.00.

Project 3286—Kanawha County—2 miles of the St. Albans-Putnam County Line road for grading, draining and paving with Bituminous Macadam. Certified check for $3,000.00.

Project 3239—Raleigh County—6.3 miles of the Craborchard-Slab Fork District Line road for grading, draining and paving with Bituminous Macadam. Certified check for $8,000.00.

Project 2027—Cabell County—Repair of Russell Creek Bridge No. 687. Replacing concrete and brick floor with wood block, additional steel and repairing piers under truss bearings. Length 470 feet. Certified check $500.00.

Project 3155—Cabell County—6.3 miles of the Meliss Salt Rock road for grading and draining. Certified check $6,000.00.

Project 3169—Lincoln County—9.4 miles of the Rangers-Harts road for grading and draining. Certified check $5,000.00.

Projects 89 and 3228—Logan County—3.5 miles of the Logan-Rossmore road for paving with cement concrete. Certified check $6,000.00.

Project 3138—Mason County—Five Mile Bridge No. 857 Concrete Deck Girder 60-ft. span and Three Mile Bridge No. 858 Concrete Deck Girder 35-ft. span, to be let in one contract. Certified check $1,100.00.

Project 3188—Wayne County—Jennies Creek Bridge No. 872 Ashlar Masonry or Concrete substructure. Certified check $500.00.

Project 3176—Brooke County—0.8 mile of the River Road for paving with cement concrete. Certified check $2,000.00.

Project 3077—Brooke County—2 miles of the Project 92 to Wellsburg road for grading and draining. Certified check $600.00.

Projects 3114 B and D Brooke County—1 mile of the River Road for paving with Cement Concrete. Certified check $1,600.00.

Project 3165—Calhoun County—1.1 mile Main Street of Grantsville for grading, draining and paving with cement concrete paving. Certified check $2,500.00.

Project 3253—Hancock County—3 miles of the River Road from Brooke County Line to Kings Creek Bridge for paving with brick. Certified check $3,000.00.

Project 3089—Hancock County—1 mile of the River Road for paving with brick. Certified check $1,600.00.

Project 3075-B—Jackson County—2 miles of the Ripley-Kenna Road for cement concrete paving. Certified check $3,000.00.

Project 3074-A—Jackson County—2 miles of the Ripley-Cottageville road for paving with cement concrete. Certified check for $2,500.00.

Project 3075—Jackson County—Kenna Bridge No. 817 Concrete Arch 50-ft. Span. Certified check $500.00.

Project 3074—Jackson County—Little Mill Creek Bridge No. 816. Concrete Deck Girder, 4-5 ft. spans. Certified check $1,100.00.

Project 3086-B—Marshall County—2 miles of the River Road for grading and draining. Certified check $800.00.

Project 3167-B—Marshall County—Denver Bridge No. 885—Concrete or masonry substructure. Certified check $500.00.

Project 3252-A—Pleasants County—1.2 miles of the St. Marys-Ellenboro road for grading and cement concrete paving. Certified check $1,500.00.

Project 3078-A—Pleasants County—French Creek Bridge No. 870. Concrete Deck Girder 2-25 ft. spans and 1-60 ft. span. Certified check $700.00.

OFFICIAL PROPOSALS

Project 3115-B—Ritchie County—2 miles of the Cairo-Nutter Farm Road for paving with Cement Concrete. Certified check $3,000.00.

Project 3168-A—Roane County—2 miles of the Gandeeville-Walton Road for paving with Bituminous Concrete Cement Concrete, Rock Asphalt or Warrenite Bitulithic. Certified check $3,000.00.

Project 3082-B—Wetzel County—3 miles of the River road for grading, draining and gravel surfacing. Certified check $2,000.00.

Project 3263—Wetzel County—1.2 miles of the Wheeling Fairmont Turnpike for grading and draining. Certified check $700.00.

Project 3116-B—Wood County—1.5 miles of the Northwestern Turnpike for paving with Bituminous Concrete, Cement Concrete Rock Asphalt or Warrenite Bitulithic. Certified check $2,000.00.

Project 3225-C—Harrison County—4.5 miles of the Good Hope-Lewis County Line road for grading, draining and paving with Bituminous Macadam. Certified check $6,500.00.

Project 3275—Marion County—2.5 miles of the Glovers Gap to Wetzel County Line for grading and draining. Certified check $3,500.00.

Project 3255—Lewis County—2 miles of the Jane Lew Harrison County Line road for grading, draining and paving with Cement Concrete. Certified check $3,000.00.

Project 3203-C—Preston County—4.5 miles of the Northwestern Turnpike for grading and draining. Certified check $2,000.00.

Project 3203-D—Preston County—6 miles of the Northwestern Turnpike for grading and draining. Certified check $2,000.00.

Project 3203-E—Preston County—5 miles of the Northwestern Turnpike for grading and draining. Certified check $2,500.00.

Project 3203-F—Preston County—5 miles of the Northwestern Turnpike for grading and draining. Certified check $2,500.00.

Project 3186—Preston County—5 miles of the Thomas-Gnegy Church road for grading, draining and paving with Cement Concrete. Certified check $9,000.00.

Project 1127—Preston County—3 miles of the Kingwood-Reedsville Road for paving with Bituminous Macadam. Certified check $3,000.00.

Project 3229—Taylor County—7 miles of the Grafton-Preston County Line road for grading and draining. Certified check $3,000.00.

Project 3224—Taylor County—3.1 miles of the Grafton-Philippi road for grading, draining and paving with Bituminous Macadam. Certified check $5,000.00.

Project 3238-A—Upshur County—1.4 miles of the Buckhannon-Clarksburg road for grading, draining and paving with cement concrete. Certified check $2,500.00.

Project 122-B—Grant County, Abrams Creek Bridge No. 883, Masonry substructure. Certified check $500.00.

Project 3013—Hardy County—5.85 miles of the Oldfields-Hampshire County Line road for completion of the grading, draining and paving with waterbound macadam. Certified check $6,000.00.

Projects 3029 and 3143—Tucker County—3 miles of the Parsons-Thomas road for paving with waterbound macadam.

Project 3143—Tucker County—5 miles of the Parsons-Thomas road for grading and draining. Certified check $4,000.00.

Project 2048-A-S—McDowell County—0.96 mile of the Kimball-Northfork road for grading and draining. Certified check $2,500.00.

Projects 2099, 2101, 3324 and 2102—Preston County—17.1 miles Cold Road Oil Surface Application including furnishing and applying cover coat. Certified check $500.00.

Project 81—Taylor County—2 miles Cold Road Oil Surface Application including furnishing and applying cover coat. Certified check $500.00.

Projects 91, 27, 16, 2107, 2108—Barbour County—12.7 miles Cold Road Oil Surface Application, including furnishing and applying cover coat. Certified check $500.00.

Proposals will be received only upon State Standard forms in accordance with plans, specifications and estimates of quantities therefor, which standard forms, plans, specifications and estimates of quantites may be obtained from the office of the Division Engineer in whose territory the proposed construction is located or from the office of the State Road Commission at Charleston, W. Va.

Each proposal must be accompanied by a certified check for the amount noted.

The right is reserved to reject any and all proposals.

THE STATE ROAD COMMISSION OF WEST VIRGINIA
E. B. CARSKADON, Secretary.

OFFICIAL PROPOSALS

Bids: May 29.

Street Paving and Trolley Track Reconstruction

Woodbury, N. J.

Pursuant to a resolution adopted May 1, 1923, the Council of the City of Woodbury will receive, at its meeting to be held Tuesday evening, May 29, 1923, at 7 o'clock p.m. (standard time), 8 o'clock p.m. (daylight saving time), at the Council Chamber, City Hall, Woodbury, New Jersey, sealed proposals for the construction of (Bid A, approximately 4,992 lineal feet of straight track complete, including all extras, track and paving, &c.) and (Bid B, approximately 6,944 square yards of reinforced concrete pavement complete, including excavations), on Cooper Street, in the City of Woodbury, Gloucester County, New Jersey, and the furnishing of all labor and materials therefor, in accordance with plans and specifications prepared by J. Owen Carter, C. E., Woodbury, New Jersey, and on file in the office of the City Clerk, Woodbury, New Jersey, and in the office of J. Owen Carter, 48 Cooper Street, Woodbury, New Jersey.

Each proposal must be accompanied with a bidder's bond, or a certificate from a surety company duly authorized to do business in this State stating that such surety company will provide said bidder with a bond in such amount as is required by and in accordance with the bid and specifications, or a certified check drawn to the order of the City of Woodbury; said bidder's bond, or certificate, or certified check to be in an amount not less than ten per centum of the bid or bids. Each proposal must be delivered by the bidder, or his agent, to the undersigned at the meeting above mentioned.

The Council of the City of Woodbury reserves the right to reject any or all proposals, and to award separate contracts under Bids A and B.

CLINTON S. DAVIS,
Dated, May 15, 1923. City Clerk.

Bids: June 5.

School Building

Mount Morris, N. Y.

The Board of Education of Mount Morris Union Free School District, Town of Mount Morris, New York, will receive proposals for construction of new school building, for repairing of present school building, including heating and ventilating, for plumbing, and for electrical work, on June 5, 1923, at 7:30 o'clock p.m., or at any time prior thereto, at school house building in said school district.

Bidders may bid for the entire work or any branch of same. Plans and specifications may be obtained from Clarence A. Foote & Son, Architects, Mount Morris, New York, on deposit of the sum of Ten ($10.00) dollars, certified check or draft, same to be forfeited unless plans and specifications are returned within ten days after bids are opened.

Board of Education, Mount Morris Union Free School District, Mount Morris, New York.

WILLIAM H. POVALL,
President.
TIFFANY E. BARNARD,
Clerk.

Bids: June 1.

Street Paving

Paducah, Ky.

Sealed bids will be received until 10 o'clock a.m., Friday, June 1, 1923, at the City Hall, Paducah, Kentucky, by Henry A. Pulliam, Commissioner of Public Works, for the construction of 67,000 square yards of street paving in the City of Paducah. Work will be divided into six different contracts.

Materials will be concrete 7 inches thick with marginal reinforcement or bituminous surfaces on a 6 inch concrete base.

Payments by cash or bonds issued against abutting property. Estimates according to state law. 65 per cent monthly payable in 6 per cent warrants.

Right is reserved to reject any or all bids.

Plans and specifications will be furnished upon deposit of $3.00, which will be refunded upon return of same. Letting June 1, 1923.

Bids for 9,100 lineal feet of concrete curb and gutter will be received on the same date.

HENRY A. PULLIAM.

OFFICIAL PROPOSALS

Bids: June 5.

Sewerage System

Long Branch, N. J.

Notice is hereby given that sealed proposals will be received by the Board of Commissioners of the City of Long Branch, New Jersey, for the building of a separate sewerage system, together with a sedimentation tank, in the northwesterly section of the city, and will be opened and read at a regular meeting of the Board at City Hall, on Tuesday, the fifth day of June, 1923, at eight o'clock p.m. (Daylight Saving Time), or as soon thereafter as may be called for.

The approximate amount of work to be done consists of 16,000 feet of main sewer, 5,000 feet of connections to the curb, with necessary manholes and sedimentation tank, all as shown on plans and specifications prepared by J. Wesley Seaman, City Engineer, which may be obtained by applying to the Engineer at his office at 192 Broadway, Long Branch, N. J., upon a deposit of $10, which will be refunded upon the return of the plans and specifications in good condition at the time the bids are received.

Bids must be made on the standard proposal form, in the manner designated therein and required by the specifications, and must be enclosed in sealed envelope bearing the name and address of the bidder, and marked "Bids for Sewer" and addressed to Frank C. Quinn, City Clerk, and must be accompanied by a certified check for not less than 10 per cent of the amount bid on the work, drawn to the order of Frank L. Howland, City Treasurer, or cash in equal amount. The Board of Commissioners reserves the right to reject any or all bids if deemed to the best interest of the Board so to do.

Dated, Long Branch, N. J., May 18, 1923.
FRANK C. QUINN, City Clerk.

Bids: June 1.

Street Paving

Shenandoah, Pa.

Bids will be received by the Borough of Shenandoah, Pa., for Paving West Coal Street, Between West and Vine Streets; West Cherry Street between Main and Chestnut Streets; East Lloyd Street between Main and White Streets, Ten Thousand (10,000) Square Yards, more or less, with Vitrified Brick on a five-inch Cement Concrete Base, Sheet Asphalt on a six-inch Cement Concrete Base, or a one course reinforced concrete pavement according to State Highway Specifications 1923, or with Bito Slag, or Warrenite Bitulithic or other Bituminous paving on a six-inch cement concrete base, all bids on Bituminous paving to include a two-foot Concrete Gutter. All bids per square yard to include excavation and Completed pavement. Bids also received on approximately two thousand feet of Concrete Curbing 1-2-4, Ten feet six inches by twenty-four inches. All bids to be in the hands of the street committee by June 1, 1923. A certified check of five per cent of amount to accompany all bids. Council reserves the right to reject any or all bids.

May 18, 1923.

GEORGE FEIST,
Chairman Street Committee,
237 So. West St., Shenandoah, Pa.

Bids: June 7.

State Road Work

Harrisburg, Pa.

Pennsylvania State Highway Department, Harrisburg, Pa.—Sealed proposals will be received at the State Capitol until 10 a.m., June 7, 1923, when bids will be publicly opened and scheduled and contract awarded as soon thereafter as possible for the reconstruction of 27 miles of Bituminous or Reinforced Concrete Pavement and for the resurfacing of 30 miles of Roadway with either Bituminous Macadam or Bituminous Surface on Concrete Foundation. Bidding blanks and specifications may be obtained free, and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg. No refund for plans returned. They also can be seen at office of State Highway Department, Harrisburg, 1001 Chestnut Street, Philadelphia, and 119 Federal Street, N. S. Pittsburgh, Pa. P. D. WRIGHT, State Highway Commissioner.

OFFICIAL PROPOSALS

Bids: May 29.

Dam and Pipe Line

Claremont, N. H.

Sealed proposals will be received by the Board of Water Commissioners of Claremont, New Hampshire, until noon on Tuesday, May 29, 1923, for construction of a dam (about 200 cubic yards of concrete), laying about 17,000 feet of 10-in. and 12-in. cast-iron water pipe, and other small items.

Plans, profiles and specifications may be seen at the office of the Commissioners at Claremont or at the office of the undersigned on and after May 23, 1923.

Plans, specifications and profiles will not be mailed.

Right is reserved to reject any or all bids or to award contract irrespective of the scale of prices proposed in bids.

E. E. DAVIS, Civil Engineer,
Northampton, Mass.

Bids: June 8.

Highway Work

Harrisburg, Pa.

Pennsylvania State Highway Department, Harrisburg, Pa.—Sealed proposals will be received at the State Capitol until 10 a.m., June 8, 1923, when bids will be publicly opened and scheduled and contract awarded as soon thereafter as possible for the reconstruction of 21 miles Bituminous or Reinforced Concrete Pavement and for the resurfacing of 36 miles of Roadway with either Bituminous Macadam or Bituminous Surface on Concrete Foundation. Bidding blanks and specifications may be obtained free, and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg. No refund for plans returned. They also can be seen at office of State Highway Department, Harrisburg, 1001 Chestnut Street, Philadelphia, and 119 Federal Street, N. S., Pittsburgh, Pa. P. D. WRIGHT, State Highway Commissioner.

Bids: May 31.

Water Works System Extensions

Easton, Md.

Sealed proposals for laying extensions to the Water Works System of the Town of Easton, Md., will be received and opened by the Mayor of Easton at the Council Chamber in Easton, Maryland, at 12.30 o'clock p.m., on the thirty-first day of May, 1923.

The work to be done comprises the furnishing, laying and complete installation of approximately 3,900 feet of 6" to 8" mains, 16 valves, 9 fire hydrants, and special fittings.

Contract, Proposal Forms and Plans may be seen at the office of the Town Clerk or of the Town Engineer, Easton, Md. Plans will be furnished upon payment of $1.00 for each set.

Each proposal for the work must be accompanied by a certified check drawn to the order of the Mayor and Council of Easton in the sum of $500.00.

JOHN C. NORTH,
Town Clerk.
E. G. KASTENHUBER, JR.,
Town Engineer.

Bids: May 31.

Trunk Intercepter in Tunnel

Akron, Ohio.

Sealed proposals will be received at the office of the Director of Public Service, Delaware Building, Akron, Ohio, until 12 o'clock noon (Central Standard Time) of May 31, 1923, for Trunk Intercepting Sewer in Hawkins Avenue consisting of the following approximate quantities:

5,110 feet 48-inch Sewer in Tunnel.
9 Manholes, 12 feet to 70 feet.
800 feet 12" to 20" V. P. Sewer.

Drawings, specifications and blank proposals can be obtained at the office of the Chief Clerk, Department of Public Service, Delaware Building, Akron, Ohio, upon a deposit of Five (5) Dollars.

Each proposal must be submitted upon the regular forms of the City of Akron and must be accompanied by a certified check in the sum of Ten Thousand Dollars ($10,000.00) on a solvent bank, as a guarantee that if the proposal be accepted, a contract will be entered into.

The City reserves the right to reject any or all bids.

By order of the Director of Public Service.
W. F. PETERS,
Director.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ADVERTISEMENTS ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE.

OFFICIAL PROPOSALS

Bids: June 4.

Branch Ave. Paving

Red Bank, N. J.

Notice is hereby given that sealed bids will be received by the Council of Borough of Red Bank for the Construction of a Concrete Pavement on Branch Avenue in the Borough of Red Bank, N. J., and opened and read in public at the rooms of said Council, Borough Hall, Red Bank, New Jersey, on June 4th, 1923, 8.00 p.m., daylight saving time.

Drawings and specifications for the proposed work prepared by George K. Allen, Jr., Borough Engineer, have been filed in the office of said Engineer at 60 Broad Street, Red Bank, New Jersey, and may be inspected by prospective bidders during business hours. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

Plans and specifications will be furnished to prospective bidders upon payment of ten dollars ($10.00), which amount will be refunded upon return of plans and specifications before the time specified for the opening of bids.

Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and name of proposed work on the outside, addressed to the Council of Borough of Red Bank and must be accompanied by a certified check for a sum not less than ten (10) per cent of the amount bid on the work, payable to the order of the Borough Collector and a surety company certificate stating that said surety company will provide the bidder with the required bond, and must be delivered at the place and before the hour above named.

The Council of Borough of Red Bank reserves the right to reject any or all bids if deemed to the best interests of the Borough so to do.

By order of the Council of Borough of Red Bank.

A. L. MILLER,
Mayor.

ATTEST:
A. E. OLSEN, Clerk.
Red Bank, N. J., May 7th, 1923.

Bids: June 4.

Street Improvement

Newburgh, N. Y.

Sealed proposals will be received by the City Manager at his office in the City Hall, Newburgh, N. Y., until 2 p.m. Monday, June 4, 1923, for paving and otherwise improving Renwick Street, between the West Shore R.R. and Liberty Street, and South Street between Water and Grand Streets with either vitrified hillside brick or reinforced concrete pavement.

The approximate quantities of pavement to be laid are as follows:

South Street about 4,050 sq.yds.
Renwick Street about 3,900 sq.yds.

Bids will be received on each street separately and cash or a certified check for $1,500 must accompany the bid on each street.

Plans and specifications are on file in the office of the City Engineer, City Hall, Newburgh, N. Y.

The City reserves the right to reject any or all bids received.

W. J. McKAY,
City Manager.

OFFICIAL PROPOSALS

Bids: June 4.

Concrete Pavement

Red Bank, N. J.

Notice is hereby given that alternate sealed bids will be received by the Council of Borough of Red Bank for the Construction of a Concrete Pavement and a Sheet Asphalt Pavement on a concrete base on Peters Place and for the Construction of a Concrete Pavement on Drummond Place and Oakland Street, in the Borough of Red Bank, N. J., and opened and read in public at the rooms of said Council, Borough Hall, Red Bank, New Jersey, on June 4, 1923, 8 p.m., daylight saving time.

Drawings and specifications for the proposed work prepared by George K. Allen, Jr., Borough Engineer, have been filed in the office of said Engineer at 60 Broad Street, Red Bank, New Jersey, and may be inspected by prospective bidders during business hours. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

Plans and specifications will be furnished to prospective bidders upon payment of ten dollars ($10), which amount will be refunded upon return of plans and specifications before the time specified for the opening of bids.

Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and name of proposed work on the outside, addressed to the Council of Borough of Red Bank and must be accompanied by a certified check for a sum not less than ten (10) per cent of the amount bid on the work, payable to the order of the Borough Collector and a surety company certificate stating that said surety company will provide the bidder with the required bond, and must be delivered at the place and before the hour above named.

The Council of Borough of Red Bank reserves the right to reject any or all bids if deemed to the best interests of the Borough so to do.

By order of the Council Borough of Red Bank.

A. L. MILLER, Mayor.

Attest:
A. E. OLSEN, Clerk.
Red Bank, N. J., May 9th, 1923

Bids: June 15.

Paving

East Cleveland, Ohio.

Sealed bids will be received by the City Manager of The City of East Cleveland, Ohio, until 12:00 o'clock, noon, June 15, 1923, for furnishing labor and material for constructing the following named improvements:

Paving all or part of Terrace Road, Dover Court, Nela Court, and Allandale Avenue with brick or asphalt.

Repaving part of Shaw Avenue with brick or asphalt.

Repaving or resurfacing Forest Hill Avenue and Third Avenue with asphalt.

Total length of streets, 7,577 ft. Area to be paved, 21,980 sq.yds. Estimated cost, $112,700.

Bids must be upon blanks furnished by the City and accompanied by bond or certified check for 10% of estimated cost.

CHAS. A. CARRAN,
City Manager.
East Cleveland, Ohio.

OFFICIAL PROPOSALS

Bids: June 7.

Main Sanitary Sewer

CONTRACT D

Marion, Ohio.

Sealed proposals will be received at the office of the Director of Public Service in the City Hall, Marion, Ohio, until 12 o'clock noon (Official Marion Time), June 7, 1923, and then publicly opened and read, for the construction of Main Sanitary Sewer, Contract D.

The following quantities give a general idea of the amount and character of the work to be done:

2,300 lin.ft. of 30 in. circular sewer.
5,000 lin.ft. of 27 in. vitrified pipe sewer.
3,600 lin.ft. of 24 in. vitrified pipe sewer.
7,500 lin.ft. of 12 to 18 in. vitrified pipe sewer.
11,500 lin.ft. of 6 to 10 in. vitrified pipe sewer.

Copies of plans and specifications and blank proposals may be obtained at the office of the Director of Public Service, City Hall, Marion, Ohio, or at the office of George B. Gascoigne, 648 Leader-News Building, Cleveland, Ohio, after May 22, 1923. A deposit of Ten Dollars ($10.00) will be required for each set of plans and specifications taken from the above offices. If a bid is submitted this deposit will be refunded upon the return of said plans and specifications in good condition. Similar deposits will be required for additional sets of plans and specifications taken from the above offices, there being no refund for their return. All checks for said plans and specifications shall be made payable to the City of Marion.

The proposal shall contain the full name and address of the party or parties making the same and all persons interested therein, and shall be accompanied by a proposal bond signed by a surety company authorized to do business in the State of Ohio or by a certified check on a solvent bank located in Marion for Eight Thousand Dollars ($8,000.00) made payable to the City of Marion, as surety that if the bid be accepted a contract will be entered into and the performance of it properly secured.

No proposal will be entertained unless made on the blanks furnished by the Director of Public Service and delivered at the office of the Director of Public Service in the City Hall, Marion, Ohio, previous to 12 o'clock noon (Official Marion Time), on the day specified.

The City through its Director of Public Service, reserves the right to reject any or all bids, to waive any informalities in the bids received, and to accept any bid which is deemed most favorable to the City of Marion, Ohio.

The City of Marion, Ohio.

E. A. SCHULTZ,
Director of Public Service.

Bids: Feb. 28, 1924.

Arapuni Electric Power Scheme

SECTION I
HEADWORKS

Wellington, New Zealand.

Tenders for the above close with the Secretary, Public Works Tenders Board, Wellington, New Zealand, at noon on 28th February, 1924. Specifications may be seen on application at the New York, Cleveland, Chicago and San Francisco offices of "Engineering News-Record" and "Electrical World."

OFFICIAL PROPOSALS

Bids: June 13.

State Highway Work

Dover, Del.

Sealed proposals will be received by the State Highway Department, at its office, Dover, Delaware, until 2 o'clock p.m., June 13, 1923, and at that place and time publicly opened, for the construction of State Aid Highways, involving the following approximate quantities:

CONTRACT NO. CS21, 5.17 MILES
HARBESON-MILTON

4.00 Acres Clearing
2.00 Acres Grubbing
27,000 Cu. Yds. Excavation
200 Tons Broken Stone Base Course
8 400 Cu. Yds. Cement Concrete Pavement
110 Cu. Yds. Class A Concrete
1,800 Lbs. Reinforcement
630 L. Ft. 15 in. R. C. Pipe
30 L. Ft. 18 in. R. C. Pipe
42 L. Ft. 24 in. R. C. Pipe
44 L. Ft. 30 in. R. C. Pipe
34 L. Ft. 36 in. R. C. Pipe
34 L. Ft. 42 in. R. C. Pipe
2,200 L. Ft. Wire Cable Guard Rail
2,600 L. Ft. Wood Shoulder Curb

CONTRACT NO. CK10 8.90 MILES
HARRINGTON-BURRSVILLE

3.83 Acres Clearing
4.97 Acres Grubbing
24,000 Cu. Yds. Excavation
25,000 Cu. Yds. Borrow
200 Tons Broken Stone Base Course
13,950 Cu. Yds. Cement Concrete Pavement
540 Cu. Yds. Class A Concrete
140 Cu. Yds. Class B Concrete
25,000 Lbs. Reinforcement
30,250 Lbs. Structural Steel
1,800 L. Ft. 15 in. R. C. Pipe
330 L. Ft. 18 in. R. C. Pipe
30 L. Ft. 24 in. R. C. Pipe
94 L. Ft. 30 in. R. C. Pipe
30 L. Ft. 42 in. R. C. Pipe
1,900 L. Ft. Wire Cable Guard Rail
2 300 L. Ft. Wood Shoulder Curb
1,500 L. Ft. Timber Piling

CONTRACT NO. CK13 0.833 MILE
HOUSTON TO MILFORD
HARRINGTON ROAD

2,400 Cu. Yds. Excavation
1,285 Cu. Yds. Cement Concrete Pavement; or
1,285 Cu. Yds. Slag Cement Concrete
10 Cu. Yds. Class A Concrete
100 Lbs. Reinforcement
140 L. Ft. 15 in. R. C. Pipe

CONTRACT NO. CS22 3.09 MILES
FRANKFORD-OMAR

10,000 Cu. Yds. Excavation
80 Tons Broken Stone Base Course
4,800 Cu. Yds. Cement Concrete Pavement; or
4,800 Cu. Yds. Slag Cement Concrete Pavement
100 Cu. Yds. Class A Concrete
1,800 Lbs. Reinforcement
500 L. Ft. 15 in. R. C. Pipe
180 L. Ft. 18 in. R. C. Pipe
400 L. Ft. Wire Cable Guard Rail
600 L. Ft. Wood Shoulder Curb

CONTRACT CS24 2.24 MILES
DUBLIN HILL-BRIDGEVILLE

6,800 Cu. Yds. Excavation
50 Tons Broken Stone Base Course
3,600 Cu. Yds. Cement Concrete Pavement
50 Cu. Yds. Class A Concrete
1,000 Lbs. Reinforcement
300 L. Ft. 15 in. R. C. Pipe
120 L. Ft. 18 in. R. C. Pipe
380 L. Ft. Wire Cable Guard Rail
500 L. Ft. Wood Shoulder Curb

Performance of contract shall commence within ten (10) days after execution of the contract and be completed during 1923 as specified.

Monthly payments will be made for 90 per cent of the construction completed each month.

Bidders must submit proposals upon forms provided by the Department.

Each proposal must be accompanied by a surety bond, certified check, or money to the amount of at least ten (10) per centum of the total amount of the proposal.

The envelope containing the proposal must be marked "Proposal for the Construction of State Aid Highway Contract No....."

The Contract will be awarded or rejected within twenty (20) days from the date of opening proposals.

The right is reserved to reject any or all bids.

Detailed plans may be seen and index plans and specifications may be obtained upon deposit of ten dollars ($10.00), which amount will be refunded upon return of plans and specifications in good condition at the office of

STATE HIGHWAY DEPARTMENT,
Dover, Delaware.

OFFICIAL PROPOSALS

BIDS: June 6

State Road Work

Providence, R. I.

Sealed proposals, for the construction under the provisions of the Federal Aid Road Act of a section of State Highway in the towns of North Providence and Lincoln, beginning at a point on the Louisquisset Pike, 1,500 feet northerly from Mineral Spring Avenue in North Providence and extending northerly on the Louisquisset Pike a distance of 3.13 miles, will be received by the State Board of Public Roads at its office, State House, Providence, R. I., until 12 M. (Daylight Saving) (11 A.M. Eastern Standard) on Wednesday, June 6, 1923, at which time they will be opened and read in Public.

The principal estimated quantities are as follows:

Contract 2304 Federal Aid Project No. 17 (Division A)

Excavation (earth & ledge)	16,000 cu. yds.
Gravel Foundation	4,000 cu. yds.
Pipe Culverts	1,200 lin. ft.
Concrete Masonry	140 cu. yds.
Wooden Guard Rail	4,300 lin. ft.
Reinforced Cement Concrete Pavement	7,342 cu. yds.
Cement for Concrete Pavement	13,360 bbls.
Galvanized steel Fabric for Pavement	166,600 lbs.
Steel Bars for Pavement	18,500 lbs.

Bids must be made upon blank forms to be furnished by the Board. No bids will be accepted unless accompanied by a certified check for the sum of $200.00 payable to the State of Rhode Island.

The Board reserves the right to reject any and all bids, and to give preference to towns or cities, in accordance with Section V of Chapter 84 of the General Laws.

Plans may be examined and specifications and bidding blanks may be obtained at the office of the State Board of Public Roads, State House, Providence, R. I., on and after Wednesday, May 23rd, 1923, every week day (except holidays and Saturdays), between the hours of 9 a.m. and 5 p.m., Saturdays 9 a.m. to 12 m.

State Board of Public Roads
ABRAM L. ATWOOD
BENJAMIN F. ROBINSON
FRANK COLE
ALTON HEAD
JOHN W. HANLEY

Bids: June 7.

State Road Work

Harrisburg, Pa.

Pennsylvania State Highway Department, Harrisburg, Pa.—Sealed proposals will be received at the State Capitol until 10 a.m., June 7, 1923, when bids will be publicly opened and scheduled and contract awarded as soon thereafter as possible for the reconstruction of 27 miles of Bituminous or Reinforced Concrete Pavement and for the resurfacing of 30 miles of Roadway with either Bituminous Macadam or Bituminous Surface on Concrete Foundation. Bidding blanks and specifications may be obtained free, and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg. No refund for plans returned. They also can be seen at office of State Highway Department, Harrisburg, 1001 Chestnut Street, Philadelphia, and 119 Federal Street, N. S. Pittsburgh, Pa. P. D. WRIGHT, State Highway Commissioner.

Bids: June 26.

Subway Construction

Philadelphia, Pa.

Sealed proposals for constructing about 1,529 linear feet of 2-track subway in Arch Street between Eighth Street and Thirteenth Street, Contract 207, will be received at the Director's Office, Department of City Transit, 1211 Chestnut Street, Philadelphia, until 11 o'clock a.m., Eastern Standard Time (12 o'clock Noon Daylight Saving Time), Tuesday, June 26, 1923, and opened immediately thereafter.

Plans and specifications can be seen at 1211 Chestnut Street, twelfth floor, and copies of same with blanks forms of proposals will be supplied to intending bidders upon deposit of $20.00 (cash or certified check), which will be refunded upon return of the plans.

Each bidder must file a proposal bond in the Law Department of the City.

The Director reserves the right to reject any or all bids.

WILLIAM S. TWINING, Director.
Philadelphia, May 23, 1923.

OFFICIAL PROPOSALS

Bids: June 5.

Bridges

Fine, N. Y.

Sealed proposals will be received at the office of the Town Clerk of the Town of Fine, St. Lawrence County, New York, until Tuesday, the 5th day of June, 1923, at 1:00 P.M. for the building of two concrete-steel arch bridges, as follows:

1. Scott's Bridge, across the Oswegatchie River about four miles north of the Village of Oswegatchie.

2. A bridge across the Little River about three-quarters of a mile north of the Village of Oswegatchie.

Both located on Fine-Star Lake Highway.

Plans, specifications may be seen at office of

1. Mr. F. H. Kelly, Town Clerk of Fine, at the Village of Oswegatchie, St. Lawrence Co., N. Y.

2. Concrete-Steel Engineering Company, Park Row Bldg., New York, N. Y.

Copies of the plans and specifications including form of proposal may be obtained from the Concrete-Steel Engineering Company upon making a deposit of $20.00, which will be refunded upon the return of the plans and specifications in good order.

Each proposal must be accompanied by an unconditional certified check on a Natonal Bank for five per cent (5%) of the contract price, made payable to the order of the "Supervisor of the Town of Fine" as evidence of good faith, and to be forfeited to the Town as liquidated damages in case of failure on the part of the bidder to enter into a contract for the execution of the work, and to furnish a satisfactory surety bond as hereinafter stipulated. Bidders' certified checks will be returned after consideration of the bids, and the check of the successful bidder will be returned as soon as the contract is signed.

Successful bidder will be required to furnish bond acceptable to Town of Fine in sum equal to 50% amount of contract.

Proposals will be entertained only from parties who have at their command the necessary capital, plant and experience for properly doing such work.

Contract for one or both bridges may be awarded to one party. The party or parties to whom a contract may be awarded will be required to execute the contract with surety within ten days from the date of service of notice to that effect; and in case of failure or neglect to do so, he or they will be considered as having abandoned it.

The right is reserved by the Town to accept any proposal or to reject any or all proposals.

TOWN OF FINE
By E. H. BACKUS, Town Superintendent.

Bids: June 27.

Water Supply System

Davenport, Wash.

Proposals will be received by the City Council, of Davenport, Washington, until 8 o'clock P.M. of the 27th day of June, 1923, for materials and labor required in construction of additions to City water supply system, as follows:

One 150,000-gallon Elevated Tank.
(alternate designs, steel and concrete tower);
Approximately 900 lineal feet of new 8-inch main,
(alternate steel and cast-iron pipe);
Changes in piping system at Pump House, including Altitude Control Valve, Gate Valve and specials;

Each proposal shall be accompanied by a bona fide certified check, on a banking institution in the state of Washington, in a sum not less than ten per cent (10%) of the amount of proposal.

Proposals shall be made upon blank forms furnished for the purpose, and shall be addressed to Mayor and City Council, in care of Mrs. Nan C. Ingle, City Clerk. Envelope to be marked "Water Works Proposal."

Plans and Specifications can be seen at the Mayor's office, Davenport, or in the office of R. M. Murray, Engineer, 326 Hutton Bldg., Spokane. Copies of Plans and Specifications for individual use may be obtained of the City Clerk on deposit of Ten Dollars ($10.00), five dollars of which amount will be refunded when sets are returned.

By order of the City Council.

Signed at Davenport, Wash., May 15, 1923.

J. E. FRASER, Mayor.
NAN C. INGLE, Clerk.

OFFICIAL PROPOSALS

Bids: June 20.

Concrete Dam

Fort Collins, Colo.

Sealed proposals will be received at the office of the North Poudre Irrigation Company in Fort Collins, Colorado, until twelve o'clock M., on June 20, 1923, for the enlargement of the Halligan Dam on the North Fork of the Cacheela Poudre River about thirty-five miles northwest of Fort Collins, Colorado, requiring about 5,000 cubic yards of foundation excavation and the placing of about 22,000 cubic yards of mass concrete in an arched concrete dam, together with other related work.

Full plans and specifications will be furnished upon application accompanied by a deposit of $15.00 to be repaid to the successful bidder and to all other bidders upon the return by them of the plans and specifications in good and acceptable condition. The Board of Directors reserves the right to reject any or all bids as the interests of the Company may require.

Each proposal must be accompanied by a certified check for five per cent of the amount bid payable to the order of the Treasurer of the North Poudre Irrigation Company for the benefit of said company as a guaranty that the bidder will, if successful, execute a satisfactory contract and furnish a bond satisfactory to the Board of Directors of the Company in the sum of not less than twenty-five per cent of the amount of his bid for the faithful performance of the work in accordance with the plans and specifications.

Proposals may be made for a completed structure according to the plans and specifications, the contractor to furnish all material therefor at his own expense, or may be made on the basis that the Company furnish cement and all steel or iron used in the construction, f.o.b. cars at Ingleside, Colorado; or the bidder may make proposals or both bases.

The proposal must be marked "Proposal for Enlargement of the Halligan Dam" and addressed "North Poudre Irrigation Company, Fort Collins, Colorado."

Done in pursuance of an order of the Board of Directors of the North Poudre Irrigation Company this 14th day of May, 1923.

A. J. WHISTLEMAN,
Secretary of the North Poudre Irrigation Co.

Bids: June 8.

Street Improvement

Fulton, N. Y.

Notice is hereby given that sealed proposals will be received by the Common Council, at the office of the City Clerk, until 8 o'clock p.m., standard time, on the 8th day of June, 1923, for paving with asphaltic concrete and otherwise improving several streets in the City of Fulton, N. Y.

APPROXIMATE QUANTITIES

27,520 sq.yds. of asphaltic pavement.
11,000 cu.yds. excavation.
20,830 lin.ft. combination curb and gutter.
20,830 lin.ft. of tile drain.
750 lin.ft. stone header.
4,970 lin.ft. storm sewer and catch basin connections.
38 catch basins.
15,600 sq.ft. sidewalk.

Proposal blanks and specifications may be obtained at the office of the City Engineer, Fulton, N. Y., a charge of $5.00 being made for same.

The Common Council reserves the right to reject any or all bids as may be deemed for the best interests of the City.

(Signed) M. C. BAKER,
City Clerk.

May 25, 1923.
(Signed) G. W. HACKETT
City Engineer.

BIDS: June 14

Pier

Charlestown, S. C.

Sealed proposals will be received by the Port Utilities Commission of Charleston, S. C., at its office, Room 712 Peoples Building until noon, June 14, 1923, and then publicly opened, for constructing with creosoted piles a pier at Market Street and a wharf at Columbus Street, Charlestown, S. C.

Specifications and proposal forms will be furnished to prospective bidders on deposit of $5.00, which will be refunded to depositors who submit proposal or return sets in good condition. Further information on application.

H. M. GALLAGHER
General Manager.

OFFICIAL PROPOSALS

Bids: June 12.

Roads and Bridges

Charleston, W. Va.

Sealed proposals will be received by the State Road Commission of West Virginia at its office in Charleston, W. Va., until ten o'clock a.m. on the 12th day of June, 1923, and opened and read immediately thereafter at the Kanawha County Court House, Charleston, W. Va., for the construction of the following bridges, sections of state road and surface treatment:

Projects 3104 and 3205-B—Boone County—12 miles of the Racine-Whitesville road for grading and draining. Certified check $6,000.00.

Project 3151-C and 48—Boone County—2 miles of the Madison to Danville road for grading, draining and paving with Bituminous Macadam. Certified check $2,400.00.

Projects 3261 and 50—Clay County—1.9 miles South end Clay Court House to Two Mile Run, for grading, draining and paving with Bituminous Macadam. Certified check $3,000.00.

Project 3038—Fayette County—5.3 miles of the Falls District Line to Ansted Road for paving with Bituminous Macadam. Certified check $6,000.00.

Project 3259—Kanawha County—6 miles of the Pocatalico to Jackson County line road for grading and draining. Certified check $4,000.00.

Project 3286—Kanawha County—2 miles of the St. Albans-Putnam County Line road for grading, draining and paving with Bituminous Macadam. Certified check for $3,000.00.

Project 3239—Raleigh County—6.3 miles of the Craborchard-Slab Fork District Line road for grading, draining and paving with Bituminous Macadam. Certified check for $8,000.00.

Project 2027—Cabell County—Repair of Russell Creek Bridge No. 687. Replacing concrete and brick floor with wood block, additional steel and repairing piers under truss bearings. Length 470 feet. Certified check $500.00.

Project 3155—Cabell County—6.3 miles of the Meliss Salt Rock road for grading and draining. Certified check $6,000.00.

Project 3169—Lincoln County—9.4 miles of the Rangers-Harts road for grading and draining. Certified check $5,000.00.

Projects 89 and 3228—Logan County—3.5 miles of the Logan-Rossmore road for paving with cement concrete. Certified check $6,000.00.

Project 3138—Mason County—Five Mile Bridge No. 857 Concrete Deck Girder 60-ft. span and Three Mile Bridge No. 858 Concrete Deck Girder 35-ft. span, to be let in one contract. Certified check $1,100.00.

Project 3188—Wayne County—Jennies Creek Bridge No. 872 Ashlar Masonry or Concrete substructure. Certified check $500.00.

Project 3176—Brooke County—0.8 mile of the River Road for paving with cement concrete. Certified check $2,000.00.

Project 3077—Brooke County—2 miles of the Project 92 to Wellsburg road for grading and draining. Certified check $600.00.

Projects 3114 B and D Brooke County—1 mile of the River Road for paving with Cement Concrete. Certified check $1,600.00.

Project 3165—Calhoun County—1.1 mile Main Street of Grantsville for grading, draining and paving with cement concrete paving. Certified check $2,500.00.

Project 3253—Hancock County—3 miles of the River Road from Brooke County Line to Kings Creek Bridge for paving with brick. Certified check $3,000.00.

Project 3089—Hancock County—1 mile of the River Road for paving with brick. Certified check $1,600.00.

Project 3075-B—Jackson County—2 miles of the Ripley-Kenna Road for cement concrete paving. Certified check $3,000.00.

Project 3074-A—Jackson County—2 miles of the Ripley-Cottageville road for paving with cement concrete. Certified check for $2,500.00.

Project 3075—Jackson County—Kenna Bridge No. 817 Concrete Arch 50-ft. Span. Certified check $500.00.

Project 3074—Jackson County—Little Mill Creek Bridge No. 816. Concrete Deck Girder, 4-5 ft. spans. Certified check $1,100.00.

Project 3086-B—Marshall County—2 miles of the River Road for grading and draining. Certified check $800.00.

Project 3167-B—Marshall County—Denver Bridge No. 885—Concrete or masonry substructure. Certified check $500.00.

Project 3252-A—Pleasants County—1.2 miles of the St. Marys-Ellenboro road for grading and cement concrete paving. Certified check $1,500.00.

Project 3078-A—Pleasants County—French Creek Bridge No. 870. Concrete Deck Girder 2-25 ft. spans and 1-60 ft. span. Certified check $700.00.

Project 3115-B—Ritchie County—2 miles of the Cairo-Nutter Farm Road for paving with Cement Concrete. Certified check $3,000.00.

Project 3168-A—Roane County—2 miles of the Gandeeville-Walton Road for paving with Bituminous Concrete Cement Concrete, Rock Asphalt or Warrenite Bitulithic. Certified check $3,000.00.

Project 3082-B—Wetzel County—3 miles of the River road for grading, draining and gravel surfacing. Certified check $2,000.00.

Project 3263—Wetzel County—1.2 miles of the Wheeling Fairmont Turnpike for grading and draining. Certified check $700.00.

Project 3116-B—Wood County—1.5 miles of the Northwestern Turnpike for paving with Bituminous Concrete, Cement Concrete Rock Asphalt or Warrenite Bitulithic. Certified check $2,000.00.

Project 3225-C—Harrison County—4.5 miles of the Good Hope-Lewis County Line road for grading, draining and paving with Bituminous Macadam. Certified check $6,500.00.

Project 3275—Marion County—2.5 miles of the Glovers Gap to Wetzel County Line for grading and draining. Certified check $3,500.00.

Project 3255—Lewis County—2 miles of the Jane Lew Harrison County Line road for grading, draining and paving with Cement Concrete. Certified check $3,000.00.

Project 3203-C—Preston County—4.5 miles of the Northwestern Turnpike for grading and draining. Certified check $2,000.00.

Project 3203-D—Preston County—6 miles of the Northwestern Turnpike for grading and draining. Certified check $2,000.00.

Project 3203-E—Preston County—5 miles of the Northwestern Turnpike for grading and draining. Certified check $2,500.00.

Project 3203-F—Preston County—5 miles of the Northwestern Turnpike for grading and draining. Certified check $2,500.00.

Project 3186—Preston County—5 miles of the Thomas-Gnegy Church road for grading, draining and paving with Cement Concrete. Certified check $9,000.00.

Project 1127—Preston County—3 miles of the Kingwood-Reedsville Road for paving with Bituminous Macadam. Certified check $3,000.00.

Project 3229—Taylor County—7 miles of the Grafton-Preston County Line road for grading and draining. Certified check $3,000.00.

Project 3224—Taylor County—3.1 miles of the Grafton-Philippi road for grading, draining and paving with Bituminous Macadam. Certified check $5,000.00.

Project 3238-A—Upshur County—1.4 miles of the Buckhannon-Clarksburg road for grading, draining and paving with cement concrete. Certified check $2,500.00.

Project 122-B—Grant County, Abrams Creek Bridge No. 883, Masonry substructure. Certified check $500.00.

Project 3013—Hardy County—5.85 miles of the Oldfields-Hampshire County Line road for completion of the grading, draining and paving with waterbound macadam. Certified check $6,000.00.

Projects 3029 and 3143—Tucker County—3 miles of the Parsons-Thomas road for paving with waterbound macadam.

Project 3143—Tucker County—5 miles of the Parsons-Thomas road for grading and draining. Certified check $4,000.00.

Project 2048-A-S—McDowell County—0.96 mile of the Kimball-Northfork road for grading and draining. Certified check $2,500.00.

Projects 2099, 2101, 3324 and 2102—Preston County—17.1 miles Cold Road Oil Surface Application including furnishing and applying cover coat. Certified check $500.00.

Project 81—Taylor County—2 miles Cold Road Oil Surface Application including furnishing and applying cover coat. Certified check $500.00.

Projects 91, 27, 16, 2107, 2108—Barbour County—12.7 miles Cold Road Oil Surface Application, including furnishing and applying cover coat. Certified check $500.00.

Proposals will be received only upon State Standard forms in accordance with plans, specifications and estimates of quantities therefor, which standard forms, plans, specifications and estimates of quantites may be obtained from the office of the Division Engineer in whose territory the proposed construction is located or from the office of the State Road Commission at Charleston, W. Va.

Each proposal must be accompanied by a certified check for the amount noted.

The right is reserved to reject any and all proposals.

THE STATE ROAD COMMISSION OF WEST VIRGINIA
E. B. CARSKADON, Secretary.

OFFICIAL PROPOSALS

Bids: June 12.

Street Improvements

Long Branch, N. J.

Notice is hereby given that sealed proposals will be received by the Board of Commissioners of the City of Long Branch, New Jersey, for the paving of Bath Avenue, North Bath Avenue, South Bath Avenue and Garfield Avenue, with approximately 35,000 square yards of asphalt, upon a concrete foundation, with concrete gutters 3 feet wide, together with new concrete curb and other work incidental to said improvements, including those portions of driveways of intersecting streets or alleys which are included within the property lines of said avenues above mentioned and will be opened and read at a regular meeting of the Board of Commissioners at City Hall, Long Branch, N. J., on Tuesday evening, June 12, 1923, at 8 o'clock, Day Light Saving Time, or as soon thereafter as same can be presented.

Drawings and specifications prepared by J. W. Seaman, City Engineer, are now on file in the office of the City Clerk and at the office of the engineer, and may be obtained from the engineer by prospective bidders during business hours, upon a deposit of $10, which will be refunded upon return of the plans and specifications in good condition at or before the time the bids are received.

All bids must be made on the standard proposal form in the manner designated therein and required by the specifications and must be enclosed in sealed envelopes bearing the name and address of the bidder and marked "Bid for paving Bath Avenue, North Bath Avenue, South Bath Avenue and Garfield Avenue" and addressed to Frank C. Quinn, City Clerk, and must be accompanied by a surety company certificate stating that said surety company will provide the bidder with the required bond on the proposed work. No bid will be considered unless accompanied by a certified check for not less than 10% of the amount bid on the work, drawn to the order of Frank L. Howland, City Treasurer, or cash in equal amount.

The standard proposal form and data may be obtained on application to the engineer at his office 192 Broadway, Long Branch, New Jersey.

The Board of Commissioners reserve the right to reject any or all bids if deemed to the best interest of the City so to do.

Dated Long Branch, New Jersey, May 26, 1923.

FRANK C. QUINN,
City Clerk.

Bids: June 11th.

Street Improvement

Adrian, Mich.

Sealed proposals will be received by the City Commission of the City of Adrian, at the office of the City Clerk, until three p.m., June 11th, 1923, for the improvement of the following streets:

Center street from Church to Erie street.
Toledo street from Main to Broad street.
Pearl stret from Winter to Church street.
Front street from Winter to Main street.
Center street from Logan to Beecher street.
Wolverton avenue, Maumee to Pearl street.

The work will consist of 5,163 yards of excavation, 11,591 yards of pavement and 2,174 feet of curbing. Alternate bids will be received on this work on 6 inch concrete base with 2½ inch asphalt top also straight 7 inch concrete construction. At the same time and place, bids will be received for resurfacing with sheet asphalt, Maumee street from Broad to Maume street bridge, Main street from Church to Front street, with 3,425 feet of header and 8,313 square yards of asphalt top.

All bids to be made on blanks provided in the proposals furnished to bidders. Bids must be accompanied by certified check made payable to the City of Adrian for the sum of $1,000.00 to insure good faith of the bidder. Plans specifications and bidding blanks may be obtained at the office of the City Clerk upon the payment of $5.00, which sum will be returned to the bidder if a bona-fide bid is submitted on the above date and plans are returned in good condition.

The right to reject any or all bids is reserved and the right to waive any immaterial defect or irregularity in the bids if it should be of interest to the City of Adrian.

By order of the City Commission.

G. PERCY LOVE,
City Clerk.

OFFICIAL PROPOSALS

Bids: June 26.

Hudson River Vehicular Tunnel

CONTRACT NO. 5

New York, N. Y.

Sealed bids will be received by New York State Bridge and Tunnel Commission and New Jersey Interstate Bridge and Tunnel Commission at the office of the Commissions, Room 618, Hall of Records, New York City, until 2:00 o'clock p.m. (Eastern Standard Time), Tuesday, June 26th, 1923, for the construction of a portion of two (2) tunnels as approaches to the river section of a vehicular tunnel under the Hudson River, said approach section being on the Island of Manhattan, known as Contract No. 5.

A statement of the quantities of the various items of work and further information are given in the invitation to bid forming part of the contract. At the above place and time the bids will be publicly opened and read. The award of the contract, if awarded, will be made by the Commissions as soon thereafter as practicable. The Commissions reserve the right to reject any and all bids.

Bonds in the sum of three hundred fifty thousand ($350,000) dollars each to the State of New York and to the State of New Jersey will be required for the faithful performance of the contract.

No bids will be received or considered unless accompanied by two certified checks upon a National or State Bank or Trust Company, satisfactory to the Commissions and located in New York City or the cities of Newark or Jersey City in the sum of seventy-five thousand ($75,000) dollars each, one payable to the order of the "Comptroller of the State of New York," and the other payable to the order of "The New Jersey Interstate Bridge and Tunnel Commission."

The time allowed for the completion of the work is twenty-four months after the date of the delivery of the contract.

Books containing forms of invitation to bid, proposal, contract, specifications and bond and contract drawings, etc., can be obtained at the office of the Commissions for the sum of $5.00 per set, which will be refunded upon their return in good condition within thirty (30) days from the date of receipt of bids.

New Jersey Interstate Bridge and Tunnel Commission.

THEODORE BOETTGER,
Chairman.

New York State Bridge and Tunnel Commission.

GEORGE R. DYER,
Chairman.

Bids: June 4.

Building Alterations and Repairs

New York, N. Y.

Sealed proposals for Alterations, Repairs, Etc., To Office Buildings, Department of Labor, 124 East 28th St., New York City, will be received by Hon. Bernard L. Shientag, Industrial Commissioner, 124 East 28th St., New York City, until 1 o'clock p.m. (Standard Time), Monday, June 4, 1923, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a deposit, consisting of a certain check drawn upon some legally incorporated bank in this State and made payable to the State of New York, or money, equal to five per cent (5%) of the amount of the proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specification No. 4099. The right is reserved to reject any or all bids. Drawings and specifications may be examined at the office of the Department of Labor, 124 East 28th St., New York City at the New York Office of the Department of Architecture, 18th Floor, Fuller Building, Broadway and 23rd St.; and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, SULLIVAN W. JONES, Capitol, Albany, N. Y.

Dated: May 17, 1923.

OFFICIAL PROPOSALS

Bids: June 21.

Road Work

Newton, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Sussex for the construction of Newton Avenue in the Borough of Sussex, County of Sussex, with a reinforced concrete surface, estimated amount of surface pavement required is 720 sq.yds. and for the improvement of Mill Street in the Borough of Sussex, County of Sussex with a reinforced concrete surface estimated amount of surface pavement required is 1,408 sq.yds. and for the improvement of Newton Stanhope Road Section 3A in the Borough of Andover, County of Sussex, estimated amount of surface pavement required is 11,798 sq.yds. and opened and read in public at the Freeholders Office, Newton, N. J., on June 21, 1923, at 11:30 a.m., Daylight Saving Time.

Drawings, Specifications and forms of bid, contract and bond for the proposed work, prepared by Harvey Snook, County Engineer, are on file in the Office of the said Engineer at Newton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the Engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to the Board of Chosen Freeholders, County of Sussex, Newton, N. J., and must be accompanied by a certificate of the Bonding Company and a certified check for not less than 10% of the amount bid and be delivered at the place and on the hour above named. The Standard Proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

By order of the Board of Chosen Freeholders.

(Signed) WM. S. VOUGHT,
Clerk.

Bids: June 22.

Furnishing and Laying Random Road Main

CONTRACT 31
BALDWIN-FAIRMOUNT PROJECT

Cleveland, Ohio.

Sealed proposals will be received at the office of the commisioner of purchases and supplies, room 213, City Hall, until 12:00 o'clock noon, official Cleveland time, Friday, June 22, 1923, for furnishing and laying Random Road Main, of the Baldwin-Fairmount Project, division of water, and will be opened and read in the council chamber immediately thereafter.

Each bid must be accompanied by a cashier's check on a solvent bank for five thousand dollars ($5,000.00) drawn payable to the city of Cleveland as surety for the acceptance of the contract.

Each bid must be made in accordance with the plans and specifications which may be obtained at the division of water drafting room, 213 City Hall, upon the deposit of five dollars ($5.00) per set, said deposit to be redeemed upon the return of said copies in good condition.

No proposal will be entertained unless made on the blank forms furnished by the division of water, and delivered at the office of the commissioner of purchases and supplies, previous to 1:00 o'clock noon on the day above specified.

The city reserves the right to reject any or all bids.

This contract contains 8,500 cu.yds. of excavation and backfilling; furnishing and setting 1,045 tons of 24-inch straight B. & S. pipe; 48 tons of B. & S. fittings; setting 3-24-inch and 8-20-inch valves furnished.

A. V. RUGGLES
Commissioner of Water.

Roads and Bridges

BOND ISSUE

Minneapolis, Minn.

The Minnesota State Legislature authorized a bond issue of $2,000,000 for Hennepin County, for the construction of roads and a bridge over the Minnesota River, between Fort Snelling and Mendota. Bridge approximately 4,100 feet long, 110 feet above low water; will probably be steel. Engineer not selected.

GEORGE H. MALLON,
Chairman County Commissioners,
Minneapolis, Minnesota.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ADVERTISEMENTS ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE.

OFFICIAL PROPOSALS

Bids: June 12.

Five Sections of State Highway

Baltimore, Md.

Sealed proposals for building five sections of State Highway, as follows:

Frederick Co. Cont. F-64. One section of State Highway from Graceham toward Rock Ridge, for a distance of 1.0 mile. (Concrete.)

Montgomery Co. Cont. No. 125-A. One section of State Highway along the Blair Road from the Brookville Pike 1 mile easterly. (Concrete Shoulders.)

Cecil Co. Cont. Ce-45. One section of State Highway from Singerly toward Fair Hill, for a distance of 2.0 miles. (Concrete.)

Dorchester Co. Cont. D-30. One section of State Highway between Eldorado and Finchville, for a distance of 1.0 mile. (Concrete.)

Allepany Co. Cont. A-3A. One section of State Highway along the Bedford Road from the Cumberland City Limits to the Cross Road and along the National Pike from the Pennsylvania R.R. bridge to Narrows Park, a distance of 1.5 miles. (Concrete Shoulders.)

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M., on the 12th day of June, 1923, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of $1, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of Five Hundred ($500) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By Order of the State Roads Commission this 21st day of May, 1923.

JOHN N. MACKALL, Chairman.

L. H. STEUART, Secretary.

Bids: June 12.

Sixteen-Inch Distribution Main from Reservoir Connections

Woodbury, N. J.

Sealed proposals, marked "Proposal for Cast Iron Pipes, Special Castings and Bell-end Stop Valves, with Boxes and Covers; also Fire hydrants, if required," or "Proposal for Cast Iron Pipe Laying," and addressed to "Mr. Clinton S. Davis, City Clerk, Woodbury, New Jersey," will be received at the meeting of the City Council of the City of Woodbury, New Jersey, at the Council Chamber, City Hall, Woodbury, New Jersey, on Tuesday, June 12, 1923, at eight o'clock P.M., for all or any part of said materials and installation.

Drawings and specifications may be examined and information obtained at the office of Mr. William H. Boardman, Engineer, 426 Walnut Street, Philadelphia, or at the office of the undersigned.

A certified check for $200.00, drawn to the order of "The City Treasurer of the City of Woodbury, New Jersey," or equivalent Bidder's Bond, must accompany each proposal.

The City Council reserves the right to reject any or all proposals or to accept any proposal for the whole or any portion of the work.

CLINTON S. DAVIS,
City Clerk,
Woodbury, N. J.

OFFICIAL PROPOSALS

Bids: June 19.

Highway Work

Baltimore, Md.

Sealed proposals for building five sections of State Highway, as follows:

Frederick Co. Cont. F-60—One section of State highway from Myersville toward Ellerton, for a distance of 1.0 mile. (Macadam Resurfacing.)

Carroll Co. Cont. Cl. 40—One section of State highway from Gamber toward Finksburg for a distance of 1.0 mile. (Concrete.)

Anne Arundel Co. Cont. AA-34—One section of State highway along the Mayo Road for a distance of 2.0 miles. (Gravel.)

Charles Co. Cont. Ch-27—One section of State Highway between Marbury and Doncaster for a distance of 2.0 miles. (Gravel.)

Queen Annes Co. Cont. Q-26—One section of State Highway from Millington toward Sudlersville for a distance of 2.0 miles. (Concrete.)

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on the 19th day of June, 1923, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the commission upon application and cash payment of $1.00, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of five hundred ($500) dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By Order of the State Roads Commission this 28th day of May, 1923.

JOHN N. MACKALL,
Chairman.

L. H. STEUART, Secretary.

Bids: June 15.

Highway Work

Albany, N. Y.

OFFICE OF THE STATE COMMISSION OF HIGHWAYS—Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock p.m., advanced standard time, which is 12 o'clock noon eastern standard time, on Friday, June 15, 1923, for the reconstruction of highways in the following counties:

ALBANY ..... (one contract: 1.43)
BROOME ..... (one contract: 3.68)
CHENANGO ..... (one contract: 1.61)
HERKIMER ..... (one contract: 1.02)
JEFFERSON ..... (one contract: 2.95)
MADISON ..... (one contract: 1.30)
MONTGOMERY ..... (one contract: 1.65)
ORANGE... (two contracts: 2.00 and 1.96)
SARATOGA ..... (one contract: 2.42)
BROOME—Grade Crossing Elimination, 0.37 mile.

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the division engineers in whose division the roads are to be reconstructed. The addresses of the division engineers and the counties in which they are in charge will be furnished upon request.

The especial attention of bidders is called to "General Information for Bidders" in the itemized proposal, specifications and contract agreement.

FRED'K STUART GREENE,
Commissioner.

W. A. PATTON, Secretary.

OFFICIAL PROPOSALS

Bids: June 21.

Road Work

Newton, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Sussex for the construction of Newton Avenue in the Borough of Sussex, County of Sussex, with a reinforced concrete surface, estimated amount of surface pavement required is 720 sq.yds. and for the improvement of Mill Street in the Borough of Sussex, County of Sussex with a reinforced concrete surface estimated amount of surface pavement required is 1,408 sq.yds. and for the improvement of Newton Stanhope Road Section 3A in the Borough of Andover, County of Sussex, estimated amount of surface pavement required is 11,798 sq.yds. and opened and read in public at the Freeholders Office, Newton, N. J., on June 21, 1923, at 11:30 a.m., Daylight Saving Time.

Drawings, Specifications and forms of bid, contract and bond for the proposed work, prepared by Harvey Snook, County Engineer, are on file in the Office of the said Engineer at Newton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the Engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to the Board of Chosen Freeholders, County of Sussex, Newton, N. J., and must be accompanied by a certificate of the Bonding Company and a certified check for not less than 10% of the amount bid and be delivered at the place and on the hour above named. The Standard Proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

By order of the Board of Chosen Freeholders.

(Signed) WM. S. VOUGHT,
Clerk.

Bids: June 19.

Grading, Curbing, Paving and Storm Sewer

East Aurora, N. Y.

Sealed proposals will be received by the Board of Trustees of the Village of East Aurora, New York, at the office of the Village Clerk, 1 Church Street, until 7 o'clock p.m. (Eastern Standard Time), Tuesday, June 19, 1923, for grading, curbing and paving Fillmore Avenue from the Easterly side of Maple Street to the Westerly right of way line of the Pennsylvania Railroad, and the laying of a storm sewer on Whaley Avenue from Fillmore Avenue to Tannery Brook, in accordance with the plans and specifications on file in the office of George C. Diehl, Village Engineer, 575 Ellicott Square, Buffalo, N. Y.

Alternate bids are requested for the following kinds of pavements (1) Brick, (2) Asphalt and (3) Asphalt Block.

All bids must be made upon blanks to be furnished by the Engineer, and must be accompanied by a certified check in the sum of ten per cent (10%) of the total amount of each bid, payable to the Village of East Aurora, N. Y.

The right is reserved to reject any or all bids.

May 29th, 1923.

D. N. RUMSEY, Village Clerk.

OFFICIAL PROPOSALS

Bids: June 26.

Hudson River Vehicular Tunnel

CONTRACT NO. 5

New York, N. Y.

Sealed bids will be received by New York State Bridge and Tunnel Commission and New Jersey Interstate Bridge and Tunnel Commission at the office of the Commissions, Room 618, Hall of Records, New York City, until 2:00 o'clock p.m. (Eastern Standard Time), Tuesday, June 26th, 1923, for the construction of a portion of two (2) tunnels as approaches to the river section of a vehicular tunnel under the Hudson River, said approach section being on the Island of Manhattan, known as Contract No. 5.

A statement of the quantities of the various items of work and further information are given in the invitation to bid forming part of the contract. At the above place and time the bids will be publicly opened and read. The award of the contract, if awarded, will be made by the Commissions as soon thereafter as practicable. The Commissions reserve the right to reject any and all bids.

Bonds in the sum of three hundred fifty thousand ($350,000) dollars each to the State of New York and to the State of New Jersey will be required for the faithful performance of the contract.

No bids will be received or considered unless accompanied by two certified checks upon a National or State Bank or Trust Company, satisfactory to the Commissions and located in New York City or the cities of Newark or Jersey City in the sum of seventy-five thousand ($75,000) dollars each, one payable to the order of the "Comptroller of the State of New York," and the other payable to the order of "The New Jersey Interstate Bridge and Tunnel Commission."

The time allowed for the completion of the work is twenty-four months after the date of the delivery of the contract.

Books containing forms of invitation to bid, proposal, contract, specifications and bond and contract drawings, etc., can be obtained at the office of the Commissions for the sum of $5.00 per set, which will be refunded upon their return in good condition within thirty (30) days from the date of receipt of bids.

New Jersey Interstate Bridge and Tunnel Commission.

THEODORE BOETTGER,
Chairman.

New York State Bridge and Tunnel Commission.

GEORGE R. DYER,
Chairman.

Bids: June 22.

Furnishing and Laying Random Road Main

CONTRACT 31

BALDWIN-FAIRMOUNT PROJECT

Cleveland, Ohio.

Sealed proposals will be received at the office of the commisioner of purchases and supplies, room 213, City Hall, until 12:00 o'clock noon, official Cleveland time, Friday, June 22, 1923, for furnishing and laying Random Road Main, of the Baldwin-Fairmount Project, division of water, and will be opened and read in the council chamber immediately thereafter.

Each bid must be accompanied by a cashier's check on a solvent bank for five thousand dollars ($5,000.00) drawn payable to the city of Cleveland as surety for the acceptance of the contract.

Each bid must be made in accordance with the plans and specifications which may be obtained at the division of water drafting room, 213 City Hall, upon the deposit of five dollars ($5.00) per set, said deposit to be redeemed upon the return of said copies in good condition.

No proposal will be entertained unless made on the blank forms furnished by the division of water, and delivered at the office of the commissioner of purchases and supplies, previous to 1:00 o'clock noon on the day above specified.

The city reserves the right to reject any or all bids.

This contract contains 8,500 cu.yds. of excavation and backfilling; furnishing and setting 1,045 tons of 24-inch straight B. & S. pipe; 48 tons of B. & S. fittings; setting 3-24-inch and 8-20-inch valves furnished.

A. V. RUGGLES,
Commissioner of Water.

OFFICIAL PROPOSALS

Bids: June 25.

Dock Front and Dredging

Greenville, Pa.

(1) Building Reinforced Concrete Dock Front for Dock No. 1 and (2) Dredging Channel between present dock front and new dock front including the removal of present dock at Conneaut Harbor, Ohio.

Sealed proposals will be received by the Bessemer and Lake Erie Railroad Company, at the Office of the Chief Engineer, Greenville, Pa., up to noon, June 25, 1923, for (1) Building Reinforced Concrete Dock Front for Dock No. 1 and (2) for Dredging that portion of channel which lies between the present dock front of Dock No. 1 and the New Dock Front for Dock No. 1 including the removal and disposal of that part of the present dock front not included in 1.

The successful bidder will be required to furnish a surety bond of a satisfactory Surety Company to the amount of (1) 150,000 dollars, (2) 20,000 dollars as security for the faithful performance of the Contract.

The principal quantities are as follows:

(1) Reinforced Concrete
Dock Front on Piles 756' } 10,600 cu.yd.
Dock Front and Piers 1188' }
Reinforced Concrete Eighteen-inch Piles, 43,000 lin.ft.
Reinforced Concrete 20"x14" Sheet Piles, 14,400 lin.ft.
U. S. Steel Sheet Piling.....595,400 pounds
(2) 1,200 lin.ft. Old Dock, 123,000 cu.yd. excavation.

Each bid shall be made on the proposal in the accompanying pamphlet and enclosed in envelope furnished herewith. The same to be securely sealed bearing, no indication of the name of the Bidder nor the amount of the bid, and shall be mailed to the officer of the Company designated in this notice to receive the same.

The pamphlet containing form of Notice, Proposal, Contract and Specifications, and the Plans of this work may be seen at or obtained from Chief Engineer's Office, Greenville, Pa.

The right is reserved to reject any and all bids.

H. T. PORTER, Chief Engineer,
Greenville, Pa.

Bids: June 21.

Sanitary Sewer Construction

Linthicum Heights, Md.

Sealed proposals addressed to the Anne Arundel County Sanitary Commission, Linthicum Heights, Maryland, for constructing sewers in the Glen Burnie Sanitary District, Contract No. 1-S containing approximately 3,200 lineal feet of six-inch vitrified pipe including house connections, 2,506 lineal feet eight-inch and 3,359 lineal feet ten-inch vitrified pipe, 158 lineal feet manholes including necessary fittings, excavation, back-fill and incidental work, and in the Linthicum Heights Sanitary District, Contract No. 2-S containing approximately 1,191 lineal feet of six-inch vitrified pipe house connections, 15,889 lineal feet eight-inch and 1,682 lineal feet ten-inch vitrified pipe sewer, 473 lineal feet of brick or concrete manholes including necessary fittings, drop connections, excavation, back-fill and incidental work, as shown on drawings on file in the office of the Commission at Linthicum Heights, Maryland, will be received at said office, until twelve o'clock noon June 21, 1923, at which place they will be publicly opened and read.

Proposals for each contract must be made upon the blank forms furnished by the Commission for that purpose, which with more complete information to bidders, plans and specifications will be furnished by the Commission upon application and cash payment of five dollars for each set, which will not be refunded by the Commission.

The successful bidder will be required to be bonded to the Commission to a sum equal to fifty per cent of the amount of his proposal.

Each proposal must be accompanied by a certified check for five per cent of the amount of the proposal and unless so accompanied will not be considered.

The right is hereby reserved to reject any or all proposals and to waive technical informalities as the interests of the Anne Arundel County Sanitary Districts may require.

The Anne Arundel County Sanitary Commission.

FRED M. WARNKEN, Chairman,
WM. C. LENKUHL,
JAMES J. MURPHY.

WM. H. SAUNDERS,
Secretary-Treasurer.

OFFICIAL PROPOSALS

Bids: June 20.

Storage Dam, Pipe Line and Filter Plant

Fairport, N. Y.

Sealed proposals will be received by the Municipal Commission of Fairport, N. Y., at its office until two o'clock P.M. standard time, Wednesday, June 20, 1923, for constructing the following works:

DIVISION 1. An earthen dam with concrete core about 45 feet in height and 400 feet in length, an adjacent earthen concrete dam 10 feet in height and about 200 feet in length with a total of 45,000 cubic yards of earth embankment and about 2,000 cubic yards of concrete. Gravel is available close to the site of the work. These dams will be located about 3 miles south of the Village of Victor, N. Y.

DIVISION 2. A rapid sand reinforced concrete filter plant with a daily capacity of 1,000,000 per day located about 3 miles south of the Village of Fairport, N. Y.

DIVISION 3. The hauling, excavating of trench and laying of approximately 10 miles of 12-inch pipe and one mile of 16-inch pipe.

DIVISION 4. The furnishing of approximately 10 miles of class A 12-inch cast iron pipe and about one mile of 16-inch cast iron pipe.

DIVISION 5. The construction of a 300,000 gallon standpipe about 30 feet in height, about one mile south of the Village of Fairport, N. Y.

The above estimate of quantities is approximate and its accuracy is not guaranteed. Bidders should make their own estimate of quantities and cost and submit bids thereon after examining the plans and specifications and the site of the work. Bids are to be made on the unit price basis unless otherwise specified.

Plans and specifications for this work may be seen or obtained at the office of James P. Wells, Consulting Engineer, Cutler Building, Rochester, N. Y., or at the office of the Municipal Commission of Fairport, N. Y. Bidders requiring copies of the specifications and plans for their own use may secure them upon making a deposit of $10.00, which will be refunded upon return of the plans and specifications in good condition. All proposals must be accompanied by a check or a bidder's bond for a sum equal to at least 5 per cent of the bid, made payable to the Fairport Municipal Commission, as a guarantee that the successful bidder will enter into a contract with the Village of Fairport to furnish the material and perform all of the construction work necessary in accordance with the plans and specifications.

All bids will be publicly opened.

The Commission reserves the right to reject any or all proposals.

FAIRPORT MUNICIPAL COMMISSION,
WILLIAM WAGNER, Chairman.

Bids: Nov. 30, 1923.

Sydney Harbour Bridge Tenders —Extension of Time

DEPARTMENT OF PUBLIC WORKS

Sydney, Australia,
January 31st, 1923.

Tenders are invited by the Government of New South Wales for the Construction of the Superstructure and substructure of a Cantilever Bridge across Sydney Harbour from Dawes Point to Milson's Point, embracing a main span of 1,600 feet in the clear, centre to centre of main piers, and a length of main bridge 2,600 feet centre to centre of anchor piers. The total length of main bridge and approach spans included in tender is 3,810 feet; also an Alternative Tender for the Construction of the Superstructure and Substructure of an Arch Bridge across Sydney Harbour from Dawes Point to Milson's Point, embracing a main span of 1,650 feet in the clear centre to centre of bearings. The total length of main bridge and approach spans included in tender is 3,770 feet. Either bridge is to provide for four lines of railway, six lines of vehicular traffic, and footway accommodation.

Copies of Specification, including Plans, General Conditions, and Tender Forms, may be obtained by bona fide tenderers on application to the Official Secretary, Australian Commissioner's Office, 44 Whitehall Street, New York City.

Tenders, the time for which has been extended, must reach the Under Secretary for Public Works, Sydney, New South Wales, not later than 30th November, 1923.

R. T. BALL,
Minister for Public Works and Railways.

OFFICIAL PROPOSALS

Bids: June 20.

Concrete Pavement

Freehold, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Monmouth for the reconstruction of the Englishtown-Jamesburg Road, No. 19, with a reinforced concrete pavement for a distance of 1.25 miles, and opened and read in public at the rooms of said board, Court House, Freehold, New Jersey, on Wednesday, June 20, 1923, at 11 A.M., daylight saving time.

Drawing and specifications for the proposed work, prepared by Geo. F. Randolph, Civil Engineer, have been filed in the office of said Engineer at 60 Broad Street, Red Bank, New Jersey, and may be inspected by prospective bidders during business hours. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

Plans and specifications will be furnished to prospective bidders upon payment of ten dollars ($10.00), which amount will be refunded upon return of plans and specifications before the time specified for the opening of bids.

Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and name of proposed work on the outside, addressed to the Board of Chosen Freeholders of the County of Monmouth and must be accompanied by a certified check for a sum not less than ten (10) per cent of the amount bid on the work, payable to the order of the County Treasurer and a surety company certificate stating that said surety company will provide the bidder with the required bond, and must be delivered at the place and before the hour above named.

The Board of Chosen Freeholders of the County of Monmouth reserves the right to reject any or all bids if deemed to the best interests of the County so to do.

By order of the Board of Chosen Freeholders of the County of Monmouth.

BRYANT B. NEWCOMB,
Director.

Attest:
CHAS. E. COLE, Clerk.
Freehold, N. J., May 23, 1923.

Bids: June 19.

Sanitary Sewers and Sewage Disposal Plant

Media, Pa.

Sealed proposals will be received by the Borough Council of the Borough of Media, Pa., at the Borough Hall on the 19th day of June, 1923, until 7:00 o'clock P.M. (Eastern Standard Time), for the construction of sanitary sewers consisting of approximately 8,000 lineal feet of 5 in, 8 in, 10 in. and 12 in. Terra Cotta pipe sewers, 30 manholes and 3 flush tanks; and one section of the proposed sewage disposal plant.

Each proposal must be accompanied by a certified check made payable to the Borough of Media, for a sum equal to 5% of the amount bid. A bond for 100% of the contract price will be required.

Plans and specifications will be on file and may be seen at the Secretary's office, Borough Hall, Media, Pa., or at the office of the Engineers, Remington & Vosbury, 601 Market Street, Camden, N. J. Complete sets of plans and specifications may be obtained from the Engineers upon a deposit of $10.00, of which sum $5.00 will be refunded upon the return of same in good condition by June 27, 1923.

The Borough reserves the right to feject any or all bids, and to decide as to the desirability of the bidders.

EDWARD MINTON,
Secretary, Borough Council.

Bids: June 26.

Pumping Plant and Building

Savanna, Ill.

Sealed bids will be received until ten o'clock a.m. June 26, 1923 by the Carroll County Drainage and Levee District No. 1 at the office of the Secretary, H. P. Greison, Savanna, Illinois for an oil engine driven pumping plant containing a 30 inch double suction centrifugal pump. Bids will also be received for a building to house this plant.

For further information address the Engineers, Elliott & Harman Engineering Co., 144 Fredonia, Peoria, Illinois.

OFFICIAL PROPOSALS

Bids: June 20.

Concrete Dam

Fort Collins, Colo.

Sealed proposals will be received at the office of the North Poudre Irrigation Company in Fort Collins, Colorado, until twelve o'clock M., on June 20, 1923, for the enlargement of the Halligan Dam on the North Fork of the Cacheela Poudre River about thirty-five miles northwest of Fort Collins, Colorado, requiring about 5,000 cubic yards of foundation excavation and the placing of about 22,000 cubic yards of mass concrete in an arched concrete dam, together with other related work.

Full plans and specifications will be furnished upon application accompanied by a deposit of $15.00 to be repaid to the successful bidder and to all other bidders upon the return by them of the plans and specifications in good and acceptable condition. The Board of Directors reserves the right to reject any or all bids as the interests of the Company may require.

Each proposal must be accompanied by a certified check for five per cent of the amount bid payable to the order of the Treasurer of the North Poudre Irrigation Company for the benefit of said company as a guaranty that the bidder will, if successful, execute a satisfactory contract and furnish a bond satisfactory to the Board of Directors of the Company in the sum of not less than twenty-five per cent of the amount of his bid for the faithful performance of the work in accordance with the plans and specifications.

Proposals may be made for a completed structure according to the plans and specifications, the contractor to furnish all material therefor at his own expense, or may be made on the basis that the Company furnish cement and all steel or iron used in the construction, f.o.b. cars at Ingleside, Colorado; or the bidder may make proposals or both bases.

The proposal must be marked "Proposal for Enlargement of the Halligan Dam" and addressed "North Poudre Irrigation Company, Fort Collins, Colorado."

Done in pursuance of an order of the Board of Directors of the North Poudre Irrigation Company this 14th day of May, 1923.

A. J. WHISTLEMAN,
Secretary of the North Poudre Irrigation Co.

Bids: July 2.

Sea Wall or Flood Protection

Vicksburg, Miss.

Sealed proposals for the construction of a concrete wall along the river front at Vicksburg, Mississippi, will be received at the City Hall until 4 p.m. July 2, 1923, at which time and place, they will be publicly opened and read.

Approximately 4,200 lineal feet of wall containing about 9,500 cu.yd. of concrete, 450 tons of reinforcing steel and 4,200 lineal feet interlocking sheet piling 10 to 20 feet long, will be contained in the work. Bidders must accompany their proposal with a certified check payable to "Board of Mayor and Aldermen," City of Vicksburg, for not less than 5 per cent of their bid price.

Care will be exercised in determining the special skill and the responsibility of the bidders, to which end each bidder will be expected to make satisfactory answers to a questionnaire, copy of which will be forwarded upon request. Plans and specifications may be obtained from Miller-Butterworth Company, Engineers, 624 Southern Trust Building, Little Rock, Arkansas, for the sum of $10. Upon surrender of the plans and specifications in good condition, $5 of this will be returned. The City reserves the right to reject any and all bids and to waive technicalities in awarding the contract.

J. J. HAYES, Mayor.

Bids: June 18.

Paving

Port Jervis, N. Y.

Sealed proposals will be received by the undersigned until 8 p.m., on June 18, 1923, for the construction of approximately 8,200 sq.yd. of reinforced concrete paving at Port Jervis, N. Y., under specifications on file in the City Clerk's Office. Certified check of $500 payable to the City of Port Jervis, N. Y., must accompany each bid. The right to reject any or all bids is reserved.

Common Council of the City of Port Jervis, N. Y.

per JOHN F. CLEARY, City Clerk.

OFFICIAL PROPOSALS

Bids: June 15.

Sewers

Erie, Pa.

Sealed proposals will be received by City Council in the Council Chamber, of Erie, Pennsylvania, on Friday, June 15, 1923, at 10 o'clock A.M., Standard Time, for the construction of the following named improvements:

Project No. 1—A main intercepting sewer, Mill Creek Tube to Fourth and Cranberry Streets.

Approximate Quantities.

65 lin. ft. 60 in. Reinforced Concrete Sewer.
3150 lin.ft. 56 in. Reinforced Concrete Sewer.
1170 lin.ft. 44 in. Reinforced Concrete Sewer.
1995 lin.ft. 42 in. Reinforced Concrete Sewer.
4510 lin.ft. 24 in. Reinforced Concrete Sewer.
275 lin.ft. 18 in. Double Strength Tile Sewer.
25 lin.ft. 12 in. Single Strength Tile Sewer.
200 lin.ft. 8 in. Single Strength Tile Sewer.

Project No. 2—Canal Sewer Extension, from Front Street Interceptor south one thousand one hundred sixty (1,160) feet, more or less.

Approximate Quantities.

1160 lin.ft. 52 in. Reinforced Concrete Sewer.
410 lin.ft. 24 in. Double Strength Tile Sewer.
340 lin.ft. 22 in. Double Strength Tile Sewer.
215 lin.ft. 18 in. Single Strength Tile Sewer.
48 lin.ft. 6 in. Cast Iron Pipe.
2 Manholes.
30 cu.yd. Concrete.

Project No. 3—Canal Sewer, Front Street south five hundred ninety-six (596) feet, more or less.

Approximate Quantities.

200 lin.ft. 20 in. Reinforced Concrete Sewer.
396 lin.ft. 18 in. Reinforced Concrete Sewer.
2 Manholes.

Project No. 5—Western Intercepting Sewer Extension.

Approximate Quantities.

2085 lin.ft. 33 in. Reinforced Concrete Sewer.
3810 lin.ft. 30 in. Reinforced Concrete Sewer.
690 lin.ft. 24 in. Reinforced Concrete Sewer.

Together with all necessary manholes, overflow weirs, connections to existing sewers and other appurtenances.

Proposals for Projects Nos. 1, 2, 3 and 5 will be received separately and a separate contract shall be entered into for each Project.

Plans and specifications may be procured from this office upon a deposit of Twenty-five ($25.00) Dollars, said money to be refunded upon the return of same in good condition. Blank proposals can be procurred in this office.

A certified check or certificate of deposit payable to the order of the City Treasurer, or cash to the amount of 10% of the proposal, must accompany each proposal, conditioned upon a contract being made and work started within a certified time. The right is reserved to reject any or all bids, also to waive defect in form.

FAULKNER G. LYNCH,
May 25, 1923. City Engineer.

Bids: June 26.

Subway Construction

Notice: The specifications for the following work having been changed, this advertisement is reinserted.

Philadelphia, Pa.

Sealed proposals for constructing about 1,529 linear feet of 2-track subway in Arch street between Eighth street and Thirteenth street, Contract 207, will be received at the Director's office, Department of City Transit, 1211 Chestnut street, Philadelphia, until 11 o'clock a.m., Eastern standard time (12 o'clock noon daylight-saving time), Tuesday, June 26, 1923, and opened immediately thereafter.

Plans and revised specifications can be seen at 1211 Chestnut street, twelfth floor, and copies of same with blank forms for proposals will be supplied to intending bidders upon deposit of $20.00 (cash or certified check), which will be refunded upon return of the plans.

Each bidder must file a proposal bond in the Law Department of the City.

The Director reserves the right to reject any or all bids.

WILLIAM H. TWINING,
Director.

Philadelphia, June 1, 1923.

Bids: June 16.

Breakwater

Rockport, Texas.

Bids for construction of Rubble mound or Timber Bulkhead breakwater, approximate cost $50,000.00. Date of letting, June 16th. Information of Mayor, Rockport, Texas.

OFFICIAL PROPOSALS

Bids: July 10.

Drainage Ditch and Improvement

DISTRICT NO. 4

Ottumwa, Ia.

In the Matter of the Cedar Creek Drainage District No. 4, of Wapello County, Iowa, and Drainage Ditch and improvement therein:

Notice is hereby given that in pursuance of an order of the Board of Supervisors of Wapello County, Iowa, made on May 17th, 1923, sealed bids will be received by the undersigned for said Board up to Two o'clock p.m., on July 10, 1923, at the Court House, Ottumwa, Ia., but not later, for the construction of said Drainage Ditch and improvement in said Drainage District No. 4, of Wapello County, Iowa, in accordance with the approved plans, profiles, specifications, and contract, in blank form for bids, and bond therefor, on file in my office; said work thereof being described as follows, and having the approximate estimated amount and quantities as specified, but which may be found to be either more or less on final measurement:

The beginning point of said Ditch and Improvement is at West ¼ Cor. N. W. ¼ Sec. 31-Competine Twp. 73-r 12 W. and ending in the S. E. ¼ Sec. 13 Pleasant Twp. 72-r. 12 on the Wapello Jefferson County Line, a distance of 7.23 miles divided into sections as follows:

Sec. E-5—42,636 cu.yds. Start work on or before May 1st, 1924. Complete by June 15, 1924.

Sec. F-6—42,129 cu.yds. Start work on or before Mch. 15, 1924. Completed by May 1, 1924.

Sec. G-7—43,643 cu.yds. Start work on or before Feb. 1, 1924. Completed by March 15, 1924.

Sec. H-8—37,654 cu.yds. Start work on or before Dec. 20, 1923. Completed by Feb. 1, 1924.

Sec. I-9—35,204 cu.yds. Start work on or before Nov. 15, 1923. Completed by Dec. 20, 1923.

Sec. J-10—24,258 cu.yds. Start work on or before Oct. 20, 1923. Completed by Nov. 15, 1923.

Sec. K-11—31,310 cu.yds. Start work on or before Sept. 15, 1923. Completed by Oct. 20, 1923.

The estimated quantity of material to be excavated in said entire ditch is 256,834 cu.yds. of excavation. This work consists in cutting a continuous channel as located, which channel is 12 feet in width at the bottom, and side slopes shall be one-half foot horizontal to one foot vertical; side slopes shall be left smooth and uniform, and bottom of channel shall be brought to proper grade elevation and left smooth and uniform ,and with an approximate depth of 10½ feet; right of way 100 feet in width.

Bids will be submitted for the entire work; and the price must be stated in both words and figures, and permission will not be granted to amend or withdraw any bid after filing with the County Auditor. Maps, plans profiles, specifications, and form for bids, contracts, etc., are on file in my office, and at the office of Brown & Cook, Engineers, Ottumwa, Iowa, and can be examined. The Board will award contract to the lowest responsible bidder therefor; but the right is hereby expressly reserved by said Board to reject any or all bids and to readvertise the letting of said work; and no bid will be considered unless on the approved form for bids furnished by the undersigned.

All bids must be signed with the recognized name of the Contractor or firm who expects to do the work if awarded the contract, and each bid must be accompanied by a certified check of some reputable bank, in the sum equal to ten per cent, of the amount of the bid, (but not to exceed $10,000.00), drawn in favor of the County Auditor of Wapello County, Iowa, as a guarantee of good faith in entering on said contract, and if awarded the contract for said work, the bidder will within ten days from the date of notice thereof, enter into said contract therefor and execute said Bond therefor, or deposit cash, as provided by law in the sum of twenty-five per cent of estimated cost of said work so let by such contract. The checks of unsuccessful bidders will be returned to them respectively as soon as award is made. All provisions of present Drainage Laws of Iowa are made a part of all said contracts.

All bids must be sealed and marked on the outside of envelope: Bid for Contract on Cedar Creek Drainage Ditch, No. 4, and addressed to Fred W. Prosser, County Auditor, Ottumwa, Wapello County, Iowa. The bids will be opened at Two o'clock p.m., on July 10, 1923, in the office of the Board of Supervisors, in Court House at Ottumwa, Iowa, and the contract, if awarded will be awarded by the said Board as soon as practicable thereafter on said date.

Witness my hand and seal this day of May, 1923.

FRED W. PROSSER,
County Auditor of Wapello Co., Ia.

Bids: June 13.

Road Fill

READVERTISEMENT

Ashland, R. I.

Sealed proposals for the construction of the Ashland Causeway, a fill about half a mile long with a maximum height of about 60 feet, to carry the Relocated Plainfield Pike across the proposed Scituate Reservoir at the village of Ashland in the Town of Scituate, R. I., about 10 miles west of the City of Providence, will be received at the office of the Water Supply Board, City Hall, Providence, R. I., until 1:30 p.m., Eastern Standard Time (2:30 p.m. Daylight Saving Time) on Wednesday, June 13, 1923, at which time and place they will be publicly opened and read.

The work will include the construction of a large concrete culverts, the placing of riprap and other appurtenant work but will not include road surfacing. The estimated quantities are: Excavation 7,000 cu.yd., borrow, 230,000 cu.yd. riprap, 28,000 cu.yd.; broken stone, 10,000 cu.yd., concrete, 3,000 cu.yd.; reinforcing steel 120,000 lb.

Pamphlets containing plans, information for bidders, form of proposal, contract and bond and specifications, may be obtained from the Secretary of the Board, City Hall, or from the Chief Engineer, 661 Westminster Street.

CITY OF PROVIDENCE
WATER SUPPLY BOARD
B. THOMAS POTTER, Chairman.
SAMUEL N. GRAMMONT, Secretary.
FRANK E. WINSOR, Chief Engineer.

Bids: June 29.

Reinforced Concrete Bridge

Reading, Pa.

Sealed proposals are hereby invited for the building of a reinforced concrete bridge over the Schuylkill River, on Schuylkill Avenue, Reading, Pa.

The bridge is to consist of five spans 106 feet and 2 spans of 40 feet, with beam and slab construction in the approaches. Total length of the bridge to be 1,057 feet, 70 feet wide all over, with a 48 feet roadway and two 11 feet 6 inch wide walks.

The contractor is to build and maintain during the construction of the new bridge a temporary bridge at the site indicated on the plans.

A deposit of $200.00 will be required for each set of plans and specifications, which will be refunded upon the return of the same. Plans and specifications are in the hands of the County Commissioners, Court House, Reading, Pa.

A certified check equal to 10 percentum of the aggregate amount of the bid must accompany each proposal.

Bids will be received by the County Controller at the Court House, Reading, Pa., until 10 o'clock in the morning of June 29, 1923.

JOHN P. WANNER,
County Controller,
Court House,
Reading, Pa.

Bids: June 15.

Street Pavement

Hudson, N. Y.

Notice is hereby given that sealed bids will be received by the Commission of Public Works, of the City of Hudson, N. Y., until 2:30 p.m., Daylight Saving Time, June 15th, 1923, for paving approximately 20,000 sq.yds. of street surface with seven (7) inch plain concrete and 19,000 sq.yds. with five (5) inch concrete and two (2) inch asphaltic concrete wearing surface. Specifications and bidding sheet will be furnished to prospective bidders upon payment of ten dollars ($10.00), which amount will be refunded upon return of specifications before the time specified for opening bids.

The Commission of Public Works reserves the right to reject any and all bids or parts of bids, or to accept any bid considered the best for the interests of the City.

M. J. O'HARA,
City Engineer.

Bids: July 10.

Drainage Ditch and Impovement

DISTRICT NO. 6

Ottumwa, Ia.

In the Matter of the Cedar Creek Drainage District No. 6, of Wapello County, Iowa, and Drainage Ditch and improvement therein:

Notice is hereby given that in pursuance of an order of the Board of Supervisors of Wapello County, Iowa, made on May 17, 1923, sealed bids will be received by the undersigned for said Board up to Two o'clock p.m. on July 10, 1923, at the Court House, Ottumwa, Ia., but not later, for the construction of said Drainage Ditch and improvement in said Drainage District No. 6, of Wapello County, Ia., in accordance with the approved plans, profiles, specifications, and contract in blank form for bids, and bond therefor, on file in my office; said work thereof being described as follows, and having the approximate estimated amount and quantities as specified, but which may be found to be either more or less on final measurement:

The beginning point of said Ditch and Improvement is at E. of CM. & ST. P. R. RY. bridge No. 1-352 in N. W. ¼ S. W. ¼ Sec. 21-Highland Twp. 73-R 13 W. and ending at the E. ¼ Cor. S. E. ¼ Sec. 36-Highland Twp., a distance of 4.47 miles, divided into sections as follows:

Sec. A-1—34,966 cu.yds. Start work on or before Nov. 1, 1924. Completed by Dec. 1, 1924.

Sec. B-2—38,541 cu.yds. Start work on or before Sept. 1, 1924. Completed by Nov. 1, 1924.

Sec. C-3—30,904 cu.yds. Start work on or before Aug. 1, 1924. Completed by Sept. 1, 1924.

Sec. D-4—43,822 cu.yds. Start work on or before June 15, 1024. Completed by Aug. 1, 1924.

The estimated quantity of material to be excavated in said entire Ditch is 148,233 cu. yds. of excavation. This work consists in cutting a continuous channel as located, which channel is 10 feet in width at the bottom, and side slopes shall be one foot horizontal to one foot vertical; side slopes shall be left smooth and uniform, and bottom of channel shall be brought to proper grade elevation and left smooth and uniform, and with an approximate depth of 9½ feet; right of way 125 feet in width from place of beginning to CM. & ST. P. Bridge in Sec. 27-73-13 and 150 feet in width from there to the end.

Bids will be submitted for the entire work; and the price must be stated in both words and figures, and permission will not be granted to amend or withdraw any bid after filing with the County Auditor. Maps plans, profiles, specifications, and form for bids, contracts, etc., are on file in my office, and at the office of Brown & Cook, Engineers, Ottumwa, Iowa, and can be examined. The Board will award contract to the lowest responsible bidder therefor; but the right is hereby expressly reserved by said Board to reject any or all bids and to readvertise the letting of said work; and no bid will be considered unless on the approved form for bids furnished by the undersigned.

All bids must be signed with the recognized name of the Contractor or firm who expects to do the work if awarded the contract, and each bid must be accompanied by a certified check of some reputable bank, in the sum equal to ten per cent, of the amount of the bid, (but not to exceed $10,000.00), drawn in favor of the County Auditor of Wapello County, Iowa, as a guarantee of good faith in entering on said contract, and if awarded the contract for said work, the bidder will within ten days from the date of notice thereof, enter into said contract therefor and execute said Bond therefor, or deposit cash, as provided by law in the sum of twenty-five per cent of estimated cost of said work so let by such contract. The checks of unsuccessful bidders will be returned to them respectively as soon as award is made. All provisions of present Drainage Laws of Iowa are made a part of all said contracts.

All bids must be sealed and marked on the outside of envelope: Bid for Contract on Cedar Creek Drainage Ditch, No. 6, and addressed to Fred W. Prosser, County Auditor, Ottumwa, Wapello County, Iowa. The bids will be opened at Two o'clock p.m. on July 10, 1923, in the offic of the Board of Supervisors, in Court House at Ottumwa, Iowa, and the contract, n awarded by the said Board as soon as practicable thereafter on said date.

Witness my hand and seal this day of May, 1923.

FRED W. PROSSER,
County Auditor of Wapello Co., Ia.

OFFICIAL PROPOSALS

Bids: June 19.

Trench Excavating

Memphis, Tenn.

The Board of Water Commissioners of the City of Memphis, Water Department, will receive proposals at the office of the Department, 105-107 North Second Street, Memphis, Tennessee up until 12 o'clock noon Tuesday, June 19, 1923, for excavating by machinery trenches for cast iron collecting conduit, tile drains and compressed air lines —this work being in connection with the Parkway Pumping Station construction. Depth of trenches varies from 4 to 16 feet. The following table shows the approximate lineal feet of trench for the various sizes of pipe:

COLLECTING CONDUIT
3,000 lineal feet for 42-inch pipe.
10,000 lineal feet for 36-inch pipe.
500 lineal feet for 30-inch pipe.
1,000 lineal feet for 20-inch pipe.
3,000 lineal feet for 14-inch pipe.

TILE DRAINS
10,000 feet for 12-inch tile.
200 feet for 8-inch tile.

FOR COMPRESSED AIR LINES
1,200 lineal feet for 4—10-inch lines in one trench.
2,500 lineal feet for 3—10-inch lines in one trench.
4,500 lineal feet for 2—10-inch lines in one trench.
2,500 lineal feet for 1—8-inch line in one trench.
3,000 lineal feet for 1—4-inch line in one trench.

It is desired that proposals be submitted per lineal foot of trench for the entire contract. The Department will guarantee a minimum of from 300 to 400 feet per day depending upon the size and depth of trench dug. Detailed information, together with plans and specifications, may be obtained at the offices of the Department, 105-107 North Second Street, Memphis, Tennessee. The successful contractor will be required to furnish bond to the full amount of the contract price covering the faithful performance of the work, the expense of this bond to be paid by the Water Department. The contractor will be required to begin work within fifteen (15) days after award of contract. The right is reserved to reject any or all bids. Address proposals to the Board of Water Commissioners of the City of Memphis, Water Department. Mark "Bid for Trench Excavating."

Board of Water Commissioners, City of Memphis, Water Department.
JAMES SHEAHAN,
General Superintendent.

Bids: June 25.

Street Paving

Augusta, Ga.

SEALED PROPOSALS will be received by the Permanent Paving and Civic Improvements Committee of the City Council of Augusta, Ga., until 12 o'clock (noon), Monday, June 25, at the City Hall, and at that time and place publicly opened, for paving the following streets:

FIFTH (CENTER) STREET, from Broad to Calhoun Streets, consisting of approximately:
10,000 Sqare yards of pavements.
3,000 Cubic yards of excavation.
2,000 Lineal feet of re-set curb.
423 Lineal feet of marginal curb.
1,000 Cubic yards of concrete in car tracks.
600 Cubic yards of ballast under car tracks.

TWIGGS STREET, from Telfair Street to the intersection of the Savannah Road and the Milledgeville Road, consisting of approximately:
27,000 Square yards of pavement.
8,000 Cubic yards of excavation.
1,500 Lineal feet of re-set curb.
600 Lineal feet of marginal curb.
1,600 Cubic yards of concrete in car tracks.
1,040 Cubic yards of ballast under car tracks.

MILLEDGEVILLE ROAD, from the Savannah Road to the City Limits, consisting of approximately:
17,000 Square yards of pavement.
5,000 Cubic yards of excavation.
10,000 Lineal feet of New Granite Curb.
Lineal feet of re-set curb.
600 Lineal feet of marginal curb.
1,200 Cubic yards of concrete in car tracks.
800 Cubic yards of ballast under car tracks.

SAVANNAH ROAD, from the Milledgeville Road to 12th (Marbury) Street, consisting of approximately:
5,500 Square yards of pavement.
1,500 Cubic yards of excavation.
2,800 Lineal feet of new granite curb.
200 Lineal feet of re-set curb.
150 Lineal feet of marginal curb.

BROAD STREET, from Eve Street to the Lake View Bridge, consisting of approximately:
18,000 Square yards of pavement.
4,500 Cubic yards of excavation.
1,000 Lineal feet of re-set curb.
4,000 Lineal feet of new granite curb.
200 Lineal feet of marginal curb.
2,000 Cubic yards of concrete in car tracks.
1,270 Cubic yards of ballast under car tracks.

Approximately thirty per cent (30%) of the above proposed pavement will be on sections of the streets containing no car tracks.

Bids will be received on any and all types of pavements.

As a guarantee that the bidder will execute the contract, if awarded, all bids must be accompanied with a certified check, or bidder's bond, in favor of the City Council of Augusta, in the sum of five per cent (5%) of the total amount bid.

Address all bids to J. W. Westmoreland, Clerk of Council, marking on envelope "Proposal for Paving.....Street, from .....to .....Street, Augusta, Ga."

Proposal form, plans and specifications may be obtained from the undersigned after June 11, by depositing the sum of ten ($10.00) dollars, which amount will be refunded upon the return of the plans and specifications.

The City reserves the right to reject any and all bids.

W. H. WISE,
City Engineer and Commissioner of Public Works.

June 7, 1923.

Bids: June 28.

Reinforced Concrete Reservoir

DuBois, Pa.

Sealed proposals addressed to the City Council of DuBois, Pa., for the construction of a reinforced concrete reservoir will be received by J. C. Weaver, City Clerk, at the City Hall, West Scribner Avenue, DuBois, Pa., until 5:00 P.M., Thursday, June 28th, 1923, and will be opened by the Council at the Council Chamber at 7:30 P.M., Eastern Standard Time, of that day.

The work under this contract will consist of the construction of a reinforced concrete reservoir, 165 feet inside diameter, 26 feet high, including the necessary excavation, and embankment for the same; the construction of a control chamber, a 12-inch terra cotta drain approximately 500 feet long, piping connections, auxiliary drains and all necessary appurtenances.

Plans, specifications, and form of contract are on file and can be obtained at the office of the City Engineer, City Hall, DuBois, Pa., or at the office of Morris Knowles, Incorporated, 507 Westinghouse Building, Pittsburgh, Pa.

A set of the plans and specifications may be obtained for use in making up a bid by depositing Ten Dollars ($10.00) and this deposit will be refunded if such plans and specifications are returned in good condition within two weeks after the date set for receiving bids by the City Council.

Each proposal shall be accompanied by a certified check for an amount not less than five per cent (5%) of the proposal, drawn to the order of the City of DuBois, Pa. The bidder to whom the contract is awarded will be required to furnish, for the faithful performance of the work under this contract, an approved Surety Company Bond in the amount of fifty per cent (50%) of the sum of the bid submitted.

CITY OF DUBOIS, PA.
A. J. HAAG,
Mayor.
J. C. WEAVER,
City Clerk.

Bids: June 18.

Paving

Port Jervis, N. Y.

Sealed proposals will be received by the undersigned until 8 p.m., on June 18, 1923, for the construction of approximately 8,200 sq.yd. of reinforced concrete paving at Port Jervis, N. Y., under specifications on file in the City Clerk's Office. Certified check of $500 payable to the City of Port Jervis, N. Y., must accompany each bid. The right to reject any or all bids is reserved.

Common Council of the City of Port Jervis, N. Y.
per JOHN F. CLEARY, City Clerk.

Bids: June 29.

Vincentown-Cross Roads Road Bridgeboro-Chester Ave. Road and Florence Road

Mount Holly, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders for the reconstruction of the following roads: Road No. 19, Bridgeboro to Chester Ave., in the Townships of Delran and Moorestown; estimated amount of surface pavement required is 38,655 sq.yds.; Road No. 3, Vincentown-Cross Roads Road, in the Township of Southampton; estimated amount of surface pavement required is 46,622 sq.yds.; Road No. 15 Florence Road, in the Township of Florence; estimated amount of surface pavement required is 26,900 sq.yds. Said roads to be constructed of sheet asphalt surface upon a macadam foundation; and opened and read in public at the Collector's Office, Mt. Holly, N. J., on the 29th day of June, 1923, at 10:45 A.M., Eastern Standard Time.

Drawings and specifications and forms, of bid contract and bond for the proposed work, prepared by H. B. Smith, County Engineer, has been filed in the office of the said engineer, Court House, Mount Holly, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue print of the drawings by the engineer on proper notice and payment of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and the name of road on the outside, addressed to Alfonza Adams, Clerk. Mount Holly, N. J., and must be accompanied by a certificate from a Surety Company and a certified check for not less than 10 per cent of the amount of the bid and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished upon application to engineer.

The Board reserves the right to reject any or all bids.

By order of the Board of Chosen Freeholders of the County of Burlington, N. J.
ALFONZA ADAMS, Clerk.

Bids: June 27.

Steel and Concrete Bridge Work

REPAIRING AIKEN STREET BRIDGE OVER NORTHERN CANAL

Lowell, Mass.

Sealed bids for repairing Aiken Street Bridge over Northern Canal in the City of Lowell, including the removal of the existing wooden dock, the two iron railings, the end plates of the two plate girders, the top course of stone of each of the granite parapets of the existing abutments, and the construction of a new concrete deck with a bituminous macadam road surfacing, new concrete sidewalks, new iron railings, new steel plates at the ends of the plate girders, some miscellaneous steel in the roadway, and the painting of the entire steel structure and some repaving of the approaches, will be received by the Board of Public Service of said city at its office in City Hall until 12 o'clock noon (daylight saving time) Wednesday, June 27, at which time and place the bids will be publicly opened and read aloud.

The bridge has two through plate girders approximately 107 feet long, spaced 35 feet between centers. The bridge carries a roadway 31 feet 6 inches wide between curbs, and two cantilever sidewalks 7 feet 6 inches wide.

Each bid must be accompanied by a properly certified check for Two Thousand (2,000) Dollars. A bond in the sum of Ten Thousand ($10,000) Dollars of an approved surety company will be required for the faithful performance of the contract.

A more complete description of the work to be done is given in Notice to Bidders, Bid, Agreement, Articles, Bond Specifications and Contract Drawings.

Copies of the foregoing may be obtained from the Engineer, Fay, Spofford & Thorndike, 200 Devonshire Street, Boston, Mass., on and after June 11, 1923.

Receipt of bids will be subject to the conditions stated in said Notice to Bidders.

The right is reserved to reject any and all bids.

Board of Public Service, Lowell, Mass.
By STEPHEN KEARNEY,
Clerk.

FAY, SPOFFORD & THORNDIKE,
200 Devonshire Street,
Boston, Mass.

OFFICIAL PROPOSALS

Bids: June 20.

Concrete Pavement

Freehold, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Monmouth for the reconstruction of the Englishtown-Jamesburg Road, No. 19, with a reinforced concrete pavement for a distance of 1.25 miles, and opened and read in public at the rooms of said board, Court House, Freehold, New Jersey, on Wednesday, June 20, 1923, at 11 A.M., daylight saving time.

Drawing and specifications for the proposed work, prepared by Geo. F. Randolph, Civil Engineer, have been filed in the office of said Engineer at 60 Broad Street, Red Bank, New Jersey, and may be inspected by prospective bidders during business hours. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

Plans and specifications will be furnished to prospective bidders upon payment of ten dollars ($10.00), which amount will be refunded upon return of plans and specifications before the time specified for the opening of bids.

Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and name of proposed work on the outside, addressed to the Board of Chosen Freeholders of the County of Monmouth and must be accompanied by a certified check for a sum not less than ten (10) per cent of the amount bid on the work, payable to the order of the County Treasurer and a surety company certificate stating that said surety company will provide the bidder with the required bond, and must be delivered at the place and before the hour above named.

The Board of Chosen Freeholders of the County of Monmouth reserves the right to reject any or all bids if deemed to the best interests of the County so to do.

By order of the Board of Chosen Freeholders of the County of Monmouth.

BRYANT B. NEWCOMB, Director.

Attest:
CHAS. E. COLE, Clerk.
Freehold, N. J., May 23, 1923.

Bids: June 22.

State Highway Work

Providence, R. I.

Sealed proposals for the reconstruction under the provisions of the Federal Aid Road Act of a Section of State Highway in the Towns of Richmond and Hopkinton, between Wyoming and Hopkinton City on the New London Turnpike, will be received by the State Board of Public Roads at its office, State House, Providence, R. I., until 12 M. (Daylight Saving), 11 a.m. (Eastern Standard) on Friday, June 22, 1923, at which time they will be opened and read in public.

The principal estimated quantities are as follows:

Contract No. 2305—Federal Aid Project No. 18—5.51 miles Reinforced Cement Concrete Pavement.

Excavation	21,200 cu.yd.
Gravel Foundation	3,000 cu.yd.
Sub-drain	1,300 lin.ft.
Pipe Culverts	2,700 lin.ft.
Wooden Guard Rail	9,000 lin.ft.
Reinforced Cem. Conc. Pavement	11,340 cu.yd.
Cement for concrete pavement	20,640 bbl.
Galvanized steel fabric in pavement	295,000 lb.
Steel bars for reinforcement	33,000 lb.

Bids must be made upon blank forms to be furnished by the Board.

No bid will be accepted unless accompanied by a certified check for the sum of $200.00, payable to the State of Rhode Island.

The Board reserves the right to reject any and all bids, and to give preference to towns or cities, in accordance with Section V of Chapter 84 of the General Laws.

Plans may be examined and specifications and bidding blanks may be obtained at the office of the State Board of Public Roads, State House, Providence, R. I., on and after Monday, June 11, 1923, every week day (except holidays and Saturdays), between the hours of 9 a.m. and 5 p.m. Saturdays 9 a.m. to 12 m.

State Board of Public Roads.
ABRAM L. ATWOOD
BENJAMIN F. ROBINSON
FRANK COLE
ALTON HEAD
JOHN W. HANLEY

OFFICIAL PROPOSALS

Bids: June 25.

State Road Work

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey for the construction of the following:

Route No. 4, Section No. 21, Point Pleasant-Laurelton, in the County of Ocean. Estimated 12,846 cu.yds. of excavation, 33,937 sq.yds. of gravel surface, and 57,483 sq.yds. of single line eight inch (8") reinforced concrete pavement.

Route No. 5, Section No. 10, Chatham-Brantwood, in the Counties of Morris, Essex and Union. Estimated 7,212 cu.yds. of excavation, 461 sq.yds. of Sheet Asphalt pavement, 4,300 sq.yds. of Granite Block pavement, and 20,566 sq.yds. of double line eight inch (8") reinforced concrete pavement.

Bids will be received at the Assembly Chamber, State House, Trenton, New Jersey, on Monday, June 25th, 1923, at 11:00 a.m., Standard Time, and opened and read immediately thereafter.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of the State Highway Department, Trenton, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on deposit of Ten Dollars ($10.00) upon application to the State Highway Department, 9th floor Broad St. Bank Building, Trenton, New Jersey. Bids must be made on the standard proposal forms in the manner designated therein, and as required by the 1922 specifications, same to be enclosed in sealed special addressed envelopes bearing the name and address of bidder and the name and section of the route on the outside, and must be accompanied by a certified check drawn to the order of the Treasurer of the State of New Jersey for not less than ten per cent (10%) of the amount of the bid, provided that the said certified check shall not be less than $500.00 nor more than $20,000.00 and be delivered at the above place on or before the hour named. Copies of the standard proposal form and special addressed envelopes will be furnished on application. Bids not enclosed in special envelopes will be considered informal and will not be opened.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provisions of the said specifications, conditioned for the faithful performance of the provisions of the contract and specifications. Each bidder must also accompany his bid with a Statement of Equipment properly filled out.

By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

Bids: June 29.

Reinforced Concrete Bridge

Reading, Pa.

Sealed proposals are hereby invited for the building of a reinforced concrete bridge over the Schuylkill River, on Schuylkill Avenue, Reading, Pa.

The bridge is to consist of five spans 106 feet and 2 spans of 40 feet, with beam and slab construction in the approaches. Total length of the bridge to be 1,057 feet, 70 feet wide all over, with a 48 feet roadway and two 11 feet 6 inch wide walks.

The contractor is to build and maintain during the construction of the new bridge a temporary bridge at the site indicated on the plans.

A deposit of $200.00 will be required for each set of plans and specifications, which will be refunded upon the return of the same. Plans and specifications are in the hands of the County Commissioners, Court House, Reading, Pa.

A certified check of $20,000.00 must be enclosed with the proposal.

Bids will be received by the County Controller at the Court House, Reading, Pa., until 10 o'clock in the morning of June 29, 1923.

JOHN P. WANNER,
County Controller,
Court House,
Reading, Pa.

OFFICIAL PROPOSALS

Bids: June 20.

Storage Dam, Pipe Line and Filter Plant

Fairport, N. Y.

Sealed proposals will be received by the Municipal Commission of Fairport, N. Y., at its office until two o'clock P.M. standard time, Wednesday, June 20, 1923, for constructing the following works:

DIVISION 1. An earthen dam with concrete core about 45 feet in height and 400 feet in length, an adjacent earthen concrete dam 10 feet in height and about 200 feet in length with a total of 45,000 cubic yards of earth embankment and about 2,000 cubic yards of concrete. Gravel is available close to the site of the work. These dams will be located about 3 miles south of the Village of Victor, N. Y.

DIVISION 2. A rapid sand reinforced concrete filter plant with a daily capacity of 1,000,000 per day located about 3 miles south of the Village of Fairport, N. Y.

DIVISION 3. The hauling, excavating of trench and laying of approximately 10 miles of 12-inch pipe and one mile of 16-inch pipe.

DIVISION 4. The furnishing of approximately 10 miles of class A 12-inch cast iron pipe and about one mile of 16-inch cast iron pipe.

DIVISION 5. The construction of a 300,000 gallon standpipe about 30 feet in height, about one mile south of the Village of Fairport, N. Y.

The above estimate of quantities is approximate and its accuracy is not guaranteed. Bidders should make their own estimate of quantities and cost and submit bids thereon after examining the plans and specifications and the site of the work. Bids are to be made on the unit price basis unless otherwise specified.

Plans and specifications for this work may be seen or obtained at the office of James P. Wells, Consulting Engineer, Cutler Building, Rochester, N. Y., or at the office of the Municipal Commission of Fairport, N. Y. Bidders requiring copies of the specifications and plans for their own use may secure them upon making a deposit of $10.00, which will be refunded upon return of the plans and specifications in good condition. All proposals must be accompanied by a check or a bidder's bond for a sum equal to at least 5 per cent of the bid, made payable to the Fairport Municipal Commission, as a guarantee that the successful bidder will enter into a contract with the Village of Fairport to furnish the material and perform all of the construction work necessary in accordance with the plans and specifications.

All bids will be publicly opened.

The Commission reserves the right to reject any or all proposals.

FAIRPORT MUNICIPAL COMMISSION,
WILLIAM WAGNER, Chairman.

Bids: June 15.

Highway Work

Albany, N. Y.

OFFICE OF THE STATE COMMISSION OF HIGHWAYS—Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock p.m., advanced standard time, which is 12 o'clock noon eastern standard time, on Friday, June 15, 1923, for the reconstruction of highways in the following counties:

ALBANY	(one contract: 1.43)
BROOME	(one contract: 3.68)
CHENANGO	(one contract: 1.61)
HERKIMER	(one contract: 1.02)
JEFFERSON	(one contract: 2.95)
MADISON	(one contract: 1.30)
MONTGOMERY	(one contract: 1.65)
ORANGE	(two contracts: 2.00 and 1.96)
SARATOGA	(one contract: 2.42)
BROOME—Grade Crossing Elimination	0.37 mile.

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the division engineers in whose division the roads are to be reconstructed. The addresses of the division engineers and the counties in which they are in charge will be furnished upon request.

The especial attention of bidders is called to "General Information for Bidders" in the itemized proposal, specifications and contract agreement.

FRED'K STUART GREENE,
Commissioner

W. A. PATTON, Secretary.

OFFICIAL PROPOSALS

Bids: June 26.

Hudson River Vehicular Tunnel

CONTRACT NO. 5

New York, N. Y.

Sealed bids will be received by New York State Bridge and Tunnel Commission and New Jersey Interstate Bridge and Tunnel Commission at the office of the Commissions, Room 618, Hall of Records, New York City, until 2:00 o'clock p.m. (Eastern Standard Time), Tuesday, June 26th, 1923, for the construction of a portion of two (2) tunnels as approaches to the river section of a vehicular tunnel under the Hudson River, said approach section being on the Island of Manhattan, known as Contract No. 5.

A statement of the quantities of the various items of work and further information are given in the invitation to bid forming part of the contract. At the above place and time the bids will be publicly opened and read. The award of the contract, if awarded, will be made by the Commissions as soon thereafter as practicable. The Commissions reserve the right to reject any and all bids.

Bonds in the sum of three hundred fifty thousand ($350,000) dollars each to the State of New York and to the State of New Jersey will be required for the faithful performance of the contract.

No bids will be received or considered unless accompanied by two certified checks upon a National or State Bank or Trust Company, satisfactory to the Commissions and located in New York City or the cities of Newark or Jersey City in the sum of seventy-five thousand ($75,000) dollars each, one payable to the order of the "Comptroller of the State of New York," and the other payable to the order of "The New Jersey Interstate Bridge and Tunnel Commission."

The time allowed for the completion of the work is twenty-four months after the date of the delivery of the contract.

Books containing forms of invitation to bid, proposal, contract, specifications and bond and contract drawings, etc., can be obtained at the office of the Commissions for the sum of $5.00 per set, which will be refunded upon their return in good condition within thirty (30) days from the date of receipt of bids.

New Jersey Interstate Bridge and Tunnel Commission.

THEODORE BOETTGER,
Chairman.

New York State Bridge and Tunnel Commission.

GEORGE R. DYER,
Chairman.

Bids: June 28.

Substructure

Chicago, Ill.

Sealed proposals for the construction of the substructure of a Double Leaf Trunnion Bascule Bridge (Strauss type) over the Main Drainage Channel of the Sanitary District of Chicago, on the line of South California Avenue extended across said Main Drainage Channel in the City of Chicago, County of Cook, State of Illinois, will be received by the Clerk at the office of said Sanitary District, Suite 700, 910 So. Michigan Avenue, Chicago, Illinois, until 12 M., standard time, on Thursday, June 28, 1923, and will be publicly opened by the Board of Trustees of said Sanitary District at a meeting to be held on that day or at the first meeting thereafter.

All proposals must be made upon blank forms of proposal furnished by the Sanitary District and shall be made in accordance with and to conform to the terms and conditions set forth in "Requirements for Bidding and Instruction to Bidders," attached thereto.

Said proposals shall be enclosed in an envelope furnished by the said Sanitary District, bearing the printed endorsement, "Proposal for Substructure, California Ave. Bridge."

Forms of proposal, specifications and plans may be obtained upon deposit of twenty-five dollars ($25), at the office of said Sanitary District, which sum, so deposited, will be refunded if said forms of proposal, plans and specifications are returned in good condition within thirty days following the opening of bids.

The Board of Trustees reserves the right to reject any or all proposals.

THE SANITARY DISTRICT
OF CHICAGO
BY WILLIS O. NANCE,
Chairman of its Committee on Finance.

ATTEST:
HARRY E. WALLACE, Clerk.
Chicago, June 4, 1923.

OFFICIAL PROPOSALS

Bids: June 27.

State Road Work

Dover, Del.

Sealed proposals will be received by the State Highway Department, at its office, Dover, Delaware, until 2 o'clock p.m., June 27, 1923, and at that place and time publicly opened, for the construction of State Aid Highways involving the following approximate quantities:

CONTRACT NO. CN13 4.58 MILES
KIRKWOOD—TYBOUT'S CORNER

35,000 Cu.Yds. Excavation
400 Tons Broken Stone Base Course
7,600 Cu.Yds. Cement Concrete Pavement
350 Cu.Yds. Class "A" Concrete
70 Cu.Yds. Class "B" Concrete
20,000 Lbs. Reinforcement
600 Lin.Ft. 15 in. R. C. Pipe
180 Lin.Ft. 18 in. R. C. Pipe
72 Lin.Ft. 24 in. R. C. Pipe
36 Lin.Ft. 30 in. R. C. Pipe
36 Lin.Ft. 36 in. R. C. Pipe
200 Lin.Ft. Relaid Pipe
1,000 Lin.Ft. 4 in. Pipe Underdrain
4,000 Sq.Yds. Class A Concrete Gutter
1,000 Lin.Ft. Wire Cable Guard Rail
1,200 Lin.Ft. Wood Shoulder Curb
800 Lin.Ft. Timber Piling

CONTRACT NO. CK16 6.00 MILES
HOLLANDSVILLE—FELTON

1.90 Acres Clearing
1.90 Acres Grubbing
23,000 Cu.Yds. Excavation
3,000 Cu.Yds. Borrow
200 Tons Broken Stone Base Course
9,225 Cu.Yds. Cement Concrete Pavement
200 Cu.Yds. Class A Concrete
5,000 Lbs. Reinforcement
800 Lin.Ft. 15 in. R. C. Pipe
240 Lin.Ft. 18 in. R. C. Pipe
30 Lin.Ft. 24 in. R. C. Pipe
60 Lin.Ft. 30 in. R. C. Pipe
30 Lin.Ft. 36 in. R. C. Pipe
100 Lin.Ft. Relaid Pipe

CONTRACT NO. 45 1.58 MILES
N & S CONNECTIONS DOVER

5,500 Cu.Yds. Excavation
12,000 Cu.Yds. Borrow
100 Tons Broken Stone Base Course
3,100 Cu.Yds. Cement Concrete Pavement
500 Tons Amiesite
400 Cu.Yds. Class "A" Concrete
50 Cu.Yds. Class "B" Concrete
8,000 Lbs. Reinforcement
300 Lin.Ft. 15 in. R. C. Pipe
40 Lin.Ft. 18 in. R. C. Pipe
2,000 Lin.Ft. Timber Piling
1,800 Lin.Ft. Bulkhead

CONTRACT NO. M-8

2,000 R. C. Guard Rail Posts

Performance of contract shall commence within ten (10) days after execution of the contract and be completed during 1923 as specified.

Monthly payments will be made for 90 per cent of the construction completed each month.

Bidders must submit proposals upon forms provided by the Department.

Each proposal must be accompanied by a surety bond, certified check, or money to the amount of at least ten (10) per centum of the total amount of the proposal.

The envelope containing the proposal must be marked "Proposal for the Construction of State Aid Highway Contract No. ....."

The Contract will be awarded or rejected within twenty (20) days from the date of opening proposals.

The right is reserved to reject any or all bids.

Detailed plans may be seen and index plans and specifications may be obtained upon deposit of ten dollars ($10.00) which amount will be refunded upon return of plans and specifications in good condition at the office of

STATE HIGHWAY DEPARTMENT,
Dover, Delaware.

Bids: June 26.

Water Mains, Valves and Hydrants

Gridley, Ill.

Sealed proposals will be received by the Board of Local Improvements of the Village of Gridley, Illinois, until 2 p.m., June 26, 1923, for furnishing and laying complete approximately 22,053 feet of 4 inch, 6 inch and 8 inch cast iron water mains, Class B. Also valves and hydrants.

Certified check for 10 per cent to accompany bid. Payment will be made in Special Assessment bonds bearing 6 per cent interest. Plans and specifications may be obtained from Mr. A. O. Rupp, Clerk, Gridley, or from Taylor & Woltmann, Unity Bldg., Bloomington, Illinois, Engineers.

OFFICIAL PROPOSALS

Bids: June 29.

Rebuilding Bridge

Salem, Mass.

Sealed proposals for rebuilding the Haverhill Lower Bridge over the Merrimack River in the City of Haverhill, Mass., will be received by the Haverhill Lower Bridge Rebuilding Commission at the County Commissioners' office in the Court House at Salem, Mass., until 11:00 o'clock a.m. of Friday, June 29, 1923, and then and there will be publicly opened and read.

The proposed bridge is to be 804 feet long and 66 feet wide, consisting of five reinforced concrete arches of 80 feet clear span, one arch of 55 feet clear span, and reinforced concrete approaches of beam and slab construction. A proposed steel bascule drawspan is not included in the proposals. The new bridge will occupy the site of the old bridge and extend downstream therefrom so that one-half of the new bridge is to be built clear of the old bridge which is then to be removed and the other half of the new bridge completed in its place.

Each proposal must be accompanied by a certified check for twenty thousand dollars ($20,000). A bond in the sum of fifty (50) per cent of the amount of the contract with an approved surety company as surety will be required for the faithful performance of the contract.

More detailed information is given in the plans, notice to contractors, specifications, and form of proposal, contract, and bond, copies of which may be inspected at the office of the Commission No. 14 Water Street, Haverhill, or may be obtained at the office of the County Engineer in the Court House at Salem upon the deposit of fifty (50) dollars, which will be refunded upon return of plans, specifications, etc., in good condition, on or before the day, herein set for the opening of proposals.

The right is reserved to reject any and all proposals.

ROBERT H. MITCHELL, Chairman.
CHARLES N. KELLY,
EDMUND C. WENTWORTH,
RAYMOND H. TREFRY,
FREDERICK BUTLER,
Haverhill Lower Bridge Rebuilding Commission.
ROBERT R. EVANS, Engineer.

Haverhill, Mass., June 8, 1923.

Bids: June 19.

Highway Work

Baltimore, Md.

Sealed proposals for building five sections of State Highway, as follows:

Frederick Co. Cont. F-60—One section of State highway from Myersville toward Ellerton, for a distance of 1.0 mile. (Macadam Resurfacing.)

Carroll Co. Cont. Cl. 40—One section of State highway from Gamber toward Finksburg for a distance of 1.0 mile. (Concrete.)

Anne Arundel Co. Cont. AA-34—One section of State highway along the Mayo Road for a distance of 2.0 miles. (Gravel.)

Charles Co. Cont. Ch-27—One section of State Highway between Marbury and Doncaster for a distance of 2.0 miles. (Gravel.)

Queen Annes Co. Cont. Q-26—One section of State Highway from Millington toward Sudlersville for a distance of 2.0 miles. (Concrete.)

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on the 19th day of June, 1923, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the commission upon application and cash payment of $1.00, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of five hundred ($500) dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By Order of the State Roads Commission this 28th day of May, 1923.

JOHN N. MACKALL, Chairman.
L. H. STEUART, Secretary.

Compensation Insurance

Some contractors "give" this insurance to a friend, either personal or political. How many, we wonder, "engage" the services of a specialist to advise them right in the intricate problems that arise in this business.

ALFRED S. HAMILTON
110 William St., New York

OFFICIAL PROPOSALS

Bids: July 10.

Drainage Ditch and Improvement

DISTRICT NO. 4

Ottumwa, Ia.

In the Matter of the Cedar Creek Drainage District No. 4, of Wapello County, Iowa, and Drainage Ditch and improvement therein:

Notice is hereby given that in pursuance of an order of the Board of Supervisors of Wapello County, Iowa, made on May 17th, 1923, sealed bids will be received by the undersigned for said Board up to Two o'clock p.m., on July 10, 1923, at the Court House, Ottumwa, Ia., but not later, for the construction of said Drainage Ditch and improvement in said Drainage District No. 4, of Wapello County, Iowa, in accordance with the approved plans, profiles, specifications, and contract, in blank form for bids, and bond therefor, on file in my office; said work thereof being described as follows, and having the approximate estimated amount and quantities as specified, but which may be found to be either more or less on final measurement:

The beginning point of said Ditch and Improvement is at West ¼ Cor. N. W. ¼ Sec. 31-Competine Twp. 73-r 12 W. and ending in the S. E. ¼ Sec. 13 Pleasant Twp. 72-r. 12 on the Wapello Jefferson County Line, a distance of 7.23 miles divided into sections as follows:

Sec. E-5—42,636 cu.yds. Start work on or before May 1st, 1924. Complete by June 15, 1924.

Sec. F-6—42,129 cu.yds. Start work on or before Mch. 15, 1924. Completed by May 1, 1924.

Sec. G-7—43,643 cu.yds. Start work on or before Feb. 1, 1924. Completed by March 15, 1924.

Sec. H-8—37,654 cu.yds. Start work on or before Dec. 20, 1923. Completed by Feb. 1, 1924.

Sec. I-9—35,204 cu.yds. Start work on or before Nov. 15, 1923. Completed by Dec. 20, 1923.

Sec. J-10—24,258 cu.yds. Start work on or before Oct. 20, 1923. Completed by Nov. 15, 1923.

Sec. K-11—31,310 cu.yds. Start work on or before Sept. 15, 1923. Completed by Oct. 20, 1923.

The estimated quantity of material to be excavated in said entire ditch is 256,834 cu.yds. of excavation. This work consists in cutting a continuous channel as located, which channel is 12 feet in width at the bottom, and side slopes shall be one-half foot horizontal to one foot vertical; side slopes shall be left smooth and uniform, and bottom of channel shall be brought to proper grade elevation and left smooth and uniform ,and with an approximate depth of 10½ feet; right of way 100 feet in width.

Bids will be submitted for the entire work; and the price must be stated in both words and figures, and permission will not be granted to amend or withdraw any bid after filing with the County Auditor. Maps, plans profiles, specifications, and form for bids, contracts, etc., are on file in my office, and at the office of Brown & Cook, Engineers, Ottumwa, Iowa, and can be examined. The Board will award contract to the lowest responsible bidder therefor; but the right is hereby expressly reserved by said Board to reject any or all bids and to readvertise the letting of said work; and no bid will be considered unless on the approved form for bids furnished by the undersigned.

All bids must be signed with the recognized name of the Contractor or firm who expects to do the work if awarded the contract, and each bid must be accompanied by a certified check of some reputable bank, in the sum equal to ten per cent. of the amount of the bid, (but not to exceed $10,000.00), drawn in favor of the County Auditor of Wapello County, Iowa, as a guarantee of good faith in entering on said contract, and if awarded the contract for said work, the bidder will within ten days from the date of notice thereof, enter into said contract therefor and execute said Bond therefor, or deposit cash, as provided by law in the sum of twenty-five per cent of estimated cost of said work so let by such contract. The checks of unsuccessful bidders will be returned to them respectively as soon as award is made. All provisions of present Drainage Laws of Iowa are made a part of all said contracts.

All bids must be sealed and marked on the outside of envelope: Bid for Contract on Cedar Creek Drainage Ditch, No. 4, and addressed to Fred W. Prosser, County Auditor, Ottumwa, Wapello County, Iowa. The bids will be opened at Two o'clock p.m., on July 10, 1923, in the office of the Board of Supervisors, in Court House at Ottumwa, Iowa, and the contract, if awarded will be awarded by the said Board as soon as practicable thereafter on said date.

Witness my hand and seal this day of May, 1923.

FRED W. PROSSER,
County Auditor of Wapello Co., Ia.

Bids: June 27.

State Road Work

Raleigh, N. C.

Sealed bids for the construction of the following projects will be received by the North Carolina State Highway Commission at Raleigh, N. C., until 10 a.m., on the 27th day of June, 1923, when they will be opened and read:

Hard surface (Concrete or Asphaltic Paving Projects), including grading, reinforced concrete or cast iron pipe, structures, etc.

Project No.	County	Length (Miles)
151–B	Hyde	4.4
189, 230, 293	Wilson-Pitt-Greene	20.5
213	Craven	10.4
295	Wilson	8.6
438	Harnett	3.8
506–B	Alamance	0.3
672	Rowan	3.5
837–B	Henderson	5.8

Topsoil, Sand Clay, Gravel, or Grading projects, including grading, drainage pipe, structures, etc.

Project No.	County	Length (Miles)
141	Halifax	18.7
146	Hertford-Bertie	6.4
168	Northampton	16.8
464	Person	11.6
608–B	Anson	3.8
702–B	Alleghany	6.4
750–B	Stokes	8.6
812	Burke	4.9
836	Henderson	10.0
851–889	McDowell-Yancey	19.0

MACADAM PROJECTS

Penetration or Water Bound Macadam Projects, including drainage pipe, structures, etc.

Project No.	County	Length (Miles)
507	Alamance	4.0
541	Guilford	4.3
556	Montgomery	3.5
802	Avery	5.7
930–A	Graham	2.9
961–A	Macon	8.3

STRUCTURE PROJECTS

302 Bladen..Forty-five 50-ft. deck girder spans and one 350-ft. Steel Truss.

811–B Burke....Overhead Crossing

Specifications, proposal forms, etc., may be obtained from the State Highway Commission at Raleigh, N. C.

Plans may be seen in the Raleigh office, or in the offices of the District Engineer.

Bridge plans may be obtained from the State Highway Commission at Raleigh, N. C., upon PAYMENT OF Five ($5.00) dollars per set.

The right is reserved to reject any or all bids.

By order of the North Carolina State Highway Commission.

Bids: June 22.

Street Paving

Trenton, N. J.

Notice is hereby given that sealed bids will be received and opened by the City Commission of the City of Trenton, N. J., at its meeting to be held in the Council Chamber, City Hall, Trenton, N. J., at 2:00 p.m. (daylight saving time), Friday, June 22, 1923, for the construction of approximately 30,000 sq.yd. of Sheet Asphalt on six (6) inch concrete foundation and approximately 2,000 sq.yd. of Granite Block on six (6) inch concrete foundation.

Specifications will be furnished to prospective bidders upon application to the Engineer of Streets.

The City Commission reserves the right to reject any or all bids not considered by them to be to the interest of the City.

LEON C. HIRSCH,
City Clerk.

JOSEPH E. ENGLISH,
Engineer of Streets.

OFFICIAL PROPOSALS

Bids: July 10.

Drainage Ditch and Impovement

DISTRICT NO. 6

Ottumwa, Ia.

In the Matter of the Cedar Creek Drainage District No. 6, of Wapello County, Iowa, and Drainage Ditch and improvement therein:

Notice is hereby given that in pursuance of an order of the Board of Supervisors of Wapello County, Iowa, made on May 17, 1923, sealed bids will be received by the undersigned for said Board up to Two o'clock p.m. on July 10, 1923, at the Court House, Ottumwa, Ia., but not later, for the construction of said Drainage Ditch and improvement in said Drainage District No. 6, of Wapello County, Ia., in accordance with the approved plans, profiles, specifications, and contract in blank form for bids, and bond therefor, on file in my office; said work thereof being described as follows, and having the approximate estimated amount and quantities as specified, but which may be found to be either more or less on final measurement:

The beginning point of said Ditch and Improvement is at E. of CM. & ST. P. R. RY. bridge No. 1-352 in N. W. ¼, S. W. ¼ Sec. 21-Highland Twp. 73-R 13 W. and ending at the E. ¼ Cor. S. E. ¼ Sec. 36-Highland Twp., a distance of 4.47 miles, divided into sections as follows:

Sec. A-1—34,966 cu.yds. Start work on or before Nov. 1, 1924. Completed by Dec. 1, 1924.

Sec. B-2—38,541 cu.yds. Start work on or before Sept. 1, 1924. Completed by Nov. 1, 1924.

Sec. C-3—30,904 cu.yds. Start work on or before Aug. 1, 1924. Completed by Sept. 1, 1924.

Sec. D-4—43,822 cu.yds. Start work on or before June 15, 1024. Completed by Aug. 1, 1924.

The estimated quantity of material to be excavated in said entire Ditch is 148,233 cu. yds. of excavation. This work consists in cutting a continuous channel as located, which channel is 10 feet in width at the bottom, and side slopes shall be one foot horizontal to one foot vertical; side slopes shall be left smooth and uniform, and bottom of channel shall be brought to proper grade elevation and left smooth and uniform, and with an approximate depth of 9½ feet; right of way 125 feet in width from place of beginning to CM. & ST. P. Bridge in Sec. 27-73-13 and 150 feet in width from there to the end.

Bids will be submitted for the entire work; and the price must be stated in both words and figures, and permission will not be granted to amend or withdraw any bid after filing with the County Auditor. Maps plans, profiles, specifications, and form for bids, contracts, etc., are on file in my office, and at the office of Brown & Cook, Engineers, Ottumwa, Iowa, and can be examined. The Board will award contract to the lowest responsible bidder therefor; but the right is hereby expressly reserved by said Board to reject any or all bids and to readvertise the letting of said work; and no bid will be considered unless on the approved form for bids furnished by the undersigned.

All bids must be signed with the recognized name of the Contractor or firm who expects to do the work if awarded the contract, and each bid must be accompanied by a certified check of some reputable bank, in the sum equal to ten per cent. of the amount of the bid, (but not to exceed $10,000.00), drawn in favor of the County Auditor of Wapello County, Iowa, as a guarantee of good faith in entering on said contract, and if awarded the contract for said work, the bidder will within ten days from the date of notice thereof, enter into said contract therefor and execute said Bond therefor, or deposit cash, as provided by law in the sum of twenty-five per cent of estimated cost of said work so let by such contract. The checks of unsuccessful bidders will be returned to them respectively as soon as award is made. All provisions of present Drainage Laws of Iowa are made a part of all said contracts.

All bids must be sealed and marked on the outside of envelope: Bid for Contract on Cedar Creek Drainage Ditch, No. 6, and addressed to Fred W. Prosser, County Auditor, Ottumwa, Wapello County, Iowa. The bids will be opened at Two o'clock p.m. on July 10, 1923, in the offic of the Board of Supervisors, in Court House at Ottumwa, Iowa, and the contract, n awarded by the said Board as soon as practicable thereafter on said date.

Witness my hand and seal this day of May, 1923.

FRED W. PROSSER,
County Auditor of Wapello Co., Ia.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ADVERTISEMENTS ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE.

OFFICIAL PROPOSALS

Bids: July 3.

Proposals to Furnish and Install A Stone Crusher Plant and Incidental Equipment

Trenton, N. J.

The Board of Freeholders of Mercer County will receive separate bids on Tuesday, July 3, 1923, at 2:30 o'clock (daylight saving time) in the afternoon, at their regular place of meeting, Court House, Trenton, New Jersey, for:

1. Furnishing, delivering and erecting at Moore Station, New Jersey, 36-inch x 24-inch jaw stone crusher, with elevators, screens, counter shafts, chain and belt drives, crusher bins, gates, hoists, housing for crusher plant, 20-ton auto truck scale, well driller, narrow gauge cars, tracks, skips, traction crane with clam shell bucket, together with the relocation of existing crusher.

2. Furnishing and delivering f.o.b. Mercer County siding, Moore Station, N. J., all motors required to operate new crusher plant, placing same and installing all wiring and incidental equipment.

Prospective bidders are referred to plans and specifications covering the above work prepared by H. Elting Breed, Consulting Engineer, 507 Fifth Avenue, New York City, which plans and specifications are on file in his office and at the office of the County Engineer, Court House, Trenton, New Jersey. Copies of said plans and specifications may be obtained upon deposit of the sum of ten dollars, which will be refunded if the plans and specifications are returned in good condition within 48 hours after the bids are opened.

Each proposal must be accompanied by a certified check in the amount of 10 per cent of the bid, payable to Edgar G. Weart, County Treasurer, also by a proposition from a surety company fulfilling the requirements of Section 507, Chapter 185, P. L. 1918.

The right is reserved to reject any or all bids and to waive any immaterial defect or informality in any bid should it be in the interest of the county to do so.

ELMER E. MARGERUM,
Director of Department of Public Buildings.

Bids: June 28.

County Road Work

Henderson, N. C.

Sealed bids for the construction of approximately three (3) miles of hard surfaced highway on the Dabney, Oxford and Cooper roads (districts Nos. 1, 2, and 3) in Vance County, North Carolina, will be received by the County Commissioners in their office at Henderson, North Carolina, at four o'clock p.m. on the 28th day of June, 1923, opened and read publicly.

No bid will be considered unless accompanied by certified check or a corporate surety bond, as specified in "Instructions to Bidders."

A Corporate Surety Bond will be required for the faithful performance of the contract, in a sum equal to one-half the total amount of bid, or other security satisfactory to the Commission.

Specifications, form of Contract, Proposal Blanks, plans and full information for bidders may be obtained at the office of Dr. A. C. Yow, Henderson, N. C., and M. E. Miller, Engineer, Salisbury, N. C.

The right is reserved to reject any or all proposals or to accept the proposal or proposals deemed best for the Paving Districts.

By order of the County Commissioners of Vance County, this the 12th day of June, 1923.

W. S. CORBITT, Secretary,
Vance County Paving District.

OFFICIAL PROPOSALS

Bids: July 6.

State Highway Work

Richmond, Va.

Sealed bids will be received at the office of the State Highway Dept. 413 N. 10th St., Richmond, Va., until 10:30 A.M., Fri., July 6th, 1923, for the construction of:

1. Proj. F-295-Rt. 39 — Richmond-Seven Pines, Henrico Co., 5.19 mi. 18'-8"-6"-8" conc. roadway, approx.: 2 ac. clearing, 10,026 cu.yds. exc., 5,946 cu.yds. borrow exc., 713 lin.ft. pipe, 277 cu.yds. "B" conc. Cert. check $1,000.00. State will furnish cement.

2. Proj. F-178-Rt. 31—Grassy Creek bridge near Clarksville in Mecklenburg Co., 120 ft. Steel truss with surface treated floor, approx. 51.7 cu.yds. "A" conc., 2,410 lbs. reinf. steel, 84,000 lbs. structural steel, 12,420 ft. B. M. Lumber, 244 lin.ft. Guard Fence. Cert. check $500.00.

3. Proj. S-65D-Rt. 33—Fancy Hill-Buffalo Creek, Rockbridge Co., 3.95 miles, 18'-8". Bit. Mac. roads approx. 5 ac. clearing, 33,482 cu.yds. exc. 1,145 cu.yds. borrow, 570 lin.ft. pipe, 70 cu.yds. "A" conc., 120 cu. yds. "B" conc., 600 lin.ft. Wood Gd. Rail. Cert. check $500.00.

4. Proj. F-227-Rt. 10—Bridge over Spoon Creek in Patrick Co., three 30' reinf. conc. beam spans, approx. 125 cu.yds. "A" conc., 126 cu.yds. "B" conc., 24,675 lbs. reinf. steel. Cert. check $500.00.

5. Proj. S-325-Rt. 112—Four bridges and approaches over Little Cedar Creek between Lebanon and Hansonsville in Russell Co., four 30' reinf. conc. beam spans. Four 25' reinf. conc. beam spans. Approx. 2,375 cu.yds. "A" conc., 287.4 cu.yds. "B" conc., 45,155 lbs. reinf. steel, 10,008 cu.yds. of borrow, 3,208 cu.yds. exc. Cert. check $500.00.

6. Proj. S-255-Rt. 11—Streets of Tazewell-Tazewell Co., 1.63 18' 38' 2" 8" Bit. Mac. road, approx. 1,368 cu.yds. exc., 66 cu.yds. borrow, 126 lin.ft. pipe, 3.06 cu.yds. "B" conc. 825 cu.yds. stone, 2,340 lin.ft. conc. curbing, 18,657 sq.yds. scarifying—alt. bids using conc. pavement, state will furnish cement

7 Proj. S-315-Rt. 32—Streets of Gordonsville, Orange Co., 0.65 miles of Bit. Mac. & Surface Treatment. Approx. 485 cu.yds. exc. 1,890 sq.yds. Base Stone, 6,050 sq.yds. scarifying, 3,400 gals. Bit. Material (0. A-2) 60 tons of stone chips, 54 cu.yds. No. 2 stone. Cert. check $500.00.

8. Proj. F-282-Rt. 14—Gretna-Chatham, Pittsylvania Co., 9.6 mi. of 20-22 soil road, approx. 21.4 ac. clearing, 69,800 cu.yds. exc. 1,986 lin.ft. pipe, 155 cu.yds. conc. "A," 374.3 cu.yds. "B" conc., 12,192 lbs. reinf. steel, 3,100 lin.ft. wood gd. rail. Cert. check $1,000.00. Plans and proposals will not be available until June 22nd.

9. Proj. S-248-Rt. 18—Clifford-Claypoole, Nelson & Amherst Co.'s., 7.49 mi. 24-26 grading and drainage. Approx. 7.4 ac. clearing, 6,200 cu.yds. exc., 2,228 cu.yds. borrow, 1,800 lin.ft. pipe, 201.2 cu.yds. "A" conc., 553.3 cu.yds. "B" conc., 15,543 lbs. reinf. steel, 4,500 lin.ft. wood gd. rail, 3,500 cu.yds. Channel Change. Cert. check $1,000.00. Plans on this project will not be available until June 22nd.

10. Proj. F-301-Rt. 28—Covesville-North in Albermarle Co., 2.13 miles 16' Bit. Mac. Approx. 19,869 cu.yds. Exc., 448 lin.ft. pipe, 118.7 cu.yds. "A" conc., 20.5 cu.yds. "B" conc., 6,928 lbs. reinf. steel, 1,245 lin.ft. Wooden Gd. Rail. Cert. check $500.00. Plans and bidding proposals will not be available until June 22nd.

Bid Bond twenty per cent inexcess of amount of certified check.

Plans and specifications are on file at the office of the State Highway Dept. and at the office of the following Dist. Engineers: Proj. F-295, 178 Richmond, Proj. S-65D, Staunton, Va., Proj. 227, Salem, Proj. 325, 255, Bristol, Proj. 315-301, Culpeper, Proj. 282, 248 Lynchburg.

OFFICIAL PROPOSALS

Additional plans for bidders for the above project can be obtained upon application to the State Highway Dept. upon receipt of $5.00 payable to H. G. Shirley, $2.500 will be refunded if plans are returned within two weeks after bids are opened. Bridge plans from W. F. Hobart, 805½ E. Franklin St., Richmond, as follows: Proj. 178, 54c., Proj. 227, 54c., Proj. 325, 2.16. If plans are desired immediately add 10c. for Special Delivery.

Engineers will be at the following places to show prospective bidders over projects as follows: Proj. 295, Dist. Engr. office Richmond, 10:30 A.M. Tues. June 19th, Proj. 178, Clarksville Hotel, 10:30 A.M. Fri., June 22nd, Proj. 65¾, Lexington Hotel, Lexington, Va., 10:30 A.M. Fri., June 22nd Proj. 227, Martinsville, 10:30 A.M. Wed., June 20th, Proj. 325, Lebanon, Noon Tues., June 26th, Proj. 255, Co. Engineers office, Tazewell, Noon Thurs., June 28th, Proj. 315. Res. Engineers office, Gordonsville, Tues., June 26th, Proj. 282. So. Railway Station, Chatham, 11 A.M. Monday, July 2nd, Proj. 248, Amherst, 10 a.m., Tues., July 2nd, Proj. 301, Covesville, 10 A.M. June 26th.

The State Highway Commission reserves the right to reject any or all bids.

H. G. SHIRLEY,
Chairman.

C. S. MULLEN, ..
Acting Commissioner.
June 15, 1923.

Bids: June 27.

DEPARTMENT OF WHARVES, DOCKS AND FERRIES, MUNICIPAL PIER NO. 4, SOUTH WHARVES, FOOT OF CHESTNUT STREET

Pier

Philadelphia, Pa.

Sealed proposals endorsed "Bids for the completion, with appurtenance work for Porter Street Pier No. 84, South Wharves, Moyamensing Group, Delaware River" will be received until 12 o'clock noon, (Standard Time) Wednesday, June 27, 1923 in Room 211, Municipal Pier No. 4, South Wharves, foot of Chestnut Street, and then publicly opened.

Plans, specifications and blank forms upon which bids must be made, can be obtained in Room 204 Municipal Pier No. 4, South Wharves, upon a deposit of a certified check in the amount of $25, which check will be returned upon the receipt in this office of the plans and specifications in good condition and unmarked. The successful bidder will be furnished with all blueprints necessary, free of charge.

The bidder's attention is called to the fact that bids are solicited, and payment for the above mentioned work is to be made out of funds now available, and an appropriation of $600,000, to the Department out of the $3,610,000, loan of May 11, 1923, when the same becomes available, and that no contract will be made until that time.

Proof must be submitted the Department by the Contractor that he has accepted the provisions of the Workingmen's Compensation Act of June 18, 1917, relative to Workingmen's compensation, and insured his liability thereunder or secured exemption therefrom.

No bid will be considered unless accompanied by a certificate from the City Solicitor of the City of Philadelphia to the effect that the provisions of an ordinance approved May 25, 1860, requiring proposal bonds on all bids exceeding in amount $500, have been complied with.

The Director reserves to himself the right to reject any or all bids as he may deem best for the interest of the City of Philadelphia.

GEORGE F. SPROULE,
Director.

June 11, 1923.

OFFICIAL PROPOSALS

Bids: July 10.

Drainage Ditch and Improvement

DISTRICT NO. 6

Ottumwa, Ia.

In the Matter of the Cedar Creek Drainage District No. 6, of Wapello County, Iowa, and Drainage Ditch and improvement therein:

Notice is hereby given that in pursuance of an order of the Board of Supervisors of Wapello County, Iowa, made on May 17, 1923, sealed bids will be received by the undersigned for said Board up to Two o'clock p.m. on July 10, 1923, at the Court House, Ottumwa, Ia., but not later, for the construction of said Drainage Ditch and improvement in said Drainage District No. 6, of Wapello County, Ia., in accordance with the approved plans, profiles, specifications, and contract in blank form for bids, and bond therefor, on file in my office; said work thereof being described as follows, and having the approximate estimated amount and quantities as specified, but which may be found to be either more or less on final measurement:

The beginning point of said Ditch and Improvement is at E. of CM. & ST. P. R. RY. bridge No. 1-352 in N. W. ¼, S. W. ¼, Sec. 21-Highland Twp. 73-R 13 W. and ending at the E. ¼ Cor. S. E. ¼ Sec. 36-Highland Twp., a distance of 4.47 miles, divided into sections as follows:

Sec. A-1—34,966 cu.yds. Start work on or before Nov. 1, 1924. Completed by Dec. 1, 1924.

Sec. B-2—38,541 cu.yds. Start work on or before Sept. 1, 1924. Completed by Nov. 1, 1924.

Sec. C-3—30,904 cu.yds. Start work on or before Aug. 1, 1924. Completed by Sept. 1, 1924.

Sec. D-4—43,822 cu.yds. Start work on or before June 15, 1024. Completed by Aug. 1, 1924.

The estimated quantity of material to be excavated in said entire Ditch is 148,233 cu. yds. of excavation. This work consists in cutting a continuous channel as located, which channel is 10 feet in width at the bottom, and side slopes shall be one foot horizontal to one foot vertical; side slopes shall be left smooth and uniform, and bottom of channel shall be brought to proper grade elevation and left smooth and uniform, and with an approximate depth of 9½ feet; right of way 125 feet in width from place of beginning to CM. & ST. P. Bridge in Sec. 27-73-13 and 150 feet in width from there to the end.

Bids will be submitted for the entire work; and the price must be stated in both words and figures, and permission will not be granted to amend or withdraw any bid after filing with the County Auditor. Maps plans, profiles, specifications, and form for bids, contracts, etc., are on file in my office, and at the office of Brown & Cook, Engineers, Ottumwa, Iowa, and can be examined. The Board will award contract to the lowest responsible bidder therefor; but the right is hereby expressly reserved by said Board to reject any or all bids and to readvertise the letting of said work; and no bid will be considered unless on the approved form for bids furnished by the undersigned.

All bids must be signed with the recognized name of the Contractor or firm who expects to do the work if awarded the contract, and each bid must be accompanied by a certified check of some reputable bank, in the sum equal to ten per cent. of the amount of the bid, (but not to exceed $10,000.00), drawn in favor of the County Auditor of Wapello County, Iowa, as a guarantee of good faith in entering on said contract, and if awarded the contract for said work, the bidder will within ten days from the date of notice thereof, enter into said contract therefor and execute said Bond therefor, or deposit cash, as provided by law in the sum of twenty-five per cent of estimated cost of said work so let by such contract. The checks of unsuccessful bidders will be returned to them respectively as soon as award is made. All provisions of present Drainage Laws of Iowa are made a part of all said contracts.

All bids must be sealed and marked on the outside of envelope: Bid for Contract on Cedar Creek Drainage Ditch, No. 6, and addressed to Fred W. Prosser, County Auditor, Ottumwa, Wapello County, Iowa. The bids will be opened at Two o'clock p.m. on July 10, 1923, in the offic of the Board of Supervisors, in Court House at Ottumwa, Iowa, and the contract, it awarded by the said Board as soon as practicable thereafter on said date.

Witness my hand and seal this day of May, 1923. FRED W. PROSSER.
County Auditor of Wapello Co., Ia.

OFFICIAL PROPOSALS

Bids: June 25.

State Road Work

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey for the construction of the following:

Route No. 4, Section No. 21, Point Pleasant-Laurelton, in the County of Ocean. Estimated 12,846 cu.yds. of excavation, 33,937 sq.yds. of gravel surface, and 57,483 sq.yds. of single line eight inch (8") reinforced concrete pavement.

Route No. 5, Section No. 10, Chatham-Brantwood, in the Counties of Morris, Essex and Union. Estimated 7,212 cu.yds. of excavation, 461 sq.yds. of Sheet Asphalt pavement, 4,300 sq.yds. of Granite Block pavement, and 20,566 sq.yds. of double line eight inch (8") reinforced concrete pavement.

Bids will be received at the Assembly Chamber, State House, Trenton, New Jersey, on Monday, June 25th, 1923, at 11:00 a.m., Standard Time, and opened and read immediately thereafter.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of the State Highway Department, Trenton, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on deposit of Ten Dollars ($10.00) upon application to the State Highway Department, 9th floor Broad St. Bank Building, Trenton, New Jersey. Bids must be made on the standard proposal forms in the manner designated therein, and as required by the 1922 specifications, same to be enclosed in sealed special addressed envelopes bearing the name and address of bidder and the name and section of the route on the outside, and must be accompanied by a certified check drawn to the order of the Treasurer of the State of New Jersey for not less than ten per cent (10%) of the amount of the bid, provided that the said certified check shall not be less than $500.00 nor more than $20,000.00 and be delivered at the above place on or before the hour named. Copies of the standard proposal form and special addressed envelopes will be furnished on application. Bids not enclosed in special envelopes will be considered informal and will not be opened.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provisions of the said specifications, conditioned for the faithful performance of the provisions of the contract and specifications. Each bidder must also accompany his bid with a Statement of Equipment properly filled out.

By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

Bids: July 5.

Structural Steel Framing and Steel Rolling Doors

New Orleans, La.

Sealed proposals will be received by the Board of Commissioners of the Port of New Orleans at their office, Suite 200 New Court Building, until 3:00 p.m., July 5, 1923, and then publicly opened for furnishing and erecting at Poland Street Landing under two separate contracts:

A. Structural Steel Framing for Shed Approximately 216 tons. (Requisition E. D. 13554.)

B. Steel Rolling Doors, approximately 4,560 square feet. (Requisition E. D. 13555.)

A deposit of $600.00 in cash or certified check is required with proposal A and $300.00 with proposal B.

A bond to the amount of fifty per cent (50%) of the sum bid is required with each notarial contract.

Specifications and proposal forms are on file in the office of the Supervisor of Purchases at No. 1 Canal Street, New Orleans, Louisiana. Complete sets will be furnished to prospective bidders on deposit of $10 for each set, which will be refunded to depositors who submit proposals or return sets in good condition.

The right is reserved to reject any or all bids and to waive informalities.

J. H. WALSH, General Manager.
Requisitions E. D. 13554 and E. D. 13555.

OFFICIAL PROPOSALS

Bids: June 22.

State Highway Work

Providence, R. I.

Sealed proposals for the reconstruction under the provisions of the Federal Aid Road Act of a Section of State Highway in the Towns of Richmond and Hopkinton, between Wyoming and Hopkinton City on the New London Turnpike, will be received by the State Board of Public Roads at its office, State House, Providence, R. I., until 12 M. (Daylight Saving), 11 a.m. (Eastern Standard) on Friday, June 22, 1923, at which time they will be opened and read in public.

The principal estimated quantities are as follows:

Contract No. 2305—Federal Aid Project No. 18—5.51 miles Reinforced Cement Concrete Pavement.

Excavation	21,200 cu.yd.
Gravel Foundation	3,000 cu.yd.
Sub-drain	1,300 lin.ft.
Pipe Culverts	2,700 lin.ft.
Wooden Guard Rail	9,000 lin.ft.
Reinforced Cem. Conc. Pavement	11,340 cu.yd.
Cement for concrete pavement	20,640 bbl.
Galvanized steel fabric in pavement	295,000 lb.
Steel bars for reinforcement	33,000 lb.

Bids must be made upon blank forms to be furnished by the Board.

No bid will be accepted unless accompanied by a certified check for the sum of $200.00, payable to the State of Rhode Island.

The Board reserves the right to reject any and all bids, and to give preference to towns or cities, in accordance with Section V of Chapter 84 of the General Laws.

Plans may be examined and specifications and bidding blanks may be obtained at the office of the State Board of Public Roads, State House, Providence, R. I., on and after Monday, June 11, 1923, every week day (except holidays and Saturdays), between the hours of 9 a.m. and 5 p.m. Saturdays 9 a.m. to 12 m.

State Board of Public Roads.
ABRAM L. ATWOOD
BENJAMIN F. ROBINSON
FRANK COLE
ALTON HEAD
JOHN W. HANLEY

Bids: June 29.

Rebuilding Bridge

Salem, Mass.

Sealed proposals for rebuilding the Haverhill Lower Bridge over the Merrimack River in the City of Haverhill, Mass., will be received by the Haverhill Lower Bridge Rebuilding Commission at the County Commissioners' office in the Court House at Salem, Mass., until 11:00 o'clock a.m. of Friday, June 29, 1923, and then and there will be publicly opened and read.

The proposed bridge is to be 804 feet long and 66 feet wide, consisting of five reinforced concrete arches of 80 feet clear span, one arch of 55 feet clear span, and reinforced concrete approaches of beam and slab construction. A proposed steel bascule drawspan is not included in the proposals. The new bridge will occupy the site of the old bridge and extend downstream therefrom so that one-half of the new bridge is to be built clear of the old bridge which is then to be removed and the other half of the new bridge completed in its place.

Each proposal must be accompanied by a certified check for twenty thousand dollars ($20,000). A bond in the sum of fifty (50) per cent of the amount of the contract with an approved surety company as surety will be required for the faithful performance of the contract.

More detailed information is given in the plans, notice to contractors, specifications, and form of proposal, contract, and bond, copies of which may be inspected at the office of the Commission No. 14 Water Street, Haverhill, or may be obtained at the office of the County Engineer in the Court House at Salem upon the deposit of fifty (50) dollars, which will be refunded upon return of plans, specifications, etc., in good condition, on or before the day, herein set for the opening of proposals.

The right is reserved to reject any and all proposals.

ROBERT H. MITCHELL, Chairman
CHARLES N. KELLY
EDMUND C. WENTWORTH
RAYMOND H. TREFRY
FREDERICK BUTLER
Haverhill Lower Bridge Rebuilding Commission.
ROBERT R. EVANS, Engineer.
Haverhill, Mass., June 8, 1923.

OFFICIAL PROPOSALS

Bids: July 2.

Sea Wall or Flood Protection

Vicksburg, Miss.

Sealed proposals for the construction of a concrete wall along the river front at Vicksburg, Mississippi, will be received at the City Hall until 4 p.m. July 2, 1923, at which time and place, they will be publicly opened and read.

Approximately 4,200 lineal feet of wall containing about 9,500 cu.yd. of concrete, 450 tons of reinforcing steel and 4,200 lineal feet interlocking sheet piling 10 to 20 feet long, will be contained in the work. Bidders must accompany their proposal with a certified check payable to "Board of Mayor and Aldermen," City of Vicksburg, for not less than 5 per cent of their bid price.

Care will be exercised in determining the special skill and the responsibility of the bidders, to which end each bidder will be expected to make satisfactory answers to a questionnaire, copy of which will be forwarded upon request. Plans and specifications may be obtained from Miller-Butterworth Company, Engineers, 624 Southern Trust Building, Little Rock, Arkansas, for the sum of $10. Upon surrender of the plans and specifications in good condition, $5 of this will be returned. The City reserves the right to reject any and all bids and to waive technicalities in awarding the contract.

J. J. HAYES, Mayor.

Bids: June 29.

Reinforced Concrete Bridge

Reading, Pa.

Sealed proposals are hereby invited for the building of a reinforced concrete bridge over the Schuylkill River, on Schuylkill Avenue, Reading, Pa.

The bridge is to consist of five spans 106 feet and 2 spans of 40 feet, with beam and slab construction in the approaches. Total length of the bridge to be 1,057 feet, 70 feet wide all over, with a 48 feet roadway and two 11 feet 6 inch wide walks.

The contractor is to build and maintain during the construction of the new bridge a temporary bridge at the site indicated on the plans.

A deposit of $200.00 will be required for each set of plans and specifications, which will be refunded upon the return of the same. Plans and specifications are in the hands of the County Commissioners, Court House, Reading, Pa.

A certified check of $20,000.00 must be enclosed with the proposal.

Bids will be received by the County Controller at the Court House, Reading, Pa., until 10 o'clock in the morning of June 29, 1923.

JOHN P. WANNER,
County Controller,
Court House,
Reading, Pa.

Bids: July 17.

Inclosed Channel

Dunkirk, N. Y.

Sealed proposals for the construction of an inclosed channel and accessories for the diversion of Hyde Creek, in the City of Dunkirk, N. Y., will be received until 8 p.m., eastern time, July 17, 1923, and then publicly opened. The right is reserved to reject any or all bids. Plans and specifications are on file and information may be had on application to the undersigned. Specifications will be forwarded to applicants. To insure return of plans a deposit of twenty dollars ($20) is required for plans mailed, which sum will be returned to applicant upon return of plans.

H. J. HENDERSON,
City Clerk.

Compensation Insurance

Some contractors "give" this insurance to a friend, either personal or political. How many, we wonder, "engage" the services of a specialist to advise them right in the intricate problems that arise in this business.

ALFRED S. HAMILTON
110 William St., New York

OFFICIAL PROPOSALS

Bids: June 26.

Hudson River Vehicular Tunnel

CONTRACT NO. 5

New York, N. Y.

Sealed bids will be received by New York State Bridge and Tunnel Commission and New Jersey Interstate Bridge and Tunnel Commission at the office of the Commissions, Room 618, Hall of Records, New York City, until 2:00 o'clock p.m. (Eastern Standard Time), Tuesday, June 26th, 1923, for the construction of a portion of two (2) tunnels as approaches to the river section of a vehicular tunnel under the Hudson River, said approach section being on the Island of Manhattan, known as Contract No. 5.

A statement of the quantities of the various items of work and further information are given in the invitation to bid forming part of the contract. At the above place and time the bids will be publicly opened and read. The award of the contract, if awarded, will be made by the Commissions as soon thereafter as practicable. The Commissions reserve the right to reject any and all bids.

Bonds in the sum of three hundred fifty thousand ($350,000) dollars each to the State of New York and to the State of New Jersey will be required for the faithful performance of the contract.

No bids will be received or considered unless accompanied by two certified checks upon a National or State Bank or Trust Company, satisfactory to the Commissions and located in New York City or the cities of Newark or Jersey City in the sum of seventy-five thousand ($75,000) dollars each, one payable to the order of the "Comptroller of the State of New York," and the other payable to the order of "The New Jersey Interstate Bridge and Tunnel Commission."

The time allowed for the completion of the work is twenty-four months after the date of the delivery of the contract.

Books containing forms of invitation to bid, proposal, contract, specifications and bond and contract drawings, etc., can be obtained at the office of the Commissions for the sum of $5.00 per set, which will be refunded upon their return in good condition within thirty (30) days from the date of receipt of bids.

New Jersey Interstate Bridge and Tunnel Commission.

THEODORE BOETTGER,
Chairman.

New York State Bridge and Tunnel Commission.

GEORGE R. DYER,
Chairman.

Bids: August 31.

Tenders For Plant

STATE ELECTRICITY COMMISSION OF VICTORIA

Melbourne, Australia.

Tenders are hereby invited for the supply, delivery, etc., of the following for the Morwell Power Scheme.

Copies of Tender Form and Specification will be available upon application to: Office of the Bureau of Foreign & Domestic Commerce, United States Department of Commerce, First National Bank Building, CHICAGO, and Office of the Bureau of Foreign & Domestic Commerce, United States Department of Commerce, 734 Customs House, NEW YORK CITY.

SPECIFICATION NO. 23/77—ALUMINUM STEEL CORED CABLE & ACCESSORIES

CHARGE: £2:0:0 for the first 3 copies of Tender Form, Conditions of Contract, and Specification complete. These charges will be returned on receipt of a bona-fide tender. A fourth copy and any further copies will be supplied for the sum of 10/ each.

PRELIMINARY DEPOSIT: A preliminary deposit of £100:0:0 is to be lodged with Tender.

The Specification may be inspected at the above mentioned Offices, and also at the office of: The Commissioner for Australia in U. S. A., Room 3012, 61 Broadway, NEW YORK.

The Commission does not bind itself to accept the lowest or any tender.

Tenders on prescribed form, properly endorsed and addressed, must be delivered to the undersigned in Melbourne not later than 5 p.m., August 31st, 1923.

R. LIDDELOW, Secretary,
State Electricity Commission of Victoria,
22-32 William Street,
Melbourne,
Victoria, Australia.

OFFICIAL PROPOSALS

Bids: July 17.

Water Works, Sewers, Street Improvements

Deland, Fla.

Sealed proposals will be received by the Board of Bond Trustees of the City of Deland, Florida, at the City Hall, for furnishing material and constructing water works improvements, sanitary and storm sewer systems and street improvements in and for the City of Deland, Florida, until 4 p.m., July 17, 1923, at which time they will be opened and read publicly.

The work includes the furnishing of all labor, material machinery and equipment of every kind necessary to construct approximately 95,000 square yards of brick, concrete, or bituminous pavements with necessary curb, gutter and appurtenances, approximately 2½ miles of storm drains 12 to 24 inches with accessories. Approximately 2 miles sanitary sewers 6 to 18 inches with accessories, approximately 8 miles water mains 4 to 10 inches with specials, three pumps, two pump houses, one generator unit and accessories, all complete and in accordance with plans and specifications on file at the office of the Engineers and the City Clerk.

Each bid must be accompanied by a certified check on a bank satisfactory to the Bond Trustees or Bidders Bond acceptable to Bond Trustees for five (5) per cent of the amount of the bid, drawn to the order of the City of Deland, Florida.

A bond in the sum of twenty (25) per cent of the amount of the contract with satisfactory surety executed through Deland, Florida, agency will be required for the faithful performanc of the work.

All bids will be compared on the basis of the Engineers' estimates of amount of work to be done.

Copies of the specifications may be obtained from the Engineers upon receipt of deposit of five ($5.00) dollars which will be returned on bona fide bid. Plans may be seen at the office of the Engineer at Deland or Atlanta, Georgia, or at the City Hall. Copies of plans may be obtained on the payment of twenty-five ($25.00) dollars.

The right is reserved to reject any or all bids.

This 8th day of June, 1923.

CITY OF DELAND, FLORIDA
By E. R. CONRAD,
By G. A. DREKA,
By C. L. ALLEN,
Bond Trustees.

J. B. McCrary Engineering Corporation,
Engineers, Atlanta, Georgia.

Bids: June 26.

Bridges

Baltimore, Md.

SEALED PROPOSALS for building the following bridges:

Frederick Co.—Cont. F-58. Reinforced concrete arch bridge over Catoctin Creek near Middletown on the Hagerstown Pike, consisting of a single span 85′ 0″ clear and a 24′ 0″ clear Roadway.

Montgomery Co.—Cont. M-18. Reinforced concrete arch bridge over Seneca Creek near Dawsonville on the road from Darnstown to Dawsonville, consisting of a double span each 46′ 0″ clear and a 24′ 0″ clear Roadway.

Hartford Co.—Cont. H-35. Reinforced concrete arch bridge over Bynum Run near Belair on the Belair-Aberdeen Road, consisting of a single span 40′ 0″ clear and a 24′ 0″ clear Roadway.

will be received by the State Roads Commission, at its offices, 601 Barrett Building, Baltimore, Maryland, until 12 M. on the 26th day of June, 1923, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of $1.00, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of Five Hundred ($500) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

BY ORDER of the State Roads Commission this 12th day of June, 1923.

JOHN N. MACKALL,
Chairman.

L. H. STEUART,
Secretary.

OFFICIAL PROPOSALS

Bids: July 10.

Drainage Ditch and Improvement

DISTRICT NO. 4

Ottumwa, Ia.

In the Matter of the Cedar Creek Drainage District No. 4, of Wapello County, Iowa, and Drainage Ditch and improvement therein:

Notice is hereby given that in pursuance of an order of the Board of Supervisors of Wapello County, Iowa, made on May 17th, 1923, sealed bids will be received by the undersigned for said Board up to Two o'clock p.m., on July 10, 1923, at the Court House, Ottumwa, Ia., but not later, for the construction of said Drainage Ditch and improvement in said Drainage District No. 4, of Wapello County, Iowa, in accordance with the approved plans, profiles, specifications, and contract, in blank form for bids, and bond therefor, on file in my office; said work thereof being described as follows, and having the approximate estimated amount and quantities as specified, but which may be found to be either more or less on final measurement:

The beginning point of said Ditch and Improvement is at West ¼ Cor. N. W. ¼ Sec. 31-Competine Twp. 73-r 12 W. and ending in the S. E. ¼ Sec. 13 Pleasant Twp. 72-r. 12 on the Wapello Jefferson County Line, a distance of 7.23 miles divided into sections as follows:

Sec. E-5—42,636 cu.yds. Start work on or before May 1st, 1924. Complete by June 15, 1924.

Sec. F-6—42,129 cu.yds. Start work on or before Mch. 15, 1924. Completed by May 1, 1924.

Sec. G-7—43,643 cu.yds. Start work on or before Feb. 1, 1924. Completed by March 15, 1924.

Sec. H-8—37,654 cu.yds. Start work on or before Dec. 20, 1923. Completed by Feb. 1, 1924.

Sec. I-9—35,204 cu.yds. Start work on or before Nov. 15, 1923. Completed by Dec. 20, 1923.

Sec. J-10—24,258 cu.yds. Start work on or before Oct. 20, 1923. Completed by Nov. 15, 1923.

Sec. K-11—31,310 cu.yds. Start work on or before Sept. 15, 1923. Completed by Oct. 20, 1923.

The estimated quantity of material to be excavated in said entire ditch is 256,834 cu.yds. of excavation. This work consists in cutting a continuous channel as located, which channel is 12 feet in width at the bottom, and side slopes shall be one-half foot horizontal to one foot vertical; side slopes shall be left smooth and uniform, and bottom of channel shall be brought to proper grade elevation and left smooth and uniform ,and with an approximate depth of 10½ feet; right of way 100 feet in width.

Bids will be submitted for the entire work; and the price must be stated in both words and figures, and permission will not be granted to amend or withdraw any bid after filing with the County Auditor. Maps, plans profiles, specifications, and form for bids, contracts, etc., are on file in my office, and at the office of Brown & Cook, Engineers, Ottumwa, Iowa, and can be examined. The Board will award contract to the lowest responsible bidder therefor; but the right is hereby expressly reserved by said Board to reject any or all bids and to readvertise the letting of said work; and no bid will be considered unless on the approved form for bids furnished by the undersigned.

All bids must be signed with the recognized name of the Contractor or firm who expects to do the work if awarded the contract, and each bid must be accompanied by a certified check of some reputable bank, in the sum equal to ten per cent, of the amount of the bid, (but not to exceed $10,000.00), drawn in favor of the County Auditor of Wapello County, Iowa, as a guarantee of good faith in entering on said contract, and if awarded the contract for said work, the bidder will within ten days from the date of notice thereof, enter into said contract therefor and execute said Bond therefor, or deposit cash, as provided by law in the sum of twenty-five per cent of estimated cost of said work so let by such contract. The checks of unsuccessful bidders will be returned to them respectively as soon as award is made. All provisions of present Drainage Laws of Iowa are made a part of all said contracts.

All bids must be sealed and marked on the outside of envelope: Bid for Contract on Cedar Creek Drainage Ditch, No. 4, and addressed to Fred W. Prosser, County Auditor, Ottumwa, Wapello County, Iowa. The bids will be opened at Two o'clock p.m., on July 10, 1923, in the office of the Board of Supervisors, in Court House at Ottumwa, Iowa, and the contract, if awarded will be awarded by the said Board as soon as practicable thereafter on said date.

Witness my hand and seal this day of May, 1923.

FRED W. PROSSER,
County Auditor of Wapello Co., Ia.

Bids: July 2.

Dam Construction

Beacon, N. Y.

Sealed proposals will be received by the City Council at its office No. 525 Main Street, Beacon, N. Y. at eight (8) o'clock p.m., Daylight Saving Time, July 2nd, 1923, for the construction of Dam at Melzingah Reservoir, Beacon, N. Y., which proposals will be opened by the Mayor or presiding officer on that day and time or on such subsequent day as the council may adjourn for that purpose.

No proposal shall be considered unless accompanied by the written consent of two sureties, conditioned that if the proposal be accepted, they will execute and deliver a bond with the bidder in a penalty to be fixed by the council conditioned for the construction of the work at the price and upon the terms proposed, according to the plans and specifications therefor, within such reasonable time as the council may limit, and subject to the supervision and approval of the Commissioner of Public Works as the specifications shall provide.

Prospective bidders are requested to visit the site of the proposed work in order to satisfy themselves as to the scope and hazards of the work.

Plans and specifications, form of proposal, bond and contract may be obtained at the office of the city, No. 525 Main Street, Beacon, New York, or at the office of George W. Krieger, Jr., Consulting Engineer, Poughkeepsie, N. Y., upon the deposit of $15.00, which amount will be refunded upon the return of the plans and specifications in good condition.

The proposal shall be accompanied by a certified check drawn upon an incorporated State or National Bank or Trust Company in good credit, within this State, payable to the order of the City of Beacon for five per cent of the amount of the bid. The successful bidder will be required to give a satisfactory bond for the faithful performance of the agreement in amount equal to fifty per cent of the value of the contract.

The City Council of the City of Beacon reserves the right to reject any or all bids.

By order of the City Council of the City of Beacon,

MARCUS G. MacLAUGHLIN,
Commissioner of Public Works.

Bids: July 2.

Road Work

White Plains, N. Y.

Sealed proposals will be received by the Board of Supervisors, Court House, White Plains, N. Y., until 10:30 a.m. (Daylight Saving Time), July 2nd, 1923, for constructing with reinforced concrete, Bedford Road and Webber Avenue, County Road No. 14 and 14A, in the Village of North Tarrytown, N. Y., a distance of approximately 1.49 miles.

Specifications, proposal sheets and all information relative to the above work may be secured at the office of the County Engineer, Court House, White Plains, N. Y., upon making a deposit of $10.00.

BOARD OF SUPERVISORS,
FRED L. MERRITT, Clerk.

Bids: July 5.

Bridge

Freehold, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Monmouth for the construction of Bridge No. Mn-30, Water St., Englishtown, consisting of one 36′ skew span with I beams encased in concrete, a 30′ reinforced concrete roadway, two 6′ sidewalks and concrete abutments on a timber pile foundation, and opened and read in public at the rooms of said board, Court House, Freehold, New Jersey, on July 5th, 1923, at 11:00 a.m., daylight saving time .

Drawings and specifications for the proposed work, prepared by George K. Allen, Jr., County Engineer, have been filed in the office of said Engineer at 60 Broad street, Red Bank, New Jersey, and may be inspected by prospective bidders during business hours. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

Plans and specifications will be furnished to prospective bidders upon payment of ten dollars ($10.00), which amount will be refunded upon return of plans and specifications before the time specified for the opening of bids.

Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and name of proposed work on the outside, addressed to the Board of Chosen Freeholders of the County of Monmouth and must be accompanied by a certified check for a sum not less than ten (10) per cent of the amount bid on the work, payable to the order of the County Treasurer and a surety company certificate stating that said surety company will provide the bidder with the required bond, and must be delivered at the place and before the hour above named.

The Board of Chosen Freeholders of the County of Monmouth reserves the right to reject any or all bids if deemed to the best interests of the County so to do.

By order of the Board of Chosen Freeholders of the County of Monmouth.

BRYANT B. NEWCOMB, Director.
ATTEST:
CHARLES E. COLE, Clerk.
Freehold, N. J., June 6th, 1923.

Bids: July 9.

Reinforced Concrete Viaduct

Akron, Ohio.

Sealed proposals are hereby invited for the building of a reinforced concrete viaduct on West State Street, Akron, Ohio.

The bridge will consist of
2 spans, 50 feet
2 spans, 47 feet
7 spans, 48.25 feet
with beam and slab construction. There will be about
9,000 l. ft. concrete piling
4,400 c. yds. concrete
300 tons reinforcing steel
3,000 s. yds. paving.

A deposit of $100. will be required for each set of plans and specifications, to be refunded on return of the same.

A certified check for Ten Thousand Dollars ($10,000.00) must accompany each proposal.

Bids will be received by the Director of Public Service, 3rd floor, Delaware Building, Akron, Ohio, until 12:00 o'clock M. Central Standard time July 9, 1923.

W. F. PETERS,
Director of Public Service.
E. A. KEMMLER,
Highway Engineer.

How Do You Figure A Contract?

Do you work it out carefully and with mathematical precision or do you put inefficient help on the job, wreath your face in a sublime smile of childlike trust and put your faith in Providence to guide you into paths of profit and places of prominence?

Swart Service is the type where you can let your eyes be the judge and your money the last thing you part with. To which we'll add, you'll be glad to pay the bill because Swart really serves.

HARMON V. SWART
Insurance Advisor *Rate Specialist*
92 WILLIAM ST., NEW YORK CITY

OFFICIAL PROPOSALS

Bids: July 5.

Bridge

Freehold, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Monmouth for the construction of Bridge No. Mn-30, Water St., Englishtown, consisting of one 36' skew span with I beams encased in concrete, a 30' reinforced concrete roadway, two 6' sidewalks and concrete abutments on a timber pile foundation, and opened and read in public at the rooms of said board, Court House, Freehold, New Jersey, on July 5th, 1923, at 11:00 a.m., daylight saving time.

Drawings and specifications for the proposed work, prepared by George K. Allen, Jr., County Engineer, have been filed in the office of said Engineer at 60 Broad street, Red Bank, New Jersey, and may be inspected by prospective bidders during business hours. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

Plans and specifications will be furnished to prospective bidders upon payment of ten dollars ($10.00), which amount will be refunded upon return of plans and specifications before the time specified for the opening of bids.

Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and name of proposed work on the outside, addressed to the Board of Chosen Freeholders of the County of Monmouth and must be accompanied by a certified check for a sum not less than ten (10) per cent of the amount bid on the work, payable to the order of the County Treasurer and a surety company certificate stating that said surety company will provide the bidder with the required bond, and must be delivered at the place and before the hour above named.

The Board of Chosen Freeholders of the County of Monmouth reserves the right to reject any or all bids if deemed to the best interests of the County so to do.

By order of the Board of Chosen Freeholders of the County of Monmouth.

BRYANT B. NEWCOMB, Director.

ATTEST:
CHARLES E. COLE, Clerk.
Freehold, N. J., June 6th, 1923.

Bids: July 9.

Concrete Pavement

Keyport, N. J.

Notice is hereby given that sealed bids will be received by the Mayor and Borough Council of the Borough of Keyport for the construction of a concrete pavement on Maple Place extending from the concrete State Highway known as Broad St., Westerly to the concrete County Road known as Broadway and opened and read in public at the Borough Hall, Keyport, N. J., on July 9, 1923, at 8 p.m.

Drawings and specifications for the proposed work, prepared by John T. Hopkins, Special Borough Engineer, have been filed in the office of the Borough Clerk, located in the Borough Hall in Keyport, N. J., and may be inspected by prospective bidders during business hours. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Borough Clerk.

Plans and specifications will be furnished to the prospective bidders on payment of ten dollars ($10.00), which amount will be refunded upon return of plans and specifications before the time specified for the opening of the bids.

Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidders and the name of proposed work on the outside, addressed to the Mayor and Borough Council of the Borough of Keyport and must be accompanied by a certified check for a sum not less than ten (10) per cent of the amount bid on the work, payable to the order of the Borough Collector and a surety company certificate stating that said surety company will provide the bidder with the required bond, and must be delivered at the place and before the hour above named.

The Mayor and the Council of the Borough of Keyport, reserves the right to reject any or all bids if deemed to the best interest of the Borough so to do.

By order of the Mayor and Council of the Borough of Keyport.

THOS. L. SMITH, Mayor.

Attest:
ELSIE OSBORN, Clerk.
Keyport, N. J., June 5, 1923.

OFFICIAL PROPOSALS

Bids: July 18.

Delaware River Bridge

CONTRACT NO. 7
ANCHORAGE CABLE BENTS

Philadelphia, Pa.

Sealed proposals for the construction of the Anchorage Cable Bents of the bridge over the Delaware River connecting the City of Philadelphia, Pa., and the City of Camden, N. J., will be received by the Delaware River Bridge Joint Commission at Room 806 Widener Building, Philadelphia, Pa., until 1:30 o'clock p.m., Eastern Standard Time, July 18, 1923, when they will be publicly opened and read. The contract will be awarded, or all bids rejected, within fourteen days after bids are opened. The right is reserved to reject any or all bids.

The two anchorages on which the anchorage cable bents are to be erected are located in the area bounded by Delaware Avenue, Race, Front and Summer Streets in Philadelphia, and immediately north of Pearl Street and about 472 feet west of Delaware Avenue in Camden. The work will include the furnishing, fabricating, painting and erecting of the steel anchorage cable bents complete as shown in the contract drawings, ready to receive the cables. The work comprises approximately 1,900 tons o steel work, and must be completed within a period of nine months.

Bids must be made upon the blank proposal form, which, together with specifications, bond and contract form, and contract drawings, may be obtained at the office of the Joint Commission, upon deposit of $25.00, which deposit will be refunded upon the receipt of bid or upon the return in good condition of the copies so taken.

Each proposal must be accompanied by a certified check for Twenty-five Thousand Dollars, drawn upon a national or state bank or trust company having an office either in Philadelphia or Camden, and payable to the Delaware River Bridge Joint Commission, and surety's consent must be shown. The bidder or bidders to whom the contract is awarded will be required to give bond in the sum of fifty per cent of the amount of the contract.

DELAWARE RIVER BRIDGE JOINT COMMISSION,
GIFFORD PINCHOT, Chairman,
JOSEPH K. COSTELLO, Secretary.

Bids: July 2.

Dam Construction

Beacon, N. Y.

Sealed proposals will be received by the City Council at its office No. 525 Main Street, Beacon, N. Y. at eight (8) o'clock p.m., Daylight Saving Time, July 2nd, 1923, for the construction of Dam at Melzingah Reservoir, Beacon, N. Y., which proposals will be opened by the Mayor or presiding officer on that day and time or on such subsequent day as the council may adjourn for that purpose.

No proposal shall be considered unless accompanied by the written consent of two sureties, conditioned that if the proposal be accepted, they will execute and deliver a bond with the bidder in a penalty to be fixed by the council conditioned for the construction of the work at the price and upon the terms proposed, according to the plans and specifications therefor, within such reasonable time as the council may limit, and subject to the supervision and approval of the Commissioner of Public Works as the specifications shall provide.

Prospective bidders are requested to visit the site of the proposed work in order to satisfy themselves as to the scope and hazards of the work.

Plans and specifications, form of proposal, bond and contract may be obtained at the office of the city, No. 525 Main Street, Beacon, New York, or at the office of George W. Krieger, Jr., Consulting Engineer, Poughkeepsie, N. Y., upon the deposit of $15.00, which amount will be refunded upon the return of the plans and specifications in good condition.

The proposal shall be accompanied by a certified check drawn upon an incorporated State or National Bank or Trust Company in good credit, within this State, payable to the order of the City of Beacon for five per cent of the amount of the bid. The successful bidder will be required to give a satisfactory bond for the faithful performance of the agreement in amount equal to fifty per cent of the value of the contract.

The City Council of the City of Beacon reserves the right to reject any or all bids.

By order of the City Council of the City of Beacon.

MARCUS G. MacLAUGHLIN,
Commissioner of Public Works.

OFFICIAL PROPOSALS

Bids: July 10.

Drainage Ditch and Improvement

DISTRICT NO. 6

Ottumwa, Ia.

In the Matter of the Cedar Creek Drainage District No. 6, of Wapello County, Iowa, and Drainage Ditch and Improvement therein:

Notice is hereby given that in pursuance of an order of the Board of Supervisors of Wapello County, Iowa, made on May 17, 1923, sealed bids will be received by the undersigned for said Board up to Two o'clock p.m. on July 10, 1923, at the Court House, Ottumwa, Ia., but not later, for the construction of said Drainage Ditch and improvement in said Drainage District No. 6, of Wapello County, Ia., in accordance with the approved plans, profiles, specifications, and contract in blank form for bids, and bond therefor, on file in my office; said work thereof being described as follows, and having the approximate estimated amount and quantities as specified, but which may be found to be either more or less on final measurement:

The beginning point of said Ditch and Improvement is at E. of CM. & ST. P. R. RY. bridge No. 1-352 in N. W. ¼, S. W. ¼, Sec. 21-Highland Twp. 73-R 13 W. and ending at the E. ¼ Cor. S. E. ¼ Sec. 36-Highland Twp., a distance of 4.47 miles, divided into sections as follows:

Sec. A-1—34,966 cu.yds. Start work on or before Nov. 1, 1924. Completed by Dec. 1, 1924.

Sec. B-2—38,541 cu.yds. Start work on or before Sept. 1, 1924. Completed by Nov. 1, 1924.

Sec. C-3—30,904 cu.yds. Start work on or before Aug. 1, 1924. Completed by Sept. 1, 1924.

Sec. D-4—43,822 cu.yds. Start work on or before June 15, 1024. Completed by Aug. 1, 1924.

The estimated quantity of material to be excavated in said entire Ditch is 148,233 cu. yds. of excavation. This work consists in cutting a continuous channel as located, which channel is 10 feet in width at the bottom, and side slopes shall be one foot horizontal to one foot vertical; side slopes shall be left smooth and uniform, and bottom of channel shall be brought to proper grade elevation and left smooth and uniform, and with an approximate depth of 9½ feet; right of way 125 feet in width from place of beginning to CM. & ST. P. Bridge in Sec. 27-73-13 and 150 feet in width from there to the end.

Bids will be submitted for the entire work; and the price must be stated in both words and figures, and permission will not be granted to amend or withdraw any bid after filing with the County Auditor. Maps plans, profiles, specifications, and form for bids, contracts, etc., are on file in my office, and at the office of Brown & Cook, Engineers, Ottumwa, Iowa, and can be examined. The Board will award contract to the lowest responsible bidder therefor; but the right is hereby expressly reserved by said Board to reject any or all bids and to readvertise the letting of said work; and no bid will be considered unless on the approved form for bids furnished by the undersigned.

All bids must be signed with the recognized name of the Contractor or firm who expects to do the work if awarded the contract, and each bid must be accompanied by a certified check of some reputable bank, in the sum equal to ten per cent. of the amount of the bid, (but not to exceed $10,000.00), drawn in favor of the County Auditor of Wapello County, Iowa, as a guarantee of good faith in entering on said contract, and if awarded the contract for said work, the bidder will within ten days from the date of notice thereof, enter into said contract therefor and execute said Bond therefor, or deposit cash, as provided by law in the sum of twenty-five per cent of estimated cost of said work so let by such contract. The checks of unsuccessful bidders will be returned to them respectively as soon as award is made. All provisions of present Drainage Laws of Iowa are made a part of all said contracts.

All bids must be sealed and marked on the outside of envelope: Bid for Contract on Cedar Creek Drainage Ditch, No. 6, and addressed to Fred W. Prosser, County Auditor, Ottumwa, Wapello County, Iowa. The bids will be opened at Two o'clock p.m. on July 10, 1923, in the offic of the Board of Supervisors, in Court House at Ottumwa, Iowa, and the contract, n awarded by the said Board as soon as practicable thereafter on said date.

Witness my hand and seal this day of May, 1923.

FRED W. PROSSER,
County Auditor of Wapello Co., Ia.

OFFICIAL PROPOSALS

Bids: July 10.

Drainage Ditch and Improvement

DISTRICT NO. 4

Ottumwa, Ia.

In the Matter of the Cedar Creek Drainage District No. 4, of Wapello County, Iowa, and Drainage Ditch and improvement therein:

Notice is hereby given that in pursuance of an order of the Board of Supervisors of Wapello County, Iowa, made on May 17th, 1923, sealed bids will be received by the undersigned for said Board up to Two o'clock p.m., on July 10, 1923, at the Court House, Ottumwa, Ia., but not later, for the construction of said Drainage Ditch and improvement in said Drainage District No. 4, of Wapello County, Iowa, in accordance with the approved plans, profiles, specifications, and contract, in blank form for bids, and bond therefor, on file in my office; said work thereof being described as follows, and having the approximate estimated amount and quantities as specified, but which may be found to be either more or less on final measurement:

The beginning point of said Ditch and Improvement is at West ¼ Cor. N. W. ¼ Sec. 31-Competine Twp. 73-r 12 W. and ending in the S. E. ¼ Sec. 13 Pleasant Twp. 72-r. 12 on the Wapello Jefferson County Line, a distance of 7.23 miles divided into sections as follows:

Sec. E-5—42,636 cu.yds. Start work on or before May 1st, 1924. Complete by June 15, 1924.

Sec. F-6—42,129 cu.yds. Start work on or before Mch. 15, 1924. Completed by May 1, 1924.

Sec. G-7—43,643 cu.yds. Start work on or before Feb. 1, 1924. Completed by March 15, 1924.

Sec. H-8—37,654 cu.yds. Start work on or before Dec. 20, 1923. Completed by Feb. 1, 1924.

Sec. I-9—35,204 cu.yds. Start work on or before Nov. 15, 1923. Completed by Dec. 20, 1923.

Sec. J-10—24,258 cu.yds. Start work on or before Oct. 20, 1923. Completed by Nov. 15, 1923.

Sec. K-11—31,310 cu.yds. Start work on or before Sept. 15, 1923. Completed by Oct. 20, 1923.

The estimated quantity of material to be excavated in said entire ditch is 256,834 cu.yds. of excavation. This work consists in cutting a continuous channel as located, which channel is 12 feet in width at the bottom, and side slopes shall be one-half foot horizontal to one foot vertical; side slopes shall be left smooth and uniform, and bottom of channel shall be brought to proper grade elevation and left smooth and uniform ,and with an approximate depth of 10½ feet; right of way 100 feet in width.

Bids will be submitted for the entire work; and the price must be stated in both words and figures, and permission will not be granted to amend or withdraw any bid after filing with the County Auditor. Maps, plans profiles, specifications, and form for bids, contracts, etc., are on file in my office, and at the office of Brown & Cook, Engineers, Ottumwa, Iowa, and can be examined. The Board will award contract to the lowest responsible bidder therefor; but the right is hereby expressly reserved by said Board to reject any or all bids and to readvertise the letting of said work; and no bid will be considered unless on the approved form for bids furnished by the undersigned.

All bids must be signed with the recognized name of the Contractor or firm who expects to do the work if awarded the contract, and each bid must be accompanied by a certified check of some reputable bank, in the sum equal to ten per cent, of the amount of the bid, (but not to exceed $10,000.00), drawn in favor of the County Auditor of Wapello County, Iowa, as a guarantee of good faith in entering on said contract, and if awarded the contract for said work, the bidder will within ten days from the date of notice thereof, enter into said contract therefor and execute said Bond therefor, or deposit cash, as provided by law in the sum of twenty-five per cent of estimated cost of said work so let by such contract. The checks of unsuccessful bidders will be returned to them respectively as soon as award is made. All provisions of present Drainage Laws of Iowa are made a part of all said contracts.

All bids must be sealed and marked on the outside of envelope: Bid for Contract on Cedar Creek Drainage Ditch, No. 4, and addressed to Fred W. Prosser, County Auditor, Ottumwa, Wapello County, Iowa. The bids will be opened at Two o'clock p.m., on July 10, 1923, in the office of the Board of Supervisors, in Court House at Ottumwa, Iowa, and the contract, if awarded will be awarded by the said Board as soon as practicable thereafter on said date.

Witness my hand and seal this day of May, 1923.

FRED W. PROSSER,
County Auditor of Wapello Co., Ia.

Bids: July 17.

Water Works, Sewers, Street Improvements

Deland, Fla.

Sealed proposals will be received by the Board of Bond Trustees of the City of Deland, Florida, at the City Hall, for furnishing material and constructing water works improvements, sanitary and storm sewer systems and street improvements in and for the City of Deland, Florida, until 4 p.m., July 17, 1923, at which time they will be opened and read publicly.

The work includes the furnishing of all labor, material machinery and equipment of every kind necessary to construct approximately 95,000 square yards of brick, concrete, or bituminous pavements with necessary curb, gutter and appurtenances, approximately 2½ miles of storm drains 12 to 24 inches with accessories. Approximately 12 miles sanitary sewers 6 to 18 inches with accessories, approximately 8 miles water mains 4 to 10 inches with specials, three pumps, two pump houses, one generator unit and accessories, all complete and in accordance with plans and specifications on file at the office of the Engineers and the City Clerk.

Each bid must be accompanied by a certified check on a bank satisfactory to the Bond Trustees or Bidders Bond acceptable to Bond Trustees for five (5) per cent of the amount of the bid, drawn to the order of the City of Deland, Florida.

A bond in the sum of twenty (25) per cent of the amount of the contract with satisfactory surety executed through Deland, Florida, agency will be required for the faithful performanc of the work.

All bids will be compared on the basis of the Engineers' estimates of amount of work to be done.

Copies of the specifications may be obtained from the Engineers upon receipt of deposit of five ($5.00) dollars which will be returned on bona fide bid. Plans may be seen at the office of the Engineer at Deland or Atlanta, Georgia, or at the City Hall. Copies of plans may be obtained on the payment of twenty-five ($25.00) dollars.

The right is reserved to reject any or all bids.

This 8th day of June, 1923.

CITY OF DELAND, FLORIDA
By E. R. CONRAD,
By G. A. DREKA,
By C. L. ALLEN,
Bond Trustees.
J. B. McCrary Engineering Corporation,
Engineers, Atlanta, Georgia.

Bids: July 5.

Grading, Paving and Curbing

Steelton, Pa.

Sealed proposals will be received by the Town Council of the Borough of Steelton, Dauphin County, Pa., until 4:00 p.m. Thursday, July 5, 1923, for the grading, paving and curbing of South Fourth Street, between the southern side of Highland Street and a point two hundred and thirty two and nine-tenths feet south of the southern side of Dupont Street.

Also that portion of Highland Street, beginning at Second Street on the west, and extending along said street in an easterly direction to Fourth Street.

A certified check for 5 per cent of the amount of the bid, payable to the Treasurer of the Borough of Steelton, must accompany each and every proposal. All proposals must be sealed and addressed to the Borough Secretary, 114 Walnut St., Steelton, Pa., and have the words "Street Improvements" marked on the outside of the envelope.

Plans and specifications may be seen, and bidding blanks and all necessary information be had at the office of the Borough Secretary, 114 Walnut St., Steelton, Pa. Council reserves the right to reject any and all bids.

H. R. RUPP,
Borough Secretary.

Bids: July 6.

Sewage Disposal Plant

Grove City, Pa.

Sealed proposals will be received by the Borough of Grove City, Mercer County, Pennsylvania at the Municipal Building until 7:00 p.m. on the 6th day of July 1923 for the construction work and other work incident to the builing of the Grove City Sewage Treatment Plant.

The work consists of the following main parts:

1. Distributing Manhole of Concrete.
2. Settling and Digestion Tanks.
3. Sludge Drying Beds, Glass covered.
4. 525 feet 24" Terra Cotto Pipe.
5. Necessary grading, excavation, etc.
6. Well House for water supply.
7. Other incidental work.

Plans and specifications can be obtained together with proposal sheet from Frank P. Graham, The Borough Engineer or at the office of Banks & Craig, Consulting Engineers, Telegraph Bld'g., Harrisburg, Pa.

A set of plans and specifications can be obtained by placing a deposit of $10.00 drawn to the Borough Engineer, $5.00 of which will be returned if the plans and specifications are returned within 15 days after the award of the contract.

Each bid must be accompanied by a certified check in the amount of $1000.00 payable to the order of the Borough of Grove City as a guarantee that the successful bidder will enter into contract with the Borough within fifteen days after the award of the contract. Checks will be returned to unsuccessful bidders.

The Borough reserves the right to reject any or all bids.

L. L. McKAY,
Secretary.

Bids: July 3.

Alternating Air Lock Siphons

Newton, N. J.

Notice is hereby given that sealed bids will be received by the Water and Sewer Commissioners of the Town of Newton, in the County of Sussex and State of New Jersey for the installation in the East Clinton Street sewage disposal plant, in said town, of a battery of, five (5) twelve inch (12") alternating air lock siphons to draw about two feet. Siphons to discharge into the same discharge lines, as are being used with the present apparatus, after said pipe lines have been relaid to centers as shown on the plans to be furnished by the manufacturer. Alternating siphons to be of the air lock type, with no moving parts. Air connections to be provided with three way valves for cutting out any desired number of beds, the remaining one or more siphons to operate. Siphons to handle intermittently and to discharge the contents of the dosing tank and lock against a twenty-four hour rate of 650,000 gallons.

Masonry work provided by the town, town to set apparatus and furnish and set tile wells.

Said bids will be opened and read in public at the Town Offices, over Howell's Hardware Store, Newton, N. J., July 3rd, 1923, at 6:30 p.m.

The commissioners reserve the right to reject any or all bids.

ETHEL B. HARRISON,
Clerk of Board of
Water Commissioners.

Dated June 16, 1923.

Bids: July 17.

Inclosed Channel

Dunkirk, N. Y.

Sealed proposals for the construction of an inclosed channel and accessories for the diversion of Hyde Creek, in the City of Dunkirk, N. Y., will be received until 8 p.m., eastern time, July 17, 1923, and then publicly opened. The right is reserved to reject any or all bids. Plans and specifications are on file and information may be had on application to the undersigned. Specifications will be forwarded to applicants. To insure return of plans a deposit of twenty dollars ($20) is required for plans mailed, which sum will be returned to applicant upon return of plans.

H. J. HENDERSON,
City Clerk.

OFFICIAL PROPOSALS

Bids: July 9.

Bridges

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey for the following:

Construction of a steel and concrete bridge of two spans, 42 ft. 4 in. C. to C. of bearings and 34 ft. 0 in. wide, including fill approaches Cedar Creek at M. P. 41.1 on State Highway Route No. 4, in the municipality of Berkley and Lacey Townships, and the County of Ocean.

Bids for the above will be received at the Assembly Chamber, State House, Trenton, New Jersey, on Monday, July 9th, 1923, at 11:45 a.m., Standard Time, and opened and read immediately thereafter.

Construction of a reinforced concrete slab bridge of one span, 22 ft. 10 in. between neat lines and 34 ft. 10 in. wide, over Primrose Brook, at M. P. 33.7 on State Highway Route No. 16 in the municipality of Harding Township, in the County of Morris.

Bids for the above will be received at the Assembly Chamber, State House, Trenton, New Jersey, on Monday, July 9th, 1923, at 12:00 noon, Standard Time, and opened and read immediately thereafter.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of Mr. John L. Vogel, Bridge Engineer, 772 Broad St., Newark, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on a deposit of Ten Dollars ($10.00) upon application to Mr. John L. Vogel, Bridge Engineer, 772 Broad St., Newark, New Jersey. Bids must be made on the standard proposal form in the manner designated therein and as required by the specifications for this work, same to be enclosed in sealed special addressed envelopes, bearing the name and address of the bidder and the work bid upon on outside, and must be accompanied by a certified check drawn to the order of the State Treasurer for not less than ten per cent (10%) of the amount of the bid, provided the said certified check shall not be less than $500.00 nor more than $20,000.00, and be delivered at the above place on or before the hour named. Copies of the standard proposal form and special addressed envelope will be furnished on application to Mr. John L. Vogel, Bridge Engineer, 772 Broad St., Newark, N. J. Bids not enclosed in special envelopes will be considered informal and will not be opened.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provisions of the said specifications, conditioned for the faithful performance of the provisions of the contract and specifications.

By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

Bids: July 16.

Paving

Plainfield, N. J.

Proposals will be received by the Common Council of the City of Plainfield, N. J., at the City Hall on Monday, July 16, 1923, at 8:30 p.m. (Daylight Saving Time), for Bituminous Macadam, Storm Sewers, etc., as follows:

18,000 sq.yds. Bituminous Macadam.
7,000 lin.ft. Concrete Curb and Gutter.
2,200 lin.ft. 18" to 30" Storm Sewers.

Certified check required, $5,000.00.

Construction bond required, 100% of cost of work.

Copies of Plans, Specifications and Forms of Proposals may be obtained at the office of the City Engineer, City Hall, Plainfield, N. J.

The Common Council reserves the right to reject any or all bids, to waive defects in bids, or to accept any bid.

JOHN J. CARROLL,
City Clerk.

OFFICIAL PROPOSALS

Bids: July 17.

Sewer Construction

LETTING NO. 9

Louisville, Ky.

Sealed proposals will be received by the Commissioners of Sewerage of Louisville until 12 o'clock noon July 17th, 1923, for the following sewer constuction in Louisville, Ky.

This letting embraces the following:

Napoleon Boulevard Sewer and Drain and Speed Ave. Laterals "South"

870 lin.ft. of 36" and 640 lin.ft. of 33" Drain.

990 lin.ft. of 21", 505 lin.ft. of 18", 2220 lin.ft. of 15", Vitrified Pipe Drain, 1725 lin.ft. of 12" Vitrified pipe Sewer and Drain, 3970 lin.ft. of 8" Vitrified Pipe Sewer.

Alternate bids invited on constructing 33" and 36" drain of Segment Block, Vitrified Pipe or Monolithic Concrete.

The estimated cost of this work is somewhat over $100,000.

Drawings, form of proposal, contract and specifications may be had at the office of the Commission upon the deposit of ten dollars ($10.00) to secure the return of same in good condition within thirty days.

Each proposal must be inclosed in a sealed envelope addressed to the Commissioners of Sewerage, 417 West Main Street, Louisville, Ky. and accompanied by a certified check drawn upon a state or national bank or a trust company established in the City of Louisville or the city of New York, for an amount not less than seven (7) per cent of the total amount of the accompanying proposal, payable to the Commissioners of Sewerage of Louisville or the bond executed as set forth in the information for bidders.

The right to reject any and all bids is reserved.

COMMISSIONERS OF SEWERAGE
OF LOUISVILLE.
By: MATT H. CRAWFORD,
Chairman.

J. B. F. BREED, Chief Engineer.
P. H. HOGE, Jr., Sec. & Treas.

Bids: July 25.

Bridge

Bridgeport, Conn.

Sealed bids for performing the work of constructing the East Washington Avenue Bridge will be received by the East Washington Avenue Bridge Commission in the Common Council Chamber, City Hall, Bridgeport, Conn., until July 25, 1923, at 3:00 p.m. (Standard Time), at which place and time they will be publicly opened by the Commission and read. The award of the contract, if awarded, will be made by the Commission as soon thereafter as practicable.

For further information apply to City Engineer James A. McElroy.

A charge of Fifty Dollars ($50.00) will be made for copy of specifications and plans, same to be refunded on receipt of bids or return of plans.

The Commission reserves the right to reject any or all bids.

EAST WASHINGTON AVENUE
BRIDGE COMMISSION
FRANCIS P. DUNIGAN, Clerk.

Bids: July 9.

Paving

Richmond, Va.

Sealed proposals will be received at this office until 12 o'clock noon, July 9, 1923, for the paving of Broad Street from Laurel Street to the Boulevard with Durax Block, Vitrified Brick or Sheet Asphalt as set forth in the specifications and proposals.

A deposit of $10.00 will be required to be made for each set of proposals obtained which will be returned only if a bona fide bid is made. Forms of proposals can be obtained on application.

A certified check for amount stated ($12,500.00) on proposals must accompany each bid as a guaranty of execution of contract. The Director of Public Works reserves the right to reject any and all bids.

ALLEN J. SAVILLE,
Director of Public Works.

OFFICIAL PROPOSALS

Bids: July 24.

Bridges and Roads

Charleston, W. Va.

Sealed proposals will be received by the State Road Commission of West Virginia at its office in Charleston, W. Va. until ten o'clock a.m. on the 24th day of July, 1923, and opened and read immediately thereafter at the Kanawha County Court House, Charleston, West Virginia, for the construction of the following bridges and sections of state road:

Projects 3151-C and 48—Boone County—2 miles of the Madison-Danville road for grading, draining and paving with Bituminous Macadam. Certified check $2400.00.

Projects 3261 and 50—Clay County—1.9 miles, South end Clay Court House & Two Mile Run, for grading, draining and paving with Bituminous Macadam including additional width to be built by town together with sewers to be installed by town. Certified check $3000.00.

..Project 3138—Mason County—Five Mile

Project 3138—Mason County—Five Mile span and Three Mile Bridge No. 858 Concrete Deck Girder 35 ft. span, to be let in one contract. Certified check $1100.00.

Project 3176—Brooke County—0.8 mile of the River Road for paving with cement concrete. Certified check $2000.00.

Project 3114 B & D—Brooke County—1 mile of the River Road for paving with cement concrete. Certified check $1600.00.

Project 3253—Hancock County—3 miles of the River Road from Brooke County line to Kings Creek Bridge for paving with brick. Certified check $3000.00.

Project 3089—Hancock County—1 mile of the River Road for paving with brick. Certified check $1600.00.

Project 3252-A—Pleasants County—1.2 miles of the St. Marys-Ellenboro road for grading and cement concrete paving. Certified check $1500.00.

Project 3197-B—Tyler County—1.5 miles of the Sistersville-Middlebourne Road for grading, draining and paving with waterbound macadam. Certified check $1500.00.

Project 3186—Preston County—5 miles of the Thomas-Gnegy Church road for grading, draining and paving with Cement Concrete. Certified check $9000.00.

Project 3013—Hardy County—5.8 miles of the Oldfields-Hampshire County Line road for completion of the grading, draining and paving with waterbound macadam. Certified check $6000.00.

Project 2064—Ohio County—Springdale Culvert 8 x 10 concrete arch. Certified check $500.00.

Project 3237—Mason County—3.5 miles Lewis District toward Leon Road, for grading and draining. Certified check $2,000.00.

Proposals will be received only upon State Standard forms in accordance with plans, specifications and estimates of quantities therefor, which standard forms, plans, specifications and estimates of quantities may be obtained from the office of the Division Engineer in whose territory the proposed construction is located or from the office of the State Road Commission at Charleston, W. Va.

Each proposal must be accompanied by a certified check for the amount noted.

The right is reserved to reject any and all proposals.

THE STATE ROAD COMMISSION
OF WEST VIRGINIA
E. B. Carskadon, Secretary.

Bids: July 9.

Street Improvement

Laurel, Miss.

Sealed proposals will be received by the Mayor and Board of Commissioners of the City of Laurel, Mississippi, at the office of the City Clerk of said City, up until two o'clock p.m. on the 9th day of July, A. D. 1923, for constructing approximately:

4,852 lin.ft. curb and gutter.
3,542 sq.yds. concrete sidewalk.
3,245 sq.yds. brick paving.
930 sq.yds. concrete paving.
1,117 lin.ft. concrete curb.

Plans and profiles may be seen and specifications and proposal forms may be obtained at the office of the City Clerk of the City of Laurel.

J. H. PACE, Street Commissioner.

CONTRACT BONDS FOR RESPONSIBLE CONTRACTORS

The fact that the Aetna has bonded him may enable a contractor to obtain bank loans and credit from supply companies.

ÆTNA CASUALTY AND SURETY COMPANY

HARTFORD, CONN. AGENTS EVERYWHERE

OFFICIAL PROPOSALS

Bids: July 20.

Clearing Land of Unmerchantable Timber

Watertown, N. Y.

Sealed bids for clearing the lands to be flowed by the Enlargement of the Stillwater Reservoir on the Beaver River in the Town of Webb, Herkimer County, N. Y., will be received by the Board of the Black River Regulating District at the office of the Water Control Commission, Room 1000, 158 State Street, Albany, N. Y. until one o'clock p.m., Standard Time, on the 20th day of July, 1923; all bids will be publicly opened and read at the time and place aforesaid.

The work to be done consists of the clearing of the unmerchantable timber and timber growth from the land around and above the existing Stillwater Reservoir and within a contour line approximately 19 feet higher than the crest of the spillway of the existing Stillwater Dam. The area to be cleared will include about 3960 acres of land, which will be divided into two sections. Section No. 1 will include about 1400 acres and Section No. 2 about 2560 acres. Any bidder may bid upon the clearing of either one or both sections, and he may also make a separate contingent bid upon either one or both sections, which bid will be contingent upon the acceptance by the Water Control Commission of his bid for the timber upon the state land in such section or sections.

Maps of the reservoir, bidding and contract forms and specifications may be seen at the office of the Board, Watertown, N. Y., and also at the offices of the Water Control Commission and the Conservation Commission at Albany, N. Y. Copies of the maps, forms and specifications may be obtained from the Board on payment of two dollars ($2.00) which will be refunded on their return in good condition within seven days after bids are opened.

All bids must be accompanied by a certified check upon a National or State bank or trust company for five per centum (5%) of the amount of the bid and payable to the order of the Board of the Black River Regulating District.

The Board reserves the right to reject any or all bids and to again advertise for further bids.

BOARD OF THE BLACK RIVER REGULATING DISTRICT.
By E. S. Cullings,
Secretary.

Bids: July 2.

Paving

Gardner, Mass.

Sealed proposals will be received by the undersigned until 11:00 a.m. on July 2, 1923 for the construction of approximately 4,000 sq.yds. of reinforced concrete paving at Gardner, Mass., under specifications on file in my office.

The right is reserved to reject any or all bids.

F. W. PROCTOR,
Supt. of Street,
Gardner, Mass.

Largest Circulation of Any Technical Paper

Engineering News-Record's circulation—over 30,000 weekly—is the largest of any technical paper printed. It includes among its readers practically every worthwhile contractor, dealer, and manufacturer in the country who is interested in bidding on public works contracts—either local or outside of his immediate vicinity.

For Additional Proposals see pages 393, 60, 61, 62 and 63

U. S. GOVERNMENT

U. S. ENGR. OFFICE, WILMINGTON, DEL. — Sealed proposals will be received here until 11 A.M., standard time, June 30, 1923, and then opened, for constructing and delivering one steel hull for quarter boat. Further information on application.

U. S. ENGINEER OFFICE, WILMINGTON, DEL. Sealed proposals will be received here until 11 a.m., standard time, July 9, 1923, and then opened, for dredging Maurice and Cohansey Rivers, N. J. Further information on application.

U. S. ENGINEER OFFICE, Galveston, Texas. Sealed proposals will be received here until 12 M., July 20, 1923, and then opened, for dredging Houston Ship Channel, Texas. Further information on application.

U. S. ENGINEER OFFICE, P. O. Box 72, Louisville, Ky.—Sealed proposals will be received here until 2 p.m., central time, July 16, 1923, and then opened, for furnishing and delivering six steel dump scows. Further information on application.

U. S. ENGINEER OFFICE, 250 Old Land Office Building, Washington, D. C. Sealed proposals will be received here until 12 m., July 20, 1923, and then opened for the construction of items a, b and c, being intake chamber, cut and cover conduit, and tunnel, respectively, of the water supply conduit for the District of Columbia. Further information on application.

SEALED PROPOSALS will be received at the U. S. Engineer Office, 329 Custom House, New Orleans, La., until 9 a.m., July 19, 1923, and then opened for dredging in the Calcasieu-Sabine section of the Intracoastal Waterway. Further information on application.

U. S. ENGINEERS OFFICE, BALTIMORE, MD.—Sealed proposals will be received here until 1 P.M., Eastern Standard Time, July 31, 1923, and then opened, for dredging in Queenstown Harbor, Md. Further information on application .

PROPOSALS FOR ONE BELT CONVEYOR.—Office, Mississippi River Commission, First and Second District, 1006 McCall Building. Memphis, Tenn. — Sealed proposals will be received here until 11 a.m., July 10, 1923, and then opened, for furnishing and delivering one (1) Belt Conveyor. Further information on application.

UNITED STATES ENGINEER OFFICE, ST. PAUL, MINN.—Sealed Proposals will be received here until 2:00 p.m. July 31, 1923, and then opened, for constructing and delivering a steel derrick boat. Further information on application.

SEALED PROPOSALS FOR CONSTRUCTING, DELIVERING AND ERECTING TWO STEEL OIL TANKS. Office, District Engineer, Mississippi River Dredging District, Post Office Box 1017, Memphis, Tenn. Sealed proposals for constructing, delivering and erecting two steel fuel oil storage tanks at U. S. Dredge Depot, will be received here until 9:30 a.m., July 19, 1923, and then opened. Further information on application.

PROPOSALS FOR FOURTEEN STEEL BARGES.—Office, Mississippi River Commission, First and Second Districts, Room 1006 McCall Bldg., Memphis, Tenn.—Sealed proposals will be received here until 11 a.m., July 18, 1923, and then opened, for furnishing 14 steel barges. Further information on application.

PROPOSALS FOR DERRICK BOAT.—Office, Mississippi River Commission, First and Second Districts, Room 1006 McCall Bldg., Memphis, Tenn.—Sealed proposals will be received here until 11 a.m., July 19, 1923, and then opened, for furnishing one 25-ton steel derrick boat, complete. Further information on application.

U. S. ENGINEER OFFICE, GALVESTON, TEXAS.—Sealed proposals will be received here until 12 m., July 21, 1923, and then opened, for dredging in Texas City Channel, Texas. Further information on application.

POSITIONS VACANT

APPLICATIONS desired from field engineer and from carpenter foreman for opening on large reinforced concrete bridge job in Pennsylvania. Write full details of education, experience, salary expected, references, etc. P-461, Eng. News-Record, Leader-News Bldg., Cleveland, Ohio.

CIVIL ENGINEER competent to survey municipal engineering problems and to write and speak clearly. Valuable association with staff of specialists in civic agency dealing with all phases of municipal government. Salary about $3600. Bureau of Municipal Research, 1417 Sansom Street, Philadelphia.

COMPRESSED AIR—Experienced inspectors wanted on masonry tunnel construction under high air pressure. Apply in person. Passaic Valley Sewerage Commissioners, 24 Branford Place, Newark, N. J.

CONSTRUCTION superintendent wanted to take charge of building large hydro electric development. Must be fully experienced on this class of work. Only high class men need apply. Reply will be considered confidential. P-453, Eng. News-Record, Real Estate Trust Bldg., Philadelphia, Pa.

DEPARTMENTAL manager wanted for company manufacturing steel products for fireproof buildings. Only engineer of excellent organizing and selling qualifications need apply, stating salary expected, experience, etc. P-474, Engineering News-Record, Leader-News Bldg., Cleveland, Ohio.

DRAFTSMAN—Structural steel for railroad office in New York City. Graduate engineer with two to five years' experience on details steel bridges preferred. Give full details with reply as to nationality, age, education, experience and salary wanted. P-332, Eng. News-Record, 10th Ave. at 36th St., New York.

DRAFTSMAN having not less than three years' experience in bridge work at modern fabricating plant. Must be technical college graduate. Applicants please give age, education, full synopsis of experience and salary desired. The Strauss Bascule Bridge Co., 225 N. Michigan Ave., Chicago, Ill.

DRAFTSMAN WANTED preferably mechanical engineer with extensive experience on paper machine design. Reply giving age, education, experience, salary. P-439, Eng. News-Record, 10th Ave. at 36th St., New York.

DRAFTSMAN (Electrical) and designer-draftsman wanted for the Panama Canal —Both should be graduates of technical engineering school with practical experience in drafting room. Electrical draftsman should be experienced in underground cable and duct layouts and records; in laying out electric lighting of buildings and in the application of electric power for general and miscellaneous industrial purposes. Designer-draftsman must be qualified for service in laying out reserve generating station, remodeling transformer substation and incidental drafting. Applicants must be American citizens (final papers) under 45 years, in good health. Free steamship transportation from New York or New Orleans, salary beginning date of sailing. No civil service examination required. For further particulars write "Chief of Office, The Panama Canal, Washington, D. C.," stating minimum salary would consider.

DRAFTSMAN wanted; experienced in structural and mechanical design in connection with industrial plants, experience in cement industry, desirable but not essential. In replying, give age, experience, salary expected. P-445, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

DRAFTSMEN—Structural steel draftsmen for factory and office buildings, coal bins, etc., must have at least three years detailing experience on this class of work and good record and references. State education, salary expected and date able to report. Bridge Dept., Canadian Allis-Chalmers, Ltd., Toronto. Permanent positions to satisfactory men.

DRAFTSMEN experienced in detailing and checking structural steel work. State age, education, experience and salary expected. Lakeside Bridge & Steel Co., North Milwaukee, Wis.

POSITIONS VACANT

DRAFTSMAN wanted. Young man with experience on structural steel work detailing and estimating. Good opportunity for a varied experience on all classes and types of steel work. Apply by letter stating experience and salary desired. Bergen Point Iron Works, Bayonne, N. J.

ENGINEERING DRAFTSMAN wanted; 10 positions in middle west open to men experienced in power plant design. Experience in the following, necessary; piping, power equipment, electrical and structural layout—good wages and good working conditions. Write qualifications and for appointment to P-437, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

ENGINEER-FOREMAN: The construction department of a public utility in Eastern Pennsylvania has an opening for an engineer thoroughly experienced on underground distributing systems who is capable of handling field engineering and directing construction. Give age, education, details of experience, references, salary required and enclose small photograph with first letter. P-475, Eng. News-Record, Real Estate Trust Bldg., Philadelphia, Pa.

EXPERIENCED structural detailers wanted; single men preferred; application should give telegraphic address, state experience and accompany sample drawing of work, state salary desired, address Box 654, Havana, Cuba.

EXPERIENCED structural steel fabricating shop foreman wanted for layout, punching, fitting, and riveting departments. Good chance for advancement. Experienced men only need apply. State experience and references. P-463, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

GENERAL superintendent of construction industrial plant. Must be capable of handling all details of reinforced concrete and structural steel. Located in Louisiana. P-466, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

WANTED

Steel Mill Draftsmen

State experience and salary expected in first letter or apply personally at

JONES & LAUGHLIN STEEL CORP.
Aliquippa Works, Woodlawn, Pa.

Here is an opportunity for a man who wishes to come to, or return to, Minnesota.

We have an opening for one experienced structural steel shop detail checker who would also be a squad boss. He should be familiar with steel and iron stairways. The man who qualifies would be certain of a permanent position. Men without the required experience should not apply. Write, stating age, experience and salary expected, to Mr. Goetz, care of St. Paul Foundry Company, St. Paul, Minnesota.

POSITIONS VACANT

OPERATOR wanted for gravity swing clamshell dredge for work on the Hudson River. State salary and reference in first letter. Thomas Smee, Box 182, Tottenville, Staten Island, N. Y.

OPERATOR wanted for Keystone Excavator in North Bennington, Vermont, 3 months' work. Address at once to Long & Montagna, North Bennington, Vt.

OPERATOR wanted for small tunnel shovel; blacksmith for drill steel with Leyner Sharpener experience; also Tunnel Muck foreman, mechanics, pipefitters, riggers and handy men. Apply in person on job at Readsboro, Vermont or at New York Office, 52 Vanderbilt Ave., Mason & Hanger Co.

REINFORCED concrete designer and detailer on building work; unmarried technical graduate preferred; two to four years' experience; state age, experience, and salary expected; location, Middle West. P-426, Eng. News-Record, 10th Ave. at 36th St., New York.

STEAM shovel operator wanted for quarry work, location New Jersey; competent man used to handling rock; permanent position for the right party; in replying state age, married or single, salary expected and whether able to furnish references. P-479, Eng. News-Record, 10th Ave. at 36th St., New York.

STEEL freight car draftsmen wanted particularly detailers and a few checkers. Apply to Steel Car Engineer, Bethlehem Steel Co., Bethlehem, Pa.

STRUCTURAL draftsmen and detailers for work on subway construction in New York City; four to nine months' employment, with probable permanency; entrance salary $1,801 per annum, with opportunity for advancement; open to citizens with two years' experience or one year after technical graduation. Reply Chief Clerk, Transit Commission, 49 Lafayette St., New York City.

STRUCTURAL engineers wanted for designing structural steel factory and mill buildings; also for designing reinforced concrete buildings; state experience in full detail and salary expected. P-165, Eng. News-Record, Leader-News Bldg., Cleveland, Ohio.

STRUCTURAL steel detailers for building work. Apply, stating particulars. The Berlin Construction Co., Inc., Berlin, Conn.

STRUCTURAL draftsman who can layout and direct detailing of structural steel for buildings. State age, education, experience, nationality, least salary to start, and how soon available. The James H. Tower Iron Works, Providence, R. I.

SUPERINTENDENT of quarrying, crushing and screening plant, thoroughly experienced handling large single operation including steam shovels. P-462, Eng. News-Record, Leader-News Bldg., Cleveland, Ohio.

THREE chiefs of party for railway preliminary location in heavy mountain country, eastern part of United States. Applicant must have sufficient experience to well qualify him to fill position and his service record must be supported by recommendations from prominent engineers under whom he has worked. None other need apply. P-468, Engineering News-Record, Real Estate Trust Bldg., Philadelphia, Pa.

WANTED civil engineer to act as chief of party on river survey. Salary $185 per month and expenses in the field. Address P. O. Box 900, Nashville, Tenn.

POSITIONS VACANT

YOUNG man wanted who is looking for a future; chance for the right man to learn the quarry, and crushing business thoroughly; college man or machinist preferred; good salary to start; plant located in New Jersey. P-467, Eng. News-Record, 10th Ave. at 36th St., New York.

EMPLOYMENT AGENCIES

EXECUTIVES, engineers, sales engineers and draftsmen wanted. We have a constant flow of inquiries for experienced and qualified men from all sections of the country. Write fully; no advance charges. H. H. Harrison & Co., Confidential Employment Service, 19 S. La Salle St., Chicago.

APPLICATION FORMS

FIRST impressions are important. Snappy, business-like applications for positions help greatly. Dollar brings prize-winner model form. Specify sales, engineering, clerical. Application Service Co., 766 W. Market St., York, Pa.

POSITIONS WANTED

Civil Engineers

ASSISTANT Professor in large Western University desires position in Civil Engineering Department ... Eastern School. Seven years' teaching experience. PW-366, Engineering News-Record, Old Colony Bldg., Chicago, Ill.

CIVIL engineer, competent and responsible, graduate of M.I.T., with four years' experience bridge, paving and building construction, desires connection with reliable architectural, engineering or contracting firm, with opportunity for a future; employed at present as inspecting and testing engineer on $5,000,000 building project; married; references. PW-416, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

CIVIL ENGINEER—College graduate, 35, desires responsible permanent position in office, field or preferably with industrial concern. Fifteen years' experience, heavy construction, reinforced concrete, dams, bridges, sewers, sewerage disposal, water works, water filtration, estimating, steel erection and design and highways. In charge large contracts as superintendent and engineer. Can furnish A-1 references. PW-444, Eng. News-Record, 10th Ave. at 36th St., New York.

CIVIL engineer 29 years of age, with seven years' experience in highways and pavements design and construction, water works and sewerage design and construction and general municipal engineering, desires connection with Construction Company or Municipality in Central Western or Southern states. Thoroughly familiar with Commission-Manager form of government. Available on one month's notice. PW-419, Eng. News-Record, 10th Ave. at 36th St., New York.

CIVIL engineer, 34, Cornell man, associate member American Society Civil Engineers, energetic, wants position of responsibility with future; especially experienced foundations and structural steel construction; some experience roads, sewers, and small water supplies; understands elements cost keeping and analysis, contract law, purchasing and following up of materials, office forms and reports; available short notice; location immaterial. PW-435, Eng. News-Record, 10th Ave. and 36th St., New York.

HIGHER ENGINEERING (*By Mail*)

Thousands of technical graduates are finding it difficult to get their EXPERIENCE, and losing valuable opportunities to secure employment. WILSON COURSES give you *practice work* and turn you into an *experienced* man. No re-hash of college work; no time lost in elementary work; our methods are endorsed by the profession; all discriminating engineers know what a Wilson course will do. Literature is FREE.

Write TODAY for information about our work.

Structural Steel Designing
Reinforced Concrete Engineering
Concrete Drafting and Estimating
BRIDGES: Steel and Concrete

Required to enroll; technical education, High School Maths, or their equivalent.

WILSON ENGINEERING CORPORATION
10 Broadway, Hanover, Mass.

Several desirable positions open for Instructors, Assistant Professors and Professors in Engineering Subjects.

For particulars, address Educational Department, The Engineering Agency, Inc., 53 W. Jackson Blvd., Chicago, Illinois. There is no advance fee of any kind. Our thirty-first successful year.

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For the successful placement of **Designers, Draftsmen, Estimators, Engineers, Salesmen** and **Executives**, with leading employers in Ohio and surrounding territory. No charge until satisfactorily placed.

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Established 1906

POSITIONS WANTED

CIVIL ENGINEER, graduate, age 31, married; 9 years' experience same company as draftsman and field engineer in responsible charge of work on construction of by product coke oven plants, including tar and benzol plants and two years' coal and ore mining desires to make permanent change. Available on notice. PW-438, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

CIVIL engineer; graduate of leading midwest University, age 28, 5 years' experience with general contractor, field and office, last three years as estimator and purchaser, can take charge of construction cost keeping, desires position with growing construction company looking for results. Available on short notice. PW-470, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

CIVIL engineer, graduate, age 34, 8 years' experience in construction of dams, canals, wharves, roads, retaining walls, bridges, railroads, buildings, sewer and water system; 1½ years on surveys of properties topographic and hydrographic; 1 year draughting, structural concrete topographic. Salary $250. Available now. PW-478, Eng. News-Record, 10th Ave. at 36th St., New York.

CIVIL engineer, degree, 34, married, desires permanent position. Nine years' railroad and municipal experience. Salary $24. Personal interview in New York state. Teaching considered. Available now. PW-481, Eng. News-Record, 10th Ave. at 36th St., New York.

CIVIL and hydraulic engineer, B.S., 1907, C.E., 1912, Assoc. M. Am. Soc. C. E., age 39, married. Experienced in irrigation reconnoisance to operation; especially in stream-flow measurements and runoff data. G. H. Ellis, U. S. G. S., Helena, Montana.

TRANSITMAN, age 23; 5 years' experience on sewer, water works and road construction wishes position on same. Location immaterial, available immediately. Minimum salary $160 per month. PW-483, Eng. News-Record, 10th Ave. at 36th St., New York.

Drafting and Designing

LADY, experienced in drafting room, desires position. Location anywhere; salary moderate. Address PW-459, Engineering News-Record, Old Colony Bldg., Chicago, Ill.

STRUCTURAL draftsman, American, 22, desires outside work with contractor or construction Co. Location immaterial. PW-471, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

STRUCTURAL draftsman designer. A-1 detailer and checker. Long experience on all kinds of steel structures. First class references. PW-455, Eng. News-Record, 10th Ave. at 36th St., New York.

Bridge & Structural

BRIDGE engineer of important railroad company wishes to change location. PW-417, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

BRIDGES and building, 10 years' experience direct supervision bridge and building construction, design, estimates and appraisal. Experience involved construction of deep foundations under heavy traffic, building of derricks, derrick cars, pile drivers, timber trestles, deep turbine foundations including installation of turbines, machine foundations, steel and concrete bridges, retaining walls and timber and brick power house and shop buildings. Age 35, married assoc. mem. Amer. Soc. Civil Engineers, American Railway Bridge and Building Association. Salary $4,000. PW-482, Eng. News-Record, Leader-News Bldg., Cleveland, Ohio.

STRUCTURAL and ornamental iron; 20 years' experience, engineer, designer, estimator, shop drawings. Capable to take charge and push jobs to completion. PW-452, Eng. News-Record, 10th Ave. at 36th St., New York.

STRUCTURAL steel engineer, technical graduate, 17 years' experience with steel fabricators, contractors, and architects; detailing, estimating, designing, contracting. Qualified for positions as chief engineer medium-sized fabricating plant, or assistant chief engineer, contracting engineer, or engineer with fabricators, contractors, or architects. Competent, hard working, A1 man. PW-469, Eng. News-Record, Leader-News Building, Cleveland, Ohio.

POSITIONS WANTED

STRUCTURAL engineer; American Protestant, 29, married, college. Seven years' experience structural estimating, design, details, measurement, surveys. Would like permanent position with consulting engineer or general contractor, with chance to generalize. Prefer New England district. PW-465, Eng. News-Record, 10th Ave. at 36th St., New York.

Estimators

ESTIMATOR, chief. Graduate C. E. Pricing all types of buildings and general construction, including sub trades. Also construction, costs and purchasing. PW-473, Eng. News-Record, 10th Ave. at 36th St., New York.

EXPERT estimator who can make neat, accurate and reliable estimates for all classes of building construction seeks connection with builder or construction firm. Age, 42. Active, good appearance and selling ability, backed up with 12 years experience as estimator and chief estimator for prominent New England builders and 8 years service as architectural draftsman for reputable architects. Available July 1st for New England territory only. PW-456, Eng. News-Record, 10th Ave. at 36th St., New York.

Surveying

HIGH school graduate with knowledge of trigonometry and surveying desires position with engineering or surveying firm. New York or vicinity. PW-495, Eng. News-Record, 10th Ave. at 36th St., New York.

INSTRUMENTMAN wants permanent position. Married, 30, three years' experience road work and general surveying. PW-905, 10th Ave. at 36th St., New York.

TRANSIT-MAN wants permanent position. Age, 27. Five years general surveying, drafting, and foreman on small construction jobs. Have a fair knowledge of hydraulic work and foundations. Have handled various kinds of labor. Can get results. PW-457, Eng. News-Record, Real Estate Trust Bldg., Philadelphia, Pa.

Superintendents

BUILDING construction superintendent accustomed to handling large operations profitably open for a position with contractor or architectural firm. Experience covers all kinds of buildings in various parts of United States. Salary $90 per week. PW-458, Eng. News-Record, 10th Ave. at 36th St., New York.

ENGINEER and superintendent, age 38, married, C. E. graduate, 15 years' responsible charge design and construction, reinforced concrete foundations, buildings, power plants, etc., desires permanent, responsible position with industrial concern or contractor. Location immaterial. PW-364, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

ENGINEER superintendent now employed would connect with good reliable company immediately; has handled big forces and built grain-elevators, paper mills, steel mills, bridges, and power houses; also office and industrial buildings. Age, 40, health excellent. Familiar with working conditions in East, South, West and Middle West, also Canada and Mexico. Can produce results and demands salary according. PW-464, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

Contract Manager, Executive, General Superintendent Estimator

I have filled all the above positions in two large construction companies. Graduate in Civil Engineering, 34 years of age, married. I know the building construction business from 14 years work in it, in all capacities. Employed, and a director in the firm with which I am connected. Present salary $6000.00. Open for a proposition with construction company or supply house where results count in settling the remuneration.

PW-371, Engineering News-Record,
10th Ave. at 36th St., New York City

POSITIONS WANTED

ENGINEER-SUPERINTENDENT — Extensive highway construction experience, also R.R. Municipal and concrete. Licensed. PW-485, Eng. News-Record, 10th Ave. at 36th St., New York.

SUPERINTENDENT of construction, 25 years' practical experience all kinds of buildings desires position in New Jersey or New York. Responsible and well recommended. PW-490, Eng. News-Record, 10th Ave. at 36th St., New York.

SUPERINTENDENT, 18 years' experience on building construction, foundations, pile driving, coffer dams, bridges, water lines, all classes reinforced concrete. PW-480, Eng. News-Record, 10th Ave. at 36th St., New York.

SUPERINTENDENT construction, thoroughly experienced; handle any size job in hydro-electric plants, dams, heavy foundations, pulp and paper mills, reinforced concrete, waterworks; understands camps; references. PW-415, Eng. News-Record, 10th Ave. at 36th St., New York.

SUPERINTENDENT of construction, broad experience on industrial and building construction, filtration plants, dock work, etc. First class organizer over fourteen years in charge of important work. Available immediately. PW-55, Eng. News-Record, 10th Ave. at 36th St., New York.

SUPERINTENDENT. Building construction, all types. 20 years' experience. A-1 man. Entire charge start to completion. Location immaterial. Open for assignment July 1st. R. S., P. O. Box 2002, Paterson, N. J.

SUPERINTENDENT, general foreman. State road builder, broad experience, A-1 man, all types of macadam, concrete, brick and paving, available short notice anywhere. PW-430, Eng. News-Record, 10th Ave. at 36th St., New York.

Miscellaneous

CONSTRUCTION and designing engineer, railroads, coal and ash handling, docks, general structures, power plants, fine experience. Would like field and design, or field only. PW-487, Eng. News-Record, 10th Ave. at 36th St., New York.

ENGINEERING student wants position with Civil Engineer in middle west or western United States; 6 months college; married. Salary secondary. PW-451, Eng. News-Record, Old Colony Bldg., Chicago, Illinois.

ENGINEER, 23, with 5½ years' experience, which includes 2 years railroad maintenance of way, also city engineering, highway, sewers and farm surveys, building construction and real estate layout. Neat draftsman and excellent vertical letters. Employed at present. Location in New York City or Northern New Jersey. PW-472, Eng. News-Record, 10th Ave. at 36th St., New York.

GENERAL contractor's engineer; graduate, member A.S.C.E. with over fifteen years' broad experience in West. Quick and accurate in estimating quantities on all classes of work such as buildings, foundations, dams, pipe lines, bridges, docks, etc., experienced in designing same and cost keeping. Practically finished present work. PW-434, Eng. News-Record, Rialto Bldg., San Francisco, Cal.

HIGHWAY engineer, 32, available for employment. Seven years' experience including surveys, preparation of plans and estimates, and construction of macadam and concrete roads. PW-440, Eng. News-Record, 10th Ave. at 36th St., New York.

PAVING INSPECTOR would like to hear from contractor, state or municipal authority requiring experienced man, well-versed in street, road and plant inspection. All types of pavements. PW-489, Eng. News-Record, Old Colony Bldg. Chicago, Ill.

POSITION in legal department of large firm desired by lawyer, with executive experience. John W. Weis, 6218 Greenwood Ave., Chicago, Ill.

SECRETARY (young woman) capable handling office. Six years' experience, three commercial and three railroad, ditch and levee construction. Go anywhere but prefer North. PW-484, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

POSITIONS WANTED

RESEARCH engineer, graduate European university, tried mathematician, four years' varied industrial development experience, wants position assisting in difficult industrial research, requiring capacity for quickly absorbing and digesting widely varied scientific data, practical sense and ability for securing co-operation. Proofs of original solutions, four languages. Starting conditions not over-important, if possibilities are promising. PW-486, Engineering News-Record, Leader-News Building, Cleveland, Ohio.

YOUNG man desires work in field office of an engineering construction company during summer. Will return to school in fall. PW-454, Eng. News-Record, 10th Ave. at 36th St., New York.

WORK WANTED

Designing, Detailing Checking

For structural steel and reinforced concrete. Industrial, mechanical, structural engineering. Shop drawings. Central States Engineering Company, 28 East Jackson Boulevard, Chicago, Ill.

Structural Steel Designing

Detailing and checking, for owners, architects, engineers, and fabricators. Reasonable prices. Experienced Engineers. WW-393, Eng. News-Record, Leader-News Bldg. Cleveland, Ohio.

PART TIME WORK WANTED

CIVIL engineer, who also knows the ropes of the selling game fairly well, and is at least on speaking terms with general business ways can spare part of his time for congenial work that will pay a salary. If you, Mr. Employer, should happen upon this advertisement drop me a line or two. Possibly we could be of use to each other. PTWW-477, Eng. News-Record, 10th Ave. at 36th St., New York.

AGENTS WANTED

Agents for Exclusive Territory

On new patented Electric Trench and Caisson Hoist Unit. Being used by leading contractors. Louis Falzer Co., 2117 Tilden St., Chicago, Ill.

SALESMEN WANTED

Construction Equipment Salesman Wanted

Who has specialized in concrete mixers. State age, salary expected and past experience in detail. SW-397, Eng. News-Record, 10th Ave. at 36th St., New York.

BUSINESS OPPORTUNITIES

Partner Wanted

To purchase half interest in small dredging plant. Address BO-450, Eng. News-Record, New York, 10th Ave. at 36th St.

Will Sell All or Half Interest

Of refinery and steel construction company in Texas. Profits average about $10,000 per year. Present owner unable to give sufficient time to business. $5,000 cash will handle. BO-476, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

BUSINESS OPPORTUNITIES

Established Engineering Business

And concrete products plant in central Illinois for sale. Separate, or will make wonderful combination. BO-491, Engineering News-Record, Old Colony Bldg., Chicago, Ill.

Established Sales-Agency For Sale

Handling structural steel, reinforcing, and a number of specialties. Location Middle West. A real opportunity for a sales-engineer to start business for a small investment. BO-492, Eng. News-Record, Leader-News Bldg., Cleveland, Ohio.

PATENT ATTORNEY

PATENTS—Send for form "Evidence of Conception" to be signed and witnessed. Form fee schedule, information, free. Lancaster and Allwine, 450 Ouray Bldg., Washington, D. C.

FOR SALE

Dumpy Level

W. & L. E. Gurley makers. J. L. Gray, Box 74, Louisa, Ky.

WANTED

Used Engineer Transit

Having vertical arc. Describe fully including instrument number and lowest possible cash price. Buyer in New York. W-460, Eng. News-Record, 10th Ave. at 36th St., New York.

FOR SALE

Oil Engine and Dynamo

Sealed bids will be received at the office of the County Clerk in the Court House in Galesburg, Illinois, up to 10 o'clock a.m., August 25th, 1923, for the following:

One Fairbanks-Morse Oil Engine, Type 25-H. P. 325 R. P. M. with 40 ft.-7 inch belt: 50 gal. Oil Tank, also two cooling tanks, capacity of each tank 400 gallons, with centrifugal pump size one inch. All in good shape. Factory No. 164985.

One Fairbanks-Morse Direct Current Dynamo, K. W. 15, Volts 125, Amp. 120, Type C. P. adjusted to 1,300 R. P. M. Volts 125 at full load also 125 at no load. Belt driven 7-inch pulley. No. 21368. In good shape.

Bids must be enclosed in a sealed envelope with the name of the bidder written or printed thereon and addressed to:

GEO. A. LARSON,
County Clerk.

Galesburg, Illinois.

CALIFORNIA!

INDUSTRIAL SITES aroung San Francisco Bay are handled by our industrial department, in charge of an experienced engineer. Information freely given. (Continuously in business 23 years).

F. F. PORTER, Porter Bldg., Oakland, Calif.

EXCAVATION

Steam Shovels for rent with crews or work taken by contract.

Dinkeys and cars or teams furnished.

H. C. AMBLER
3717 Old York Road, Philadelphia, Pa.

FERRY

FOR SALE

In absolutely good running order. 14 feet wide. 40 feet long, including two aprons. Constructed by the Minneapolis Steel Machinery Co. Iron sides, two iron beams, 350 feet cable.

G. SCHWYZER
410 Donaldson Bldg., Minneapolis, Minn.

TARPAULINS
AND
Waterproof Canvas Covers

All Sizes—All Weights at Hand

DASH MFG. CO., INC.
56 Suffolk St., New York City.

For Sale or Lease; A bargain

QUARRY AND CRUSHING PLANT

on railroad. Business thoroughly established. An exceptional proposition.

FS-431, Engineering News-Record
Real Estate Trust Bldg., Phila., Pa.

WANTED

LOCOMOTIVE CRANE

1—Standard Gauge, 25 tons capacity.

SADDLE TANK LOCOMOTIVES

2—Standard Gauge, 25-ton engine will do. Cannot use over 40.

W-433, Engineering News-Record
Leader News Bldg., Cleveland, Ohio.

AGENTS WANTED

MIXERS-PAVERS SAW RIGS

See display ad in June 7th Issue

Oshkosh Mfg Co., Oshkosh, Wis.

Second-Hand Transits and Levels

Guaranteed in Good Order and Adjustment.

Write for New Bargain List

WILLIAMS, BROWN & EARLE, INC.
918 Chestnut St., Philadelphia, Pa.
Department D

WANTED

Stiff Leg Derrick

15 tons capacity, 60-ft. boom.

Merritt Chapman & Scott Corporation
17 Battery Place, New York City

We Dig and Refill Trenches

for water, sewer, gas, conduits and drains.

Pipe laid by contract and installation of water systems.

Trench Machines and Backfillers For Rent

W. G. Fritz Co., Inc., *Contractors*
258 Valley Road, West Orange, N. J.

NEW AND USED SURVEYING INSTRUMENTS AT FACTORY PRICES

Satisfaction guaranteed or money refunded. Write for complete list and catalogue of our high grade instruments and supplies for civil engineers, surveyors, mining, builders, contractors, etc.; 40 years' experience in repairing instruments of all makes at reasonable prices. Prompt service.

WISSLER INSTRUMENT CO.
607 N. Broadway, St. Louis, Mo.

WANTED

Stone Crusher—Dump Bodies

250 yd. capacity Stone Crusher.
3 Dump Bodies for Ford Dump Truck.

F. H. WELLS, Savannah, N. Y.

FOR SALE

Used Transits and Levels

BUFF, 46 Dey St., New York.

WANTED DRAGLINE

60-ft. boom, 1½-yd. bucket, which can carry a 2-yd. light bucket and maintain the builders load limit. Must be fitted with Diesel or Semi-Diesel Oil Engine.

THE H. C. DARNELL MACHINERY CO.
15th and Elmwood, Kansas City, Mo.

AUCTION

Sale of

NAVY SURPLUS

by

PUBLIC AUCTION

At Navy Yard, New York, N. Y.

on JULY 10th and 11th, 1923

AUCTION

There is given below a general list showing the character of material in each sale referred to above. Catalogs of sale covering all details regarding the sales can be obtained from the Central Sales Office or the Auctioneers mentioned.

Catalog No. 504-A

Sale of July 10, 1923, Steel and Metals at Navy Yard, New York, N. Y. under the auspices of Alfred Freeman & Company, 149 Grand Street, New York City:—

Brass and Copper, Building Materials, Contractor's Supplies, Iron and Steel and other Metals. Scrap Accumulations,

Catalog No. 503-A

Sale of Surplus materials at Navy Yard, New York under the auspices of Smith & Jaffe, 68 W. 45th St., New York City, July 11, 1923:—

Fire Brick, Brass and Copper, Iron and Steel and other Metals, Gauges, Pipe Fitting, Plumbing Supplies, Marine Equip., Wire and Cables, Scrap Accumulation, Tools, Hardware and 12 Electric Railway Cars with 10 Trailers.

CENTRAL SALES OFFICE, NAVY YARD, WASHINGTON, D. C.

WANTED

Bucyrus Shovel

1—70-C, in first-class condition, A.S.M.E. boiler.

Dinkeys

3—36-in. gauge, eithe 18 or 20 tons, A.S.M.E. boiler.

Western Steel Beam Cars

40—4-yd., 36-in. gauge.

Cannot pay fancy prices. Dealers save postage

W-432, Engineering News-Record
Leader News Bldg. Cleveland, Ohio.

Ready for Delivery Now

4,000,000 FEET OF LUMBER

Fir and Yellow Pine.
Sizes as follows:

358 pcs., 12x12, 20 ft. long.
134 pcs., 12x12, 30 ft. long.
18 pcs., 12x12, 10 ft. long.
1,107 pcs., 6x6, 10 to 12 ft. long.
3,060 pcs., 3x12, 20 ft. long.
953 pcs., 4x10, 20 ft. long.
2,088 pcs., 2x8, 20 ft. long.
212 pcs., 6x10, 9 ft. long.
237,800 sq. ft. 2x8 floor beams, 9 to 18 ft. long.
200 windows, 2 ft. 10 in. wide by 5 ft. 2 in. high, complete.
132,600 sq. ft. 6-in. sheeting.
13,800 sq. ft. novelty siding.
20—8x8 ft. rolling steel doors.

Above lumber from Navy Warehouses, four years old, free from nails, and immediate delivery by rail or water. Two million feet same sizes, future delivery.

Kirsch Demolishing Co.
35th St. and 2nd Ave., So. Brooklyn, N. Y.

FOR SALE

1—No. 3793, Size 61 (¾-yd.) Ransome **Concrete Mixer** with side loader and hoist for hoisting bucket, 25-hp., either 2 or 3-ph., 60-cy., 220-v. Motor, hoisting bucket with hopper for tower on truck with steel frame, lately overhauled $1200
1—No. 520 (¾-yd.) Smith Chicago Mixer with 15-hp., 3-ph., A.C. Motor and side loader, rebuilt 600
1—No. 10 (1 bag) Chicago Con. Mixer on skids with pulley 60
1—20-cu.ft. Ransome **Concrete Hopper** 50
1—Fairbanks-Morse, 8-hp. **Gasoline Engine**, with pulley and clutch 60
1—No. 105 Standard **Concrete Mixer** on truck with Novo Engine 100
1—2¾x10 Deep Well **Pump Head**, with 2½-hp. Novo Engine 90

FRANK N. GOBLE, INC.
49 Brookfield St., White Plains, N. Y.

FOR SALE—FOR RENT

3—Austin Cube Pavers, Boilers, Engines, Boom, Bucket, Batch Meter, Caterpillars.
1—Potter Trenching Machine.
1—10-ton Kelly Roller.
1—5-ton Iroquois Roller.

Empire Engineering & Equipment Co.
Office and Yard: Cor. W. Gen. Robinson and Dasher St., Pittsburgh, Pa.

FOR SALE

STEEL SHEET PILING

120 pcs., 14-in. Lack. Arch Web, 22 to 24 ft. long.
15 pcs., 14-in. Lack. Arch Web, 11 to 18 ft. long.
8 pcs., 14-in. Lack. Straight Web, 22 ft. 6 in. long.
Good Redriving Condition. Price $37.50 per ton 2000 lb. for entire lot F.O.B. cars, Salem, N. J.

J. M. HYNES
Lock Box 242, Salem, N. J.

WANTED

STEEL SHEET PILING

100 Pcs. 40 to 50 ft. long.
200 Pcs 20 to 30 ft. long.
Suitable condition for redriving.
W-399, Engineering News-Record
1570 Old Colony Bldg., Chicago, Ill.

Steam Shovels For Rent

Type A1 Thew, located Jersey City, N. J.

Immediate Shipment

JAMES S. BRADEN
30 Church St., New York, N. Y.

TO RENT

Erie Steam Shovel

High Lift Type "B". Caterpillar Traction.

L. V. MORRIS,
Box 106, Locust Valley, N. Y.

We will sell at

PUBLIC AUCTION

Absolute *By* **CHAS. KRISER,** *Auctioneer* ***Unreserved***

By order of, and for the account of

NEWPORT SHIPBUILDING COMPANY

Wilmington, North Carolina **(Builders of Concrete Ships)**

All of the WOODWORKING MACHINERY, MACHINE TOOLS, CONTRACTORS and YARD EQUIPMENT, STEEL and SUPPLIES at the shipyard, Wilmington, N. C.

Thursday, July 12, 1923

Commencing 10:30 A. M. SHARP!! (Eastern Standard Time)

VALUATION $350,000.00

Everything will be sold without limit or reserve!!

SALE INCLUDES:

Chain Mortisers, Inside and Outside Moulders, Surfacers, Tenoners, Band Saws, Resaws, Bevel Band Saw, Boring Machines, Belt Sander, Saw Tables, Dado Saws, Scroll Saws, Joiners, Lathes, Shapers, Grinders, Pipe Machines up to 10 in., Pipe Expander, Bolt Cutter, Radial Drills, Drill Presses, Hack Saws, Vises, Forges, Benches, Concrete Mixers, Cement Guns, Engines, Air Compressors, Hoists, 50-ton capacity Steel Stiff Leg Derrick, Boilers, 40-ton Locomotive and Tender, Standard Gauge Flat Cars, 100 tons Steel Reinforcing Bars, tons of New Fittings, Brass, Malleable and Cast Iron, tons of Scrap, Rope, Chain Hoists, Bolts and Nuts, Ship Supplies, Air Tools, Acetylene Torches, 50 Electric Motors and Generators up to 75 H.P., Office Furniture and Hundreds of other items.

This equipment is all of modern type and in excellent condition.
Plant open for inspection from June 28th to the day of the sale.

ONLY ONE **advertisement will appear in this paper—SO SEND IMMEDIATELY FOR** ***COMPLETE AUCTION CATALOGUE.***

Industrial Plants Corporation

'Phone Rector 2270

25 Church St., New York, N. Y.

USED EQUIPMENT

AND NEW, OFFERED FOR RE-SALE

Space for these advertisements is sold by the advertising inch—30 inches to a page. The price per inch is based on total space used—multiply ad space by number of insertions.

RATE PER INCH:
1 to 3 inches.....$5.00 an inch
4 to 7 inches..... 4.80 an inch
8 to 14 inches..... 4.70 an inch

An inch is measured vertically on one column—three columns to a page. Any space may be used measured by the even inch in height by 1, 2, or 3 columns in width.

RATES FOR LARGER SPACES, OR SPACE ON A YEARLY BASIS, FURNISHED ON REQUEST

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Construction WE BUY, SELL AND RENT *Equipment*

AIR COMPRESSORS

1—Ingersoll-Rand, 10x10, Belt drive.
1—Chicago, 70 ft., Gas. Power, mounted with Tank, mounted on Trucks.
1—Chicago, 150 ft., Gas. Power,
2—Westinghouse, Compound, 150 ft.

CRANES

1—P. & H. 205, semi-caterpillar.
1—Overland Traction Wheels, steam power.
1—20-ton Ohio, std. gauge.

HOISTS

1—American, 10 x 12, D.C., D.D., skel.
3—7 x 10, DC, DD, various makes.
1—6 x 8, DC, DD skel. Lambert.
1—Thomas DD with 50-hp., A.C. Motor.
1—Thomas DD with 75-hp., A.C. Motor.
1—Lambert, 8¼ x 10, DD, butt strapped boiler.
1—American, 8¼ x 10, DD, butt strapped boiler.
1—Thomas Double Drum with 100-hp., D.C. Motor.

LOCOMOTIVES

2—Std. Gauge Baldwin and American, 50 ton.
1—Standard Gauge Baldwin, 30 ton, rebuilt.
7—24-in. Gauge Plymouth & Whitcomb, gas.
3—36-in. Gauge Davenport, Porter & Vulcan.
3—6-ton, 24-in. Gauge Geared Whitcomb.
1—Std. Ga. 10 x 16 Lima.

DERRICKS

3—Steel Stiff-Leg, 60 to 100-ft. booms.
1—Wood Stiff-Leg Derrick, bucket operating.
6—Steel Guy, 100-ft. masts, 15 to 25 tons.
8—Steel Guy, 110-ft. masts, 25 to 40 tons.
2—Steel Stiff-Legs, 110-ft. booms, 20 tons.
1—All-Steel Derrick Car, capacity 25 tons.

ROAD EQUIPMENT

2—Lakewood Finishing Machines, 16 & 18 ft.
60—Batch Boxes, 29 ft.
5—Rollers, 8 to 10 ton, tandem and 3 wheel, steam and gasoline power.
6—Pavers, 12E to 21E.

CONCRETE MIXERS

1—21-S Marsh Capron Batch Hopper.
2—7-S Rex Low Charging Mixers.
1—21-S Rex, Steam Power.
1—7-S Boss, Gas. Power, Side Loader.

STEAM SHOVELS

1—Type B, Erie.
4—Traction and Caterpillar, ¾-yd. shovels, Marion, Osgood, Bucyrus and Thew.
2—Bucyrus 70C's; also 70-ton railroad type.
1—Bucyrus 35B on caterpillar.
1—Marion 35 traction wheels.
1—Standard Bucyrus 150-B.

CARS

75—36-in. gauge, 4-yd. Western Dump.
50—24-in. gauge, 1½ yd. steel "V"-shaped.
30—24-in. gauge, Western All-Steel Flat.
30—18-in. gauge, 1-yd. Western.
70—24-in. gauge, 1½-yd. Wood Bodies.

DRAG LINES

1—Monighan 1-T. Walker type.
1—Monighan 2½-T. Walker type.
1—Bucyrus 14-B, on caterpillar.

PILING HAMMERS

1—No. 3 McKiernan-Terry.
1—No. 9 McKiernan-Terry.
1—No. 3 Union. 1—No. 2 Vulcan.

BUCKETS

1—¾-yd. Kiesler Clam Shell Bucket.
1—1-yd. Hayward Clam Shell Bucket.
1—1-yd. Page Dragline Bucket.

MISCELLANEOUS

2—50-hp. Locomotive Type Boilers.
1—Erie 6-in. Centrifugal Pump with Engine.
1—Lakewood Steel Tower, 150 ft., with Bucket
1—Insley Steel Tower, 200 ft. with Bucket
1—4-in., belt driven Centrifugal Pump.
2—Steel Stone Skips.
4—Vertical Boilers, ranging from 25 to 40-hp.

The above are only a few of the items we have for sale. Write or wire for our latest stock list.

RENNOLDS EQUIPMENT CO.

711 STANDARD TRUST BLDG.
CHICAGO, ILL.

PHONE: RANDOLPH 4184

ECA REBUILT

"WE BUY— REBUILD— SELL OR RENT"

ELECTRIC HOISTS AND DERRICKS FORM HOG ISLAND

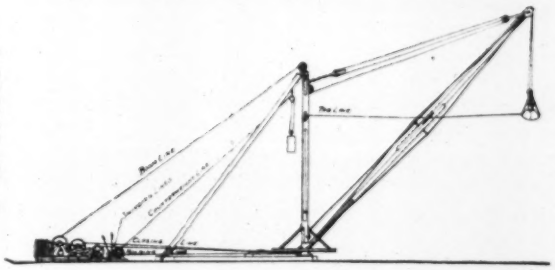
Available For Inspection and Shipment From Our Four Plants

Specifications of Electric Hoists

Large number of American late model hoists. These hoists have 2 drums with attached swinging gear, with 37-hp. Otis A.C., 440-v., 60-cy., 3-ph. electric motor—Complete with controllers and resistance grids—Can be changed to suit customer's current requirements if desired.

Can furnish counterweighted holding drums with these hoists when used for operating bucket.

Also several 55 and 75-hp., Single and Double Drum Hoists with A.C. Motors.



Specifications of Derricks

Large number of practically new American stiff-leg derricks.
Boom, 14x14x80 ft., trussed.
Mast, 16x16x40 ft.
Legs, 14x14x62 ft.
Bull wheel, 16 ft.
For Single Line Work or Arranged for Bucket Operation.
Will sell fittings only if desired.
Also have large stock of lighter stiff-leg derricks, several steel stiff-legs, 20, 30 and 50 ton.

Guy Derricks

A number of both wood and steel guy derricks, 5, 10 and 25-ton capacity.

ALL THE EQUIPMENT LISTED BELOW HAS BEEN REBUILT AND MAY BE INSPECTED IN ONE OF OUR OWN WAREHOUSES

AIR COMPRESSORS

1—Sullivan Class W.G.3, belt driven cylinder, 10x12.

2—10½-in. Type C Westinghouse Steam Compound Air Compressors. Capacity 150 cu. ft. at 100 lbs. Requires 25 hp. Boiler.

1—Bury Class L 8x8 Compressor complete with air receiver with 15 hp., A.C., 220 volt, 60 cycle motor.

1—Schramm No. 30 Gasoline, on trucks with air receiver, cap. 50 cu. ft. per minute.

CONCRETE MIXERS

30—Concrete Mixers, sizes 28S, cap. 1-yd., 21S, cap. ¾-yd.; 14S, cap. ½-yd., and 10S, cap. 1¾-yd. With steam or electric power; with side loaders or batch hoppers. Following makes: Marsh-Capron, Koehring, Milwaukee, Ransome, Smith, Smith-Chicago, Rex, Lakewood, Foote, Cube, or Oshkosh.

45—7S, cap. 1 bag, with low charging platforms, with gasoline engines.

CRANES

1—Byers Auto Crane on traction wheels, with 30-ft. boom, with ½ or ¾-yd. clam shell bucket.

1—15-ton, 8-wheel, O.&S., 40-ft. boom.

1—15-ton Browning locomotive crane on 4-wheel, standard gauge trucks, with 40-ft. boom and bucket operating.

CLAM SHELL BUCKETS

29—Clam Shell Buckets. Sizes ½, ¾, 1, 1½ or 2-yd. All makes.

CRUSHER

1—No. 4 Austin Gyratory crusher.
1—10x20 Climax Jaw Crusher on Trucks.

DIAPHRAGM PUMPS

90—Diaphragm Pumps on trucks, with 3-in., or 4-in. suction, with 3-hp., 2-hp., or 1½-hp. Gasoline engines. Following makes: Atlantic, Bull Dog, C.H.&E., Domestic, Gould, Humphrey, Keystone, Novo, Schramm and Sultan.

30—Hand Diaphragm Pumps, 3-in. and 4-in. suction.

A large assortment of steam pumps, Simplex and Duplex, also several Nys and Pulsometer Pumps, No. 5 and No. 6. Several hand driven force pumps, 2-in. and 1½-in. suction.

CENTRIFUGAL PUMPS

All sizes from 12-in. suction, 10-in. discharge, down to 2½-in. suction, 2-in. discharge. Belt driven and dir. conn. to steam engines, gas engines and electric motors.

STEAM HOISTS

20—Three-Drum Hoists, with or without boilers. Sizes, 10x12, 9x10, 8¼x10, and 7x10, with separate swingers for derrick work. All makes.

40—Two-Drum Hoists, with or without boilers. Sizes, 10x12, 9x10, 8¼x10, 7x10, 6¼x10, 6x8, and 5x8. Can be equipped with holding drum for bucket work. Several special Cableway Excavator or Drag Scraper Hoists. All makes.

12—Single Drum Hoists 9x10, 6¼x10, 8x8. Lidgerwood, American and Lambert.

6—Swinging Engines.

1—Double Drum Belt Hoist, cap. 6000 lb.

1—Belt Hoist, single drum, 2500 lb. line pull.

1—4¾x6 double cylinder, single drum, reversible with elevator sheave, complete with boiler.

1—8-hp. Byers S. D. Reversible, with boiler and elevator sheave.

ELECTRIC HOISTS

1—O & S. double drum, with 20-hp. Westinghouse, 220 v., 60 cy., 3 ph., with drum controller resistance grids, complete.

RAIL AND TRACK

4—Miles, 24-in. Gauge Portable Track, with steel ties, made up of 20-lb. rail with switches.

GUY DERRICKS

1—Wooden Guy Derrick, mast 60-ft., boom 56-ft., 16x16 timbers—single line.

1—All steel with 90-ft. mast, 80-ft. boom, with all guys, with bull wheel, 10-ton capacity, bucket operating.

ROAD ROLLERS

2—Erie Tandem, 1—8-ton, 1—3-ton.

2—Kelly - Springfield, 10-ton, 3-wheel; 1—gas, 1—steam.

1—Iroquis, 5-ton, steam Tandem.

3—10-ton, 3-wheel. 2—Buffalo-Pitts, steam. 1—Austin, gas.

STEAM SHOVELS

1—Bucyrus, 70-ton, on MCB std. gauge trucks, with 2½-yd. dipper.

4—Keystone Excavators. 3—No. 3, 1—No. 4.

1—Marion No. 28 Traction Wheel, ¾-yd. bucket.

1—Type A1 Thew on traction wheels with ⅞-yd. dipper.

2—Type O Thew on traction wheels with ⅝-yd. dipper.

STEAM HAMMERS

7—McKiernan & Terry. 6—No. 9B. 1—No. 6.

2—Vulcan, 1—No. 2 and 1—No. 1. Several drop hammers.

LOCOMOTIVES

1—Shay Geared, 36-gauge, 6x10, 13-ton.

2—24-in. gauge steam Saddle Tanks, 1—Davenport 7½-ton. 1—Kopple 6½-ton.

Write for latest Stock List just off the press.

Equipment Corporation of America

Manufacturers and Rebuilders of Contractors' Equipment

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1455 Lumber Exchange Bldg.
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PITTSBURGH, PA.
655 Empire Bldg.
Phone, Smithfield 1502

FOR SALE OR RENT

STEAM SHOVELS

1—14B Bucyrus Traction Shovel, Shop No. 3338 new in 1920. 2/3-yd. dipper.
1—Model 36 Marion, full revolving traction, Shop No. 3304, new 1½-yd. dipper.
4—70C Bucyrus. Shop No. 1167, 1426, 1499 and 1608; 2½-yd. dippers.
3—70-ton Bucyrus, Shop Nos. 860, 977, and 1233. 2½-yd. dippers.
1—70-ton Bucyrus. Shop No. 920, equipped with new 70C boom. 2½-yd. dipper.
3—Model 60 Marion, Shop Nos. 1463, 1711 and 2367, 2½-yd. dippers.

STEAM SHOVEL PARTS

3—Booms for 70-ton Bucyrus, length 29 ft.
1—Boom for 70C Bucyrus shovel, composite, length 40 ft.
3—Dippers, Bucyrus, 2½-yd. capacity.
1—Bucyrus Dipper, 3 cu. yd. capacity.
Jack Arms, Dipper Arms and Boom Engines for 70-ton Bucyrus Shovels.
1—Boom for Model 60 Marion Shovel.
2—Dipper Arms for Model 60 Marion.
1—Dipper, 2½ yd., for Model 60 Marion.

DRAGLINE EXCAVATORS

1—Class 14 Bucyrus Dragline; 60-ft. boom, 2-yd. Page Bucket, skids and rollers, or truck wheels.
1—Class 24 Bucyrus Dragline, Shop No. 772; skids and rollers, 100-ft. boom, 3½-yd. Page bucket.
1—Class 24 Bucyrus Dragline, built 1919, 115-ft. boom, 3½-yd. Page bucket, steam operated.

LOCOMOTIVES

1—17 x 24 Davenport, 6-wheeled switcher, new in 1912, weight 47 tons, steam pressure 180 lb
1—18 x 24 American, 6-wheeled switcher, Brooks No. 2318. Wt. 55 tons on drivers.
1—16 x 22 C. M. & St. P. Ry., Class J-2, 4-wheeled switcher. Weight 32 tons.

LOCOMOTIVES (Continued)

1—standard gauge, 11 x 16 American 4-wheeled saddle tank Locomotive, shop No. 47421, built 1912. Weight 21 tons, steam brakes, automatic couplers.
3—36-in. gauge, 11 x 16 Vulcan dinkies, shop Nos. 1700 to 2200 series. Steel cabs and butt joint boilers. Weight 20 tons.
1—36-in. gauge, 11 x 16 Davenport dinkey. Shop No. 710. Wt. 20 tons.
1—36-in. gauge, 10 x 16 Porter Dinkey. Shop No. 3912. Wt. 18 tons.
1—36-in. gauge, 10 x 16 Vulcan Dinkey. Shop No. 868. Wt. 18 tons.
1—36-in. gauge Baldwin Dinkey, Shop No. 34550; wt. 18 tons.
1—36-in. gauge American Dinkey, Shop No. 46733; wt. 18 tons.

CRANES

1—Type B Erie Traction Crane; 33-ft. boom and ¾-yd. clam shell bucket. Shop No. 838. New in 1920.
1—10-ton Industrial Crane (Shop No. 1989), 4 wheeled, 40-ft. boom.
1—20-ton McMyler, Serial No. 388, built 1912. 8 wheeled; 45-ft. boom, bucket operating drums.
1—25-ton Industrial Crane, 8 wheeled, full M.C.B., bucket handling drums; (Shop No. 3261), 55-ft. boom and 20-ft. ext.
1—30-ton Ohio Crane, new in 1918; 8-wheeled, full M.C.B.; bucket handling; 50-ft. boom; Ohio, Penn., N. Y., Mich. and Mass. Std. boiler.
1—30-ton Ohio Locomotive Crane, 8-wheeled, full M.C.B., bucket handling, 50-ft. boom, with 20-ft. extension. Shop No. 3416. Built 1920. A.S.M.E. boiler.
1—Pintle Type Crane, built by Variety Iron & Steel Works. New in 1919; 48-ft. boom, 15-ton cap. at 18-ft. radius; 7-ft. 10½-in. gauge, 12-ft. wheelbase, self-propelling. Base of boom 17 ft. above track. Bucket-operating drums. Wt. 50 tons. Price, 25% of new.

DUMP CARS

3—16-yd. Western Air Dump Cars.
20—12-yd. Western Air Dump Cars, 19-ft. beds, full M.C.B. steel underframes, box girder doors.
4—12-yd. Western Dump Cars, air brakes and hand dump, 19-ft. beds, steel underframes, box girder doors, full M.C.B., 60,000 lb. capacity trucks.
5—12-yd. Oliver Dump Cars, steel underframes; full M.C.B.
13—8-yd. Western, 36-in. gauge, double truck side Dump Cars; steel draw sills, wood beds.
9—4-yd. Continental, 36-in. Gauge Side Dump Cars, wood beds, steel draw sills.
70—4-yd. Western, 36-in. Gauge, Wood Sill Dump Cars, truss rod doors.
34—4-yd. Continental, 36-in. gauge, wood draw sills, 4 pedestals, truss rod doors.
8—3½-yd. Peteler 36-in. gauge side dump cars, wood sills and wood beds.

SPREADER AND DERRICK CARS

1—Standard Gauge Western Spreader Car.
1—36-in. gauge Western Spreader Car.
1—36-in. gauge Oliver Spreader Car.
1—Std. Gauge Derrick Car.

HOISTING ENGINES

1—7 x 10, D.C., D.D. Lambert Hoisting Engine, with boiler.
1—7 x 10, D.C., D.D. Clyde Hoist with A.S.M.E. boiler.

MISCELLANEOUS

2—80-hp. horiz. Boilers, complete with fittings.
2—1½ yd. Page Dragline Buckets.
6—1½-yd. Western Dump Wagons.
11—Mead-Morrison 1⅝-yd. Clam Shell
1—Industrial Steam Pile Driver Hammer, Serial No. 324.
1—Pair Steel Pile Driver Guides, 42 ft. long, for above hammer.
1—Stable Tent, 30 ft. x 50 ft.

CLAPP, RILEY & HALL EQUIPMENT CO., 14 So. Canal St., Chicago
(Successors to Clapp, Norstrom & Riley Equipment Co.)

FOR SALE

7—**Dump Scows,** 280 to 700 cu. yd. capacity.

1—5 to 7 cu. yd. Clam Shell **Dredge.**

1—5-yd. Clam Shell **Dredge.**

1—2½-yd. **Dipper Dredge.**

3—Flat Deck **Scows,** 87 to 110 ft. x 30 to 32 ft.

1—Coal Scow with Derrick and Hoisting Engine, 300 tons.

Prices on application to

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31 State St., Boston, Mass.

LOCOMOTIVE CRANE

1—10-ton Industrial, 4-wheel standard gage, 40-ft. boom, ¾-yd. clam shell bucket.
1—12-ton, 8-wheel O. & S., M.C.B., 40-ft. boom, equipped with ¾-yd. clam shell bucket.
1—O. & S. Gasoline traction, 35-ft. boom, ¾-yd. bucket.
1—Erie "B" traction, 36-ft. boom.

SHOVELS

1—Model 61 Marion, 2½-yd. dipper, railroad trucks.
1—70-ton Bucyrus, 2½-yd. dipper, railroad trucks.
1—Type "A" Erie traction, ½-yd. dipper.
1—Model 36 Marion, 32-ft. boom, 22-ft dipper stick, 1-yd. dipper, caterpillar traction.
1—Model 28 Marion combination crane and steam shovel, traction wheels.
1—Late Type "O" Thew, 1921, boom, ¾-yd. dipper. Traction wheels, high lift shipper shaft.
1—Model 18 Osgood, caterpillar traction, high lift, 20-ft. boom, ¾-yd. dipper.
1—Erie "B", caterpillar, high lift, with boom hoist, 20-ft. boom, 18-ft. dipper handle, ¾-yd. dipper. Used 6 months on light work.
1—Browning, Type No. 8, 38-ft. boom, 22-ft. dipper handle, 1-yd. dipper, mounted on 4 wheels, standard gage, with stability wheels on same shaft. Used 2 months.

DRAGLINE

1—Erie caterpillar traction, 40-ft. boom 1-yd. Page bucket.
1—Austin combination steam shovel and dragline, Model 5, caterpillar traction.
1—Marion Model 251, 115-ft. boom, 3½-yd. bucket.
1—Monighan, 120-ft. boom, 3½-yd. bucket.
1—Monighan T1 (Walker) Gasoline, 50-ft. boom, 1-yd. Page bucket.

HOISTING ENGINES

1—Byers Traveling Derrick, all-steel construction, 14-ft. gage, 3-drum engine independent swinger, 50-ft. boom.
1—10x13, D.C., 3-drum Mundy Hoisting Engine with Boiler.

LOCOMOTIVES

1—Vulcan, 38 ton, saddle tank, std. gage.
1—Vulcan, 21 ton, saddle tank, std. gage.
1—Vulcan, 11 ton, saddle tank, 36-in. gage.

JOHN F. CONNELL CO.
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LOCOMOTIVE CRANES

1—McMyler, 20 ton, 8 wheel, M.C.B., 40-ft. boom, bucket drums.
1—Byers Semi-Caterpillar, 35-ft. boom, ½-yd. Owen bucket.
1—15 to 20-ton Brown Hoist, 50-ft. boom, 1½-yd. bucket.
1—New 12-ton, Type E Orton & Steinbrenner, gasoline on caterpillars, bucket drums, 40-ft. boom.
1—O.&S., 20 ton, 8 wheel, M.C.B., 50-ft. boom, bucket drums, with dragline equip. & buckets.
1—O.&S., full revolving, 32-ft. boom on traction wheels, ¾-yd. bucket.

LOCOMOTIVES

1—6-wheel switcher, 18x24.
1—12x18, Porter saddle tank, 36-in. gauge.

SHOVELS AND DRAGLINES

1—Model 18 Osgood on caterpillars, ¾-yd. dipper, high lift.
1—Model 92 Marion on standard gauge railroad trucks.
1—Model 18B Bucyrus on caterpillars, 1¼-yd. dipper.
1—No. 3 Keystone with ditcher and skimmer scoops.
1—No. 6 Keystone, ditcher and skimmer with clam shell attachment.
1—Erie B on traction wheels, ¾-yd. dipper.

HOISTING ENGINES

1—Flory, 8¼x10, D.D., Incline or Shaft Hoist.
1—Stroudsburg, 10 x 12, D.C., D.D., with boiler, like new.

PAVERS

1—21E Austin, steam, semi-caterpillar.
1—21E Foote, Steam, full caterpillar, new.

ASPHALT PLANTS

1—2000-yd. Merriman, 1 car plant.
1— 800-yd. Iroquois, Portable.

STEAM ROAD ROLLERS

1— 8-ton Iroquois tandem.
1—10-ton, 3-wheel Case roller with scarifier, new last year.
1—10-ton, 3-wheel Kelly-Springfield.

CARS, AIR COMPRESSORS, BOILERS AND OTHER EQUIPMENT.

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HOISTS DERRICKS

WE EXPECT TO BE SOLD OUT AND DO NOT GUARANTEE DELIVERY AFTER JULY 1, 1923

ELECTRIC HOIST AND DERRICK $1800

PRICES F. O. B. CARS, PRIMOS, PA.

PARTS

We have a quantity of parts and fittings that came into our possession with the Hoists and Derricks that we purchased at Hog Island that we are offering for sale as Hoist extras or a set of Derrick fittings.

TIMBERS

Several 14 x 14 and 16 x 16, 40 ft., 50 ft. and 55 ft. new fur pine at 10c. per BM foot.

You Save at Least $2000

These Hoists and Derricks are standard late models, manufactured by The American Hoist & Derrick Co., St. Paul, Minn. They are almost new, and every one is GUARANTEED to be in first-class running order.

The Hoists have two drums and swingers, and are complete with starting and control equipment. Having banked lever control, and rated 6,000 pounds single line on each hoisting drum. Slewing rope 36 ft. per minute, and hoisting rope speed 160 ft. per minute. The MOTORS are OTIS 37 hp. A.C., 60-cycle, 3-phase, 440-volt, intermittent duty, slip-ring induction type and, if desired, may be changed to suit the individual current requirements of purchasers at cost.

These Hoists and Derricks may be inspected at any time. This Equipment is being sold in sets and in units of a Hoist or Derrick if desired. Immediate shipment can be made anywhere, but QUICK ACTION IS IMPERATIVE.

Wire, Phone or Write for Detailed Information, Folder, etc.

THE ELECTRIC HOIST & DERRICK CO.
PRIMOS, PENNSYLVANIA
Primos, Pa., is 8 miles west of Philadelphia on P., B. & W. R. R.

DIMENSIONS OF DERRICKS

Mast—16 in. square, 40 ft. high.

Boom—Made of (2) 14 in. sq. timber 48 ft. long spliced to lengths of 80 ft. with (2) ⅞ in. and (2) 1⅛ in. truss rods.

Stiff Legs—14 in. sq., 60 ft. long or 16 in. sq., 46, 50 or 55 ft. long, will furnish either length desired, capacity 5 to 10 tons. Bull wheel 16 ft. dia. Principal sheaves 16 in. dia. and 14 in. single blocks.

The Cable which was formerly used will be given with each purchase of a Hoist with Derrick.

FOR SALE OR FOR RENT

Concrete Mixers, Lakewood Concrete Towers, Hoisting Engines, Derricks, Pumps, Gasoline Tractors, Steam Hammers, Buckets and Compressor outfits.

Edward Ehrbar, Inc., 29-33 Meserole Ave., Brooklyn, N. Y.

STIRLING BOILERS

823 Horse Power

Operated Less Than 90 Days

30—Class M-30, 823 hp. Babcock and Wilcox Stirling Water Tube Boilers, 200 lb. pressure. Drums, double riveted, double strap butt joint. Complete with Westinghouse Stokers, Forced Draft Fans, Vulcan Soot Blowers and all accessories. Inspection invited.

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in new Gas, Gasoline, Kerosene and Oil Engines, about half price, retested and inspected carefully and painted before shipment.

A large number of used and rebuilt Engines of all kinds, Steam Engines, Hoists, Boilers, Compressors, Stone Crushers and complete equipment for contractors and other plants.

Electric Motors, Generators and Direct Electric Units for all purposes.

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Single Track Through Truss R. R. Draw Span Bridge

436 ft 0 in. C. to C. End Pins. E 50, 659 tons. New, never been erected.

40 other bridges

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PAVERS—ROLLERS

1—10-E Smith steam paver, wheel trac., boom and bucket, 2-bag size, new 1921, $1475.
1—13-E Foote steam wheel paver, 2-bag size, chute, $625.
2—Austin 10-ton motor rollers, double cylinder engines, fine condition, each, $1100.

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SCALES

Guaranteed in Good Condition

150—Howe and Fairbanks Scales, 600 lbs. to 100 ton capacity. Platform, floor, warehouse, miners and transportation, truck and spiral types.

Write for prices and specifications

NASHVILLE INDUSTRIAL CORPORATION
Jacksonville, Tennessee.

Erie Pump Bargain

New, Never Used

8 inch heavy duty. Write for bargain price.

STROUD & COMPANY
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FOR SALE

CABLEWAY OUTFITS

3—Complete Cableway Outfits for light work of about 1,000-ft. span; Including hoisting engines, boilers, carriages, buckets, fall blocks, sheaves, rope, etc., complete. Each $2,500

HOISTING ENGINES

1—D.C., D.D. Link Motion, Byers 5½x7, no boiler ..... $ 500
1—D.C., D.D. Link Motion, Lidgerwood, 6x8, no boiler 600
1—D.C., D.D. Link Motion, Byers, 5½x7, with boiler 1,000
1—D.C., D.D. Single Motion, Byers, 6x7, with boiler 1,000

BOILERS

2—35-hp. Vert. Boilers, all fittings, each .. $ 400

AUTO CRANES

1—Type C Byers, Trac. Wheels, ¾-yd. Clam Shell $2,200

PUMPS

2—3-in. Emerson Steam Pumps, each .... $ 200
2—3-in. Pulsometer Steam Pumps, each .. 200
1—2-in. Goulds Steam Force Pump 75

HAULING EQUIPMENT

2—3½-ton Paige Dump Trucks, good as new, each $2,500
1—Cletrac Caterpillar Tractor, used 2 mos. 1,000
2—Studebaker Dump Wagons, each 150

MISCELLANEOUS

1—No. 3 McKiernan-Terry Steam Pile Hammer ..... $ 300
2—McKiernan-Terry Steam Drills, each .. 200
3—Electric Blasting Machines, each 25
26—Insley, Ransome and Archer Chutes, per Lin. Ft. 1
1—Insley Mast Hoist, complete 150
60—Pcs. Lackawanna Steel Sheet Piling, 9-ft., 0-in. Lengths 250
1—Littleford Portable Tar Heater, with 2 pouring pots 60
1—O.&S. ¼-yd. Orange Peel Bucket, new. 250

The Concrete Steel Bridge Co.
Clarksburg, West Virginia.

FOR SALE

Tractor

New 5-ton, Caterpillar Type, standard make, never used, suitable for road work and excavation. F.O.B. Buffalo, New York. Write for specifications.

FS-400, Engineering News-Record
10th Ave. at 36th St., New York City.

1—10-ton, 3-wheel **Kelley-Springfield,** 4 years old, 8 months' use.
1—10-ton, 3-wheel **Buffalo Pitts.**
2—5-ton **Tandem Kelley.**
1—8-ton **Buffalo Pitts.**
2—No. 3 **Keystone Excavators.**
2—No. 4 **Keystone Excavators.**

Acme Equipment Company
207 Fulton Building, Pittsburgh, Pa.

I BEAMS
200 tons of 6-in., 12¼-lb. Steel Beams, 15 ft., 9 in. long.

HOISTING ENGINE
1—Twin Drum Coal Hoist, made by Geo. Haiss Mfg. Co., N. Y.; cylinders, 8x12; drums 24 in. dia.; 16-in. face; 37 in. dia. flanges; 40 hp.; Grab ½ ton.

BOILERS
3—Manning Vertical Boilers, 500 hp.; will insure for 175 lb.; immediate delivery.
1—H.R.T. Mass. Std. Boiler, 72 in. dia.x19 ft., 6 in. long; 125-lb. pressure.
3—Vertical Boilers; 35 hp.; 48 in. dia.x 9 ft., 1 in. high; insured for 125 lb.

TANKS
All sizes of Tanks, open and closed, suitable for storage of gasoline or oil, in stock at our Boston Yard.

SECOND-HAND PIPE
Of all sizes, with new threads and couplings.

THE PERRY, BUXTON, DOANE CO.
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Dependable Used Equipment

maintained, inspected and overhauled at our own shops, by men familiar with every piece, which assures you equipment that is dependable and superior to just ordinary used machines.

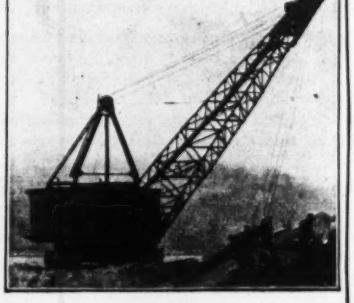
Miami Conservancy District

DRAGLINE EXCAVATORS

1—"Lidgerwood" Class "B" Steam Dragline Excavator, truck mounted, 60-ft. or 75-ft. boom, 2-yd., or 1½-yd. bucket.

1—"Lidgerwood" Class "B" Dragline Excavator, truck mounted, 60-ft. or 75-ft. boom, 2-yd. or 1½-yd. bucket.

1—"Lidgerwood" Class "B" Steam Dragline Excavator, mounted on four double flanged wheels. Boom is 60-ft. with 15-ft. extension and handles 1½-yd. or 2-yd. bucket.



1—"Bucyrus" Class 24 Electric Dragline Excavator, mounted on skids and rollers, 100-ft. boom and 3½-yd. bucket.

1—"Bucyrus" Class 14 Steam Dragline Excavators, mounted on caterpillars, with 60-ft. boom and 2-yd. bucket.

3—"Bucyrus" Class 24 Electric Dragline Excavators, skid mounted, with 85-, 100-, or 115-ft. boom, and 4½-, 3½-, or 2½-yd. bucket.

1—"Marion" Model 21 Dragline Excavator and Crane, mounted on caterpillars; 32-ft. boom, ¾-yd. bucket, either drag or clam shell.

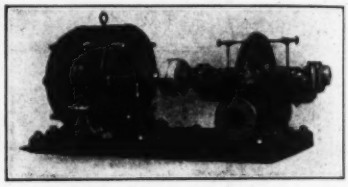
August 1st Delivery

PUMPS

1—Worthington 4-in. centrifugal.
1—Worthington 6-in. centrifugal.
2—Weinman steam-driven automatic.
1—Piston Pump, 1½-in. suction, 1½-in. discharge, with gas engine.
1—Morris 8-in. centrifugal.
1—Worthington 8-in. centrifugal pump.
1—Weinman 3-in. suction, with 3-hp. motor.
1—Dean 7½x5x6.
1—Cameron steam piston, 7x6x7.
1—6-in. American centrifugal, dir. conn. to vertical steam engine.
1—12-in. Kingsford horiz. cent. pump.
1—"Swaby" 8-in. cent., with steam eng.
1—Morris 8-stage centrifugal.
1—14-in. Plat., double suction centrifugal stage horiz. dir. conn. 50-hp. motor; pump and motor.
1—12-in. R.H. "Morris" horiz. cent. unwatering pump, dir. conn. to steam engine.
2—Cameron 10-in. cent., dir. conn. to 100-hp. Westghse. motors, pump and motor.
1—8-in. Class B. S. Worthington cent. double suction, dir. conn. to 200-hp. Gen. Elec. induction motor. Pump and motor.

NOTE:—Will sell any of the above pumps without motors.

3—6-in. Allis-Chal., double suction, dir. conn., Bronze Impeller. Pump and motor.
6—8-in. Allis-Chal., double suction, dir. conn., Bronze Impeller. Pump and motor.
2—12-in. Allis-Chal., double suction, dir. conn., Bronze Impeller. Pump and motor.
1—14-in. Allis-Chal., double suction, dir. conn., Bucyrus Impeller. Pump and motor.
The Allis-Chalmers Pumps are direct connected to motors and can be bought without motors.



DUMP CARS
(Ready for delivery)
10—12-yd. Western, late model air dump.
8—12-yd. Western hand dump.

125—ELECTRIC MOTORS—125
7½ to 500 hp.—220-440—A.C.

PLYMOUTH GASOLINE LOCOMOTIVES
3-ton, 24 and 36-in. gauge.

SUB-STATION TOWERS
high voltage, with lightning arresters, and disconnecting switches.

9 CONCRETE BUCKETS
1½-yd. capacity.

SMITH CONCRETE MIXERS
½-yd. steam—¼-yd., gasoline.

LOCOMOTIVE CRANE
Orton & Steinbrenner, 20 ton.

SPIRAL RIVETED PIPE
5000 ft., 12 and 15 in.

100—TRANSFORMERS—100
6/10 kva. to 500 kva.

TRANSMISSION AND HIGH TENSION LINE MATERIAL

DREDGE PIPE
15-in. slip joint and elbows.

STEAM PILE HAMMERS
1—No. 4 Vulcan.
1—Ingersoll-Rand, 3 in.

LOCOMOTIVES
1—40-ton Baldwin, std. gauge.
1—15-ton Vulcan, 36-in. gauge.

Miami Conservancy District, Dayton, O.
(Sales Division)

FOR SALE

Industrial Road Equipment

Located in Central Illinois

1—Complete Industrial Road Outfit consisting of 20-lb., 24-in. gauge track, 24-in. gauge Koppel batch-box Cars, also V-dump.

Plymouth Locomotives, 2-in. pipe, CH & E pumps, Lakewood Finishing Machines. Lakewood subgrader, 5-ton Roller, etc. All in perfect condition.

Frazier-Davis Const. Co.
Arcade Bldg., St. Louis

NEW BOILER TUBES
Immediate Stock Shipment—All Sizes
Desired Lengths at Mill Prices

NEW AND RELAYING RAILS
ALL WEIGHTS
Small Vertical Boilers
Automatic Gas Fired Boilers

HYDE & CO., INC.
331 4th Ave., Pittsburgh, Pa.

BOILER

1—250 Hp. Return Tubular 84 in. x 18 ft.

BENTLEY-MORRISON CORP.
Elizabeth, N. J.

Robert H. Laverie & Harris Brothers Co., Liquidators

Announce the Sale of

Machinery-Equipment-Supplies

Located at

SHOOTERS ISLAND, New York

Machinery, equipment and supplies now located on Shooters Island. Finest machine tools, structural tools, power equipment and general industrial plant supplies.

26-ft. Wickes Bros. Horizontal Bending Rolls, equipped with motors to suit requirements.

14-ft. Vertical, Southwark Foundry and Machine Works Bending Rolls, equipped with motors to suit requirements.

Hugh-Smith Company Hydraulic Flanging Bending Machine or Brake, Horizontal Type, 24-ft. bed.

Smith Brothers & Company Four-Sided Punching and Shearing Machine, capacity to punch 1 in. thru 1 in. and shear 6 x ¾ in.

Collier-Smith Quickwork No. 6 Rotary Shear, 48 in. throat, 1 in. plate.

Crane Company 8 in. Pipe Threading Machine, capacity 2½ in. to 8 in.

Chambersburg & Erie Foundry Steam Hammers, 5, 3 and 1½ tons capacity.

Dietrick & Harvey Open Side Planer, 74 in. x 60 in. x 20 ft.

10, 25 and 50 ton Overhead Electric Travelling Cranes.

Ingersoll-Rand 5,000-ft. direct connected Air Compressors.

Sullivan 2,500-ft. Corliss Steam Driven Air Compressors.

Address all communications concerning Shooters Island equipment to Harris Brothers Co., Room 712, 17 State St., New York, N. Y.

STEAM SHOVELS

1—95-ton Bucyrus Railroad Type Steam Shovel, 4½-yd. dipper.
4—70-ton Bucyrus Railroad Type Steam Shovels, 2½ to 3-yd. dippers.
Shovels are rebuilt and in first class working order.

DUMP CARS

80—12-yd. Wester & Oliver All Steel Dump Cars. Standard gauge.
40—1¼-yd. Austin Two Side Dump Cars. Wood body. 20-in. gauge.

POWER PUMPS

1—24-in. Kingsford Horizontal Centrifugal Pump. Belt driven.
1—12-in. Platt Iron Works Horizontal Centrifugal Pump. Arranged for direct connection.
1—12-in. Fulton Machine Co. Horizontal Centrifugal Pump. Belt driven.
1—8-in. American Horizontal Centrifugal Pump. Direct connected to 20-hp. Westinghouse 220-v., direct current motor.
1—No. 924—9-in.x10-in. Goulds Triplex Pump. Belt driven.
1—8-in.x8-in. Deane Triplex Pump, belt driven.
1—7-in.x8-in. Deane Triplex Pump, belt driven.

HOISTING ENGINES

4—7½-in.x10-in. Dake. Dbl. Cyl., Sgl. Drum Steam Hoists, with reversing throttle valves.
1—6¼-in.x8-in. Clyde Dbl. Cyl., Dbl. Drum Steam Hoist.
1—4½-in.x6-in. Stroudsburg. Dbl. Cyl. Sgl Drum Steam Hoist, with boiler.
1—5-in.x8-in. Lidgerwood Dbl. Cyl. Sgl. Drum Steam Hoist, reversible link motion.

STEEL STORAGE TANKS

12—20,000 gal. capacity, vertical.
8—10,000 gal. capacity, horizontal.
15— 5,500 gal. capacity, horizontal.
10— 2,000 gal. capacity, horizontal.

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1—1850-ft. W.B. 2 Sullivan Steam Driven Air Compressor. 100 lbs. pressure.
1—1700-ft. G.C. S.D. Chicago Pneumatic Tool Co. Steam Driven Air Compressor. 100 lbs. pressure.
1—1000-ft. Class H. Ingersoll Steam Driven Air Compressor.
3—50-ft. New York Air Brake Co. Locomotive Type Air Compressors.
1—1750-ft. Laidlow Dunn Gordon Belt Driven Air Compressor. 100 lbs. pressure.
1—309-ft. Class S.O. 2 Chicago Pneumatic Tool Co. Oil Engine Driven Air Compressor. 100 lbs. pressure.

STEAM PUMPS

1—10-in.x16-in.x8½-in.x18-in. Fairbanks-Morse Duplex Steam Pump. Plunger type, outside packed.
1—16-in.x8½-in.x12-in. Worthington Duplex Steam Pump.
1—14-in.x8½-in.x10-in. Worthington Duplex Steam Pump.
1—8-in.x12-in.x8-in.x12-in. Worthington Duplex Steam Pump.
4—9-in. x 5¼-in. x 12-in. Deane Duplex Steam Pumps.
1—750 gal. capacity C. H. Wheeler Underwriters Duplex Steam Fire Pump. Size 16 in. x 9 in. x 12 in. Section 10 in. Discharge 8 in.

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35th and Iron Streets **CHICAGO**

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1—1-yd. HAYWARD ORANGE PEEL.
2—24-in. gauge LAKEWOOD CARS with Lakewood Controllable Form Buckets.
1—STIFF LEG DERRICK with 12-in.x12-in.x60-ft. boom, with bull wheel, equipped for clam shell work. Good condition.
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3—No. 19 D.B. SULLIVAN AIR JACK HAM'RS.
1—No. 9 D.C. SULLIVAN AIR JACK HAM'RS.
400 ft. of 6-in. W. I. PIPE, with flanges.
1500 ft. of ⅜-in. BLACK PIPE.
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1—A-FRAME TRAVELING DERRICK with 80-ft. Steel Boom.
1—Type O THEW FULL REVOLVING SHOVEL for sale or rent.
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1—20-in. MORRIS CENTRIFUGAL PUMP, D.C. Steam Engine.
3700-ft. INDUSTRIAL TRACK, 24-in. gauge, 20-lb. rail, 15-ft. sections, 6 ties to the section, and three switches.
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Shop No. 4262 in first class condition with six roll Skimmer Scoop. **Price $3500.00**

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Special prices on lots of five or more.

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16—15 in., 75 lb., 16 ft. 5 in. long, together with three tons of plates. Used on temporary work five months.

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1—Iroquois, 800-yd., 2 unit Portable Plant.
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10—80,000-lb. capacity Gondola Cars.
5—60,000-lb. capacity Rebuilt Box Cars.

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Box Cars—40 ft.—Steel Underframes.
Gondola Cars—80,000 lb. Capacity.

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7½-in.x12-in. **Mundy** Double Cylinder, Double Drum Hoisting Engine with A.S.M.E. Code Boiler.
6¼-in.x8-in. **Lidgerwood** Double Cylinder, Single Drum Skeleton Frame Hoisting Engine.
5½-in.x10-in. **Mundy** Double Cylinder, Double Drum Hoisting Engine with A.S.M.E. Code Boiler.
5-in.x10-in. **Mundy** Double Cylinder, Double Drum Hoisting Engine with Boiler.

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7—36 in. gauge; 18 ton, 4-driver saddle tank Locomotives.

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All in first class condition, ready for immediate shipment.

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1 Smith Tilting Mixer

1 cu. yd. capacity, with batch hopper. With or without motor. Used on two jobs.

1 Wood Frame Whirley

40-ft. boom, full circle swing, American hoist engine and independent swinging engine. Just the thing for the job that cannot stand much investment.
The mixer and Whirley must sell regardless of price. Also have 2 Whirleys, all steel construction, with 50 and 60-ft. booms and three drum hoists on them.
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Model 29 Osgood Shovel on road wheels completely overhauled, two years old..... $6,500
Ten-ton Kelly Tandem Steam Roller in excellent condition, shop number 747..... $1,350
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20-ton McMyler, 8-wheel **Locomotive Crane;** double drum for bucket operation; 50-ft. steel boom, with clamshell bucket; in first class condition. Immediate shipment.

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steam power, on wheels, with distributing spout. Practically new. First-class condition.

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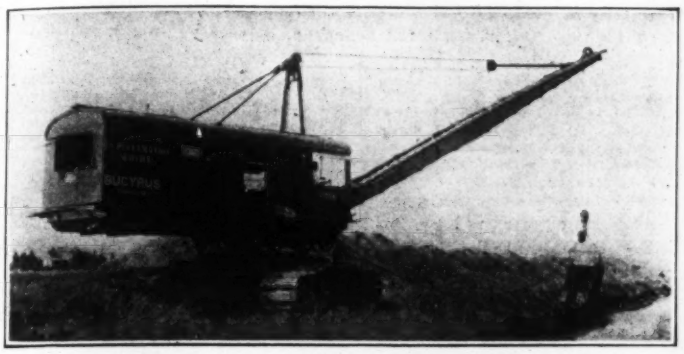

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For Bucket Work

1—75-ft. boom, Terry, wooden stiff-leg.
1—92-ft. boom, Terry, wooden stiff-leg.

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Standard Gage — **Saddle Tank**

5—14x22, 4-wheel Americans.
2—13x18, 4-wheel Americans.
2—14x22, 4-wheel Baldwins.
3—13x20, 4-wheel Baldwins.

STEAM SHOVELS

1—95C Bucyrus, 3½-yd. dipper, Serial No. 1415.
1—73 Osgood, 3-yd. dipper, Serial No. 496.
2—70C Bucyrus, 2½-yd. dipper, Serial No. 1782.
1—69 Osgood, 2½-yd. dipper, Serial No. 546.

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11—16-yd. K.&J., all-steel air dump, standard gage, rebuilt like new.

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From Our Large Stock of New and Overhauled Equipment

7-S Knickerbocker Concrete Mixer, gasoline driven.

10-ton Buffalo Pitts 3-wheel Roller with pressure scarifier.

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4 mi. 24-in. gauge Portable Track, 20-lb. rail.

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Also Forms, Graders, Concrete Mixers, Road Pumps, Shovels, Buckets, etc. Write for Complete List.

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1—Type B. Erie Caterpillar, ¾-yd. dipper, 22-ft. boom, 19-ft. sticks.
1—Type B. Erie Revolving Traction Type, ¾-yd. dipper.
1—No. 1 Thew 1-yd. dipper, Traction Type.
1—14 B. Bucyrus, Traction Type, ¾-yd. dipper.

Many other shovels—send for list.

LOCOMOTIVES

1—24-in. gauge, 7-in. x 12-in., 8-ton Locomotive.

80 Locomotives in stock—send for list.

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4 miles, 24-in. gauge, Kopple Portable Track, 20-lb. Rail.

We have 50,000 ft. 1½-in. Galvanized Steel Cable. New never used, recently purchased from government.

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Contractors Mchy. & Supply Co.

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Locomotive For Sale

1—Vulcan 5x10 Four Driver Saddle Tank, 36-in. gauge, in first class condition. Price $1500.00

KEISER-GEISMER ENGINEERING CO.
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40-TON LOCOMOTIVE

1—14x22, stand. gauge, 40-ton **American**, 4-wheel Saddle Tank, new late 1921, A.S.M.E. boiler, 190 lb. pressure, automatic couplers, slightly used, just overhauled, guaranteed like new.

Immediate Shipment—Attractive Prices

GREY STEEL PRODUCTS CO.
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New 30-in. gauge, 25 tons. Very attractive price. For particulars address.

FS-114, Engineering News-Record
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1—Whitcomb 6-ton, 24-in. gauge **Locomotive**, used 90 days, $2,250.
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20—Western, oak **Batch Boxes**, bottom dump, 37 cu. ft. capacity, with separate compartments for cement, sand and gravel; practically new, at $37.50.

The above equipment is guaranteed the same as new. Can be inspected at our warehouse.

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100,000 lbs. Capacity Flat Car

38 ft. long, steel underframe.
First class condition. Immediate shipment.

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We Buy and Sell Rails, Cars, Steel Piling, Etc.

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Late Type Thew **Steam Shovel,** ¾-yd. dipper.
Shipper shaft boom.
Rex 14-E **Paver** on wheels.
Bucyrus 70-C **Steam Shovel,** completely overhauled. Also
all other types of contractors' machinery.
What have you to offer?

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All Types—COMPRESSORS—*All Drives*

I am the only machinery dealer specializing in compressors, and have the largest stock—located in all sections of North America. Each inquiry will receive the benefit of ten years experience.

5320-5011 ft. PRE Ingersoll, Electric.
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1730 ft. O-CE Chicago, Electric.
1190-599 ft. XB-2 Ingersoll, two-stage belt.
706-445 ft. WJ-3 Sullivan, two-stage belt.
688 ft. ER-1 Ingersoll, single-stage belt, 45 lb.
324 ft. ER-1 Ingersoll, single-stage belt.
New—209 ft. Climax, single-stage belt.
121 ft. ER-1 Ingersoll, single-stage belt, 25 lb.
2588 ft. OC-3 Ingersoll, steam.
2570 ft. Laidlaw Feather Valve, steam, 80 lb. air.
1592 ft. X-1 Ingersoll, steam, 55 lb. air.
1955-1531-648 ft. XPV-3 Ingersoll, steam.
1190-599-446 ft. X-3 Ingersoll, steam.
888-599-446 ft. X-2 Ingersoll, steam.
396 ft. WB-2 Sullivan, steam.
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176 ft. N-SS Chicago, steam.

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2500 kw., Westinghouse Turbo, 3-60-2300.
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625 kva., Westinghouse Turbo, 3-60-2400.
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New 400 kw., Westinghouse Turbo, 3-60-240.
250 kw., Nat. Brake-Russell set, 3-60-2300.
202 hp. HRT Mass. Std. 165 lbs.
No. 5 Leyner Drill Sharpener.
20-ton Browning Loco. Crane, 50-ft. boom.
2—1000 ft. Cableways, Engines, no towers

BOILERS—GENERATORS—LOCOMOTIVE CRANES—DERRICKS, ETC.

10 High St.—***A. Lee Ellis***—Boston, Mass.

"The Buyer Must Be Satisfied—Always"

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PAVER

Ransome 21-E Paver, steam driven boom and bucket discharge. Has laid 2 miles 20 ft. road. $4,000.

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1—Lakewood Machine in perfect condition. $1,000.

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1—6-ton Plymouth. $2,200.
3—3-ton Plymouths. $1,200. Perfect condition.
6,000 ft. 24 gauge track; 15 batch-box cars with Hyatt roller Bearings; 30 batch-boxes 34 cubic ft.

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Complete New Concrete Plant

(used six mon*hs), including 180-ft. Insley steel tower, two 40-ft. bucket elevators, Blaw-Knox measuring batchers, 21-S Smith Tilting Steam Mixer, Lambert double drum concrete tower hoist —speed 350 ft. per minute, 80 hp. locomotive boiler, now located at Washington, D. C., on job. Save $4,000.

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FOR SALE

Rex (Chain Belt) Concrete Mixer, ½ yard capacity

Mixer is equipped with steam engine and boiler, power loader and automatic water tank, mounted on steel skids and trucks. Holds 24 feet of loose material. Thoroughly overhauled and equipped with new fittings throughout. For practical purposes. Like new.

We offer this mixer at a SAVING OF OVER $1,000.00. F.O.B. cars or truck, Metropolitan District.

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70-ft. boom; all steel. First class condition.

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Rails, Cars, Locomotives, Steel Piling, Etc.

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CONVEYORS	LOADERS	TRUCKS
CRANES	LOCOMOTIVES	TRACK
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Write, wire or phone for descriptions and prices of machines you need.

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2—10-ton **Buffalo Pitts Rollers.**
1—21-E **Rex Paver.**
1—100-ton **Blaw-Knox Bin.**
1—36x48 **Jaw Crusher.**
1—6-ton **Kelly-Springfield Roller.**
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1—Marion 60 **Steam Shovel.**
1—Type O **Thew Shovel.**
1—**Byers Auto Crane.**
1—**Mundy Swinging Engine.**
1—10-ton **Monarch Roller.**
1—24-in.x30-ft. **Belt Conveyor.**

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FOR SALE

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1—Foote Paver, size 27-E, with steam engine and boiler and distributing chute—$1800.
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For immediate shipment. Located close to New York; in good working order.

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14-E Rex, good as new, used but 4 weeks.
14-E Koehring.
No. 9 Koehring.

SUTTON & CORSON CO.
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TRAILERS—TRACTORS—TRUCKS

12—Troy Trailers. Drop Frame. Side Dump. High Speed.
1—10-ton Holt Caterpillar Tractor, 40-60 type.
2—5-ton Mack Chassis, Flusher Equipment.
All in First-Class Condition—completely overhauled

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Road-Rollers; Pavers; Shovels; Keystone Excavators; Locomotives; Track; Dump and Flat Cars; Hoists; Cranes; Graders; Finishers.

All necessary Equipment for complete plant.

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Steam Hoist with Boiler

1—Donegan & Swift, with 125-ft. ⅝-in. cable, 4½-in.x8-in. double cylinder, single drum.

Good as new, will sell cheap.

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1—Gyratory No. 6-F with fittings.

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Railroad Type

1—Model 92 Marion, 5 yd.
1—Model 80 Marion, 4 yd.
1—Model 60 Marion, 2½ yd.
1—70-C Bucyrus, 2½ yd.
1—Model 41 Marion, 1½ yd.
2—Model 40 Marion, 1½ yd.
1—Model 20 Marion, 1¼ yd.
1—Model 36 Marion, 1½ yd. (Revolving).

Crawler Type

2—Model 37 Marion, High Lift, 1¼ yd.
4—Model 36 Marion, High Lift, 1 yd.
1—225-B Bucyrus, 6 yd.
1— 50-B Bucyrus, 1¼ yd.
1— 35-B Bucyrus, 1½ yd.
5—Model 21 Marions, ¾ yd.
2—Model 28 Marions, ¾ yd.
2—18 Osgoods, ¾ yd.

Traction Type

1—Model 36 Marion, 1½ yd.
1—Model 30 Marion, ¾ yd.
2—18 Osgoods, ¾ yd.
2—Model 28 Marions, ¾ yd.
2—Type B. Erie, ¾ yd.
2—Type A. Erie, ½ yd.

LOCOMOTIVES

1—40-ton Davenport, 4-D, S.G. Switcher.
1—40-ton American, 4-D, S.T., S.G.
1—20-ton Lima, 4-D, S.T., S.G.
2—10x16-18-ton, 36-in. gauge Porters.
2—10x16-18-ton, 36-in. gauge Vulcans.
3— 8x14-14-ton, 36-in. gauge Vulcans.
1—50-ton, 36-in. gauge Climax Geared.
1—40-ton, 36-in. gauge Climax Geared.
1—10x16-18-ton, 42-in. gauge Porter.
1—6x10-7½-ton, 42-in. gauge Vulcan.
1—7x12-24-in. gauge Vulcan.
1—7x12-24-in. gauge Davenport.
1—8x12-24-in. gauge Vulcan.
2—3½-ton, 24-in. gauge Burton, Gasoline.
1—3-ton, 24-in. gauge Plymouth, Gasoline.
2—3-ton, 36-in. gauge Plymouth, Gasoline.
2—5-ton, 36-in. gauge W. Elec., Trolley Type.
1—8-ton, 36-in. gauge W. Elec., Trolley Type.

TRACK

2 miles track, 80-lb. rail, complete with splices.

CLAM SHELL BUCKETS

1— ¾-yd. Williams "Favorite."
1— ¾-yd. Blaw-Knox. 2—1¼-yd. Owen
1— ¾-yd. Owen. 1—1½-yd. Owen
4—1-yd. Owen. 2—2-yd. Owen

LOCOMOTIVE CRANES

1—25-ton, 8-wheel Ohio, 60-ft. boom.
1—20-ton, 8-wheel Ohio, 60-ft. boom.
1—20-ton, 8-wheel Industrial, 42-ft. boom.
1—14-ft., 6-in. ga. McMyler Whirley, 60-ft. bm.
1—10-ton Byers Crawler, Revolving, 35-ft. boom.
1—Byers Auto-crane, Semi-Caterpillar.

ROAD ROLLERS

1—10-ton, 3-wheel Kelly-Springfield.
1—10-ton, 3-wheel Buffalo-Pitts.
1—Steam Pressure Cylinder Scarifier.
1—"Porcupine" Scarifier.

PAVERS

1—14-E. Rex Traction, Steam.
1—21-E. Rex Crawler, Steam.

CARS

12—12-yd., S.G. Oliver Hand Dump (All Steel).
10—12-yd., S.G. Western Hand Dump.
14—12-yd., S.G. Western Air Dump.
12— 4-yd., 36-in. gauge Western Steel Beams.
20— 4-yd., 36-in. gauge Western Wood Beams.
12— 4-yd., 36-in. gauge K.&J. Steel Beams.
16— 3-yd., 36-in. gauge K.&J. Wood Beams.
9— 3-yd., 36-in. gauge Continental Wood Bms.
1—36-in. gauge Flat.
11—1½-yd., 24-in. gauge Western Wood Beams.
8—36-cu. ft., 24-in. gauge Koppel (Steel).

Also Air Compressors, Engines, Boilers, Derricks, Steam, Gasoline and Electric Hoists, Road Builders' Equipment, Concrete Mixers, Pumps, Crushers, Rails, Portable Track, Steam Hammers, Scrapers, and Wagons.

UTILITY EQUIPMENT COMPANY, Union Bank Bldg., Pittsburgh, Pa.

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Two hulls 90 ft. x 16 ft. each, clearance over all 35 ft., fully equipped locomotive type return tube boiler, triple drum 9 x 12 National hoist, swing engine, necessary spud hoists and spuds, etc., boom 55 ft. long.....$7500
1—10 16 Vulcan Locomotive, 36 in. gauge..... 1200
7—12-yd. Oliver Dump Cars (entirely rebuilt and not since used,) each.. 1000
1—65-ton Bucyrus Shovel..... 7500
1—70-ton Bucyrus Shovel..... 5000
1—1-yd. Haywood Orange Peel Bucket..... 550
1—3-yd. Haywood Orange Peel Bucket..... 1500

Also other construction equipment at low prices.

James H. Dawes, General Contractor, Tonawanda, N. Y.

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No. 3 Austin Ditcher For Sale

Used less than six months. Four cylinder Buffalo Engine, burns kerosene. Excavates ditch 12 ft. across top, 3 ft. across bottom, sloping sides. First-class condition.

MacAndrews and Forbes Company
3rd St. and Jefferson Ave., Camden, N. J.

STEAM HOISTS

7x10 Lidgerwood, D.C., Dble. Drum, with Boiler.
8¼x10 Flory, D.C., Double Drum, with Boiler.
8¼x10 American, D.C., Double Drum, with Boiler.
8¼x10 American, D.C., 3 Drum, with Boiler.
8x12 Flory, D.C., Double Drum, without Boiler.
8¼x10 Amer., D.C., Double Drum, without Boiler.

GASOLINE LOCOMOTIVES

3-Ton Plymouth, 24-in. Gauge.
6-Ton Whitcomb, 24-in. Gauge.
7-Ton Whitcomb, 24-in. Gauge.
3-Ton Plymouth, 36-in. Gauge.
10-Ton Port Huron Steam Roller, 3 Wheeler, D.C.
25-hp. Rumley Traction Eng., D.C., Steel Gearing.
3 Port Huron, Reversible, 6-yd., Steel Dump Cars.

ARTHUR S. PARTRIDGE
415 Pine Street, St. Louis, Mo.

FOR SALE

ROAD EQUIPMENT

1—10-ton **Austin Road Roller, gasoline.**
1—15-ton **Holt Caterpillar Tractor,** 75 hp.
2—**Maney Scrapers.**
1—**Little Giant Austin Western Road Grader.**
2500 lin. ft., 20 lb. 24-in. gauge industrial track in 15-ft. sections.

MIXERS

1—¾-yd. **Ransome Mixer,** mounted on skids, equipped with steam engine, side loader and batch hopper.

DRAGLINE

1—**Class 14 Bucyrus Dragline** mounted on caterpillar tractors. Shop No. 3562 with 70-ft. boom, 2-yd. Page bucket.

Above Equipment Located at Chicago

MELLON-STUART CO.
Fisher Bldg., Chicago

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New and second-hand structural steel; all sizes.
100 tons 4.1 military barb wire, galvanized.
C/1 Bessemer screw cutting stock, 9/32 in., 11/32 in., 5/16 in. and ⅜ in.
2—72-in. x 18-ft. H.R.T. Pennsylvania standard, 125 lbs., complete with fronts and fittings.
300,000 ft. Merchant Long Leaf Yellow Pine, sizes 12 x 14 and under.
200 pair six hole, 34-in., section A, 85-A.S. new angle bars.
Tanks (all sizes), Stacks, Contractors' Equipment, Hoisting Engines, Boilers, Pumps, etc.

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FOR SALE

AUSTIN TRENCHER

1—OO, used very little, like new. Also an **Austin Backfiller.**

R. F. RELLY CONTRACTING CO.,
Easton, Penna.

TRENCH MACHINES

1—Austin 00 digs 10 ft. deep up to 29 in. wide, gasoline driven.
3—Parsons Backfiller, caterpillar traction.
2—Buckeye No. 4, Gasoline driven.
1—042 Austin digs 18 ft. deep up to 42 in. wide, gasoline driven.

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FOR SALE

PARSONS' TRENCHING MACHINE

For Immediate Delivery

JOHN B. McLANE & COMPANY
Newport, Kentucky

MERRIMAN ASPHALT PLANT

We have for sale one rebuilt No. 1 Merriman 2000 yard, One-Car Steam Melting Asphalt Plant. It is in fine condition and we can make good delivery.

Here's your chance to get a real asphalt plant at a price that is right. Better get in touch with us quickly.

The East Iron & Machine Co.
Lima, Ohio.

For Sale Cheap

750,000 Belgian Square Trap Rock Paving **Block.**

Also

3—Whitcomb **Locomotives,** 15,000 ft. 20-lb. rail.
24-in. gauge **Koppel Cars** and Western Batch **Boxes.**

SAMPSON & REUTER
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FOR RENT OR SALE

Hoisting Engines
Air Compressors
Concrete Mixers
Boilers, Pumps
Derricks
Steam Shovels
Buckets and Smoke Stacks

Pierce Foundation Corp.
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Melrose 7678

FOR SALE OR RENT

STEAM SHOVELS

1—Model 18, Osgood, revolving, mounted on caterpillar, high-lift equipment, ¾-yd. dipper (New July, 1922).

1—Model 18, Osgood, revolving, mounted on caterpillar, high lift equipment, ¾-yd. dipper (New 1920).

1—Model 28, Marion, revolving, Shop No. 3375, traction wheels, standard boom, ⅝-yd. dipper.

1—18B Bucyrus, revolving, Shop No. 1764, traction wheels, standard boom, ⅞-cu. yd. dipper.

2—70C Bucyrus, Railway type, Shop Nos. 1499 and 1582, standard gauge, 2½-yd. dippers.

1—Little Giant, Railway type, standard gauge, equipped with standard boom, 1¼-yd. dipper.

GONDOLA CARS

50—80,000-lb. capacity, standard gauge; all cars in service. Specifications on request.

LOCOMOTIVE

1—24-ton, 6-wheeled, connected Whitcomb gasoline switcher, standard gauge, 6-cyl. Minneapolis engine.

TRACTORS AND TRAILER

1—10-ton Holt Caterpillar Tractor.
1—120-hp. Holt Caterpillar Tractor, completely rebuilt at factory
1—5-ton Troy Trailer.

DRAGLINES

1—Class 14 Bucyrus caterpillars, 60-ft. boom, 2-yd. bucket.
1—Class 24 Bucyrus, steam-operated, Shop No. 772, skids and rollers, 100-ft. boom, 3½-yd. bucket.
1—Class 24 Bucyrus Electric skids and rollers, 100-ft. boom, 3½-yd. bucket.
1—Monighan, A-1, steam, traction wheels 40-ft. boom, 1-yd bucket.

The above list is constantly changing. No matter what your machinery requirements are, write us—we may have it.

BECK & BABB, 29 La Salle Street, CHICAGO, ILL.

CRANE

Austin No. 4 full revolving gasoline driven Crane on caterpillar tread 35 ft. boom. Used two months.

LOCOMOTIVE

Baldwin 35-ton, standard gauge saddle tank 0-4-0 air brake and air dump.

A. J. O'Neill Company
1524 Chestnut St., Philadelphia, Pa.

EXCEPTIONALLY GOOD ITEMS

LOCOMOTIVE CRANES

1—25-ton Broad Gauge Locomotive Type Crane, 50-ft. boom, D.D., Bucket Handling, A.S.M.E. Boiler, new 1918. Perfect condition.
1—20-ton Browning D.D., 50-ft. boom, 8-wheel Mass. Boiler, Shop No. 1149. Located Phila.

ROAD CRANE

1—"Little Giant", Full Revolving Road Crane, mounted on traction wheels, 30-ft. boom, new July, 1920.

AIR COMPRESSOR

1—2000-cu. ft. Laidlaw, 2-Stage Tandem, Compound Steam Operated Air Compressor, new 1918. Perfect condition. Must be moved quickly. Will price right for quick sale.

SADDLE BOILER CARS

3—All-Steel Saddle Boiler Cars, 140,000-lb. underframe. Can be used also as Flat Cars. Standard gauge, 8 wheel. Perfect condition.

WE ALSO OFFER

Dredges, Shovels, Cars, Locomotives, Draglines, Road Equipment, Hoisting Engines, Etc.

WHAT ARE YOUR REQUIREMENTS?

B. M. WEISS

1324 Widener Bldg. Phone Locust 4816 Philadelphia, Pa.

LOCOMOTIVE CRANES

1—McMyler, 20 ton, 8 wheel, 40-ft. boom, bucket operating, located in Cleveland.

1—Orten & Steinbrenner, 15 ton, 8 wheel, 40-ft. boom, 1-yd. bucket, located in Elizabeth, N. J.

1—Interstate, 20 ton, 8 wheel, 50-ft. boom, bucket operating, located in Elizabeth, N. J.

1—Browning, 15 ton, 4 wheel, 50-ft. boom, bucket operating, located in Elizabeth, N. J.

1—Browning, 15 ton, 8 wheel, 38-ft. boom, bucket operating, located in Ohio.

1—Brown Hoist, 15-20 ton, 8 wheel, 42-ft. boom, book block.

1—Industrial, 7½ ton, 4 wheel.

1—Browning, 7½ ton, 4 wheel, electric.

Hoisting Machinery Co.
50 Church Street, New York.

LOCOMOTIVE CRANE

20-ton American, 8-wheel, M.C.B. Trucks, double drum arranged, for clam shell operation. A. S. M. E. boiler, 125 lb. working pressure.

Crane in excellent condition. Ready to put on job.

Big List Contractors Equipment

L. A. GREEN
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Phone Court 0690.

FOR SALE

BYERS AUTO CRANE MODEL "C"

Modern Type on Traction Wheels, in Excellent Operating Condition.

30 hp., 4 cylinder, Gasoline Engine
Car body, deep steel channels, 18 ft. long. Width outside wheels, 10 ft.
Derrick capacity 4,500 lb. at 20-ft. radius.
¾-yd. bucket capacity.
Length of boom, 30 ft.

Immediate Delivery.

THE NEW LONDON SHIP & ENGINE CO.
Groton, Connecticut.

Railroad Cars

100—80,000-lb. capacity flat cars; new bodies.

100—80,000-lb. capacity box cars; thoroughly rebuilt.

35—100,000-lb. capacity tank cars; good as new—7,200-gal. capacity.

Houston Railway Car Co.
Houston, Texas.

FOR SALE

Cranes—Shovels

1—Osgood "18" Steam Shovel. On traction wheels. In excellent condition. Price $3000.

1—P & H "205" Crane. ½-yd clamshell. Only used four months.

1—Keystone No. 6 with ditching and skimmer attachments. New in 1921, just overhauled. Price $3200.

(Other Equipment not listed)

G. C. WILLIAMS
28 East Jackson Blvd., Chicago, Ill.
Phone: Wabash 9327.

LOCOMOTIVE CRANES

No. 205 P & H 30-ft. boom, ¾-yd. bucket.
No. 3 Byers, 32-ft. boom, ¾-yd. bucket, steam.
BYERS AUTOCRANE, 30-ft. boom, 1-yd. bucket.

STEAM SHOVELS

Model 28 Marion, ⅝-yd. dipper, traction.
No. 0 Thew ⅝-yd. dipper, railway type.
3—Model 60 Marion, 2½-yd. dipper, railway type.
225-B Bucyrus Electric Shovel, 5, 6, 8-yd. Bkts.
110-C Bucyrus Standard Gauge Shovel.

BOILERS

2—100 hp. Locomotive type, 100 lb.
60 hp. Locomotive type, 90 lb.

HOISTS

25 and 50 hp. Electric Hoists, D.D., Dragline, 440 v., 60 cy., 3 ph. motors.
100 hp. Thomas 2-speed, 220 v., 3 ph., 60 cy.
Contractors and Rock Crushing Equipment.

ROSS POWER EQUIPMENT CO.
Indianapolis, Ind.

FLAT CARS

40 STD. GAGE 20,000 LBS. CAPACITY
4 WHEEL—ROLLER BEARING

All-Steel Construction. GOOD AS NEW.

Suitable for general industrial purposes as push cars or with gasoline or steam locomotives. Auto couplers; weight 2700 lbs. each.

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Rail, Locomotives, Steel Piling, Cranes, Tanks, Etc.

We Buy, Sell, Rent and Rebuild

CONTRACTORS EQUIPMENT

For Immediate Delivery

Browning ⅞-yd. Caterpillar Shovels

CATERPILLAR CRANES

Browning 7½-ton Caterpillar Cranes, 38-ft. boom.

TRACTION WHEEL SHOVELS

Marion Model 31, on traction wheels.
Type 3-A Thew 22-ft. dipper sticks, 1¼-yd. dipper, shipper shaft type.
Type A-1 Thew, on traction wheels, ⅞-yd. dipper.
1—Electric Self-Generating Locomotive Crane, mounted on traction wheels.

LOCOMOTIVE CRANES

1—20-ton, 4-wheel Browning Crane, 40-ft. boom.
1—15-ton, O. & S., 8-wheel Crane, 40-ft. boom.
1—30-ton Browning Crane, 8 wheel, 40-ft. boom.
1—20-ton Browning Locomotive Crane, 8 wheel, 50-ft. boom.
1—Brown Hoist, No. 4-J Locomotive Crane, 50-ft. boom.

STRIPPING SHOVELS

New and used, ranging in capacity from 2 to 6 yds., either steam or electric driven.

VICTOR R. BROWNING & CO.
Lock Box 27, Collinwood Station,
Cleveland, Ohio.

LOCOMOTIVE CRANE

1—25-ton, 8-wheel, stand. gauge Browning No. 5-C, built late 1921, A.S.M.E. boiler, 50-ft. boom, double drums, outriggers, slightly used, just overhauled, like new.
Immediate Shipment—Attractive Price.

GREY STEEL PRODUCTS CO.
111 Broadway, New York, N. Y.

CRANE

100-ft. Radius, American Hoist and Derrick Cos., 60-ft. lift. Six ton capacity. Complete with Hoisting Engine and fittings. (Excepting guy lines and cables). This machine is new—never erected, perfect condition. Bargain, at less than 1/3 of its value.

SPECIALTY ENGINEERING CO.
Allegheney Ave. & Trenton Ave., Phila.

FOR SALE

LOCOMOTIVE CRANE

Osgood "29" Mounted on standard railroad trucks for clamshell or crane service, 40-ft. boom.

THE LAKEWOOD ENGINEERING CO.
Cleveland, U. S. A.

WE OWN AND OFFER

CRANES

Cranes are standard, 25 to 30 ton, Link Belt, locomotive crane tops, mounted on all steel heavy Gantry sub-structure. Full revolving, steam operated, Mass. std. boilers, self-propelling, 20-ft. gauge, 90-ft. booms (52-ft. with 38-ft. center section), 22-ft. clearance in heighth.

Cranes all perfect condition, like new.
Immediate Delivery

B. M. WEISS

1324 Widener Bldg., Philadelphia, Pa.

LOCOMOTIVE CRANES

1—Brownhoist 15-ton Locomotive Crane, 8-wheel, Built 1919.
1—O&S 18-ton Locomotive Crane, 8-wheel, bucket-handling.
1—O&S 15-ton Locomotive Crane, 8-wheel, bucket-handling.

LOCOMOTIVES

1—17x24 in. Baldwin 6-wheel shifter, built 1907; 180 pounds working pressure.
1—18x24 in. Brooks 6-wheel shifter, 160 pounds working pressure.
1—28-ton Standard Gauge Shay Geared Locomotive.
10—36 in. Gauge Electric Storage Battery Locomotives. Also other Locomotives; Steam Shovels, Steel Rails, etc. Complete list sent on request.

Birmingham Rail & Locomotive Co.
Birmingham, Ala.

Clyde Crane

New, Never Used

Will handle material, can be used as dragline or hoist. Write for bargain price.

STROUD & COMPANY
Omaha, Nebr.

Step Out With Me—

and look at my BIG BROWNHOIST Locomotive Crane Dragline at Chicago. A real money maker for someone—you perhaps. I have priced it at less than half the manufacturer's price. Used only 4 months. 100 ft. boom, full revolving; mounted on two 8-wheel R.R. trucks, spaced 24 ft. between centers. Self-propelling.

Other Money Makers

A rebuilt INDUSTRIAL, 8-wheel, M.C.B., capacity at 12-ft. radius 25-TONS with outriggers, 20-TONS without outriggers; new 50-ft boom; new A. S. M. E. boiler; 1 YEAR'S GUARANTEE. Location: Bay City, Mich.

A 20-TON INDUSTRIAL 8-wheel M.C.B., double drums, 50-ft. boom, 1½-yd. clamshell bucket. Fine condition. Location; La Salle, Ill.

A 25-TON BROWNING No. 8, 8-wheel, M.C.B., equipped with double drums, 52-ft. boom and turbo-generator. Location; Bay City, Mich.

A Model E, 25-TON OHIO, 50-ft. boom, 8-wheel M.C.B., double drums with 7½-kw. generator. New A. S. M. E. boiler. Location; Franklin, Pa.

A large 14-ft. gage McMYLER, 64-ft. boom, 2½-yd. clamshell bucket, Ohio-Massachusetts boiler, double drums. Excellent working condition. Location; Port Huron, Mich.

A 10-TON capacity McMYLER, 50-ft. boom, 1½-yd. bucket, double drums, A.S.M.E. boiler, 4-wheel, std. gage. Can be made 8-ft. gage. Location; Port Huron, Mich.

A 20-TON BROWNHOIST, 8-wheel, M.C.B. 40-ft. boom. Location; Chester, Pa.

A 12-TON O. & S., 8-wheel, M.C.B., single drum, 54-ft. boom. Location; St. Louis, Mo.

2 OSGOODS, single drum, 4-wheel R.R. trucks, 35-ft. booms. Location; Lincoln, N.J.

An OSGOOD, single drum, 4-wheel R.R. trucks, 40-ft. boom. Location; Kingston, N.Y.

A 10-TON INDUSTRIAL, 4-wheel, single drum, 35-ft. boom. Old machine, but in good operating condition. Priced especially low. Location: Pottstown, Pa.

A 15-TON BROWNING, 8-wheel, M.C.B., 40-ft. boom, single drum. Priced low for quick sale. Location: Pottstown, Pa.

Brand New—To Rent

1—17½ Ton INDUSTRIAL
1—20 Ton OHIO

Philip T.
KING
"The Crane Man"
30 Church St., New York

HOLT TRACTORS

(caterpillar)
12-TON and 10-TON
Both in Fine Overhauled Condition
VERY CHEAP for QUICK SALE

CROCKWELL MINE & MILL SUPPLY CO.
907 Fed. Reserve Bldg., St. Louis

FOR SALE

Gantry Tower Cranes

New
Electrically Operated
78-ft. high—65-ft. boom—18-ft. between rail centers.
Capacity 40,000 lbs.

POTTSTOWN STEEL COMPANY
Douglassville, Pa.

Some Real Purchases

Immediate Shipment

1—20-ton McMyler Interstate Locomotive Crane.
1—10-ton McMyler Interstate Locomotive Crane.
2—Thew Traction Steam Shovels.
1—7x12 Saddle Tank, 24-in. Gauge Davenport Locomotive.
1—10x16 Saddle Tank, 36-in. Gauge Porter Locomotive.
1—65-ton Bucyrus Steam Shovel, 2½-yd. dipper.

Exceptionally Low Prices

Please Telegraph, Telephone or Write Us If Interested.

A. C. TORBERT
Continental and Commercial Bank Bldg., Chicago, Illinois.

STEAM SHOVELS

1—Model 37, on crawlers.
2—Type "B" Erie, on crawlers.
1—No. 18 Osgood, on crawlers, with crane attachment.
2—Type "B" Erie, on traction wheels.
1—Model 20 Marion.

LOCOMOTIVE CRANES

1—20-ton Industrial, on MCB trucks, with 42-ft. boom.
1—Byers Auto. Crane, on crawlers.

HOISTING ENGINES WITH BOILERS

1—7¼x10 D.C. three drum Mundy.
1—6½x12 D.C. three drum Mundy.
1—6½x12 D.C. two drum Mundy.
1—8½x10 D.C. two drum Lambert.
1—7½x10 D.C. two drum Lambert.
2—7 x10 D.C. two drum Lidgerwood.

HOISTING ENGINES WITHOUT BOILERS

1—9 x13 D.C. three drum National.
1—8½x12 D.C. single drum Lidgerwood.
1—9 x10 D.C. single drum Lidgerwood.
2—8¼x10 D.C. two drum Lidgerwood.
1—9 x12 D.C. single drum Pen Argyle.
1—10 x15 D.C. single drum Bacon.
1—12 x15 D.C. single drum Bacon.
1—8½x12 D.C. single drum Lambert.
3—7 x10 D.C. single drum Carlins.
1—6¼x 8 D.C. single drum Lidgerwood.

ELECTRIC HOISTS

1—3-drum Clyde 75-hp.,550-v. D.C. motor.
1—2-drum Thomas 50-hp.,220-v. D.C. motor.
3—2-drum Thomas 30-hp.,220-v. D.C. motor.
3—2-drum Thomas 30-hp.,220-v. A.C. motor.

SWINGING ENGINES

1—7 x8 American.
1—5½x8 Lambert.
1—4 x6 National.
1—4 x6 Mead-Morrison.

Derricks, Boilers, Pumps, Concrete Mixers, Road Rollers, Air Compressors.

Everything for the Contractor

Pittsburgh Machinery & Equipment Company
Fulton Bldg., Pittsburgh, Pa.

Repaired Equipment

Steam Shovels

2—Type "B" Erie, ¾-yd., traction wheel, standard booms, shop numbers 206 and 312.

1—Type "B" Erie, ¾-yd., traction wheel, high lift, shop number 914.

3—Model 28 Marions, ⅝-yd. dipper, traction wheels, shop numbers 3134, 3137 and 3229.

4—Model 60 Marion RR type. 2½-yd. dipper, shop numbers 1995, 1999, 2059 and 2372.

1—Model 70 Marion RR type, 2½-yd. dipper, shop number 2693.

Locomotives, Standard Gauge

1—18x24-in., 60-ton, 6-wheel Switcher with side tanks.

12-yard Standard Gauge Cars

20—26-ft. bed Western, air-dump.

36 in. Gauge Saddle Tank Locomotives

5—10x16-in. H. K. Porter, 18-ton.

Also a large stock of miscellaneous construction machinery including railroad ditchers and locomotive cranes. All the above equipment is located at our Pittsburgh shops where inspection can be made.

H. KLEINHANS COMPANY

Union Trust Building, Pittsburgh, Pa.

STEAM SHOVELS

Thew No. 0 Traction, Electric.
Erie B Caterpillar, ¾ yd., high lift.
Erie B Traction, ¾-yd., standard.
Erie B Traction, ¾ yd., high lift.
Marion 21 Caterpillar, ¾ yd.
Marion 31 Caterpillar, 1 yd.
Marion 28 Traction, ¾ yd., attractive price.
Marion 36 Caterpillar, 1½ yd.
Marion Railroad 41, 60, 61 and 70.
Bucyrus Railroad 70-C and 100-C.
Osgood Railroad 43, 69 and 73.
Osgood 18 Traction, ¾ yd., standard.
Large Revolving Stripping Shovels.

Cars—Locomotives—Cranes

W. R. WADDELL
50 Church St., New York
Tel.: Cortland 4873

A REAL BARGAIN

Model 92 Marion Steam Shovel

with 5-yd. Dipper. Machine is as good as new. Three years old, but handled only about 200,000 yards soft material.

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Monadnock Bldg., Chicago, Ill.

FOR SALE

Two—4 cylinder Reo Motor 15 Passenger Busses

Mounted on Standard Steel RR Wheels and Axels

Also a 13-foot Long Box Car Trailer

All in Good Condition

A very handy, convenient and economical outfit for a small railroad

Also the original tires and axels to readjust for general road work

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Bargain for Quick Transaction

Hyman-Michaels Company
531 Peoples Gas Bldg., Chicago

STEAM SHOVEL

18-B Bucyrus, shop No. 2031.

DUMP CARS

24—3-yd. Double Truck, 24-in. gauge.
8—Camp Cars, standard gauge.

LOCOMOTIVES

2—8½x12 Davenport Geared, A.S. M.E. Boilers, 24-in. gauge, shop Nos. 1823 and 1824.

All of above equipment in first class condition.

Porter Bros., Norfolk, Va.

FOR SALE

USED CONTRACTORS' EQUIPMENT

SHOVELS

1—Erie Type B, ¾-yd., caterpillar tread, only moved 25,000-cu. yd. excavation, attachment; 1—36-ft. boom and 1-yd. clam shell bucket.
1—No. 3 Keystone Excavator, with skimmer and ditcher attachments. Rebuilt.

CRUSHER

1—13x30 Farrell Jaw Crusher, extra set jaws and flywheels, drive belts, line shaft, etc.

PAVERS

1—18-E Koehring boom and bucket, laid three mile road.
1—14-E, Lakewood, boom and bucket, laid five mile road.

Low Prices, Write for Information

Hagerstown Equipment Company
Hagerstown, Maryland

FOR SALE

***NEW* HAYWARD**

CLAM SHELL BUCKETS

Class E

Sizes:

1 cu. yd. 1½ cu. yd. 1⅝-cu. yd.

At two-thirds of present prices
Immediate Delivery from Brooklyn Stock

MARVIN BRIGGS, INC.
167 Sixth St., Brooklyn, N. Y.

ALBERT PIPE SUPPLY CO.

Berry and North 13th St., Brooklyn, N. Y.

Special Offerings

Second Hand Standard Line Pipe

25,000 ft. 2 in. Pipe 9 cents ft.
25,000 ft. 3 in. Pipe 19 cents ft.
25,000 ft. 4 in. Pipe 26 cents ft.
50,000 ft. 6 in. Pipe 50 cents ft.
5,000 ft. 12 in. Pipe 50 lb. Pipe $1.25 ft.

F.O.B. cars Ohio, shipping point, good threads and couplings.

1000 tons ½ in. to 20 in. S. H. Black and Galv. Pipe
New threads and couplings.

NEW PIPE

1000 ft. 8 in. New Galv. 29 lb. Pipe $1.45 ft.
1500 ft. 16 in. New Bl. Steel Pipe ⅞ in. wall P. E. $3.00 ft.

400 tons New Black & Galv. Pipe ½ in. to 3 in. inclusive

Second-Hand and New

PIPE

¾ to 18 inch with threads and couplings.
Guaranteed for service.
Pipe up to 18-in cut to sketch.

Pipe & Contractors Supply Co.
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SECOND-HAND PIPE

All Sizes.
Immediate Shipment
from Stock.
Right Prices.

J. SAVESKY'S SONS
Marion, Ind.

Second Hand PIPE Guaranteed Retested

Wrought Iron or Steel. Straight lengths 16 ft. and over, with new threads and couplings. Also pipe cut to sketch. Large stock always on hand for prompt shipment. Get our prices.

LINK PIPE & SUPPLY CO.,
Ferry and Foundry Sts., Newark, N. J.

Established 1904

ALBERT & DAVIDSON Corporation

FOR SALE
Second-Hand and NEW

PIPE

Large Stock
All Sizes
Threaded and with Couplings
Also Cut to Sketch

256-264 Oakland Street, Brooklyn, N. Y.

WROUGHT IRON AND STEEL PIPE

New and second-hand. With new threads and couplings. All sizes from ⅛ to 12 in. Also cut to sketch.

DAVIDSON PIPE & IRON CORP.
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PIPE SECOND HAND

With new threads and couplings; also cut to sketch.

PFAFF & KENDALL
Ferry & Foundry Sts., Newark, N. J

FOR SALE

HEAVY PIPE

75-tons New Black Special Extra. Plain ends. Long lengths.
Approximate dimensions are 4½-in. I.D., 5⅝-in. O.D., weighing 24½ lbs. to foot.

FLOWER CITY PIPE & IRON CORP.
P.O. Box 558, Rochester, N. Y.

FOR SALE

Cast Iron Water Pipe

1200 ft., 8 in., Class B bell and Spigot. *Good as new. Immediate shipment.*

WALTER A. ZELNICKER SUPPLY CO.
St. Louis, Mo.

Second Hand Wrought Iron and Steel PIPE Overhauled Rethreaded Coupled

All Sizes in Stock

Greenpoint Iron & Pipe Co., Inc.,
330-332 Graham Avenue, Brooklyn, N. Y.

0-4-0 Switcher

40-ton, 8 wheel. 160 lb. steam working pressure. Air brakes. Reported by inspector in good operating condition. Price $4,000 f.o.b. Newton Falls, N. Y.

W. D. Arnot Purch. Agent
Newton Falls Paper Co.
Newton Falls, N. Y.

For Sale at a Sacrifice Price

NEW PIPE

25 pieces 12-in. Submarine Flexible Ward Joints 12-ft. lengths weighing 1330 lb. each.

LUNA AMUSEMENT COMPANY
Coney Island, New York

PIPE

Large Stocks, New and Second Hand.
Immediate Delivery

L. & D. Pipe Supply Co., Inc.
1096 Flushing Avenue, Brooklyn, N. Y.

1500 Tons

85 lb. A. S. C. E. Section

Relaying Rails

with Angle Bars

Immediate Shipment

Central South and Southwestern delivery

S. W. LINDHEIMER
1st National Bank Bldg.
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Rails and Track Material

RAILS

New and Relaying

All sections in stock. Bridge girders, locomotives, cars.

M. K. FRANK
Union Trust Bldg., Pittsburgh, Pa.

PILING

Steel Sheet Piling

Lackawanna and United States in various lengths for immediate shipment.

BROWN & SITES CO.

Main Office:
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Steel Sheet Piling

FOR RENT

Bought and Sold

J. R. WEMLINGER & CO., Inc.
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FOR SALE

STEEL SHEET PILING

350 pieces 12-ft. and 15-ft. lengths.
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60 pieces 50-ft. Lackawanna Wedge Piles.

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Volume 90 New York, June 28, 1923 Number 26

Engineering News-Record

A CONSOLIDATION OF ENGINEERING NEWS, ENGINEERING RECORD, AND THE CONTRACTOR

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Sixty Long Timber Columns Tested 1117
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Earth Dam Built by Flooding Dry Fill 1118
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Engineering News-Record, June 28, 1923. 8¾ cols.

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How One Man Landed a Job

THERE are more ways than one to use "Engineering News-Record." Here is the story of how the paper helped a construction foreman locate a job in California:

"ONE DAY, while I was working for the —— Construction Co. in Massachusetts as a concrete labor foreman, I felt like going away some place. I told the superintendent that I wanted to go away but he did not want to believe that. However, next morning, instead of going to work, I took the train for Boston.

"After two days in Boston I would have had some work but thinking that I had worked for the —— Construction Co. for about 15 years, beginning as a water boy and becoming a boss, and not wanting to go back, being ashamed to as I left there without reason, I thought I would go to Los Angeles for the winter. I telephoned the Boston office to tell them that I was leaving for Los Angeles and they asked me if I was going into motion pictures and I answered that I was going to California for a vacation, so I took the train for Los Angeles.

"WHEN I arrived at Chicago I opened my suit case and found *Engineering News-Record* and saw that they were doing more concrete work in San Francisco than in Los Angeles, so I took the train for San Francisco, and as soon as I arrived there and stepped out of the ferry building, I saw that they were building a 16-story office building. I went to see the superintendent. I told him I always had worked as boss and that I was looking for work and he told me that I could go to work at once as a stripping foreman.

"With best regards to *Engineering News-Record* that I have a very nice job, I beg to remain,

"Yours truly,
"—— ——."

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MOTOR TRUCK WINCH

hauled this 26-ton boiler more than 3 miles over winding, hilly roads, and lowered it into a pumping station.

Mead-Morrison Vertical Capstan Winches are safe, sure, silent, compact. They load, move and haul a surprising variety of loads and make money for their owners by *letting the engine do the work.*

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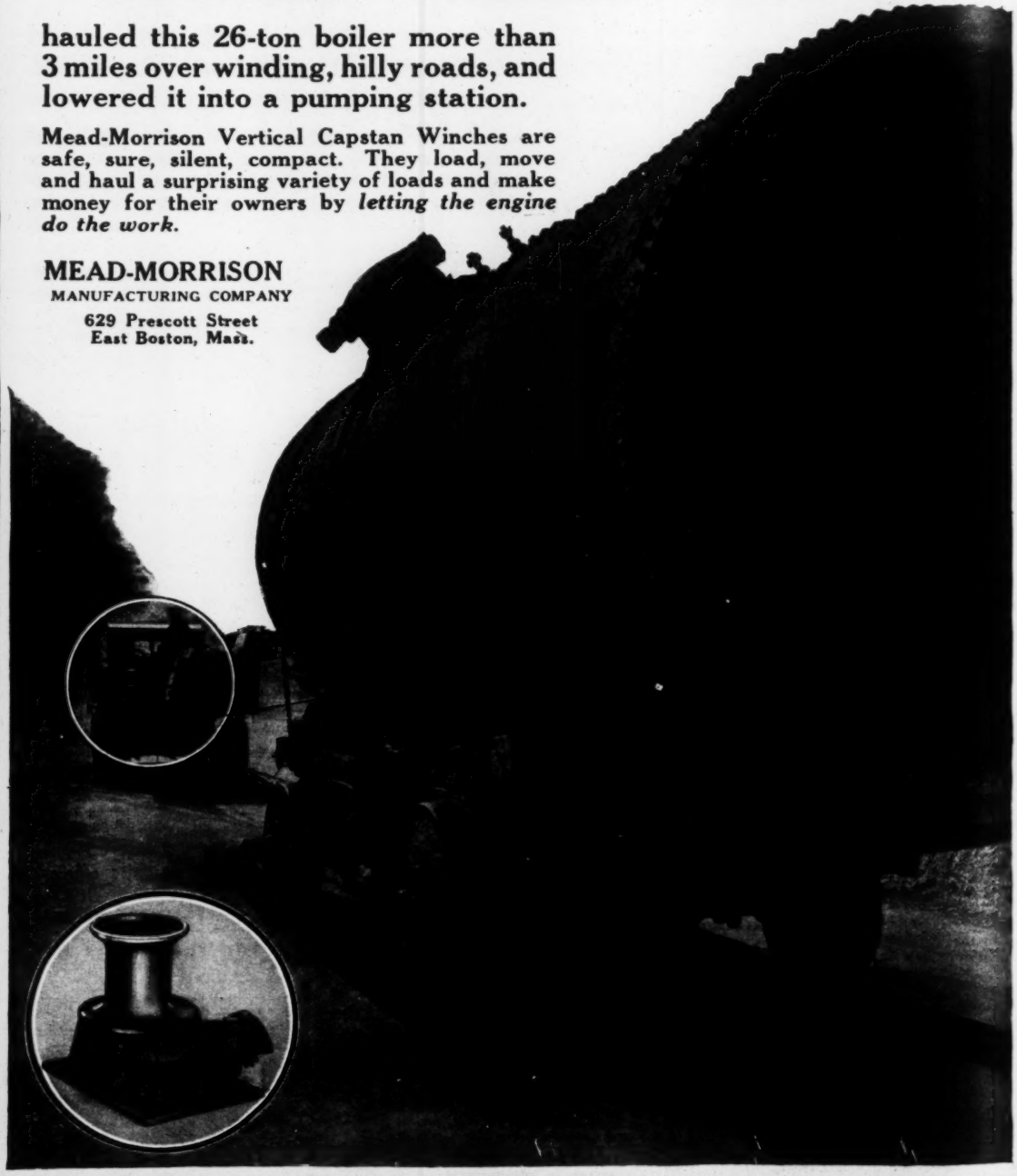

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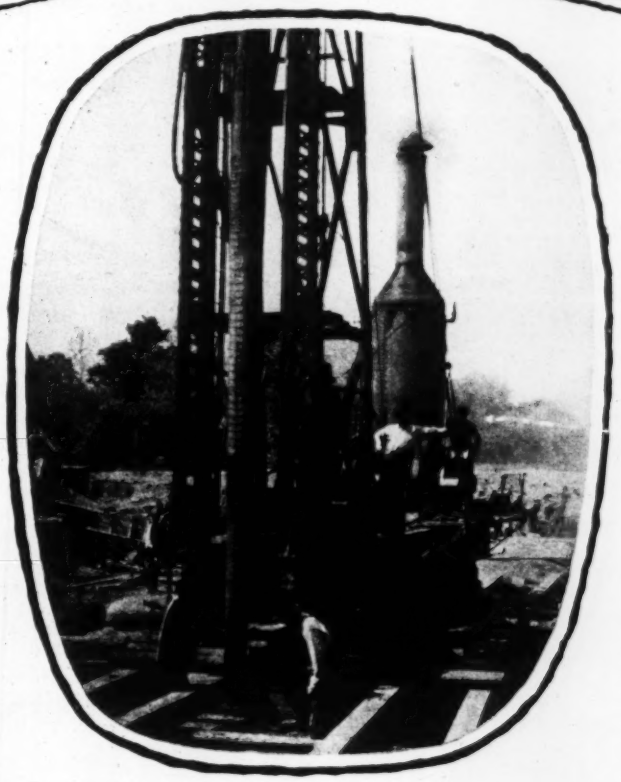

The Architect or Owner who wants to be absolutely certain that every Concrete Pile will be perfect insists on such piles being driven by the famous RAYMOND Method, using a spirally reinforced steel shell that is left in the ground.

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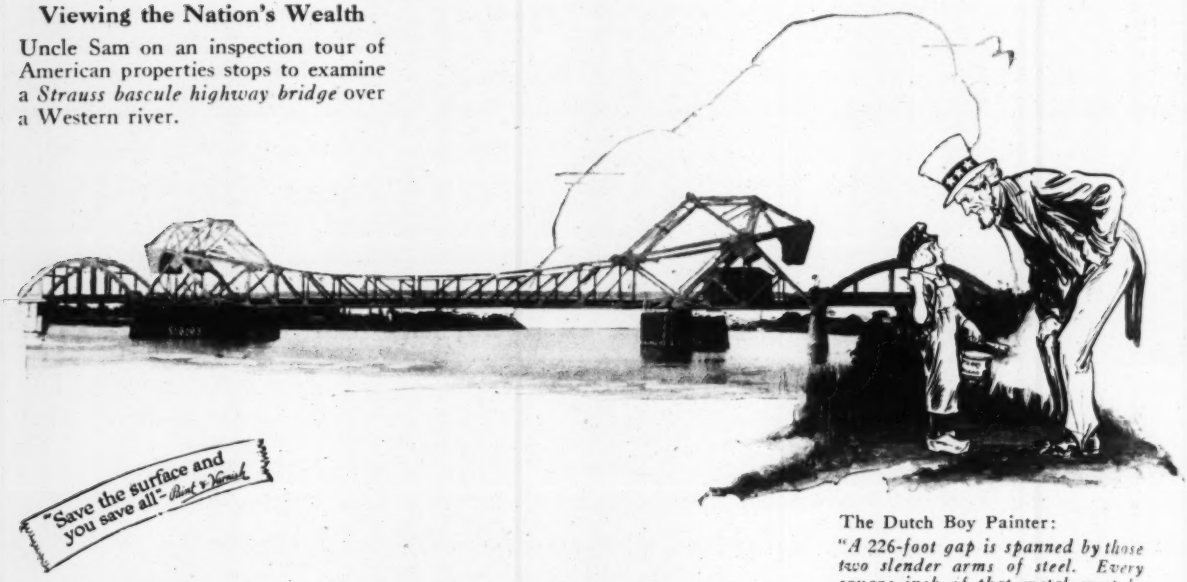
"A form for every pile—A pile for every purpose"

Viewing the Nation's Wealth

Uncle Sam on an inspection tour of American properties stops to examine a *Strauss bascule highway bridge* over a Western river.



The Dutch Boy Painter:
"A 226-foot gap is spanned by those two slender arms of steel. Every square inch of that metal must be protected with plenty of red-lead paint. Otherwise, rust will get in its work of destruction. Red-lead is the surest, safest protection against corrosion."

Closed to shipping— but wide open to corrosion

UP and down these balanced levers smoothly swing. They are strong. The engineer has provided for every stress and strain.

But if this bascule construction is to *remain* strong, each square inch of steel must be protected against rust. Each square inch of steel must be kept covered with good paint.

For many years red-lead has been recognized as metal's most effective defense against corrosion. Extensive tests have been made under all possible conditions. But all research only emphasizes the rust-resisting qualities of red-lead.

Because it is pure red-lead, Dutch Boy Red-Lead supplies complete protection to all classes of metal construction and equipment. It is specified by name because of its *known* standard of quality.

Dutch Boy Red-Lead gives a tough, elastic covering that expands and contracts without cracking. It sticks tight to clean metal and does not flake off or scale. It has unusual spreading power. A given quantity will cover more surface than the same amount of most other paints.

You can get Dutch Boy Red-Lead in paste form and as a liquid ready for the brush. For shop painting and priming coats the straight, untinted red-lead should be used. The *liquid* comes also in browns, greens and black for finishing coats. The untinted *paste* can be tinted to any dark color.

Specify Dutch Boy Red-Lead by name. *There is no "or equivalent"!*

Write for Painting Helps No. 5.

NATIONAL LEAD COMPANY

New York, 111 Broadway; Boston, 131 State St.; Buffalo, 116 Oak St.; Chicago, 900 West 18th St.; Cincinnati, 659 Freeman Ave.; Cleveland, 820 West Superior Ave.; Pittsburgh, National Lead & Oil Co. of Pa., 316 Fourth Ave.; Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut St.; St. Louis, 722 Chestnut St.; San Francisco, 485 California St.

Dutch Boy Red-Lead

Detail representing the construction of fireproof flooring first used in this bank building erected in 1855. Iron joists, constructed from two curved sheets and two flat strips, riveted top and bottom, rested on iron girders. Above the joists corrugated iron sheets supported a concrete filling, over which was laid the wood flooring.

Three-Quarters of a Century!

THREE-QUARTERS of a century ago a broad-visioned architect specified riveted iron joists for the floors of this historic bank building. His specification originated the first light weight type of fireproof construction.

Previous to this time heavy structural steel forms had been deemed essential for permanent floors. The record of seventy-five years of service, however, has far more than justified this architect in his radical departure from former standards.

When this bank building was finally torn down to make way for a large and modern edifice, its floors were still found to be in perfect condition. The ravages of time and wear had in no way impaired or damaged them.

Science, too, within recent years has fully demonstrated the correctness of the theory upon which these floors were built—that fire-safety, durability and permanence are not dependent upon the weight and mass of the materials employed. And today thousands of buildings bear testimony to the growing popularity of this steel joist fireproof construction.

With the introduction of Truscon and National Steel Joists, the Truscon Steel Company has played a conspicuous part in the development of fireproof, permanent, yet light weight and economical flooring for all light occupancy buildings. Such flooring constitutes a saving, not alone in first cost, but in upkeep costs. It is crack-proof, vermin-proof and in every way suited to meet the ideals of present-day building.

If you are planning a home, office building, hotel apartment, store, school, etc., learn more of the safety, economy and durability of steel joist floor construction. Write today for detailed information and descriptive booklet.

TRUSCON AND NATIONAL STEEL JOISTS

TRUSCON STEEL COMPANY
YOUNGSTOWN, OHIO, U. S. A.
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For addresses see 'phone books of principal cities.
Canada: Walkerville, Ont. Export Div.: New York.
National Steel Joist Co., Massillon, Ohio

The great advance made in modern fireproofing is illustrated by this Truscon Steel Joist Floor Construction. Simple to install. Merely place the joists and apply the metal lath above for concrete and below for plastered ceilings. No fitting, no forms, no false work—no special equipment. Used everywhere for apartments, schools, stores, hotels, first floors of homes, etc.

At left—a CP-5 Rock Drill in operation. *Above—illustration showing the CP-5 Rock Drill.*

CP-5 Rock Drill—
a strictly one-man drifter

THE CP-5 Rock Drill is a strictly one-man machine. It weighs from 35 to 60 pounds less than other heavy mounted-type drifters. It sets low in its cradle. It has no bothersome knobs. It insures quicker set-ups with less labor. It permits changing drill steel without affecting alignment. It works *with* the operator. For example, the hose stays close to the drill out of his way.

The CP-5 is proving indispensable for heavy drifting, cross-cutting and tunneling, because it combines the *speed* and *power* of heavier drifters, plus *light weight*, *ease of operation*, *durability* and *upkeep economy*.

In formations varying in hardness from slate to jasper, the CP-5 equalled the performance of 160-170-pound drifters. This performance record was made possible by certain outstanding features fully outlined in Special Publication 697. Request *your* copy today.

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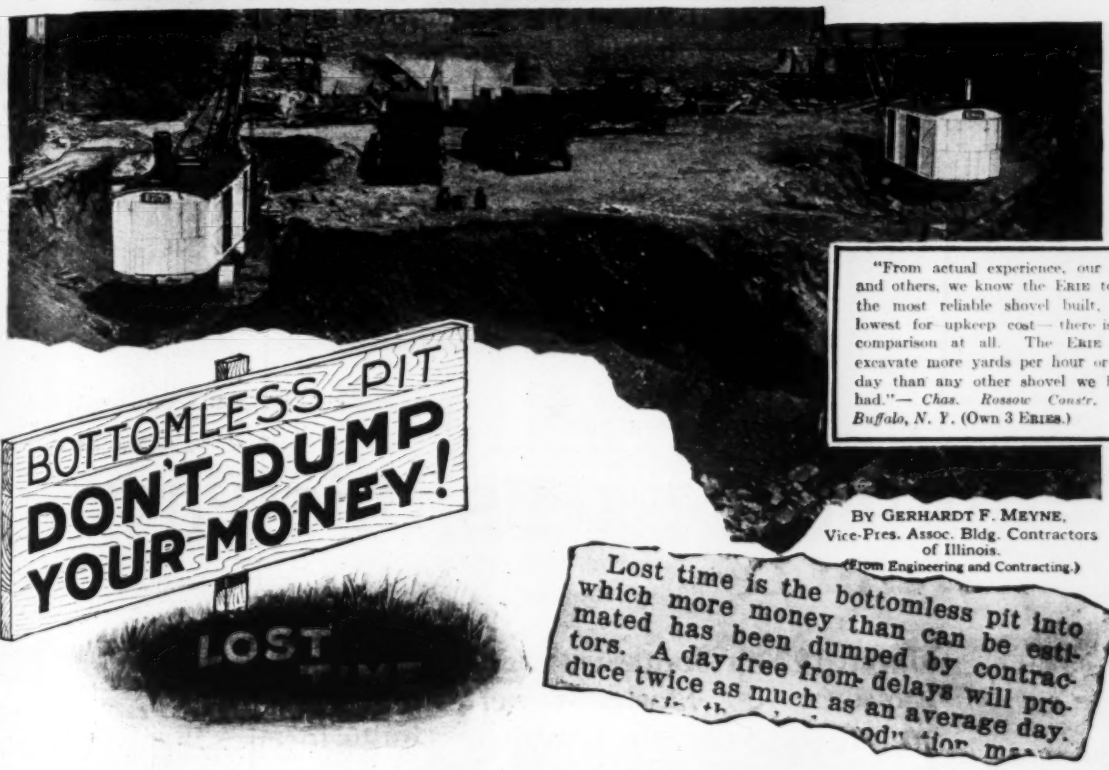
Rock Drills

Most sections have only 150 to 200 days a year of good weather suitable for outside work

Use the Shovel that WORKS EVERY GOOD DAY



"From actual experience, our own and others, we know the ERIE to be the most reliable shovel built, and lowest for upkeep cost— there is no comparison at all. The ERIE can excavate more yards per hour or per day than any other shovel we have had."— *Chas. Rossow Constr. Co. Buffalo, N. Y.* (Own 3 ERIES.)

BY GERHARDT F. MEYNE,
Vice-Pres. Assoc. Bldg. Contractors of Illinois.
(From Engineering and Contracting.)

Lost time is the bottomless pit into which more money than can be estimated has been dumped by contractors. A day free from delays will produce twice as much as an average day.

These contractors, and hundreds like them,

know better than to throw their money into the "lost-time" pit:

"I would advise any contractor who is in the market to buy an ERIE— because it stands up. If we were to get another shovel it would be nothing but an ERIE.

"We have had our ERIE for nine months and have spent about ten dollars for repairs; most of our work is heavy grading and large cellars."— *Daniel Haupert, Haupert & Lombardi Brooklyn, N. Y.*

"The ERIE cannot be compared to any other machine that I have seen or used. Before purchasing my ERIE I owned another shovel which I was obliged to sell because of its extremely high upkeep cost.

"Grading roads and digging sewers with my ERIE for a year and a half, my repair cost has been only $9.00."— *C. A. Johnson, Virginia, Minn.*

"I prefer the ERIE to any other shovel on the market today, and have had experience with 7 different ERIES in the past five years.

"Have found the ERIE the most reliable shovel, and its upkeep cost is the least. My ERIE has been grading roads, excavating for foundations and loading gravel from creek bed, often working under 3 feet of water."— *K. M. Clement, Boone, N. C.*

"We have worked our ERIE Shovel night and day for 4 months without losing more than six hours, and it is in as good shape as when we bought it— and we have had no expense worth mentioning. In our estimation the ERIE is the best shovel that is built."— *Swaney & Gilmore, Uniontown, Pa.*

YOUR UP-TO-DATE CONTRACTOR keeps cost records that really tell him something! He knows just how much it costs him per hour when a machine breaks down and stops his work— how much it costs in lost labor, unproductive overhead, *and loss of profits.*

That's why you see the big majority of successful contractors using ERIES. They know the dollars-and-cents value of equipment that is RELIABLE.

Up-to-date contractor wants service like this:

"One of our ERIES has been grading continuously for seven months without losing as much as two hours' total time. The ERIE is the best shovel we have ever used; it is the most reliable and has the lowest upkeep cost."— *Robert G. Lassiter & Company, Norfolk, Va.* (*Owners of 6 ERIES.*)

One letter like this means nothing: *five or six* letters like this do not mean very much. But when you read and hear HUNDREDS of such statements by contractors — all telling of this same kind of service from ERIE Shovels and Cranes— then it is wise to profit by their expERIEnce!

Actual service records prove that ERIES have only 1-3 as much repair expense, AND MAKE A CORRESPONDING SAVING IN WORKING TIME.

We will be glad to show you hundreds of letters like those at the left— written by successful contractors who have had years of experience with different shovels and cranes. Also, we can send you many carefully checked records of upkeep cost.

Keep your money out of the "lost-time" pit. Consider the facts, and you will be sure to "buy right." Drop us a line for the "Upkeep Cost Record Book."

ERIE STEAM SHOVEL CO., Erie, Pa., U. S. A.

Incorporated 1883; *formerly* BALL ENGINE CO. Builders of ERIE Steam Shovels and Locomotive Cranes
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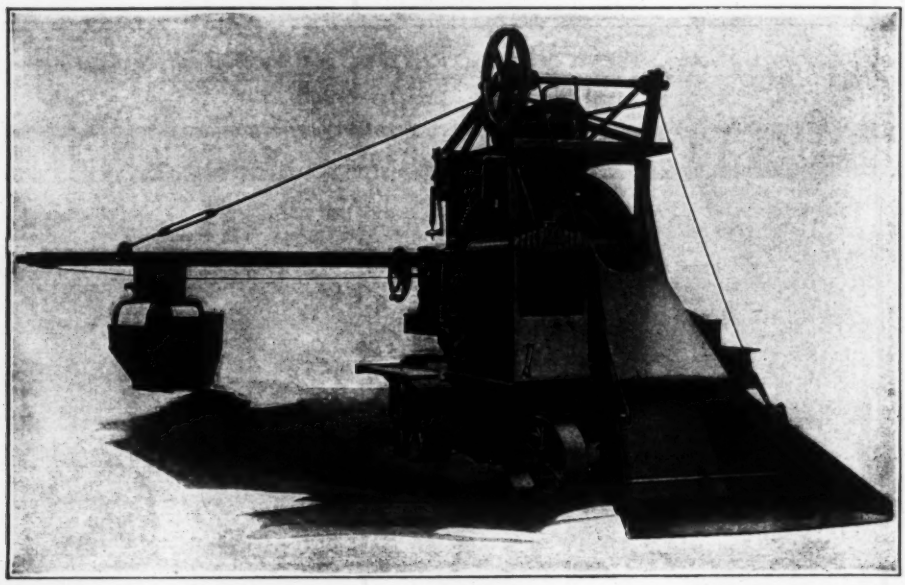
ERIE



Performance sells this Paver
for instance–

March 1922 a Southern road contractor bought a Ransome 10-E Paver. Its performance made such an impression on the contractors in his locality that inside of five months *seven* had followed his example and become Ransome owners.

And the same thing is happening this year in other parts of the country. The Ransome Paver out on the job is selling the Ransome Paver back in the plant at Dunellen. The price is right—the upkeep low, and the paver *delivers the goods.*

You'll want to get posted on this Ransome 10-E Improved Paver. We will be glad to send complete information.

5113

Without obligation on my part, please send me information on:—
Building Mixers, sizes 4-S__; 7-S__; 10-S__; 14-S__; 21-S__; 28-S__; 56-S__. Driven by Belt__, Steam__, Gasoline__, Electric__
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*NAME*_____ *ADDRESS*_____

Ransome 10-E PAVER

RANSOME CONCRETE MACHINERY CO.

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Brownhoist Builds

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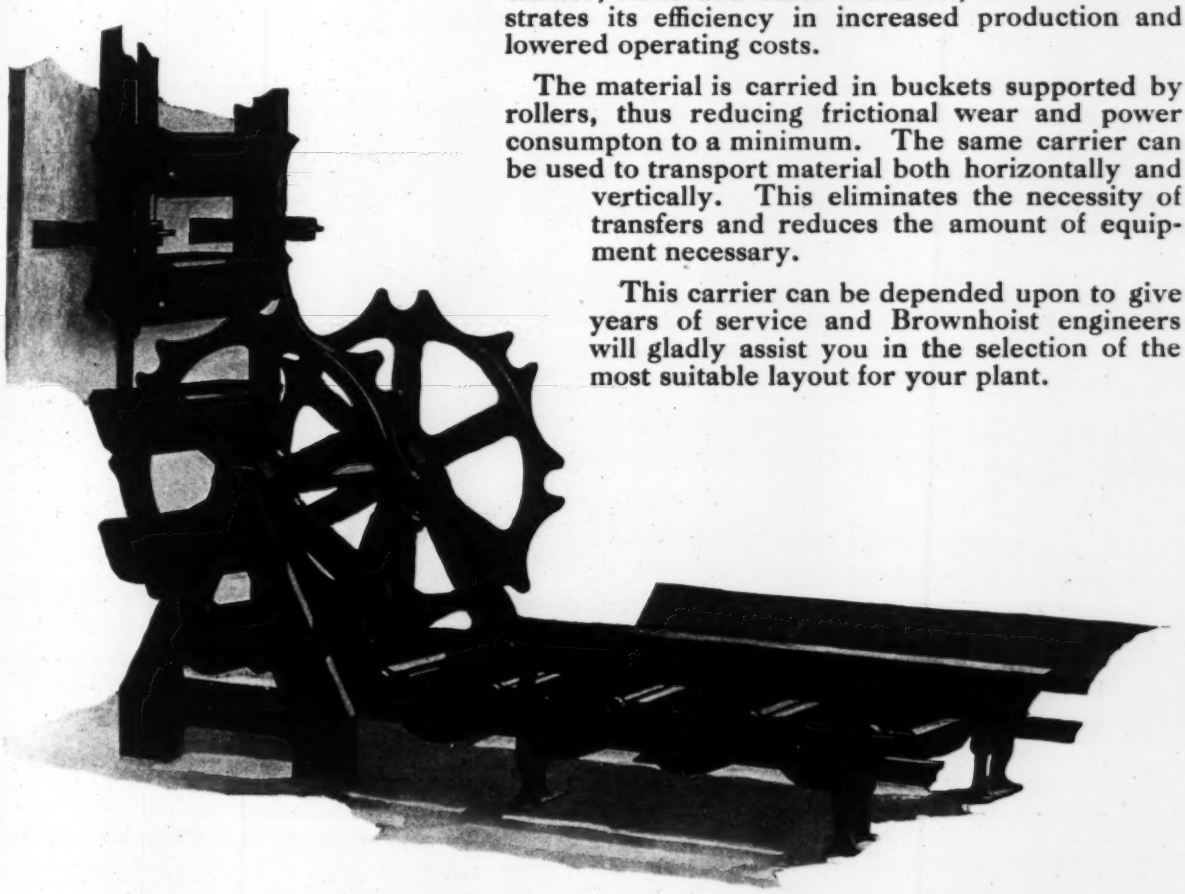
Of the utmost importance in choosing a conveyor system is the ability of the equipment to perform its work, efficiently and continuously, year after year, with low maintainence and operating cost. Shut downs for repairs must be few and far between and power consumption must be low.

The Brownhoist pivoted bucket carrier fulfills every requirement for this type of equipment unusually well. In the handling of coal, ashes, cement clinker, stone and other materials, it soon demonstrates its efficiency in increased production and lowered operating costs.

The material is carried in buckets supported by rollers, thus reducing frictional wear and power consumpton to a minimum. The same carrier can be used to transport material both horizontally and vertically. This eliminates the necessity of transfers and reduces the amount of equipment necessary.

This carrier can be depended upon to give years of service and Brownhoist engineers will gladly assist you in the selection of the most suitable layout for your plant.



The Brown Hoisting Machinery Co., *Cleveland, Ohio*

Branch Offices: New York, Chicago, Pittsburgh, San Francisco, New Orleans

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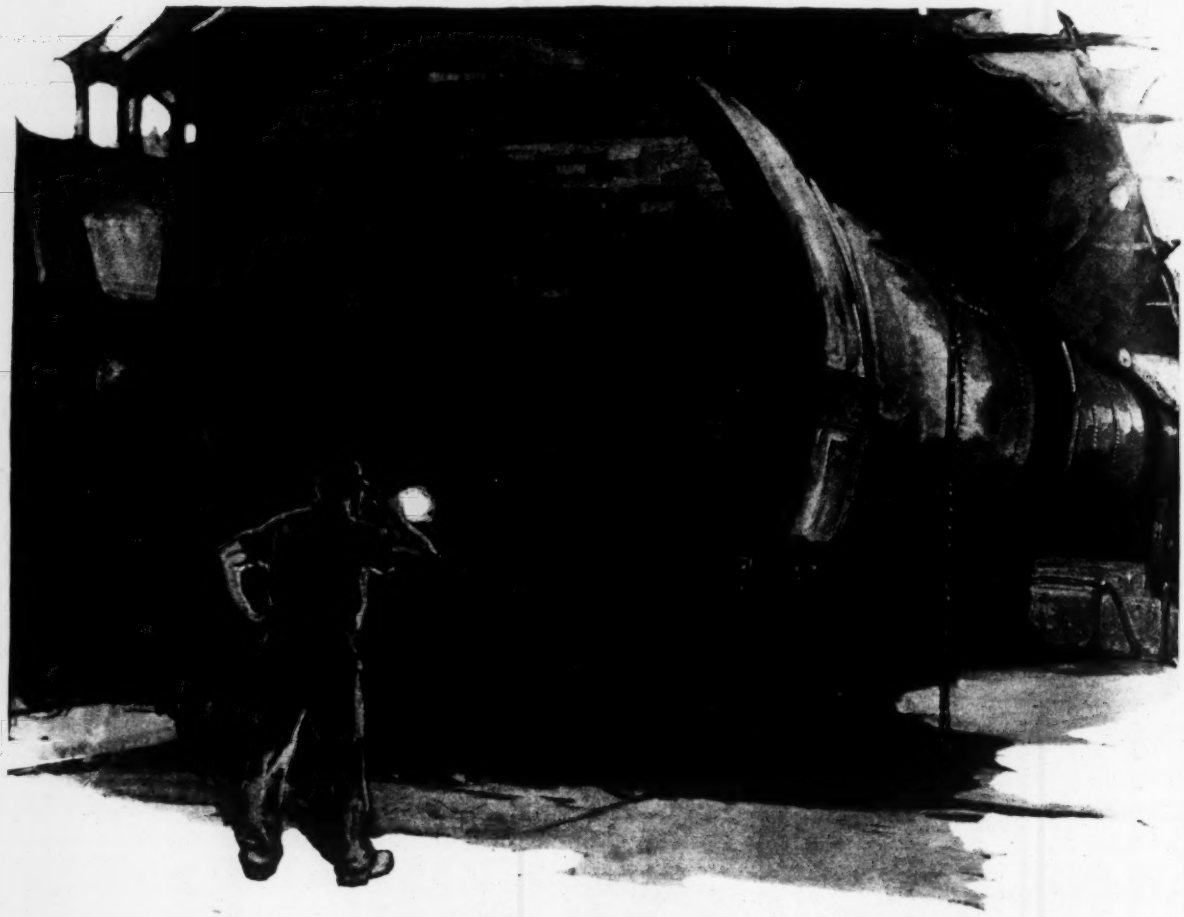

Like Looking at the Sun

If you were to look into one of the great rotary kilns in a cement mill, you would see only a glare of light so intense that it would be like looking at the noon-day sun. For a few moments after, you would be unable to see anything.

But borrow the workman's colored goggles to protect your eyes, and peer through the peep-hole again. Then you will see a tornado of coal—of gas or spraying oil—bursting into a sheet of sun-white flame. Into the other end of the kiln flow the finely ground limestone and clay—the materials for cement.

In their three-hour journey through this inferno, the materials undergo many changes. Moisture and gases are driven off as the rotation of the kiln tumbles the materials about, subjecting them to gradually increasing heat until the sun-white flame half melts the powder and it rolls into glass-hard clinker. This clinker, an entirely new chemical compound, when pulverized becomes portland cement.

Scientific control marks every stage of the burning process. Producing the required 2,500 to 3,000 degrees Fahrenheit of heat consumes great quantities of fuel—30 pounds of coal, or its equivalent, for each 94-pound sack of cement.

For the whole cement-making process, the consumption of coal is approximately 50 pounds a sack—more than half a ton of coal to a ton of cement.

PORTLAND CEMENT ASSOCIATION

A National Organization to Improve and Extend the Uses of Concrete

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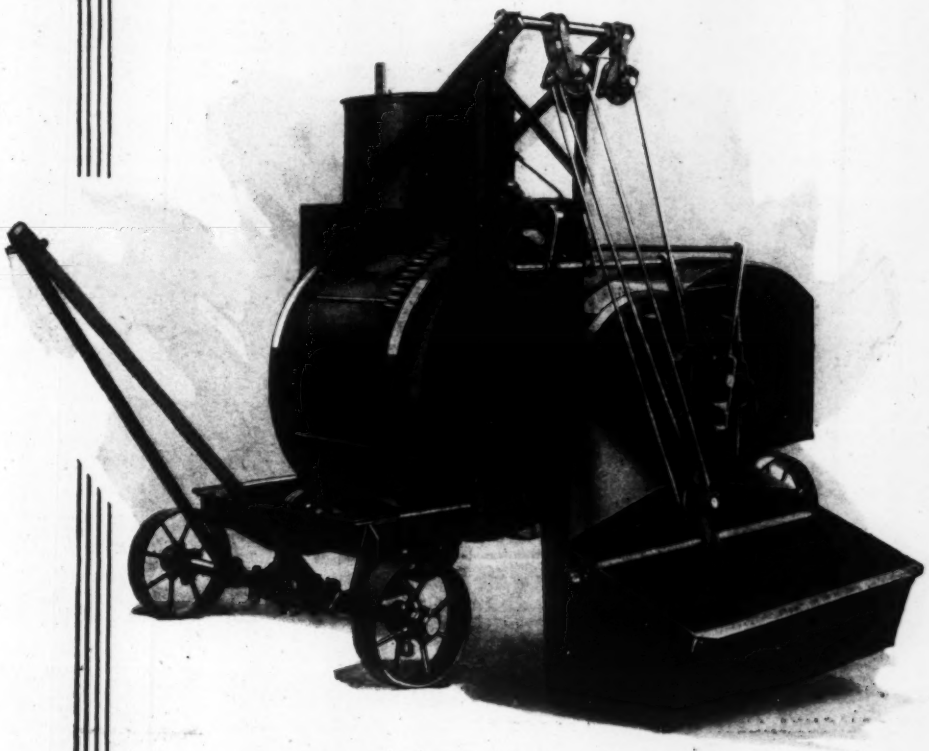
AUSTIN
MOVES THE EARTH—MIXES THE CONCRETE

THE AUSTIN DRUM MIXER



The Austin Drum Mixer with Side Loader

There is a difference in these Austin Drums, though they may resemble other drum type mixers. This difference is in the mixing action and the unusual enduring qualities. In place of the usual "V" spreaders and short blades we use long blades. In charging the mixer these blades carry the material away from the charging side almost instantaneously. This provides fast charging and prevents clogging. While mixing, the blades aid in carrying the material up and dropping onto the discharge spout. The inverted spout throws the material back to the charging side of the mixer. This induces a mixing action, supplemented by a remixing action that shortens the time required to secure a thoroughly mixed batch.

The result is more batches per hour, more jobs per season and greater profit at the completion of the job. *Catalog DM-3 sent on request.*

AUSTIN MACHINERY CORPORATION

3500 Dorr Street

Toledo, Ohio

AUSTIN BUILT CONTRACTORS' EQUIPMENT

CUBE MIXERS CUB-HEX MIXERS CUBE PAVERS DRUM PAVERS ASPHALT PLANTS TRENCH MACHINES TRENCH WIDENERS DITCHERS BACKFILLERS DRAGLINES CRANES SHOVELS SKIMMERS CLAMSHELLS WAGON LOADERS SUBGRADERS CONCRETE ROAD TAMPER AND FINISHER.

Inserts For All Purposes

CARRIED IN STOCK

DAYTON No. 5
Malleable Iron

"Y" SOCKET
Malleable Iron

SLOTTED INSERT
Pressed Steel
12-in., 18-in., 24-in., 36-in.

OTHER
HAVEMEYER PRODUCTS

TY-CHAIRS
BAR-TYS
EASEL-CHAIRS
SLAB BAR-SPACERS
BEAM BAR-SPACERS
HY-CHAIRS
X-TENSION CLIPS
CURB-BARS
STAIR-TREADS
WALL-TYS

CONCRETE STEEL COMPANY

42 Broadway, New York

Warehouses and Fabricating Shops

PHILADELPHIA
BIRMINGHAM
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YOUNGSTOWN
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DENVER, COLO.
LOS ANGELES, CAL.

Sales Agencies with Stocks in other Principal Cities

A Haiss Truck Loader

Is a Flexible Piece of Equipment

For Loading Trucks at Siding

Digging and Loading in Sand or Gravel Bank.

Loading at Quarry Stockpile.

Loading in Material Yards.

Loading to truck, car or truck-tractor at roadside storage.

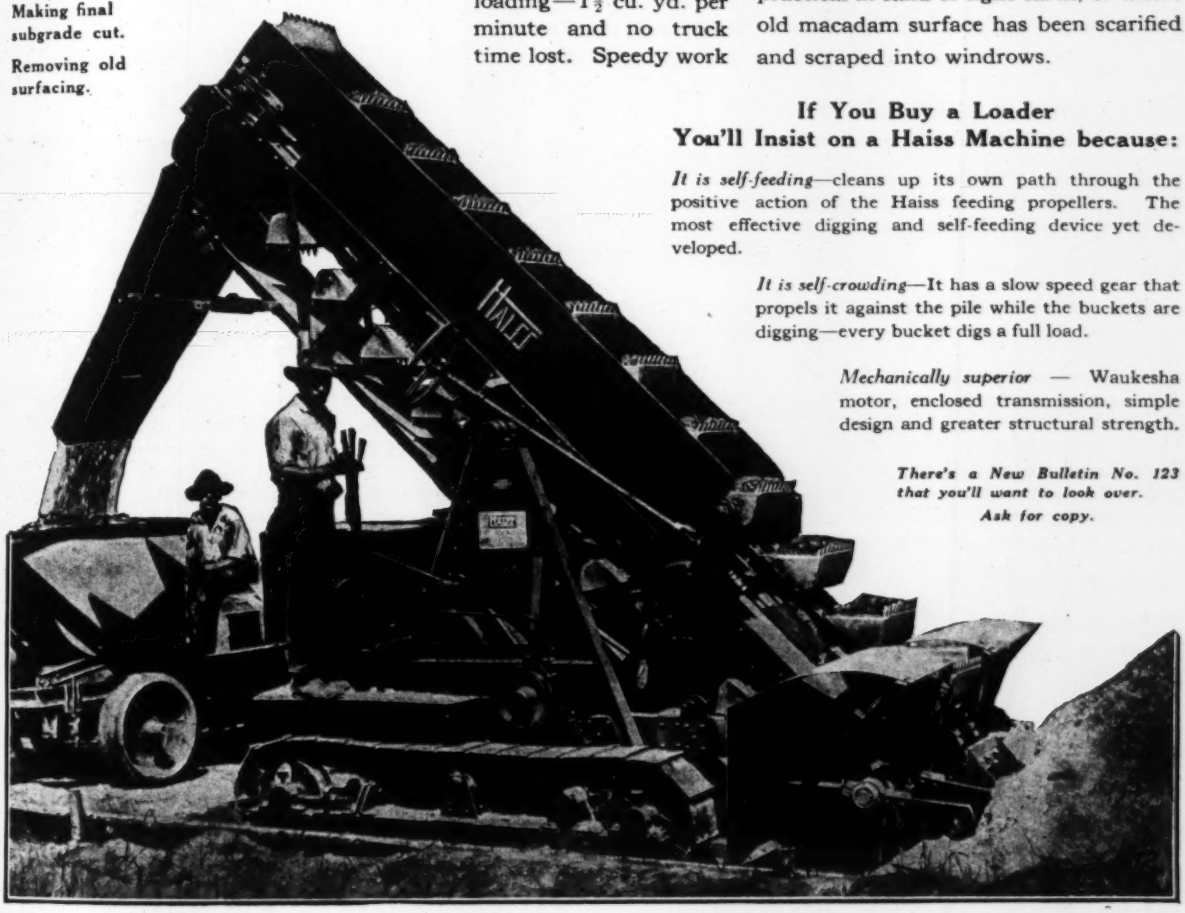
Making final subgrade cut.

Removing old surfacing.

When you buy a Haiss Truck Loader you are not tying up money in a one-purpose machine. You can apply its economies on any one of a number of jobs.

The big job is stockpile loading—1½ cu. yd. per minute and no truck time lost. Speedy work but only ¼ the cost of hand shoveling.

Remember it is not merely a bucket loader—it digs, not as a steam shovel or for steam shovel work, but entirely practical in sand or light earth, or where old macadam surface has been scarified and scraped into windrows.



If You Buy a Loader You'll Insist on a Haiss Machine because:

It is self-feeding—cleans up its own path through the positive action of the Haiss feeding propellers. The most effective digging and self-feeding device yet developed.

It is self-crowding—It has a slow speed gear that propels it against the pile while the buckets are digging—every bucket digs a full load.

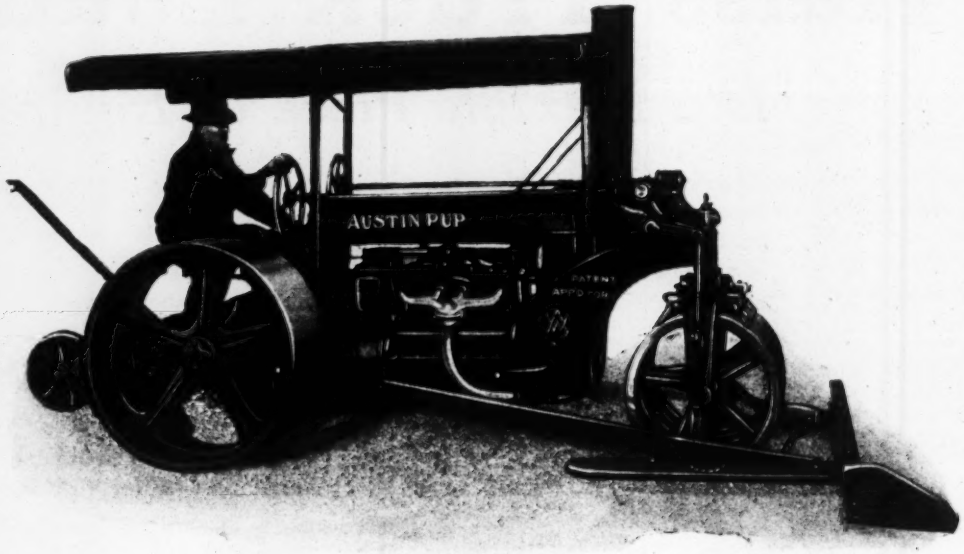
Mechanically superior — Waukesha motor, enclosed transmission, simple design and greater structural strength.

There's a New Bulletin No. 123 that you'll want to look over. Ask for copy.

The Geo. Haiss Mfg. Company, Inc., 140th St. and Rider Ave., New York

Established 1892 **Representatives throughout the world**

Millars' Timber & Trading Co., London, British Representatives



The Pup Complete with Maintainer and Scarifier

The Austin Pup

Weight: 3, 3½ or 4 tons

THE AUSTIN PUP is the undoubted sensation of the road building and maintenance fields. Exhibited for the first time at the Chicago Good Roads Show in January, where it attracted far more than its proportionate share of attention, it has already become one of the most popular tools with contractors and public officials of all classes from State to Township and City to Village. The reason for such universal popularity is not hard to discover; the Pup adapts itself perfectly to a surprisingly wide range of work and clearly surpasses older methods in every instance, as is shown by the following excerpts from a few of the letters we have received from enthusiastic users.

C. M. Upham, State Highway Engineer of North Carolina, writes that "The Austin Pup Roller that we are utilizing in our experimental work is giving exceptionally good results. We are also using the Pup Roller in rolling surface stone on bituminous macadam maintenance. We find that this machine is very handy in working out many of these details."

From Ritchie & Ramsey, Topeka, Kansas, Contractors, we learn that "The Pup has more than lived up to our fondest expectations. Frank Bills, who has always been our roller man, and who has operated about every piece of machinery that a street or road contractor could possibly use, states that the Pup, from a standpoint of economy in operation, simplicity of design and diversity of uses to which it can be put, exceeds every piece of contractor's machinery he has ever seen."

Rolling Subgrade

PRICE AND SERVICE are two of the Pup's most attractive features. By utilizing the Fordson tractor to furnish the motive power, we have taken advantage of Ford's costs which are below anything known in the world because he builds his goods by the hundreds of thousands; and the first cost of the Pup is, therefore, considerably below what it would be if we were to build it complete. An arrangement has also been made whereby the Ford Motor Company, of Detroit, pays the local Ford dealer, in the territory where the Pup is delivered, a commission on the Fordson part of the outfit, so the Pup owner receives dealer service and prompt deliveries of Fordson parts from the Ford dealer in addition to the service maintained by our numerous warehouses and service stations.

Planing a Rough Mountain Road

Roller and Road Maintainer

Furnished With or Without Maintainer and Scarifier Attachments

WEST VIRGINIA adds this testimony: "The pictures are of the Pup working on one of the hardest propositions I think I ever saw in West Virginia. The ruts on the road were anywhere from one foot to eighteen inches in depth, but the little Pup waded right in and sure did plane the road down. One of the tax-payers passing by while the machine was working remarked that it was worth more than any other road machine he ever saw on any work; that all the work that they had done with the road grader this year was wasted money. Made four trips over a little more than a mile of road and reclaimed it from practically an impassable piece of road to one over which autos could drive with comfort, with about six hours work."

F. E. Ross, City Engineer of Jefferson, Mo., says that "The Pup has been in use almost every working day since we received it and is giving the best of satisfaction.

"It has abundance of power. We have used it on grades as high as 12 per cent and have never had to use low gear. We took the roller to the city park to roll the golf links. On the way to the park it had to climb a 20 per cent grade on a gravel road. As the grade was so steep that the roller would spin its wheels, we put a few lugs on each wheel, put the machine in high gear and went over the top.

"Before buying the roller we had all patches tamped. The tamping was the most expensive part of the repair work, wore the men out and took about three-fourths of their time. Since we received the roller, the same crew is doing about four times as much work as before, is doing 100 per cent better work, and at a saving sufficient to more than pay for the roller this season."

A special circular tells the whole story of the Pup Roller and Road Maintainer, and its many uses. Write for a copy today.

The Austin-Western Road Machinery Co.

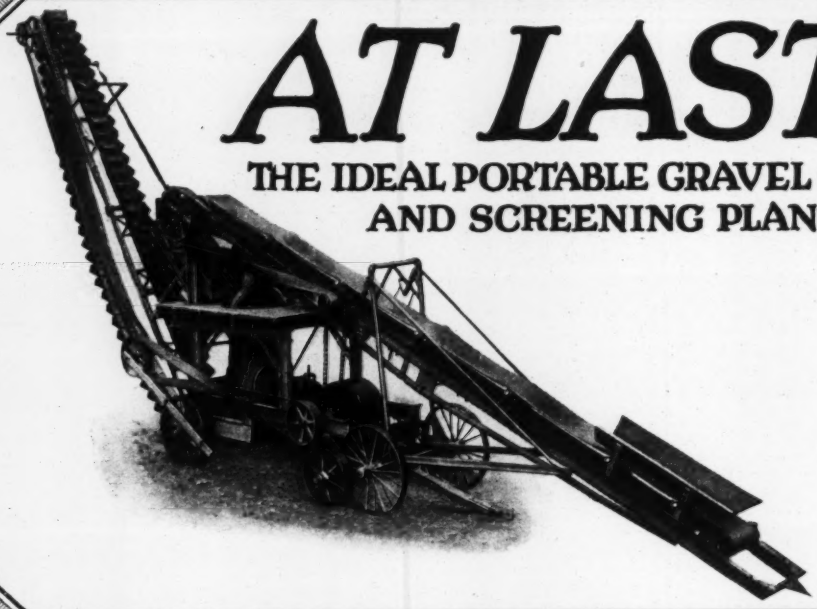
Factories and Home Office Chicago

Warehouses and Service Stations in all Principal Cities

On Patchwork

AT LAST!

THE IDEAL PORTABLE GRAVEL CRUSHING AND SCREENING PLANT



GRAVEL is brought from the pit in wagons, drags or fresnos, and dumped through a trap directly upon the conveyor, which in turn deposits the material upon a grizzly screen. The undersized material drops through the bars of the grizzly upon a chute leading directly to the elevator, while the oversize rolls down the bars into the crusher.

Nos. 2, 3 and 4 Austin Gyratory Crushers can be mounted on trucks and furnished with rigid or folding elevators of the required lengths, and gravel conveyors ranging in length from 30 feet to 50 feet. Optional equipment includes a revolving screen mounted on a portable bin.

While moving from place to place, the elevator folds down over the crusher; the conveyor is disconnected from the crusher, and its lower end attached to a truck or wagon.

(A special bulletin describing these portable plants in detail is just off the press. We would like to send you a copy. Ask for Portable Gyratory Crusher Bulletin "H")

AUSTIN MANUFACTURING CO.

New York · CHICAGO · San Francisco

Gasoline Power!

Others will follow in Northwest's Footsteps—

NOW that the NORTHWEST has demonstrated its superior operation, it is said that a number of engineers are experimenting in an effort to build a gas shovel that will meet the simplicity of the Patented NORTHWEST.

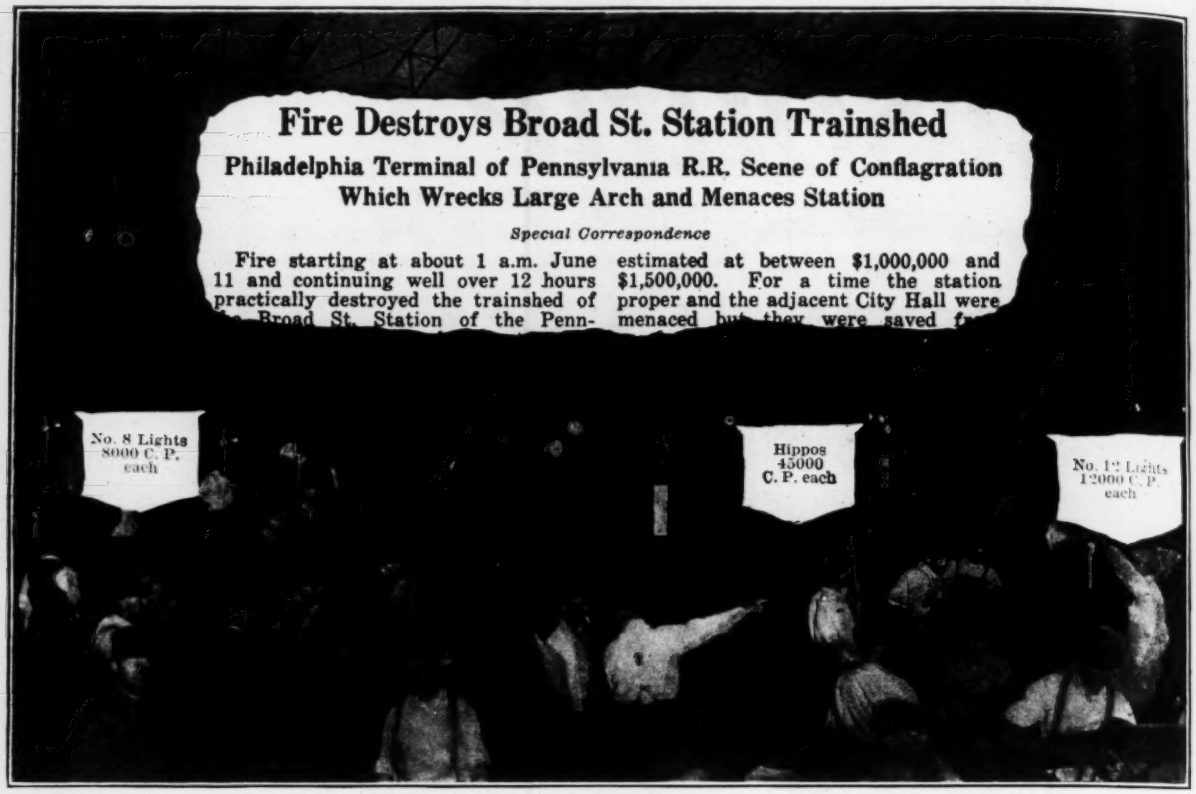
This shows that other manufacturers are following in NORTHWEST'S footsteps.

NORTHWEST ENGINEERING CO.
1227 Steger Building, CHICAGO

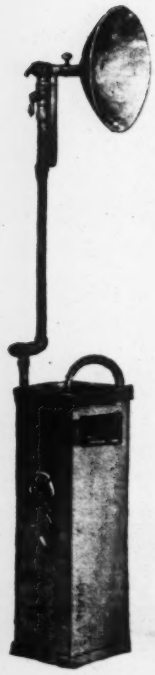
NORTHWEST

Gas or Electric

CRANE
DRAGLINE
SHOVEL



THE MILBURN LIGHT



On the job in Philadelphia!

The ruins of the Broad Street Station trainshed had not quit smoking before numbers of Milburn Lights were on the job with the clean-up gang! Fifty Milburn lights were ordered at 2 p. m. (afternoon of the fire) and were on the job *that night*. Note the *batteries* of Milburns in the photo above. New platform construction work was begun at once—and the Milburn Lights helped to speed up the work. Here is another and striking instance of the dependability, quick-set up and efficiency of Milburn Lights—they are the lights to call upon in everyday work or in the big emergency. Operate on any kind of Carbide.

Send for Circular 21, or order a light on trial.
Warehoused everywhere

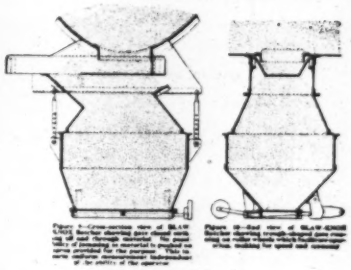
No. 8, over 8,000 candlepower. Burns 12 hours on 8 lb. of carbide. Costs 3c per hour

P. S.—The "Milburn Combination CUT-WELD Torch" is also being used on the job of dismantling the twisted steel frame-work.

The Alexander Milburn Company
1416-1428 W. Baltimore St.
Baltimore, Md.

The Same Good Quality *of* Concrete

from Foundation to Roof



Uniform concrete—every batch exactly alike—automatically proportioned *to the cubic inch* by a BATCHERPLANT.

Labor-saving—*one man* strikes off and dumps accurately measured batches of sand and stone as fast as the mixer can handle them.

As the foundation for a central mixing and distributing system the all-steel BATCHERPLANT costs less to install; costs less to operate; is more accurate—and will speed up the pouring of your concrete to a far greater extent than any other device for storing and measuring. The BATCHERPLANT has 100% salvage value, and can be used on job after job.

Tell us about *your* job—we'll help you lay out your mixing and distributing system.

Blaw-Knox Road Building Equipment
Road Forms
Universal Forms
Truck Turntables
Batcherplants
Handy Houses
Clamshell Buckets
Cement Handling and Loading System

BLAW-KNOX COMPANY
601 Farmer's Bank Bldg., Pittsburgh, Pa.
New York - Baltimore Birmingham Chicago Detroit
London, Eng.

BLAW-KNOX Batcherplant

Conveyors like this, built with rugged Rex Chain, are aiding in the production of Buick, Dodge Brothers, Ford, Nash, Paige, Studebaker and many other motor cars

Doing more work with less effort

Though facing a *decreasing* supply of labor the industries of this country now are being called on to satisfy an *increasing* demand for their products. Forced to make more units with fewer human hands, thousands of plants are meeting the issue through a broader use of labor-conserving methods and equipment. Conveyors built with Rex Chain are playing an important part in this new order of the day. Saving time and effort in the moving of materials from operation to operation, they are releasing labor for those tasks which must be done by hand, and are insuring larger outputs at lower cost. Probably there are places in your plant where Rex Chain, in conveyors or drives, can effect vital economies. Our engineers can show you how.

This powerful and long-lasting Rex Chabelco Steel Chain is delivering equal satisfaction in conveying materials and in driving rolls, drums, oil-well drills, screens, construction machinery and other equipment

CHAIN BELT COMPANY, MILWAUKEE

Branch Offices and Representatives in Principal Cities in the United States and Abroad

REX CHAIN

Rex Sprockets, Rex Conveyors, Rex Concrete Mixers and Pavers, Rex Traveling Water Screens

Iowa—A Repeat Order State

No. 6 of a series of 10 Repeat Order States

75 Repeat Orders from Iowa

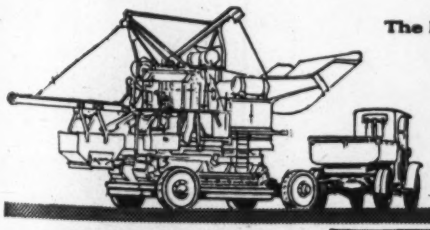
(Including only names of owners who have bought 2 or more Foote Pavers)

Home of the first MultiFoote paver ever built. Foote and MultiFoote pavers have from *first*, been the choice of repeat order buyers in Iowa.

13 Iowa Contractors have bought	2 or more	Foote Pavers
7 Iowa Contractors have bought	3 or more	Foote Pavers
6 Iowa Contractors have bought	5 or more	Foote Pavers
6 Iowa Contractors have bought	6 or more	Foote Pavers
6 Iowa Contractors have bought	7 or more	Foote Pavers
3 Iowa Contractors have bought	8 or more	Foote Pavers
2 Iowa Contractors have bought	9 or more	Foote Pavers
2 Iowa Contractors have bought	10 or more	Foote Pavers
2 Iowa Contractors have bought	11 or more	Foote Pavers
2 Iowa Contractors have bought	12 or more	Foote Pavers
1 Iowa Contractor has bought	13	Foote Pavers

When Iowa Contractors repeatedly buy Foote Pavers, year after year, isn't it pretty good evidence they are satisfied that Foote performance cannot be duplicated by any other paving mixer on the market?

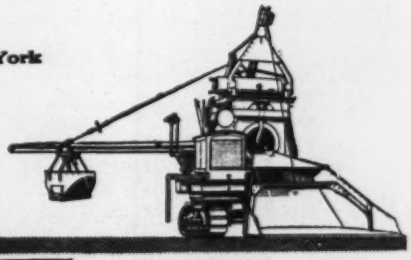
Just Steady Footage—day in and day out—season after season—on job after job—that's why *more than 65% of all our sales are repeat orders.*



The Foote Company, Inc., Nunda, New York

Manufacturers of MultiFoote Pavers and Designers of the Foote Transport Trailer for Hauling Heavy Contractors' Equipment

MultiFoote Traction prevents delays in moving the paver along **on the job.** The **Foote Transport Trailer** cuts down time and repair expense in moving a paver, roller or other heavy equipment **to the job.** Write for information.



Quicker to the Job ROAD **MULTI FOOTE** PAVER *Faster on the Job*

TRADE MARK REGISTERED

KOEHRING

Easy Flowing Concrete

EASY flowing, easy spouting concrete begins with the mixing action. The plasticity that means easy flowing without excess of water depends on the thorough coating of every fragment of stone and grain of sand with cement. Then cement acts as a lubricant—the concrete is plastic, easy flowing, easy to work—a real factor in lower costs.

The Koehring re-mixing action prevents segregation of aggregate according to size — sends every grain of sand and cement, every fragment of stone through the mixing process for re-mixing. The result is perfect uniformity of concrete from the first to last shovelful of every batch, and a plastic, free flowing concrete that spouts and "works" to great advantage.

This, together with the Koehring *"Heavy Duty"* construction which means long, trouble-free service life, gives the Koehring owner an extra profit margin on every season's work.

Write for Catalog C 8

KOEHRING COMPANY

Manufacturers of concrete mixers, cranes, draglines, shovels

MILWAUKEE, WIS.

Sales offices and service warehouses in all principal cities.

Foreign Dept. Office 1370, 50 Church St., New York; *Canada*, Koehring Co. of Canada, Ltd., 105 Front St., East, Toronto, Ontario; *Mexico*, F. S. Lapum, Cinco De Mayo 21, Mexico, D. F.

Koehring Capacities

Heavy Duty Construction Mixers; 10, 14, 21 and 28 cu. ft. mixed concrete.

Pavers: 7, 10, 14, 21, 34 cu. ft. mixed concrete.

Dandie Light Mixer: 4 and 7 cu. ft. mixed concrete. May be equipped with power skip or low charging platform. Water measuring tank and light duty hoist.

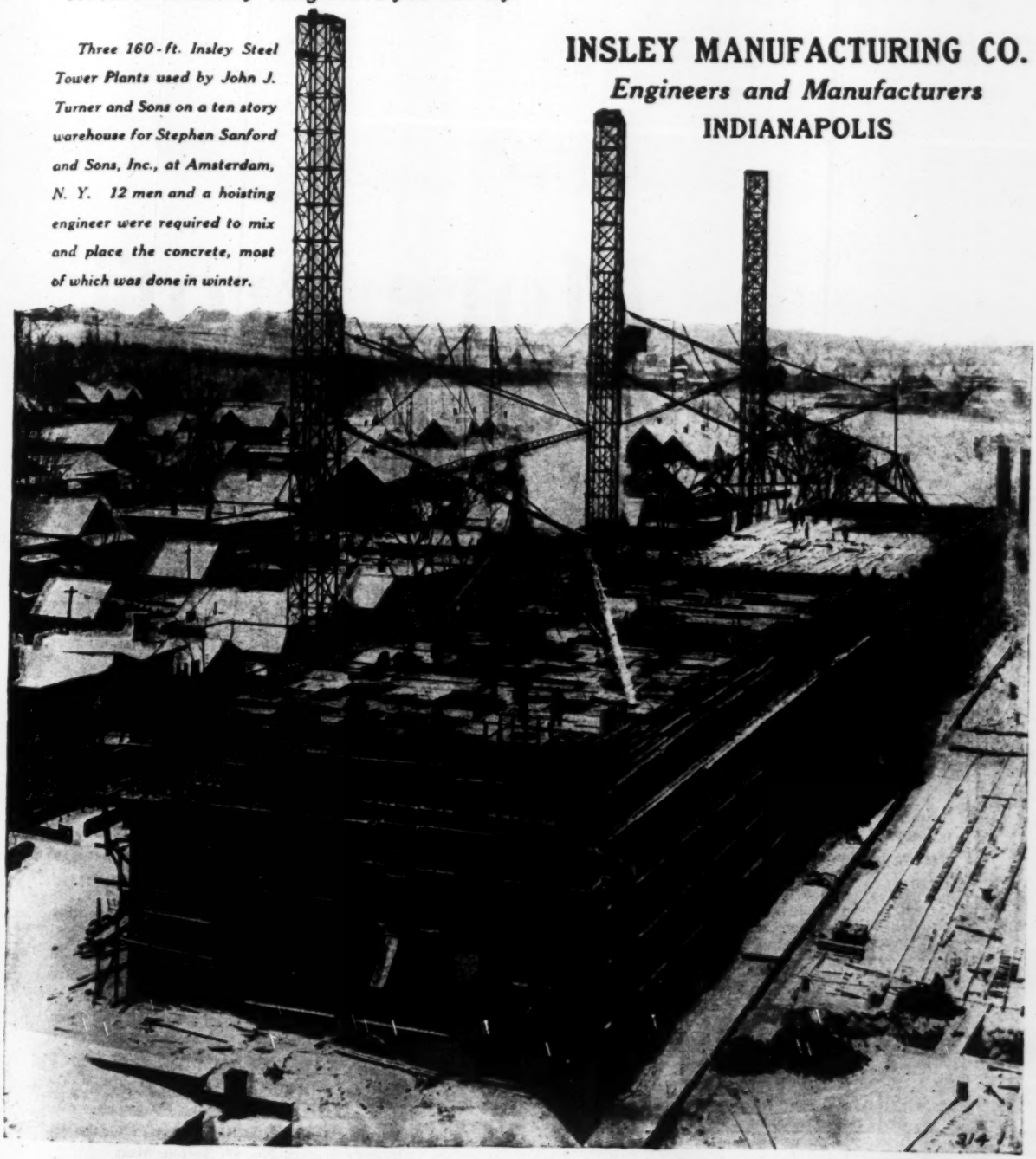
Insley Concrete Placing Equipment

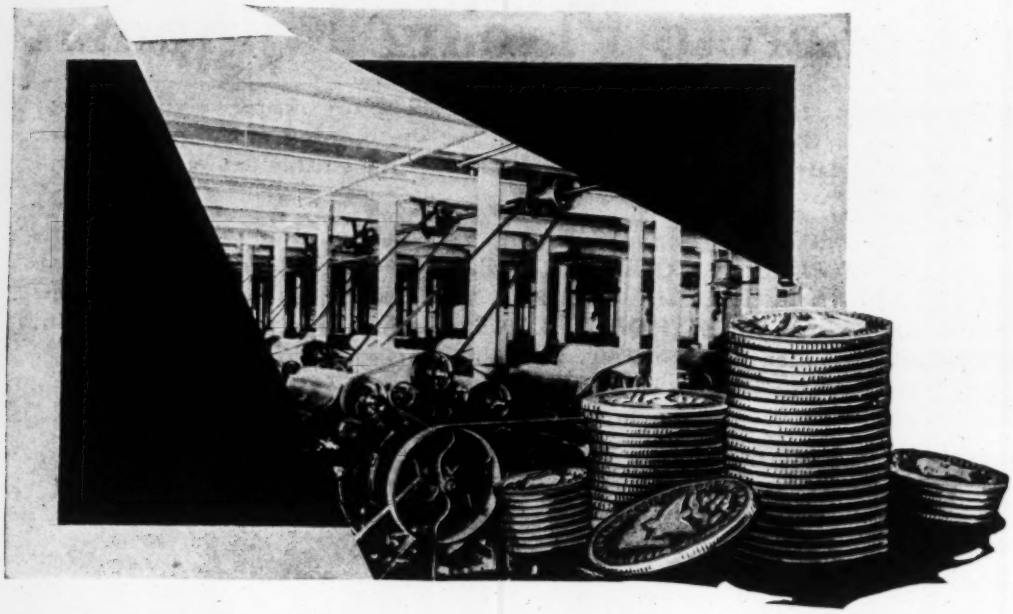
"We are confident that the Insley design of Boom and Counterweight Chutes, and Sliding Frame, is the best that can be had," is the opinion of John J. Turner and Sons of Amsterdam, N. Y. "Stoppages for shifting chutes are entirely done away with."

There are large numbers of contractors who have had similar experiences with INSLEY CONCRETE PLACING EQUIPMENT, whether it be on a 13,000 cu. yd. job as is shown by this illustration, using a multiple tower plant, or a small job of a few hundred yards requiring a MAST HOIST PLANT. Let us show you how the special features of Insley design save you money.

INSLEY MANUFACTURING CO.
Engineers and Manufacturers
INDIANAPOLIS

Three 160-ft. Insley Steel Tower Plants used by John J. Turner and Sons on a ten story warehouse for Stephen Sanford and Sons, Inc., at Amsterdam, N. Y. 12 men and a hoisting engineer were required to mix and place the concrete, most of which was done in winter.





Save the surface and you save all

Copyright 1923 by E. I. du Pont de Nemours and Company

Du Pont Prescription Paint Service covers every requirement of the construction industry. There is a du Pont Paint or Varnish for every type of surface.

Bridges
Buildings
Structural Steel of every description
Railroad Structures
Warehouses
Standpipes
Tanks and Towers
Steel Stacks
Storage Bins
Hoppers, Etc.

Write us describing your requirements

1793 · BORN WITH THE REPUBLIC · 1802

DU PONT

PAINTS AND VARNISHES

More Profit *with* DU-LITE

The White That's Always White

No need to tell you that the acceptance of any construction job depends to a large extent on the finished appearance. It is particularly important that the interior be finished to give maximum light reflection — thus insuring to your client more profits through increased production.

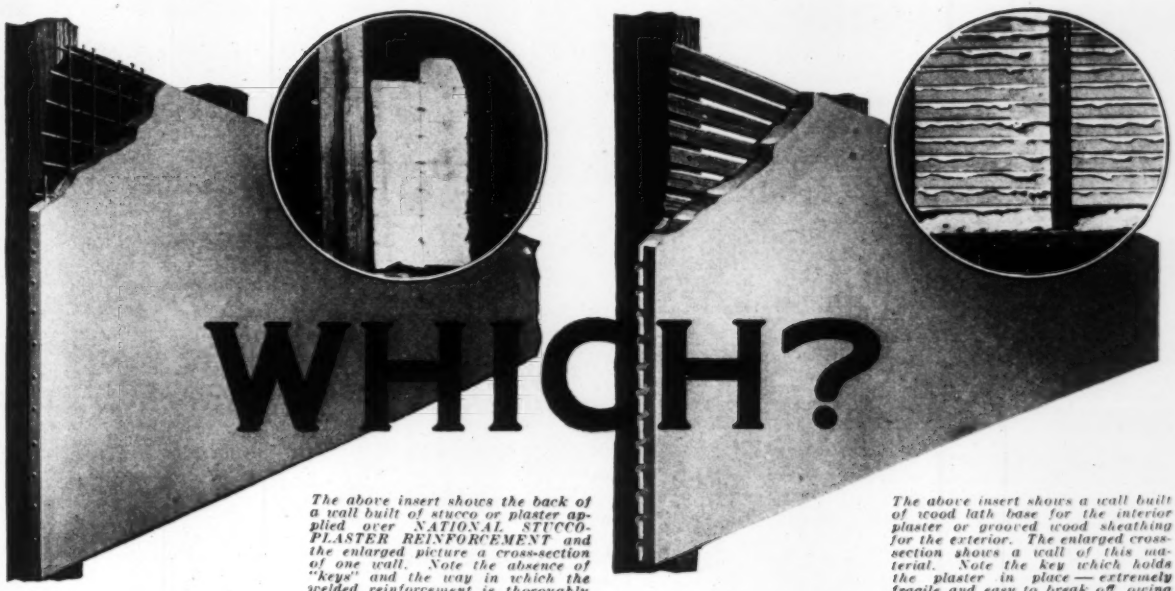
Realizing this, du Pont Chemical Engineers, in their problem of providing paints for the construction industry, have developed an interior white paint that

Sets a New Standard in Quality

With this Improved Du-Lite you can fully satisfy your client from the standpoint of light-reflection, and its use will mean more profits to you through its greater covering power, and easier working properties.

Engineers, contractors and plant superintendents may obtain free a copy of "Principles and Practices of Upkeep Painting"—a practical handbook covering every painting problem—on receipt of signed request on their business stationery. To others the price is $2.00 per copy. Write Dept. B.

E. I. DU PONT DE NEMOURS & CO., INC.
35th St. and Gray's Ferry Road
PHILADELPHIA, PA.
Chicago Varnish Works, 2100 Elston Ave., Chicago, Ill.
Everett Station, No. 49, Boston, Mass.



The above insert shows the back of a wall built of stucco or plaster applied over NATIONAL STUCCO-PLASTER REINFORCEMENT and the enlarged picture a cross-section of one wall. Note the absence of "keys" and the way in which the welded reinforcement is thoroughly embedded in the plaster and stucco; thus assuring a reinforced job.

The above insert shows a wall built of wood lath base for the interior plaster or grooved wood sheathing for the exterior. The enlarged cross-section shows a wall of this material. Note the key which holds the plaster in place — extremely fragile and easy to break off, owing to the expansion and contraction of the wood bases.

Handled by all dealers —write for literature and samples

Which would you rather have—exterior walls reinforced with NATIONAL STUCCO-PLASTER REINFORCEMENT (galvanized) at the same or less cost with the assurance of permanency . . . . interior walls, partitions and ceilings, reinforced with NATIONAL STUCCO-PLASTER REINFORCEMENT (galvanized) at a slight increase over the cost of wood lath, thereby insuring the plaster against cracks and lath marks, and making it possible to put decorations on the walls and ceilings without fear of discoloration. . . . . or—those types of lath which have been commonly used and resulted in the cracking and falling off of the stucco and plaster, due to expansion and contraction and breaking off of the "keys."

Again we ask "WHICH?"

When you build, insist on having NATIONAL STUCCO-PLASTER REINFORCEMENT

National Steel Fabric Company

(Subsidiary of Pittsburgh Steel Company)

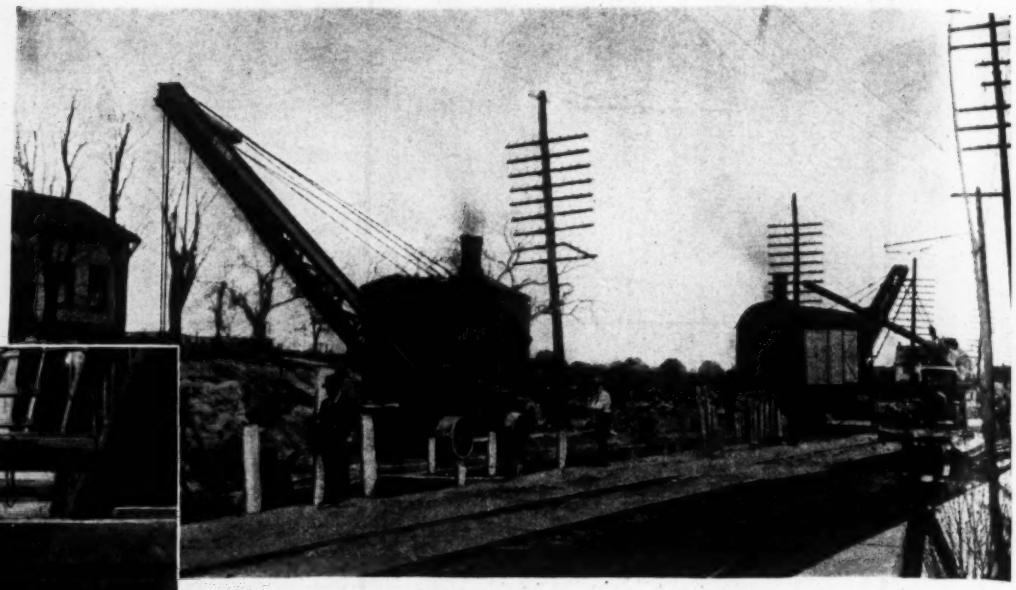
700 Union Arcade **Pittsburgh, Pa.**

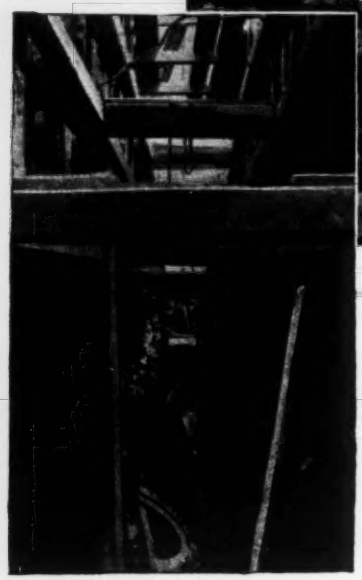
NATIONAL STEEL FABRIC CO

Subsidiary of PITTSBURGH STEEL CO

UNION ARCADE BUILDING PITTSBURGH, U.S.A

Above and Below





Suited to the Job

from Every Standpoint

SEVEN YEARS trenching in hard blue shale and rock! Some test for any shovel. Yet The Haddad-Mall Company have recently made it "another Thew" because they know they can depend on it.

This job is representative of what they expect from their shovels. Two and one-half miles of trench averaging 23 feet deep; 50 to 75 feet completed each day. "Completed" means digging, laying two sewer lines and filling.

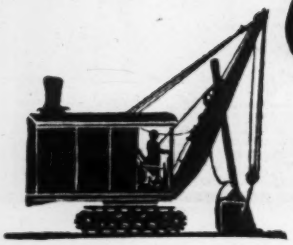
Shovels that will do this are worth getting acquainted with. Write for Bulletin 113 and find out some more facts about the Type A-1 Thew.

THE THEW SHOVEL CO., LORAIN, O.

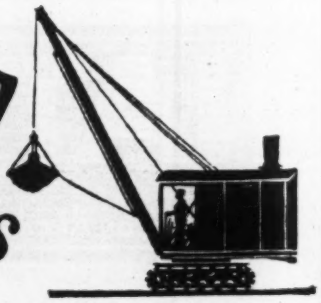
The A-1 Thew

"Our first Thew shovel, a Type A-1, was purchased in 1915. We have used it solely for trench excavation, mostly hard blue shale and rock. This machine has gone through some real hard work and has stood up splendidly. We are pleased with both machines and feel that they have given us full satisfaction. Your service has been first class.

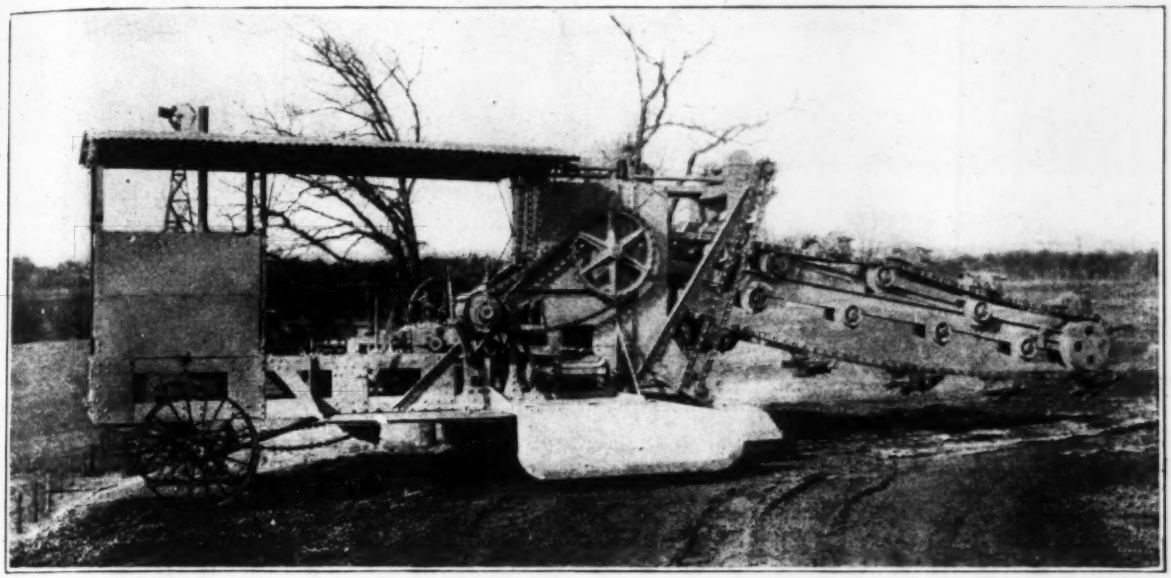
THE HADDAD-MALL CO.
931 Schofield Building
Cleveland, Ohio



Thew
Power Shovels



PARSONS



WE don't know who built the first trench excavator—it may have been King Tut—but we do know who builds the *best* one on the market today—it's called the

PARSONS MODEL 30

It cuts 12 feet deep and 30 inches wide and for work of this size the new Model 30 is the sturdiest, fastest, longest lived, easiest operated, most mabile and best paying machine ever built. That's a fact.

Think about these points—direct drive—12 foot wheel base—Parsons quality heat treated electric steel castings—overlapping steel treads on Parco Traction—traction drive through sliding and worn gears—patented endless chain crowding device—45 H.P. heavy duty engine—main reverse and worm gears in oil tight housings.

Wire or write for a representative to call.

THE PARSONS COMPANY
NEWTON, IOWA, U. S. A.

Kansas City, 1737 Walnut St. **New York, 145 Centre St.** **Chicago, 11 S. La Salle St.**

Louisville Houston Los Angeles Denver Salt Lake City **San Francisco**
Seattle Baltimore Memphis Richmond Philadelphia Atlanta Buffalo **New Orleans**
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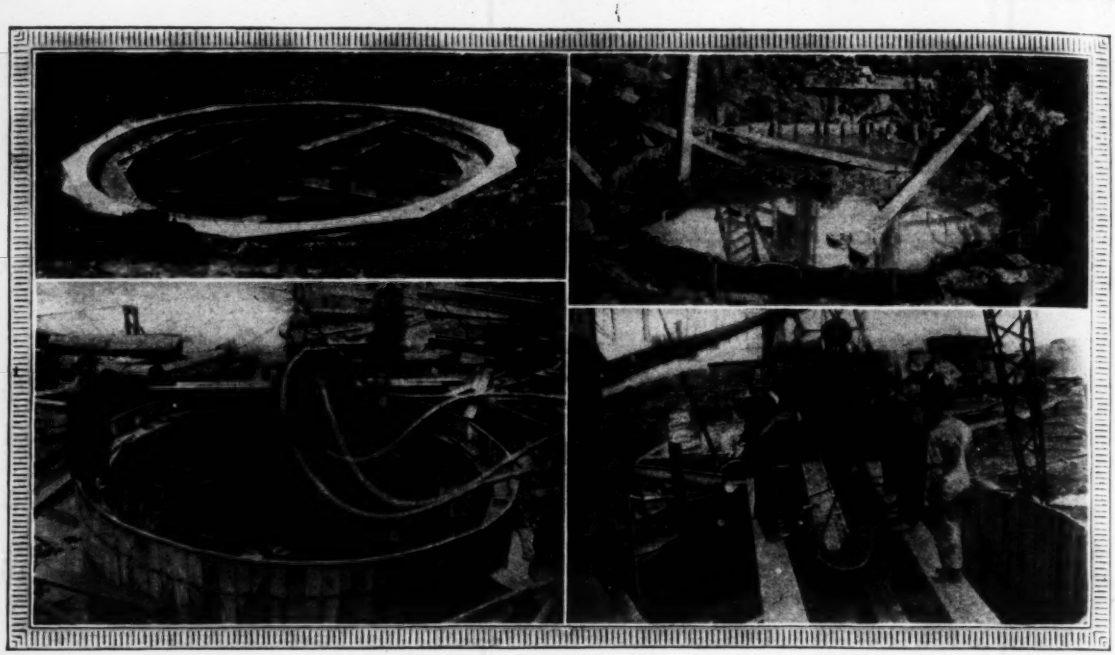
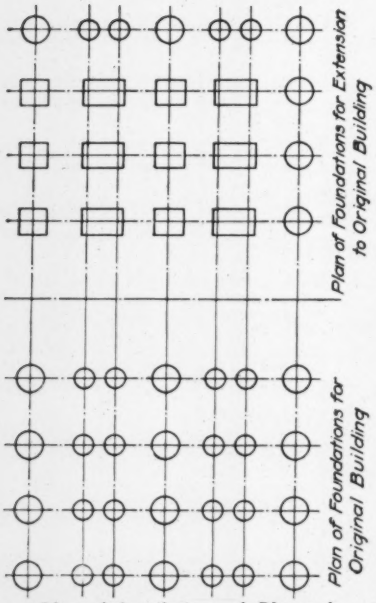
MUSSEN'S LIMITED, SOLE DISTRIBUTORS IN CANADA
Montreal, Toronto, Winnipeg, Vancouver



Top—Bottom template for foundation cylinder in place; piling after driving, showing center pile for locating driving mast
Bottom—Driven cylinder with top wooden form and concrete ring brace in position, also sand ejector in operation; filling cylinder with concrete

Installing the



Plan of foundations of Plant of Philadelphia Electric Company, showing extent of recent addition

for Delaware Station Philadelphia Electric

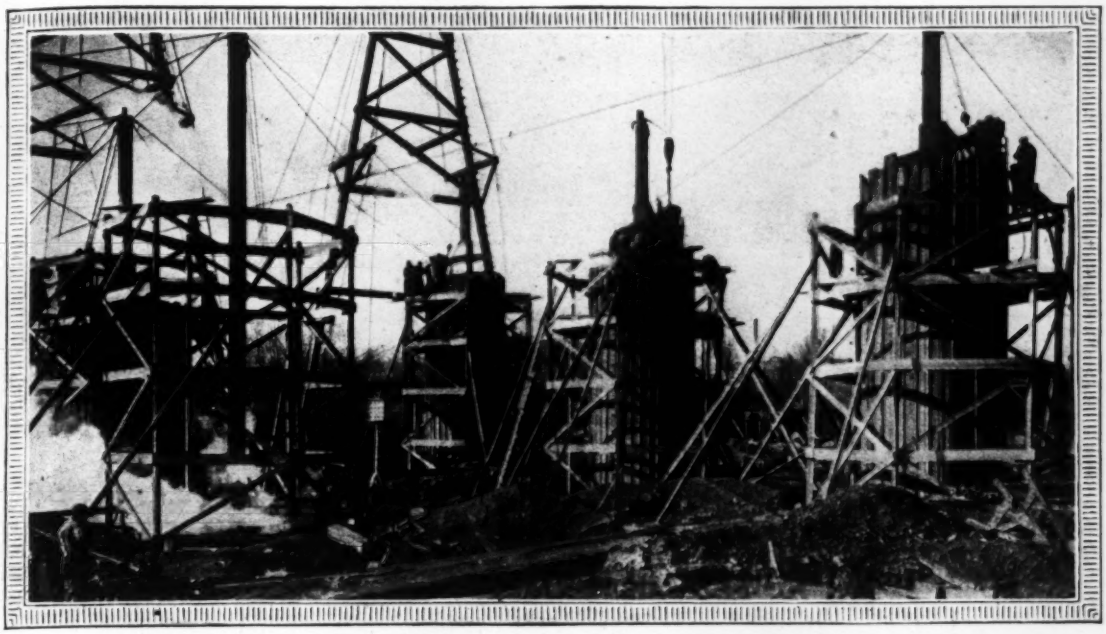
The Delaware Station Power House of the Philadelphia Electric Company is located on low-lying, wet land, previously used as a shipyard.

The first installation consisted of twenty-eight piers, each approximately 14 feet in diameter, and constructed within permanent cylindrical open caissons. Each caisson was composed of 42 pieces of Lackawanna 12¾in. x ⅜in. straight-web section in 32-foot lengths.

The steel sheet piling was assembled by means of cable way around two templates, one at ground level, the second at a height above ground of two-thirds the length of the steel, thus insuring accurate size of cylinder and plumbness of steel. After setting and closing the cylinder, the piling sections were driven short distances in succession down to bed rock, that is the piling was entirely driven before excavation was started.

In this way the piling of the cylinders was driven quickly and without interruption. Likewise the excavation of the material proceeded rapidly and without interruption, and the whole foundation job was accomplished with very satisfactory economy.

BETHLEHEM



Five cylinders being driven at once. Note the plumbness of the Lackawanna Steel Sheet Piling
John T. Windram, Architect; Stone and Webster, Builders, The Philadelphia Electric Co., Engineers

foundation piers

Power House of the Company—

When an addition to the Delaware Station was started in 1922, the general method that had proved so successful for the first foundations was adopted for the additional foundations. Open caissons, excavated in the dry and braced with circular steel rings, were used, with Lackawanna Piling in 40 and 45-foot lengths.

Economy and efficiency is obtained in foundation, pier, bulkhead and similar work by the use of Lackawanna Piling. Our piling engineer's experience covers hundreds of jobs, and they are ready to help on your piling problems.

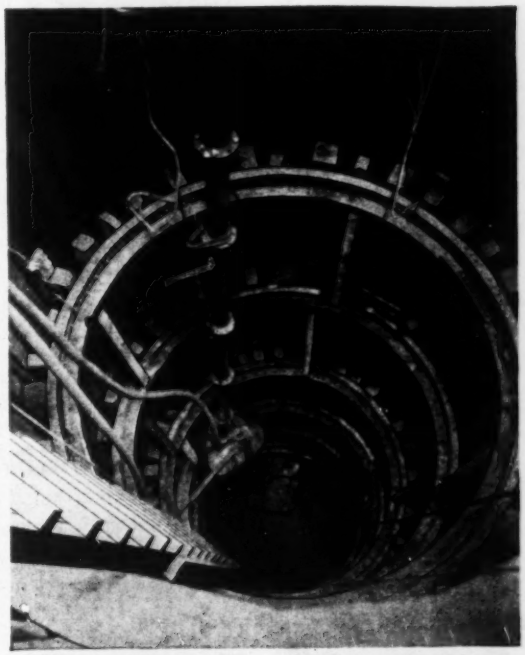
New Catalog giving data, dimensions and details sent on request

BETHLEHEM STEEL COMPANY
General Offices: BETHLEHEM, PA.

Sales Offices:

New York	Baltimore		Pittsburgh	Chicago
Boston	Washington	Cincinnati	Cleveland	St. Louis
Philadelphia	Atlanta	Buffalo	Detroit	San Francisco

BETHLEHEM STEEL EXPORT CORPORATION
25 BROADWAY, NEW YORK CITY
Sole Exporter of Our Commercial Products



One of the circular caissons showing six sets of bracing rings in position. Bottom at elevation about —45.

LACKAWANNA STEEL SHEET PILING

"Jackhamer" drills used in Tennessee quarry furnishing stone for highway construction. These machines are drilling 10 ft. holes in hard limestone.

The Universal One-Man Rock Drill

"JACKHAMER"

A "Jackhamer" is the rock drill for all-around work. No contractor's equipment is complete without, at least, one of these machines.

One man can operate and work the "Jackhamer." He can run the drill wherever he can get a foot hold, and drill holes at any angle. The "Jackhamer" rotates its drill steel and cleans the hole of the cuttings.

For road construction—grading, quarrying ditching, trench digging—or for building excavation, tunnelling, block hole work, etc., use the "Jackhamer."

And, for furnishing air to your "Jackhamer" Drills use an I-R Portable Compressor—a compact, complete, easily moved air compressor plant on wheels, built primarily for the contractor.

Bulletin 4046 contains a detail description of the construction of the "Jackhamer" and of the work which it can do. Send for a copy now.

INGERSOLL-RAND COMPANY, 11 BROADWAY, NEW YORK

BUTTE, BUFFALO, BIRMINGHAM, DULUTH, DENVER, BOSTON, EL PASO, SEATTLE, ST. LOUIS, CHICAGO, NEW YORK, KNOXVILLE, SCRANTON, LONDON, PARIS, HOUGHTON, CLEVELAND, PITTSBURGH, LOS ANGELES, DETROIT, NEW ORLEANS, PHILADELPHIA, SAN FRANCISCO, SALT LAKE CITY, JOPLIN, DALLAS

For Canada, refer Canadian Ingersoll-Rand Co., Limited, 260 St. James Street, Montreal, Quebec

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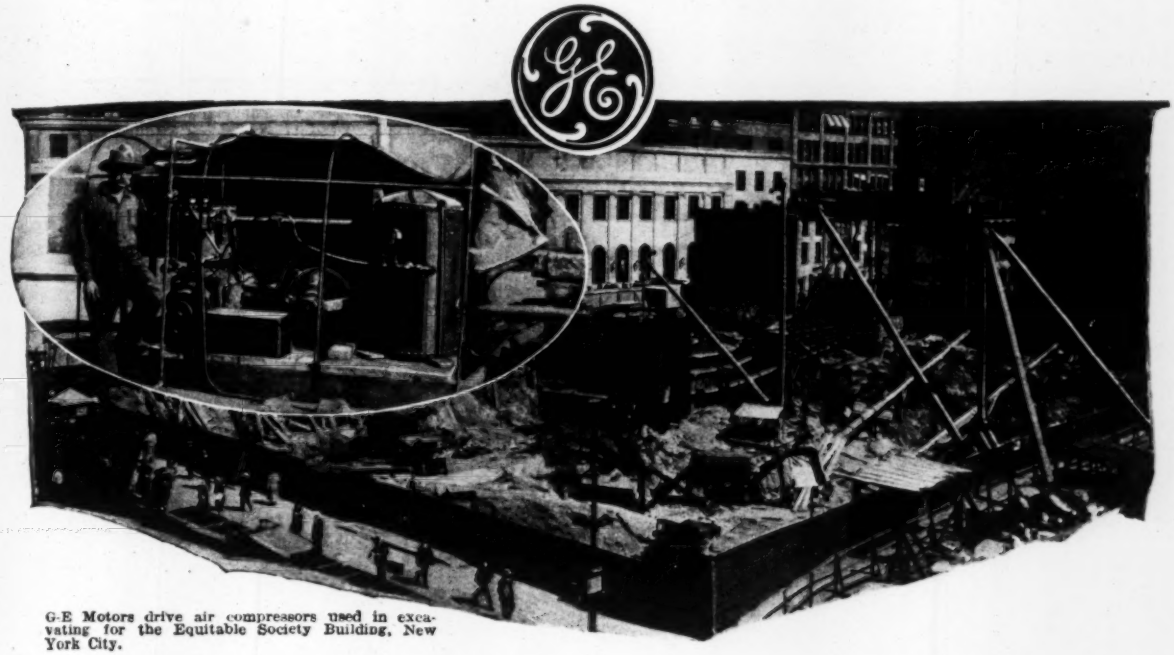
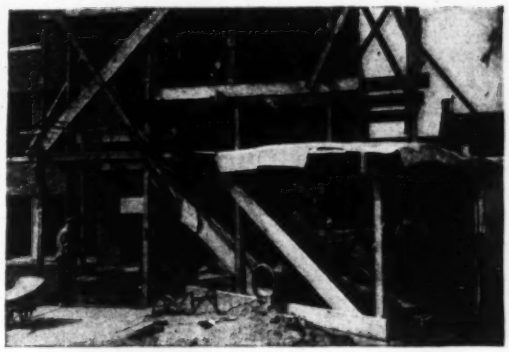
Ingersoll-Rand



G-E Motors drive air compressors used in excavating for the Equitable Society Building, New York City.



G-E Motor drives hoist used in erecting the Home Insurance Building, New York City.

G-E Motor drives elevator used in constructing the Title Guarantee & Trust Co. Building at Jamaica, Long Island.

The Power of Progress

Modern business efficiency demands skyscrapers—modern construction efficiency utilizes G-E Motors to the utmost.

From the start of the first pneumatic drill eating into the living rock at the beginning of the excavating until the completion of the finished building, G-E Motors aid the builder.

They drive the compressors which furnish air for drills and riveters.

They operate pumps for draining excavations—derricks used at every stage of the job, from clearing the excavated material from where the foundation rests, to lifting the final structural girder on which some proud worker plants the flag—hoists for furnishing lumber, brick, concrete, tile and plaster—mixers, conveyors, and elevators.

And when the job is done, they are easily moved on to the next job.

Ask G-E engineers to help you select electrical equipment for your construction plant. You can reach them at G-E Sales Offices in all large cities.

General Electric Company
Schenectady, N. Y.

GENERAL ELECTRIC

43B-756

8 Dorrco Screen Units for Los Angeles

to treat 80,000,000 gallons of municipal sewage per day.

The awarding of this contract is another indorsement of the Dorrco Screen which is steadily proving its superiority because of:

Lowest first cost per million gallons handled regardless of volume.

A minimum of moving parts.

Simple construction of screen and concrete work.

Self-cleansing —— no brushes, scrapers, nor water jets.

Minimum attention required.

Well drained screenings delivered ready for final disposal.

Dorrco Screening Plants are now in operation or under construction for the treatment of municipal sewage at:

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Send for Bulletin No. 20

The Dorr Company
Engineers

Sanitary Engineering Department
247 Park Avenue
Denver New York London

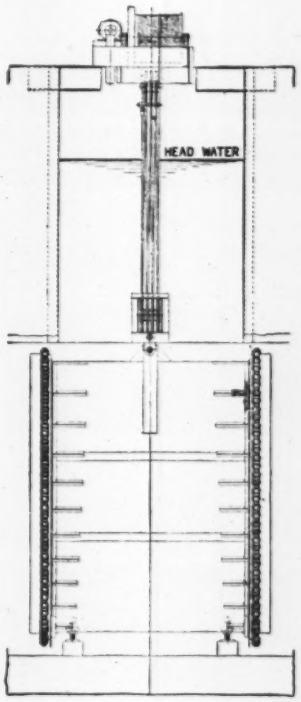
RESEARCH TESTS DESIGN EQUIPMENT

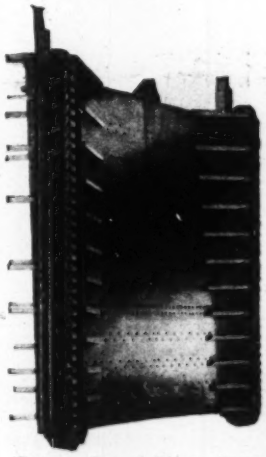
Broome Caterpillar Sluice Gates

are seated by the action of gravity and the water pressure behind them, *the seat being inclined to the movement of the gate.* Adjustment screws at the lower end of the gate eliminate all sliding friction.

They have given years of efficient service. They are in operation in the United States and Canada, and many additional installations are being made throughout the country.

They are adaptable for penstocks, locks, flash-boards, flood control or any situation where sliding gates are used.

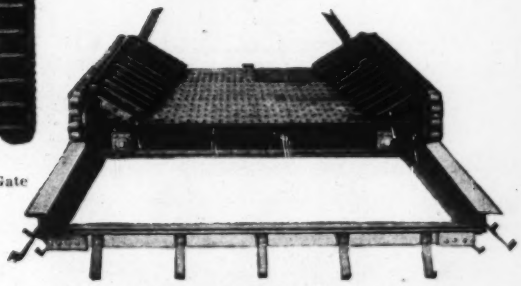




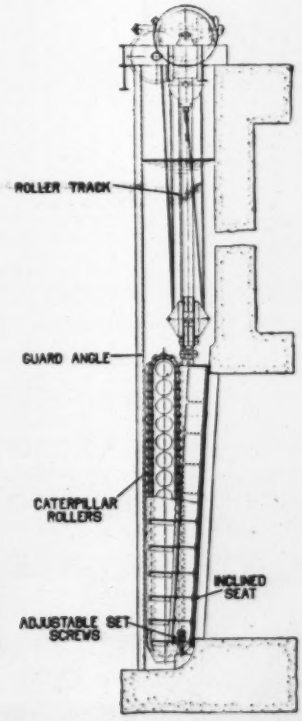
Pressure face of Broome Gate

CHAMPION Gate Hoists — hand and power operated — are the most up-to-date lifting units on the market.

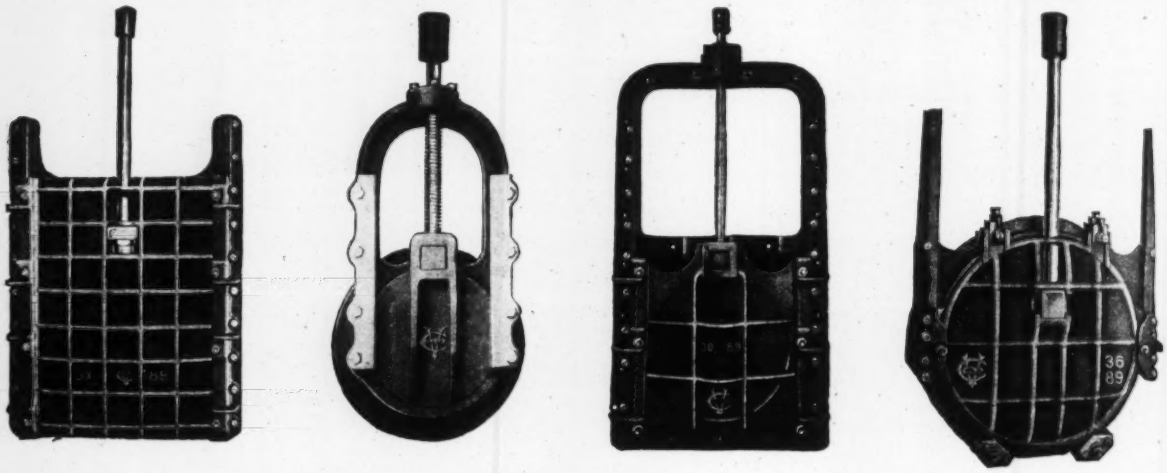
The Champion Engineering Co.
Kenton, Ohio



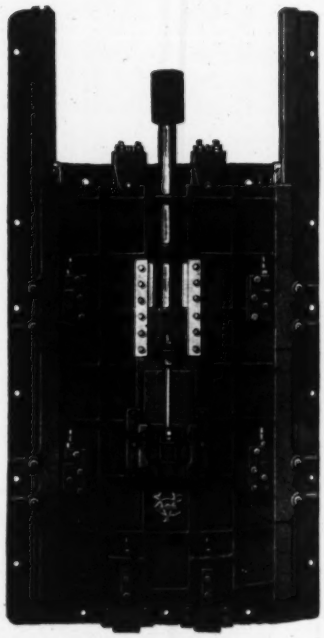
View of Broome Gate, looking up from below
Note the Set Screws



CHAPMAN



A few of our many Standard designs



Each one of these Sluice Gates has been carefully designed and built in every detail of metal and construction, for its particular purpose. Standard patterns and advanced method keep production costs at minimum.

Our experience in this field covers the production of Waste Gates, Controlling Gates, Inlet and Outlet Gates, Distributing Gates, etc., etc. These cuts illustrate a few of our many standard designs.

The Chapman Catalog

We have issued a catalog of more than 300 pages that is practically a "textbook" on the latest Sluice Gate Practice and all related mechanism. We will be glad to forward you a copy with our compliments, upon request.

The Chapman Valve Mfg. Co., Indian Orchard, Mass.

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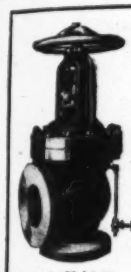
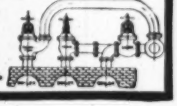
New York, Pittsburgh, Detroit, Chicago, San Francisco, Houston, Boston, Philadelphia, Cleveland, Los Angeles, Tulsa, Syracuse

VALVES

GOLDEN-ANDERSON
Pat. Automatic Double Cushioned Triple Acting Non-Return Valves



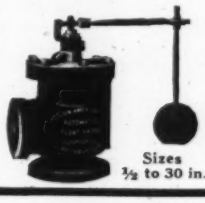
1. Prevent shut-downs due to reversal of steam flow.
2. Instantly close and isolate a boiler when a tube bursts.
3. Cut off steam flow from every boiler instantly when a steam pipe ruptures.
4. Automatically cut a boiler into line.
5. Prevent backflow into cold boiler
6. The only valves that can be tested in service.



Angle Globe or Elbow Pattern

GOLDEN-ANDERSON
Pat. Automatic Cushioned Water Float Valves

1. Automatically Maintain Uniform Water Levels in Tanks, Standpipes, etc.



2. Instantly Adjusted to Operate Quickly or Slowly.
3. Floats Swivel to any Angle—Most Satisfactory Float Valves Known.
4. No Metal-to-Metal Seats — No Water, Hammer or Shock.
5. Cushioned by Water and Air.

Sizes ½ to 30 in.

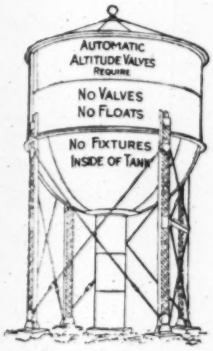
"No Metal-to-Metal Seats"

GOLDEN-ANDERSON
Pat. Cushioned Water Relief Valves

1. Automatically relieve excess pressure.
2. Prevent stress, strain and bursting of mains.
3. Correct mechanical construction.
4. Perfect air and water, cushioning.
5. No metal-to-metal seats. No hammering or shocks.
6. Angle and globe pattern. Sizes 3 to 30 in

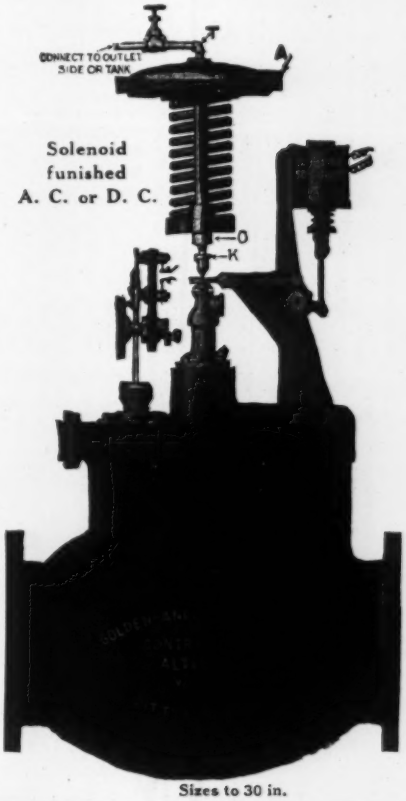
Pumps Motor-driven? Use Golden-Anderson

Patented Automatic Cushioned "Stop-Starter Electric" Controlling Altitude Valves



These valves will "cut in" or "cut out" one or more driven pumps. Actuated by the fall or rise of water level in stand-pipes, tanks or reservoirs. Control pumps automatically from distant points if desired. By maintaining a constant water level, they stop water waste due to overflow, and also all unnecessary pumping. For high or low pressure. Air and water cushioned. No floats or fixtures. No water hammer or shock. No metal to metal seats. Solenoid furnished for alternating or direct current. Especially adapted for railroads, water works and industrial plants.

"No Floats or Fixtures"
"No Water Hammer or Shock"



Solenoid funished A. C. or D. C.

Sizes to 30 in.

Golden-Anderson Valve Specialty Co., 1202 Fulton Bldg., Pittsburgh, Pa.

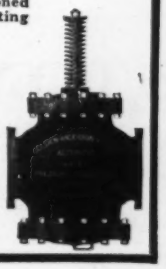
Absolute Guarantee

GOLDEN-ANDERSON
Pat. Cushioned Electric Water Service Valves

1. Give instant control of water distribution from pumping station in case of fire.
2. Open or close by electricity from distant points —a.c. or d.c. circuits. Also close by hand.
3. No waste of electricity. Current is on only few seconds.
4. Cushioned in opening and closing.
5. No water hammer, shock, sticking, surging or chattering

"Hosts of References"

GOLDEN-ANDERSON
Pat. Automatic Cushioned Water Pressure Regulating Valves



1. Maintain a constant reduced pressure regardless of fluctuations on high pressure side.
2. Perfectly Cushioned by water and air. No metal-to-metal seats.
3. The best valve made for maintaining a constant low pressure where consumption is continuous.
4. Operates quickly or slowly as required—No attention necessary.
5. Positively no hammering or sticking. Sizes to 24 in.

GOLDEN-ANDERSON
Pat. Automatic Double Cushioned Check Valves

1. Especially adapted for Water Service.
2. For High or Low Pressure.
3. Thoroughly Cushioned. No chattering, Hammering, or Sticking.
4. Globe or Angle Patterns up to 30 in.
5. Especially adapted for hydraulic elevator service.

COFFIN VALVE COMPANY,

Makers of the Largest Sluice and Gate Valves in America

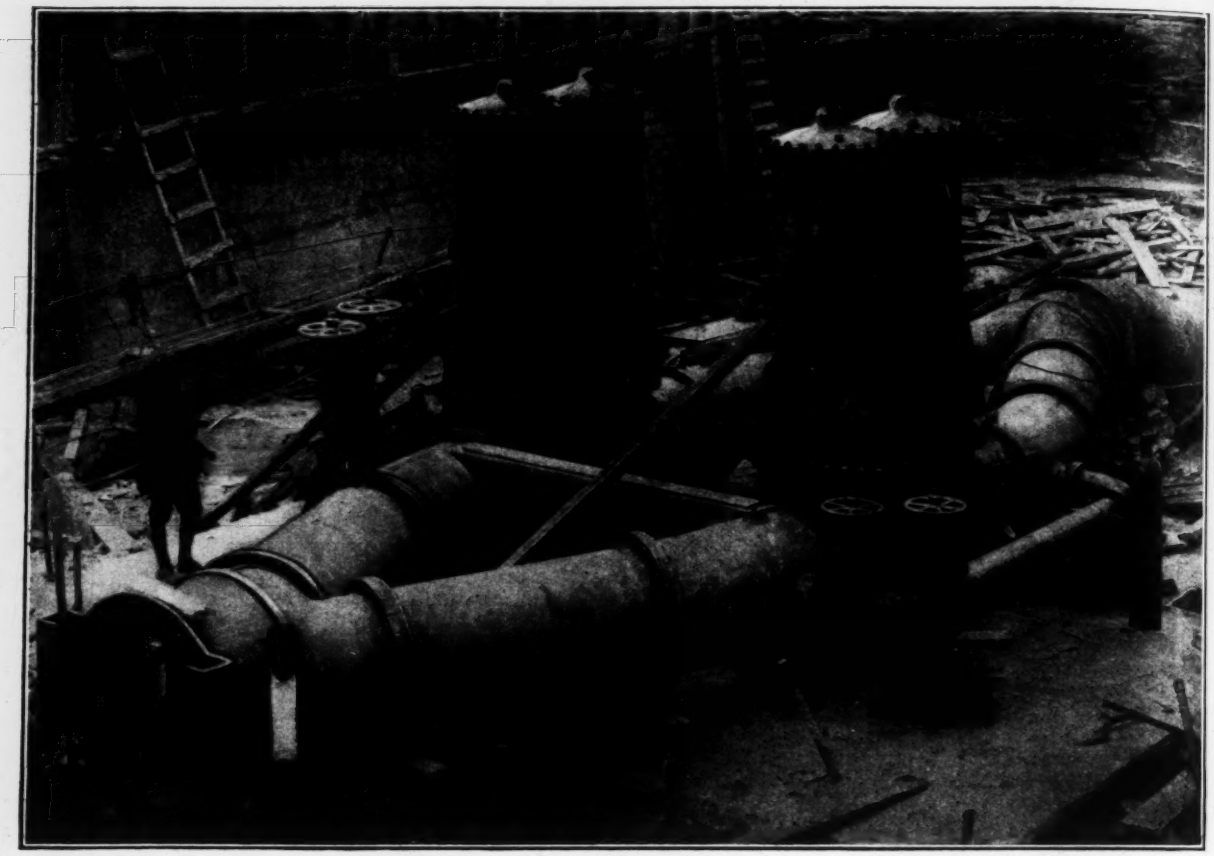


Photo Courtesy N. Y. Board of Water Supply

WE FURNISHED the four 30-in. Solid Bronze Gate Valves (with solid bronze hydraulic cylinders) and the 8-in. and 12-in. Gate Valves also shown (which are solid bronze) and the solid bronze 30-in. Pipes in the foreground, for the New York Board of Water Supply, Gilboa Dam.

This system of piping and valves provides the Blow-off and Steam Control.

Check Valves
Flap Valves
Foot Valves
Sewer Gates

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Toronto, Ont.: The Arthur S. Leitch Co., Ltd., 1001 Kent Building
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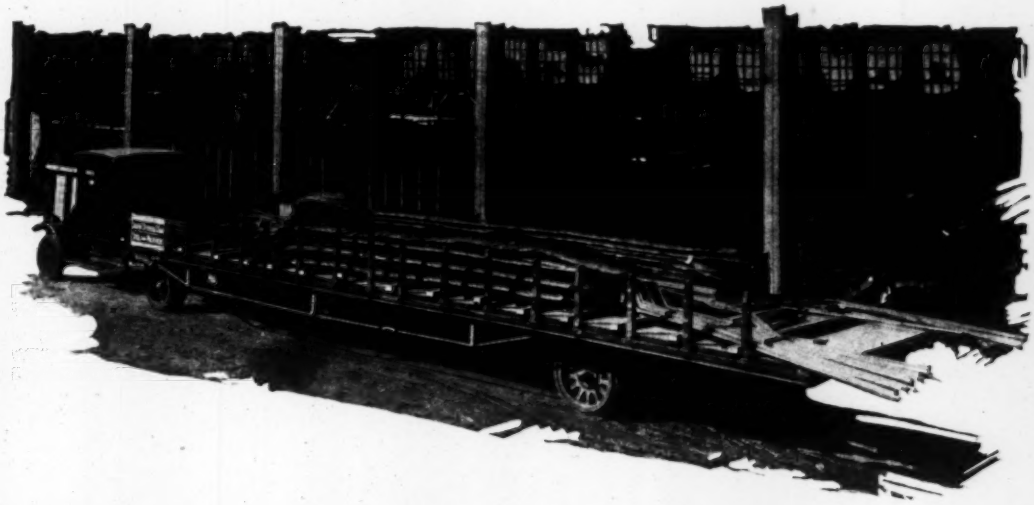

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BACK of Ryerson Reinforcing-Service are six huge plants, each with its thousands of tons of reinforcing materials such as bars, spiral rods and spacers, wire, accessories, etc., We are the contractor's storeroom and reinforcing shop.

Our large stock of steel on hand together with our complete equipment for bending, making spirals and special pieces, enables us to make quick shipment of the complete material—cut, bent, bundled and tagged, ready for the forms.

It will pay you to send us your plans for a lump sum or pound price estimate.

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Save 14c Per Ton Loading With the Jeffrey Portable Belt Conveyer

One man and a Jeffrey "Portable" can load a 5-ton truck in 10 minutes. Doing this work by hand takes 3 men 40 minutes. Figuring then the cost of labor at 40c. per hour, the conveyor will load at a cost of 2c. per ton against 16c. per ton by hand, or an average saving of 14c. on each ton loaded.

A Few of the Important Features:

Easily operated Worm and Wheel Raising and Lowering Device automatically locks conveyer in any position.

Troughed Belt carries gritty material without injury to belt.

Strong sharp nose can be readily thrust into pile.

Steel Guard Plates protect lower strand of belt.

Chain Guard protects high-speed chain.

A light, rugged and inexpensive conveyer which will load, reclaim or store coal, coke, sand, gravel, crushed stone and smaller materials — unload cars — handle bricks, tile, small boxes and bags.

Write for further information and prices

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Milwaukee, Wis. ... M & M. Bldg.
Boston, Mass. .... 141 Milk Street
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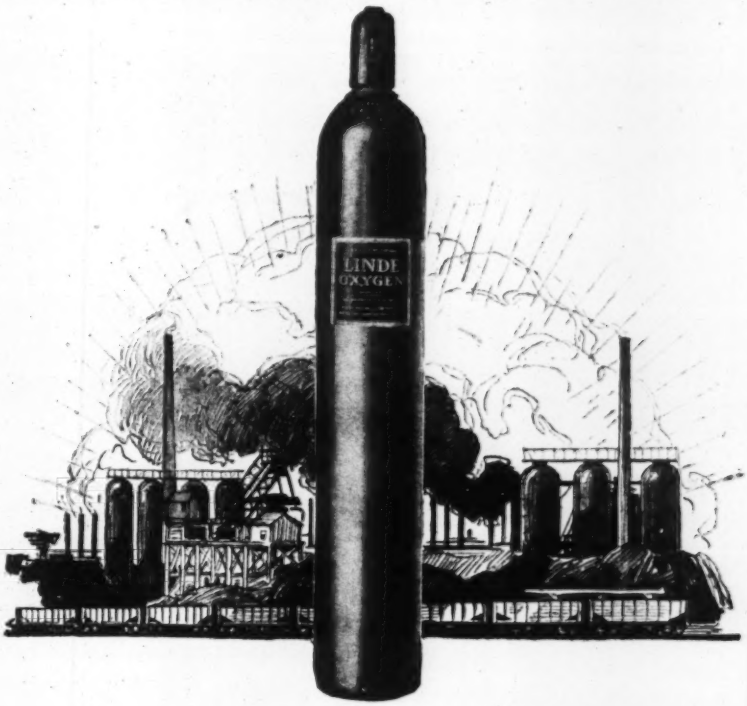
Charleston, W. Va. ... 914 Kanawha Street
Scranton, Pa. .. 518 Union Nat'l Bank Bldg.

JEFFREY



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The use of gas welded joints in pipe lines has been adopted by many of the largest oil and natural gas companies.

Hundreds of miles of welded pipe lines are used daily with complete satisfaction.

Linde Service Engineers working with Linde users have played an important part in establishing standard practices for welding joints on all kinds of piping. The result of this practical experience in the development of gas welded pipe joints is placed within convenient reach of every Linde user through Linde Service.

Because of the unusual interest over the entire country for information about gas welded pipe joints the Linde Company has prepared a booklet which should be of interest to every large user of piping.

A copy of "How Welded Joints Solved Pipe Line Troubles," may be secured upon request from our nearest District Sales Office.

Linde Service is the logical development of Linde's Desire to give its patrons every facility and service in the use of Linde Products

For your convenience—31 plants—58 warehouses

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The Largest Producer of Oxygen in the World

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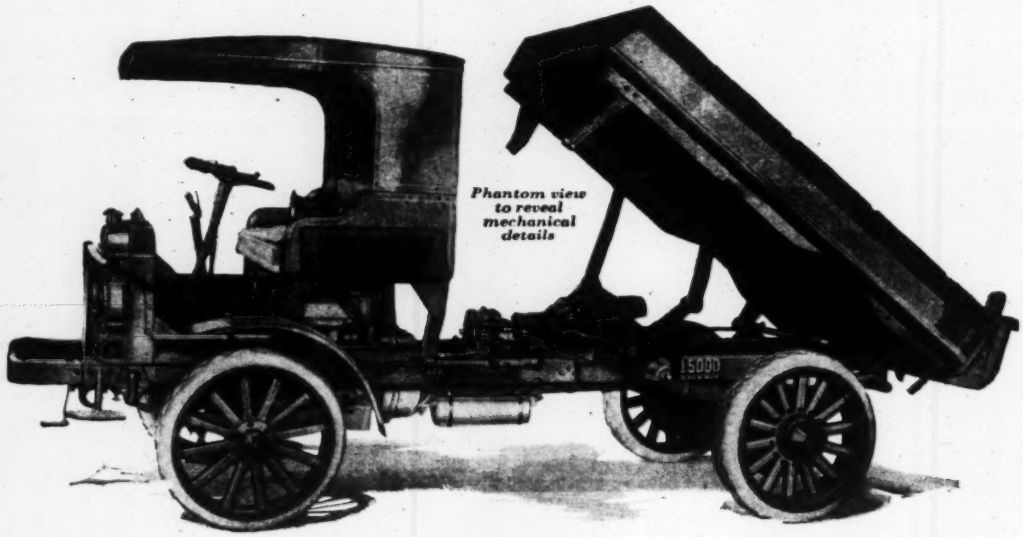
LINDE OXYGEN

Exclusive Autocar rotary dump



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The motor truck with
short wheelbase handiness
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This is the Triumvirate that you always find seated around the Electric Elevator.

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"WE WANT YOU TO PUT YOUR STEAM-HYDRAULIC IN PLACE OF THE ELECTRIC.

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There are no repairs to speak of with a Ridgway Elevator. Nothing to it to break and wear out and get out of order.

In 1914 the Remington Arms & Ammunition Co. put in 12 Ridgway Elevators. They were driven as hard as they could go day and night all through the Great War.

IN 9 YEARS THE REMINGTON ARMS CO. HAVE NOT HAD TO ORDER A SINGLE REPAIR FOR ANY RIDGWAY ELEVATOR

It is the same story with all Ridgway Elevators.

How about those elevators you have? Well we guess so.

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The electric elevator machinery is almost always in a dark place.

Electricity is the greatest Fire Fiend now devastating. Your paper daily has accounts of FIRES FROM THE ELEVATOR.

The Ridgway Elevator is operated by a small steam pipe, always harmless.

These are three of the many reasons why the Biggest and Best Concerns

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CRAIGE RIDGWAY & SON CO., Coatesville, Pa.

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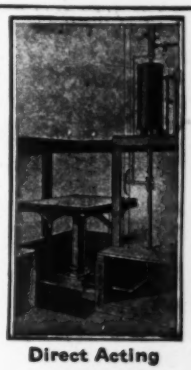

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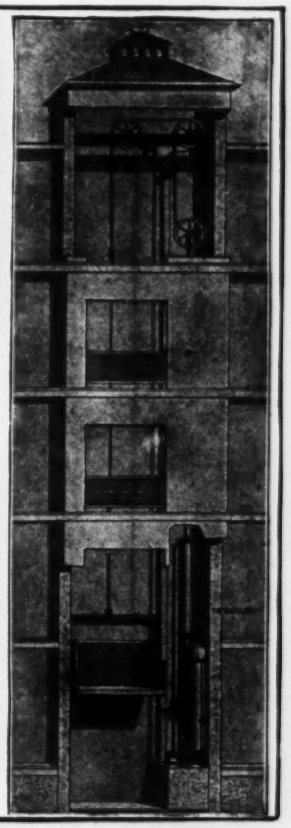

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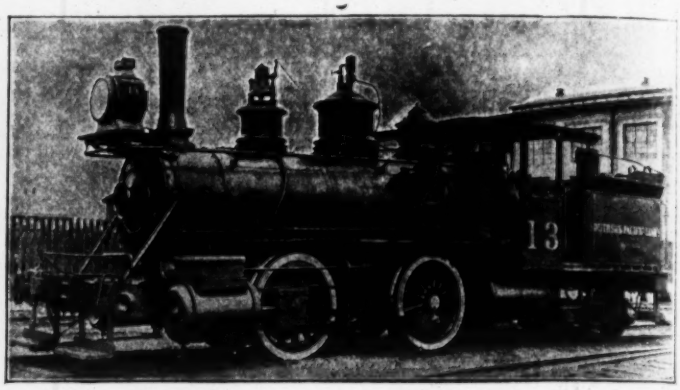

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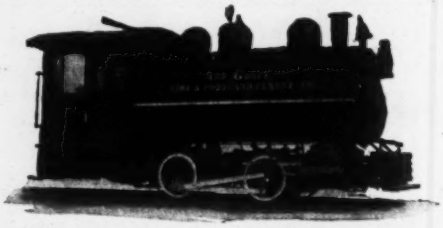

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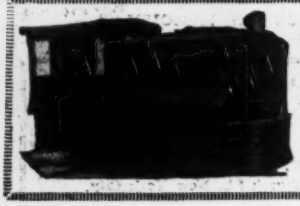

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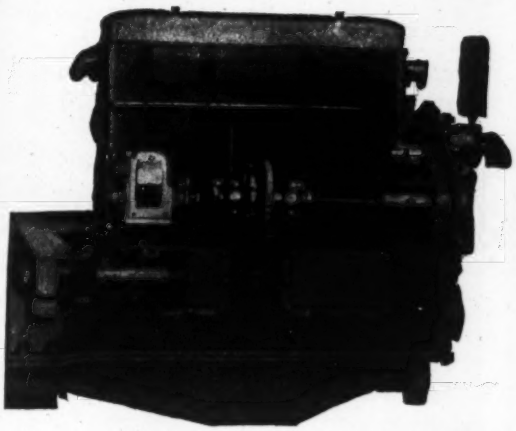

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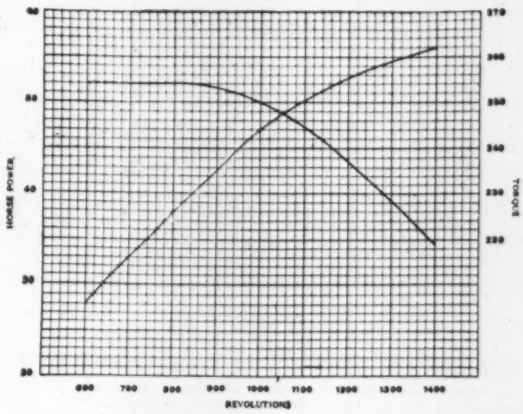

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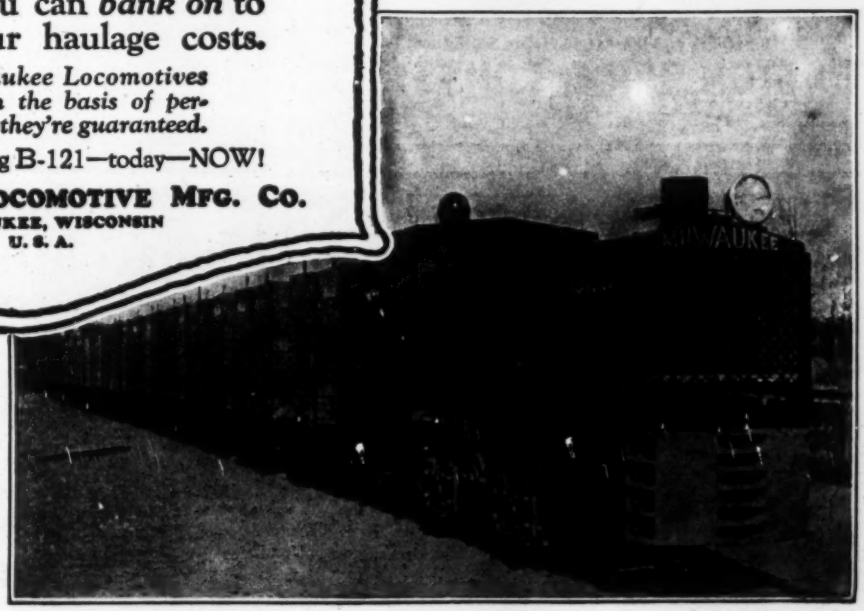

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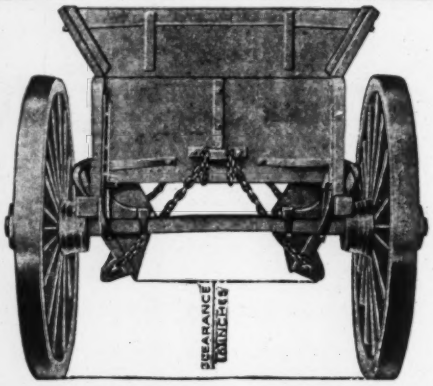

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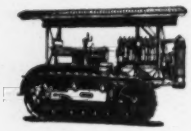

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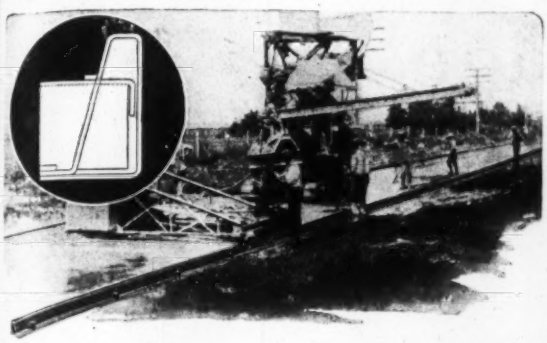

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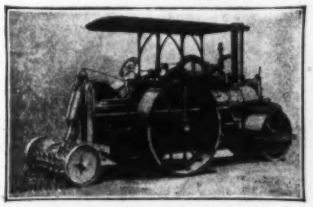

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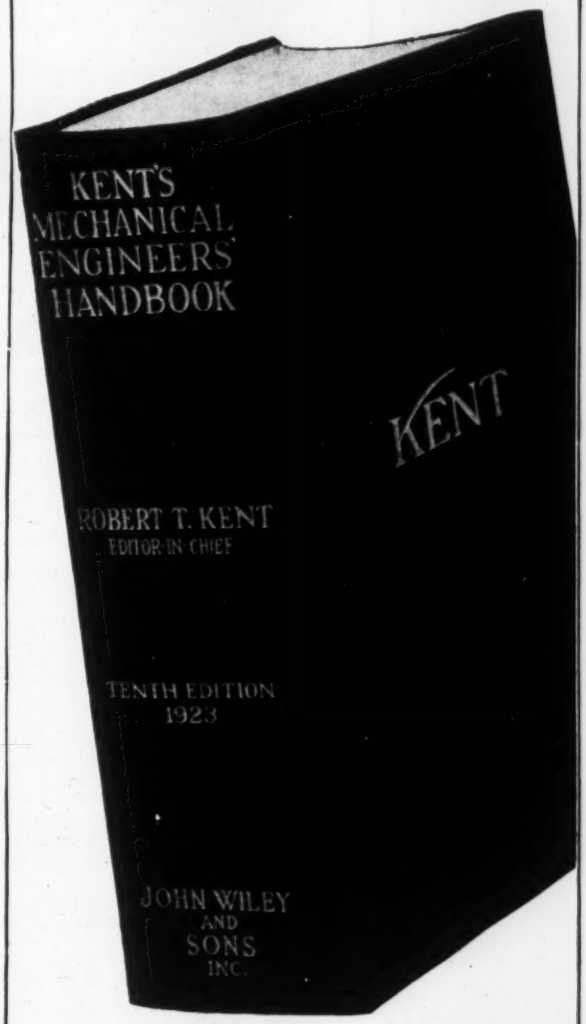

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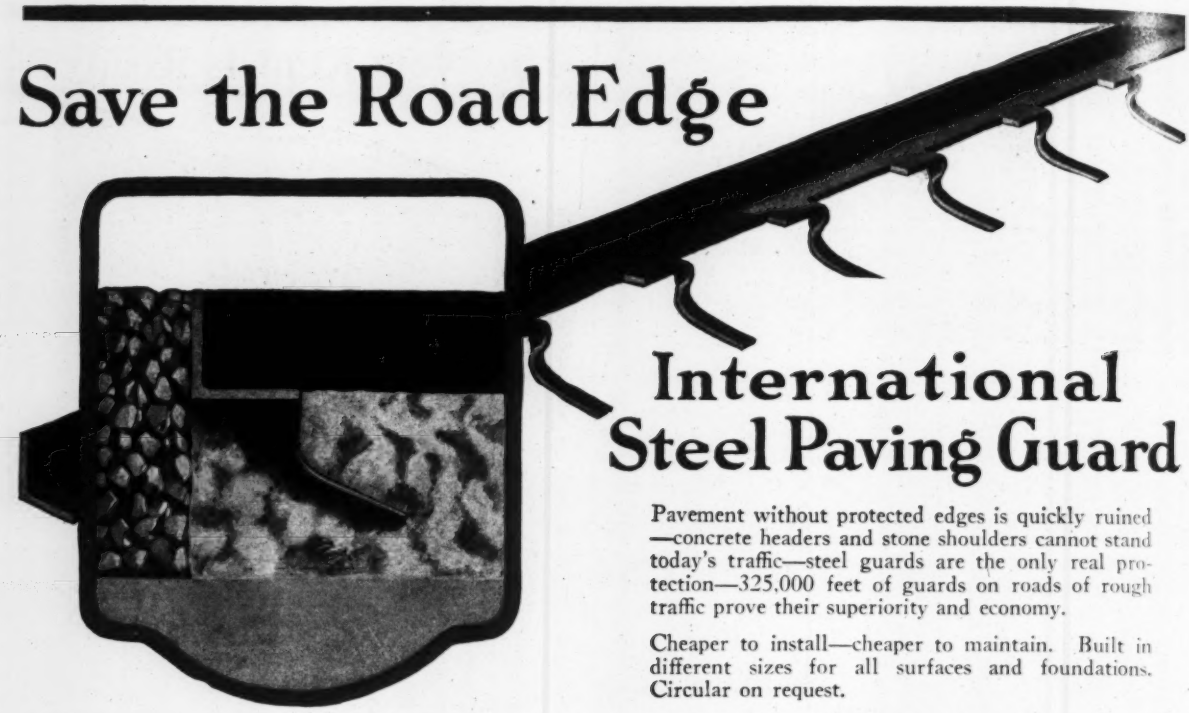

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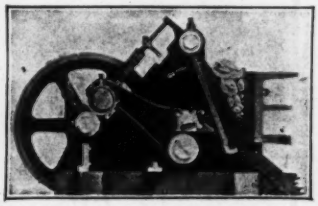

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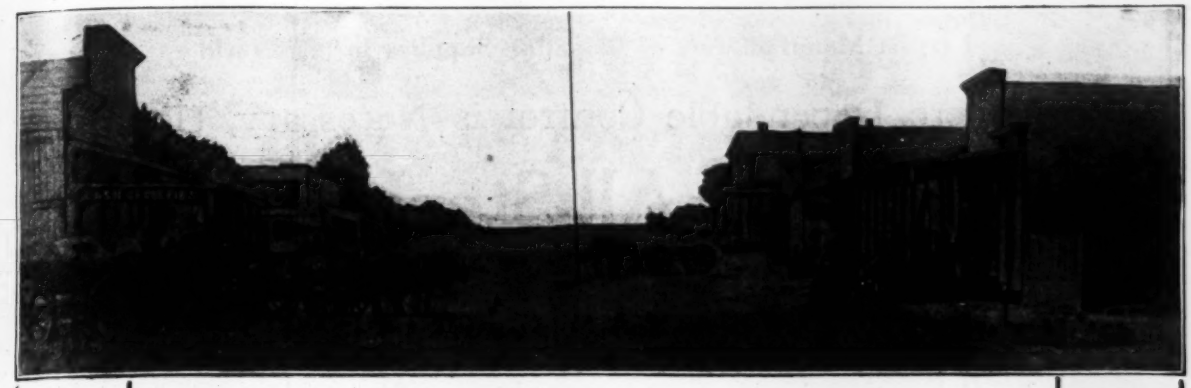

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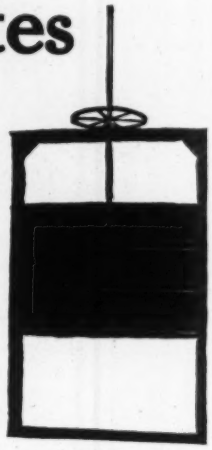

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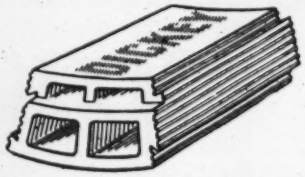

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of Genuine Open Hearth Iron, with a proper admixture of Copper and generous coating of Spelter, are daily making new friends and substantiating our claims for superior strength and durability.

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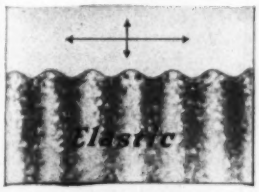
641 West Tenth St., Newport, Ky.

CORRUGATED CULVERTS

"ACME" (Nestable) and IMPERAL Riveted Corrugated Culverts. Made of anti-Corrosive Toncan Metal. Write for prices.

THE CANTON CULVERT & SILO CO.
MANUFACTURERS
CANTON OHIO U.S.A.

The A-B-C of
Culvert Engineering



Corrugated Culverts give to stress in any direction.

Corrugated Culverts endure pounding and reversals of stress better than any other type.

ARMCO Culverts have been proved uncrushable under a fill equal to diameter.

A Few culverts can have an adequate foundation. They are usually located in depressions filled high with silt. In most instances, it is totally impractical to dig deep enough to give any structure a bed-rock base in such a location.

B When foundations are at all adequate, they are usually the most expensive part of the installations—an expense far in excess of that required.

C There is but one type of Culvert that will endure without resting upon a solid base. The well made Corrugated Culvert resists the forces of shifting, heaving earth, settling, freezing and the weight and pound of traffic.

Stress may disarticulate a weak or jointed culvert.

ARMCO Culverts do not absorb water. They do not "weather" like porous materials.

Settling and earth creepage leave the Corrugated Structure efficient and unharmed.

and—

The A-B-C of
Corrugated Culverts

A The material of Corrugated Culverts must resist rust.

B Rust resistance requires high purity of the iron used, for two reasons—iron of high purity *resists rust of itself,* and it takes and holds more firmly a protecting coat of galvanizing.

C ARMCO Culverts are made of ARMCO Ingot Iron, the purest commercial iron produced, and of the highest UNIFORM purity. The ARMCO Culvert you buy tomorrow is made of exactly the same material that is found in ARMCO Veterans under the highways and railways of the world—the culverts that have made ARMCO the world's standard for durability and economy.

ARMCO CULVERT & FLUME MFRS. ASSN.
215 NORTH MICHIGAN AVE. CHICAGO

ARMCO CULVERTS

This Little Dot

If this rectangle were a sheet of ARMCO INGOT Iron, the little dot would represent all the impurities. If the dot were the least bit larger, due to the addition of any other material, the result would not be ARMCO Ingot Iron. ARMCO has less than 1 part impurities to every 625 parts of pure ferrite—less than 1 *ounce* of impurities to every 39 *pounds* of pure iron.

ARMCO
Ingot Iron

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SERVICE

Sometimes one treatment is sufficient to protect timber against decay for a stated time. **Protexol**

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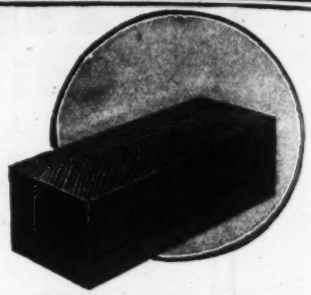

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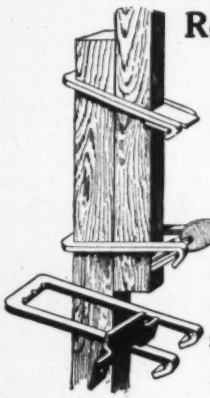

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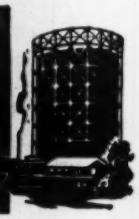

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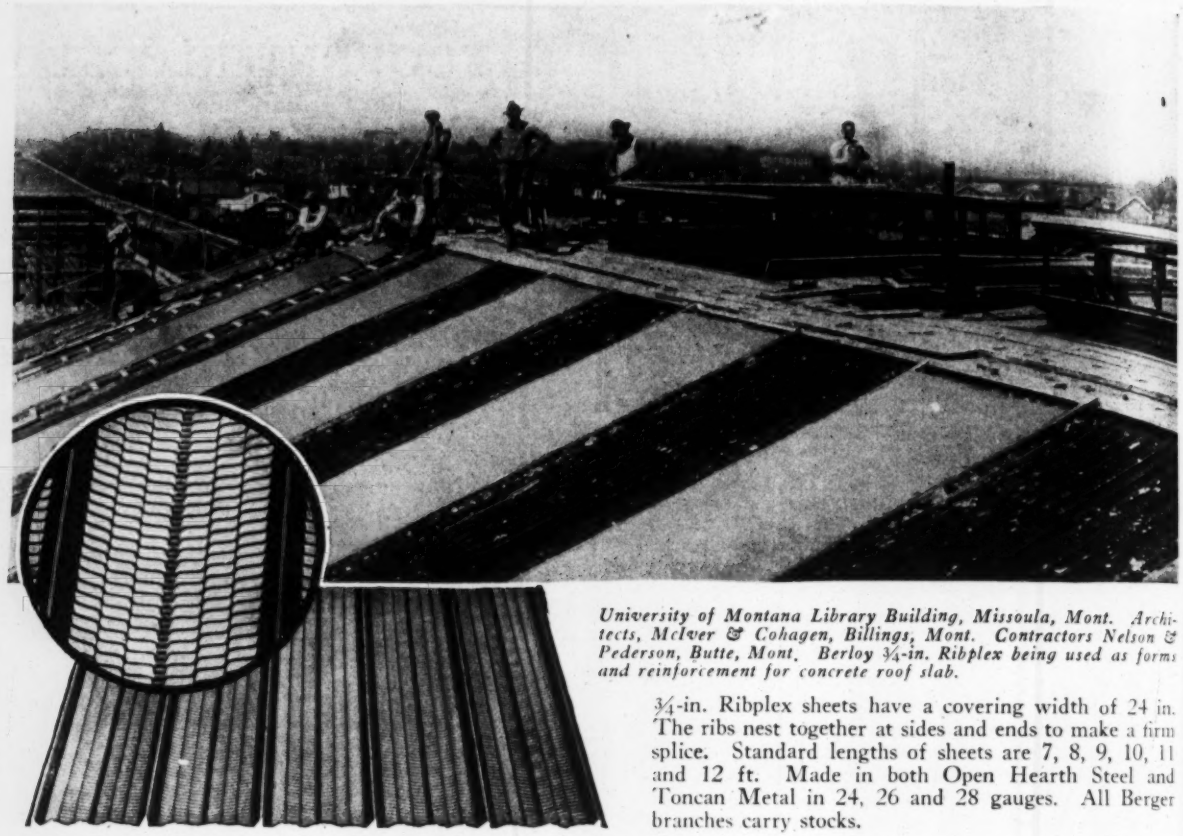

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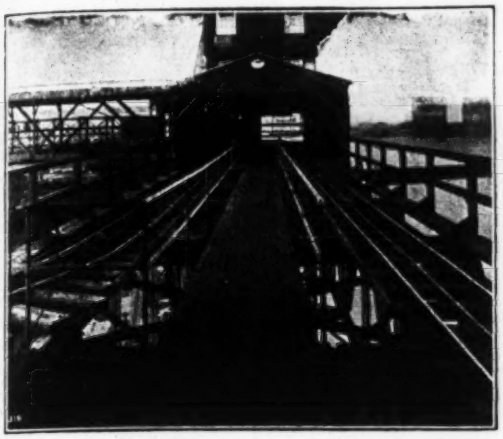

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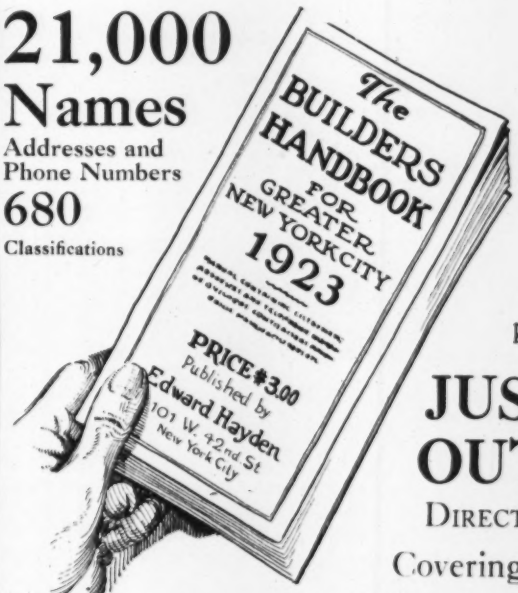

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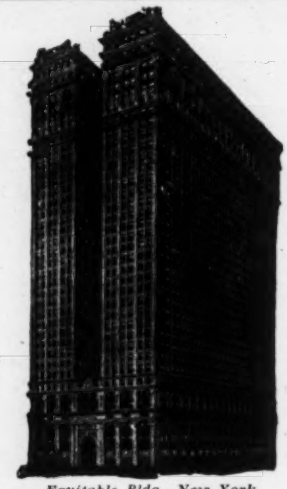

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ALLISON STEEL PRODUCTS CO.
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FOR CORRECT METHODS OF USING CONCRETE

VULCANITE PORTLAND CEMENT CO

PHILADELPHIA BOSTON NEW YORK

Business Established 1832

The Lawrence Cement Co.

No. 302 Broadway New York, N. Y.

Selling Agents for

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In Successful Use a Third-Century

PENNSYLVANIA
PORTLAND CEMENT

Highest Quality

Manufactured by

Pennsylvania Cement Co.

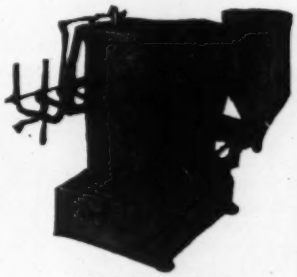
New York Boston Philadelphia Buffalo

Results Are Best Measured in *Dollars and Cents*

Clean, count and bale your cement sacks in one handling. An automatic counter and a baler are a part of the regular equipment.

"Saves 1 sack of cement from 100 empties."

The sack is dropped over beaters which hold it open. A few strokes is enough to clean thoroughly.



Style B Power Driven

This means a large saving in cement, time, labor and freight which is all yours because the machine is inexpensive and the power consumption low. Firms that know their costs are our best customers.

THE WILLSEA WORKS

Successors to Century Cement Machine Co.

Builders of special machinery. The Hercules Concrete Block and Trimming Stone Machine.

60 Brown's Race, Rochester, N. Y.

HENDRICK SCREENS

for every purpose

ELEVATOR BUCKETS (plain and perforated) STACKS AND TANKS
GENERAL SHEET AND LIGHT STRUCTURAL WORK
LIGHT AND HEAVY STEEL PLATE CONSTRUCTION

HENDRICK MFG. CO. CARBONDALE, PENNA.

New York Office, 30 Church St. Pittsburgh Office, 544 Union Trust Bldg.
Hazleton, Penna., Office, 705 Markle Bank Bldg.

WONDER MIXERS

The ORIGINAL Single Opening Tilting Mixer — ball bearing drum — pouring discharge—fast visible mixing action.

Ask for the new WONDER catalog

It contains the biggest values on the market.

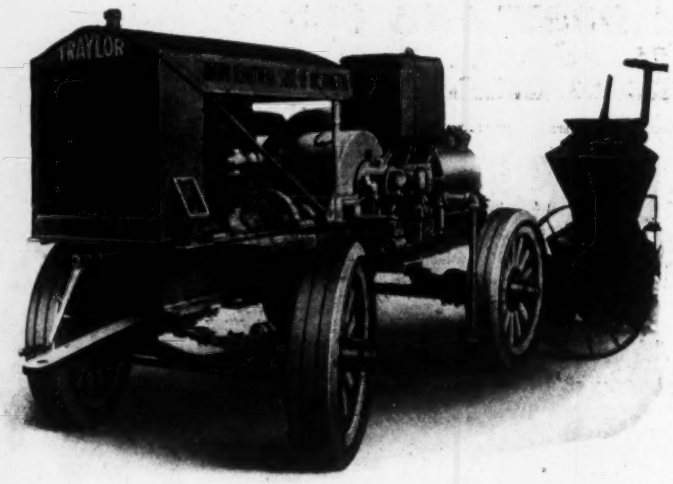
Write today

Construction Machinery Company

427 Vinton Street Waterloo, Iowa

Here's the way you've always felt a Compressor should be mounted!

The TRAYLOR PORTABLE GASOLINE COMPRESSOR



If you've ever had a compressor wracked to pieces by the bumps—thumps—jumps of transportation, you'll welcome this "rubber heel" mounting with the sturdy wheels, axles and springs to back it up! This is the last word in compressor efficiency now—this is the perfected Traylor, with the slow speed, horizontal straight-line drive, worm gears and pump for delivering water under pressure. Runs equally well on gas or current. *Write for Bulletins.*

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Made in two sizes. Also mounted on standard iron wheels, if desired.

The Underpinning & Foundation Co. 342 Madison Ave. New York City
Difficult Foundations
Pneumatic, Steel, Concrete and Wooden Pile Foundations. Bridge Piers; Underpinning Heavy Building
"HERCULES" STEEL PILES

STAR BRAND BLOCKS
Are Standard
For any lift or difficult working condition they are safest, strongest and most durable.
Boston & Lockport Block Co.
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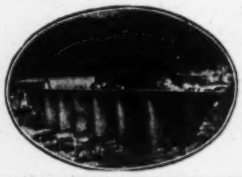
New York City 33 South St. Chicago 413 Fort Dearborn Bldg.

VULCAN IRON WORKS
THE WARRINGTON (VULCAN)
STEAM PILE HAMMERS
PILE DRIVERS AND PILE DRIVING MACHINERY
327 NO. IRVING AVE. — CHICAGO



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Best for Any Foundation
High Safety Factor Low First Cost
Rapid Construction No Maintenance
Send for Cost Data, Literature, Photos.
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SIMPLEX CONCRETE PILING
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"The Pile With a BIG Foot"
MacARTHUR PEDESTAL PILE
The MacARTHUR METHOD insures maximum foundation safety under every working condition in all kinds of soil.
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"Sullivanize" Your Drill Steel

Sullivan Drill Steel Furnace and Drill Sharpener, showing compact installation.

DON'T handicap your rock drills or delay your runners by using steel that is improperly heat-treated, badly formed or poorly sharpened.

Train your blacksmith to put as much footage as possible into each steel he sends on the job.

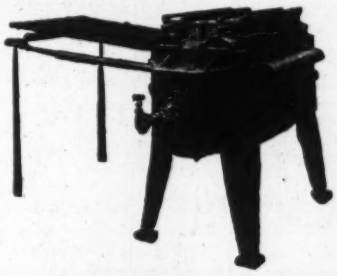
Sullivan Furnaces and Sharpeners Provide Drill Steel Quality Insurance

The Sullivan oil or gas Furnace heats the steel gradually, evenly, while electrical devices prevent overheating or burning, and indicate, also if the steel is **not** hot enough for working or tempering.

The hammer-forging action of the Sullivan Sharpener refines the grain of the metal, and with each repeated sharpening renders it tougher, less liable to wear or breakage.

Sullivan-sharpened bits are made to exact shape and gauge by tool steel dies and dollies. They "follow" accurately in the drill hole.

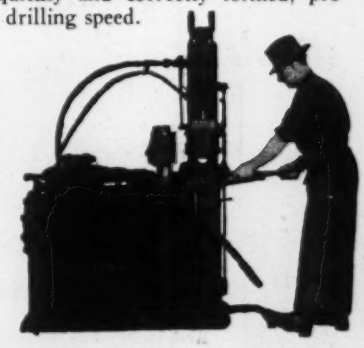
With the Sullivan gauging device, genuine double taper bits are quickly and correctly formed, providing increased drilling speed.



Sullivan Furnaces and Sharpeners insure that each steel is of uniform hardness, of exact shape, that the steel quality you paid for is preserved and that you will obtain the maximum feet of hole from each steel.

Sharpeners, Bulletin 472-E

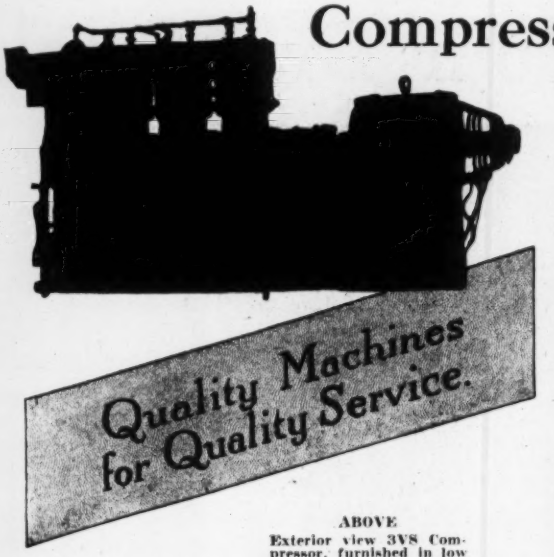
Furnaces, Bulletin 474-A



Send for New Steel Handbook and Instructions, 80 pages, free, No. 472-G

SULLIVAN MACHINERY COMPANY

124 SOUTH MICHIGAN AVE., CHICAGO, ILLINOIS U.S.A.



Compressed Air at Minimum Cost!

THE price you pay for compressed air depends on the cost of air compressor maintenance and operation.

It is traditional of Westinghouse-National Compressors that they remain in perfect running condition for years without requiring expensive repairs or replacements.

As to cost of operation—figuring power as the chief item—our distinctive Automatic Control effects a saving that is quickly reflected in production costs.

ABOVE
Exterior view 3VS Compressor, furnished in low pressure sizes of 250 to 520 cu. ft. displacement; high pressure sizes, 150 to 335 cu. ft.

Westinghouse Traction Brake Company
General Offices and Works: Wilmerding, Pa.

Offices:

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Chicago, Ill.	Mexico City	Pittsburgh
Columbus, O.	St. Paul, Minn.	Washington
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Houston, Tex.		San Francisco

WESTINGHOUSE-NATIONAL
AIR COMPRESSORS

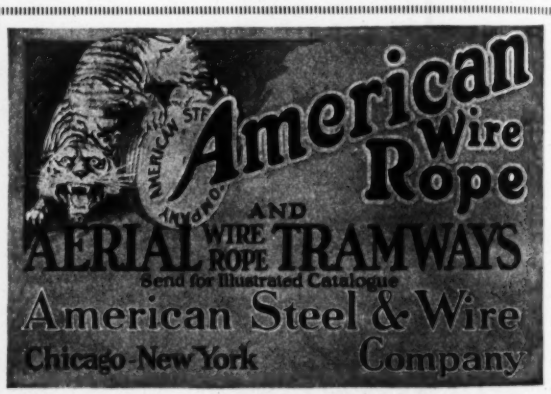
If it can't be done with McKiernan-Terry Pile Hammers— it can't be done at all!

WRITE FOR
BULLETIN 31

McKIERNAN-TERRY DRILL COMPANY

Rock Drills Pile Hammers Lifting Jacks
Mining and Quarrying Machinery
13 Park Row, New York
Works at Dover, N. J.

Agencies in the following Cities: Boston, Chicago, Pittsburgh, Cleveland, Detroit, St. Paul, San Francisco, Columbus, O., New Orleans, Philadelphia, Portland, Oregon. *Foreign Representatives:* British Steel Piling Co., London, England.



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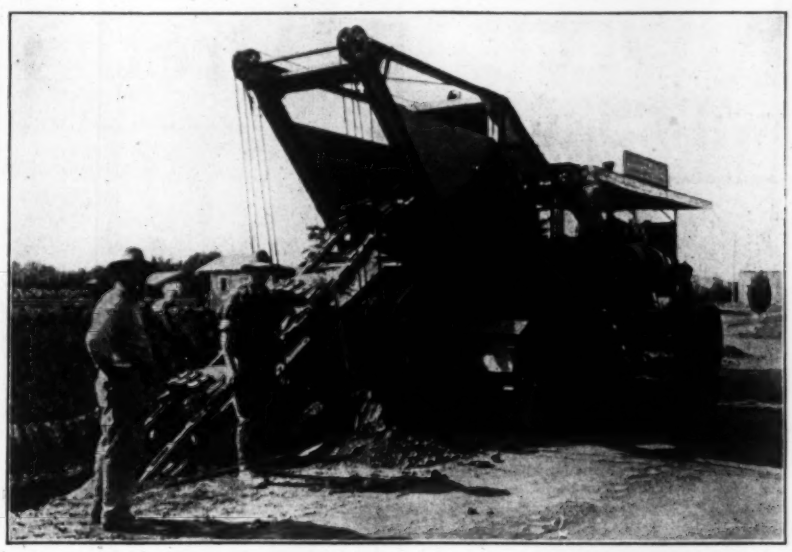
POTTER
Trench Machines, Buckets
POTTER MFG. CO.
3505 E. Washington St., INDIANAPOLIS, IND.

"MORETRENCH"
Conveying Excavator

Digs and backfills trenches in one operation. Any size—any depth. See our big advertisement next week. Write or phone.

Moore Trench Machine Co.
Rockaway, New Jersey

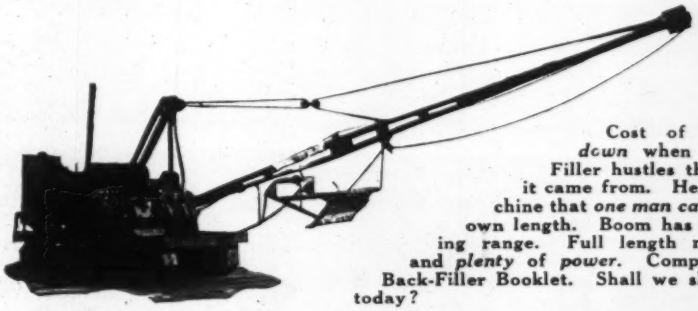


It's a Comfortable Sort of Feeling

Makes you feel kinda good to know that the company you've bought a machine from is going to take care of you. Here's a contractor way out in Los Angeles—Harper D. Churchill. He wrote us:

"I chose a Buckeye after carefully checking their performance and specifications. At this instance, I wish to go on record that the Buckeye organization is the squarest and easiest to do business with that I know of. Your wants are taken care of promptly and efficiently. They make you feel as though they are interested in your welfare. This alone would make us give them all our business."

That's putting it pretty "strong." But you'll find most Buckeye owners *strong for Buckeyes* and the *service* that goes with 'em. Put a Buckeye on your next job—you'll find we're right when we say "you'll always be glad you bought a Buckeye."



Going Down!

Cost of back-filling *going down* when a Buckeye Back-Filler hustles the dirt back where it came from. Here's a one-man machine that *one man can run*. Turns in its own length. Boom has 160 degree swinging range. Full length multiplane traction and *plenty* of *power*. Complete details in the Back-Filler Booklet. Shall we shoot you a copy—today?

The Buckeye Traction Ditcher Company, Findlay, Ohio

Manufacturers of Trench Excavators (both Wheel and Chain-and-Bucket Types), Pipe-Line Trench Excavators, Tile and Open Ditchers, Back-Fillers, Pipe Screwing Machines, Curb Diggers and Clay Diggers.

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Buckeye

UNION
Cableway Skips

This company is probably the largest producer of heavy cableway skips in this country. We fill orders for hundreds every year and have executed single orders for two hundred and more.

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UNION STANDARD TYPE SKIP with spreader bar and chains built in capacities up to 10 cubic yards. (Illustrated.)

STYLE L

UNION GATE SKIP (Patented). A skip permitting full loading of material such as coal, sand, earth, etc. Built in capacities up to 10 cubic yards. (Illustrated).

STYLE M

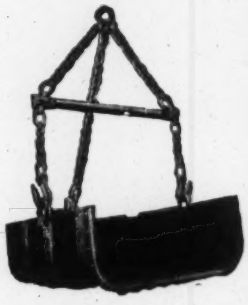
UNION STEEL SCALE BOX, with chains and dumping trigger. Built in capacities up to 2½ cubic yards. (Illustrated).

STYLE N

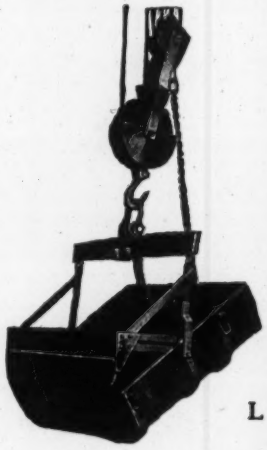
UNION WOOD SCALE BOX. Built of oak with iron mountings.

STYLE O

UNION EXPORT SKIP. A skip developed by us for export. Sloping sides permit nesting, thereby saving a large percentage of the ocean transportation charges.



K



L

M

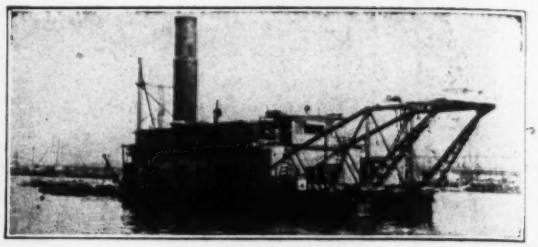
Write for new Catalog published April, 1923.

UNION IRON WORKS
Lackawanna Siding
Hoboken, N. J.

UNION DOUBLE ACTING HAMMERS

DRIVE AND PULL

Dredging



Filling, Land Reclamation, Canals and Port Works

River and Harbor Improvements
Deep Waterways and Ship Channels

We are equipped to execute all kinds of dredging, reclamation and port works anywhere in the United States.

CONTRACTORS to THE FEDERAL GOVERNMENT

Correspondence Invited from Southern Officials and Corporate and Private Interests Everywhere.

Largest Plant **Longest Experience**

Atlantic, Gulf and Pacific Co.

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CONVERTIBLE Attachment Operates ¾-yd. clamshell, skimmer, scoop, ditcher scoop, drag line, shovel, magnet, or hook.

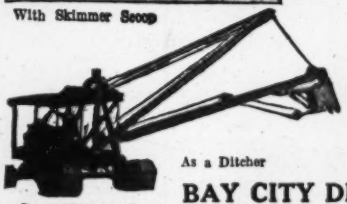
With Skimmer Scoop

BAY CITY CRANE EXCAVATOR

Model 16

One machine—Many uses The Versatile Bay City never need be idle. A profitable investment for every contractor.

Write for Circular 12



As a Ditcher

See Skimmer Scoop our ad in last issue.

Builders of

CRANES
EXCAVATORS
LAND DREDGES

Walking, Track Crawler and Floating Type

BAY CITY DREDGE WORKS
2603 Center Ave., Bay City, Mich.

SAUERMAN
JUNIOR
CABLEWAY

For small gravel pits and light work in digging material from underwater, this inexpensive new type of cableway excavator is a labor-saver. Just like our large standard machines only not so heavy and hoist is portable. **Ask for Bulletin 123.**

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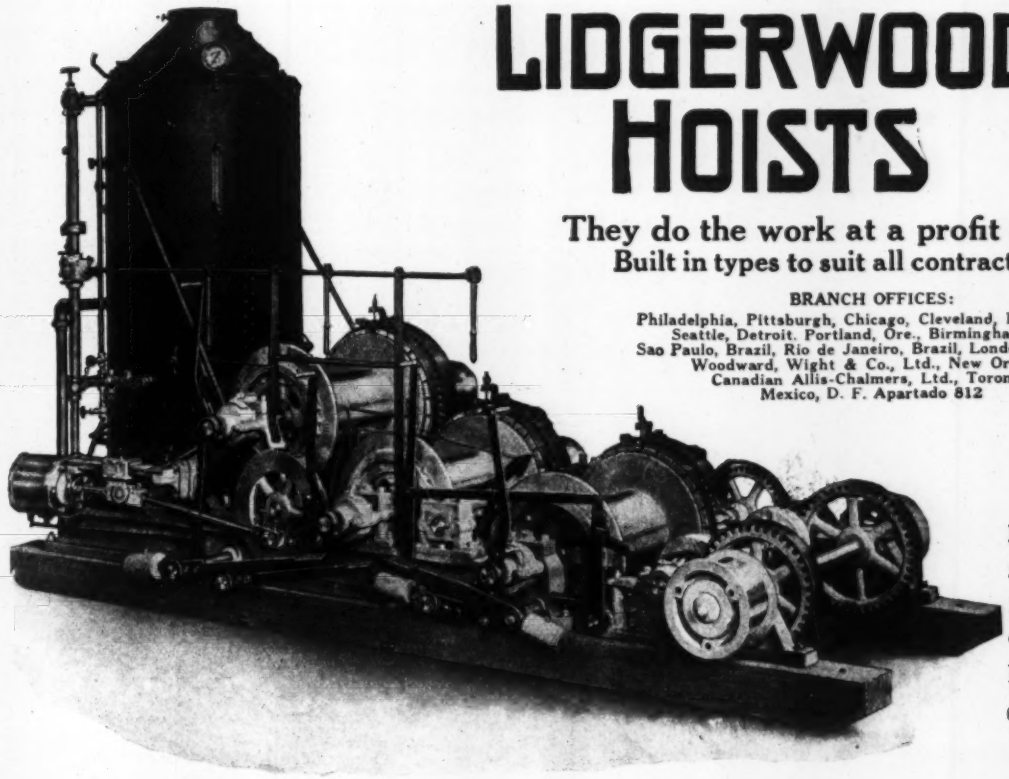

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They do the work at a profit to the user
Built in types to suit all contractors' uses

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NATIONAL

15 HP. with Le Roi Engine

Gasoline Hoists

Send for Catalog

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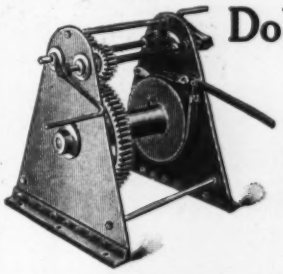

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Stocks of Fittings, Blocks, Sheaves, Winches, etc., carried by our agents—
G. S. Green Co., New York.
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DOBBIE Foundry & Machine Co.
Manufacturers
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PATTERSON
Extra Heavy Snatch Blocks
Double cross riveted. Self-lubricating sheaves. Hand forged swivel hook. Inside reinforcing strap. Widely used on many big construction jobs.
Write for Catalog No. 22
W. W. Patterson Co.,
50 Water Street, Pittsburgh, Pa.

STROUDSBURG HOISTING MACHINERY
STEAM—ELECTRIC—GASOLINE
FOR ALL PURPOSES
Catalog Upon Request
STROUDSBURG ENGINE WORKS
Stroudsburg, Pa.

Dependable Wire Rope

"HERCULES" WIRE ROPE

Hercules (Red Strand) Wire Rope is wear resisting at every point. Its unusual combination of strength, toughness and elasticity make it economical as well as dependable.

Established 1857

A. Leschen & Sons Rope Co.
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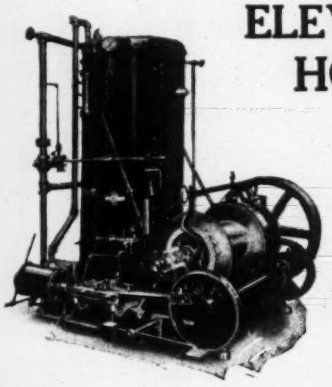
TRADE MARK
MUNDY
ESTABLISHED 1869

BRICK MASON'S
ELEVATOR
HOIST



IDEAL for use in building construction for light hoisting. It is especially adapted for double elevators carrying building materials, being provided with large elevator sheave wheel clutch to the drum shaft.

J. S. MUNDY HOISTING ENGINE CO.
Manufacturers of High Grade Hoisting Equipment
New York Sales and Export Office: 30 Church Street
NEWARK, NEW JERSEY, U. S. A.

Clyde's Greatest Asset—

Hundreds of satisfied customers who always specify Clyde Equipment on repeat orders.

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Fulfill Every Requirement
Save Time, Labor and Space
THE TOLEDO CRANE CO.
BUCYRUS, OHIO

MOORE SPEEDCRANE
A lightweight, flexible speed crane that represents the greatest advance made in crane construction in the past 20 years.
Has a single universal clutch that swings the crane, propels the machine, raises and lowers the boom.
Send for literature.
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"Marions" Pioneered
In Big Operations—
They Still Lead
The Marion Steam Shovel Co.
Marion, Ohio, U. S. A.

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With a Wizard's Deftness
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Roebling Welding Wire
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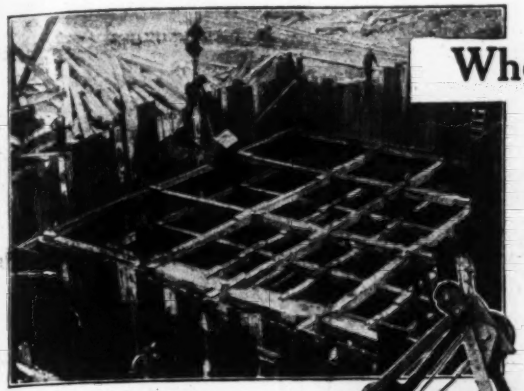


When the digging looks "*Too tough for a clamshell*"— use the WILLIAMS *Hercules*

Take the advice of concerns like the Kirkpatrick Sand & Cement Company, who have tried out different makes of buckets in the hardest digging. They will tell you that the WILLIAMS "Hercules" has dug successfully in material that was too hard for an orangepeel.

The "Hercules" digs hardpan, tough clay, cemented gravel and imbedded boulders.

If you have hard excavating to do, you don't have to experiment. The experience of many contractors has demonstrated the ability of the "Hercules" to dig hard materials—and the *reliability* of this powerful bucket is covered by the regular WILLIAMS guarantee: *All parts guaranteed against breakage.* What other bucket but a WILLIAMS can you get for the hardest kinds of excavation, with a guarantee like this behind it?

If you are going to have some hard clamshell excavation, just describe the work and we will tell you what you can expect to do with a WILLIAMS "Hercules". Write us.

"In the past 15 years, we have tried many different makes of clamshell and orangepeel buckets, but we have found that the WILLIAMS clamshell is the best digging bucket we have ever used." *A. Mohan, Kirkpatrick Sand & Cement Co., Birmingham, Ala.*

The WILLIAMS Closing Arm, with sheaves in tandem, gives the "Hercules" unrivalled power for biting into hard materials.

Our 60-page catalog describes the WILLIAMS "Hercules," and other WILLIAMS 1-line, 2-line, 3-line and 4-line clamshells. It contains interesting photos, blueprints and descriptions of the 12 standard types of clamshells in the complete WILLIAMS line—for any class of work, any kind of crane or derrick. Write for Catalog N.

—G. H. WILLIAMS CO., Erie, Pa., U. S. A.

WILLIAMS
QUICK-ACTING CLAMSHELLS
All Parts Guaranteed Against Breakage

Get a Practical Crane

Furnished in mounting and power to suit requirements of buyer.

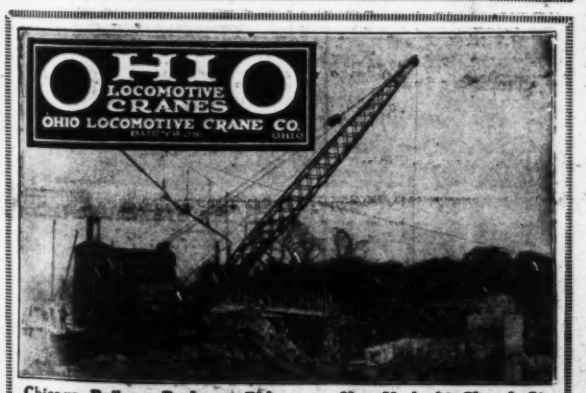
BOOM can be raised or lowered under load while operating—this is one of the practical features, exclusive with Byers.

Write us for interesting bulletins.

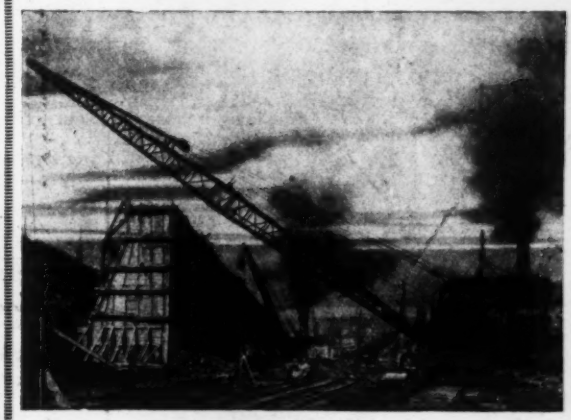
***BYERS* Model 10**
Full Circle Crane

Also Auto-Cranes, Truckcranes, Buckets, Hoists, etc.

THE BYERS MACHINE COMPANY, 250 Sycamore St., Ravenna, O.



Chicago, Railway Exchange Bldg. **New York, 30 Church St.**



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INDUSTRIAL CRANES

are readily adapted for Excavation Work, Pile Driving, Concrete Work, Handling Great Iron, Timber and Steel Units.

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Sales Engineers in all principal cities

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Buckets | All Types
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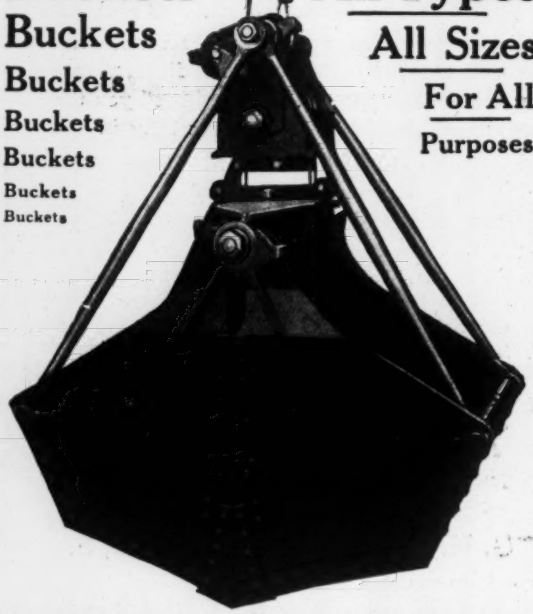
Buckets
Buckets



ORTON & STEINBRENNER CO.
Offices: Chicago Ill.
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Heavy Duty Steam Shovels

Have you seen one of them at work? A regular giant for digging. Easy to operate—low operating and maintenance cost—and fast. Will go most anywhere. Has interchangeable trucks and can be converted, easily and quickly, to Clamshell or dragline.

¾ and 1 yd. capacities
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Clamshell and Orange-peel Buckets

Dredging Buckets. Hydraulic Dredging Equipment. Complete Dredges. All work designed and finished in our own plant. Backed by 50 years' experience. Repairs to all types of Buckets and Dredges.

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Iron Works, Inc.
Jersey City, N. J.

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buckets

clam-shell and orange peel

Locomotive Cranes · Bridge Cranes
Equipment for Moving Materials

THE McMYLER-INTERSTATE CO.
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INTERSTATE

LAKEWOOD CLAM SHELLS

for digging, dredging and handling - send for descriptive bulletin

The Lakewood Engineering Company
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Complete Paving Plant
Paving Mixers, Batch Boxes, Cars, Track, Finishing Machines, Subgraders, Locomotives.

Construction Plant
Steel Towers, Chuting Plant, Heavy Duty and Small Mixers, Cars, Track, Hoppers, Chuts.

CLAMSHELL BUCKETS

Built by master builders for every kind of digging or rehandling. One, two, three or four line buckets built to fit your crane and fit your work.

BLAW-KNOX COMPANY
601 Farmers Bank Building, PITTSBURGH, PA.

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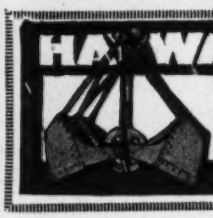
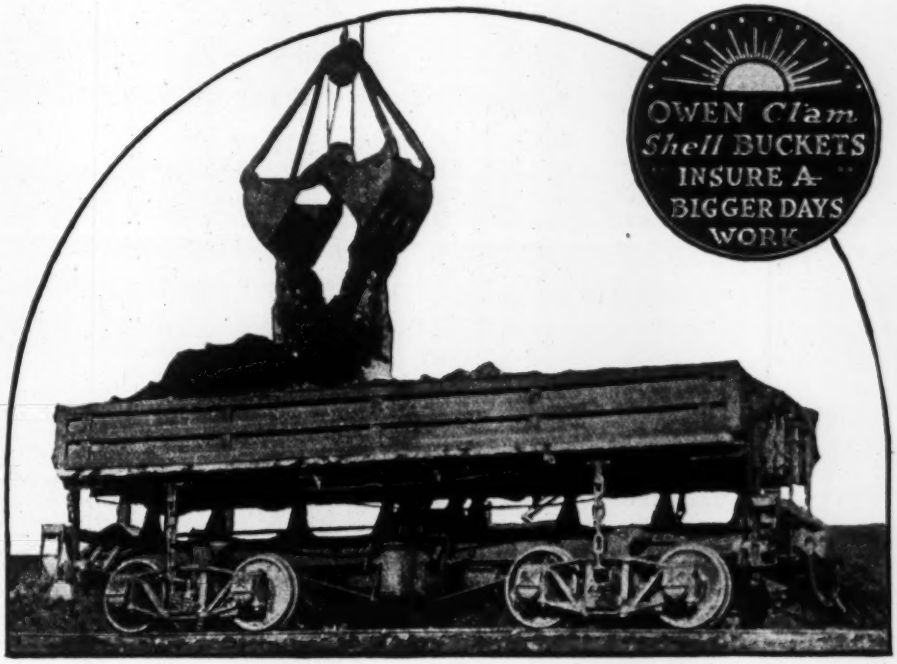


Clam Shell, Orange Peel, Electric Motor, and Drag Scraper Buckets for all excavating, dredging, and rehandling purposes. Ask for Catalog 43, or consult our engineers gratis.

The Hayward Co., 48-50 Church St., N. Y.

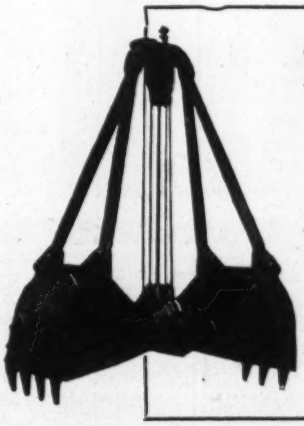
OWEN



RAILROAD CONTRACTORS

prefer the Owen Bucket because of its adaptability to the work at hand. They have found the "Owen" equally efficient when loading or unloading sand and crushed stone as when digging for abutment footings. They buy *one* bucket now for both classes of work where *two* types were used heretofore because the "Owen" adjustable features of weight, digging power and closing speed enables it to meet every material-handling requirement in the wide range of work encountered in railroad construction. This feature is illustrated and briefly described under Reason No. 4 in Pamphlet No. 11. This is one of 8 reasons based upon 8 new and exclusive features of bucket construction, outlined below, contained in this pamphlet covering our Type "J"—The Railroad Contractor's Bucket. Act now. Get Pamphlet No. 11 for your file today.

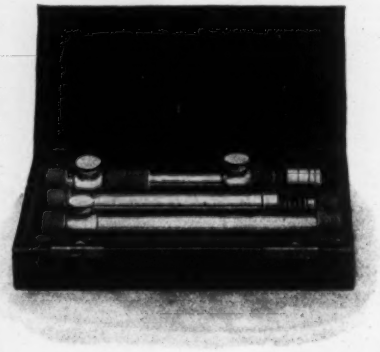
THE OWEN BUCKET COMPANY
533 Kirby Bldg., Cleveland, O.



THERE ARE 8 REASONS

why Owen type J Buckets Cost Less to Operate, are more durable and insure a bigger day's work.

1. 60% of entire weight is in the center, and at the lowest point of the bucket when open.
2. Undiminished closing power of five to one.
3. Lever type arm brackets increase digging power.
4. Closing speed, digging power and weight adjustable.
5. Fair leads to closing cable insure maximum life.
6. Cutting edges or teeth hit the material first.
7. V-shape arm construction preserves rigidity.
8. Hinge assembly guaranteed unbreakable.



Color and Turbidity of Water Determined with Accuracy

Water is often "colored" by vegetable matter or "turbid" from mud and silt carried in suspension. When water is used for a municipal supply, color and turbidity are always objectionable; when furnished to industries either quality is usually harmful to the products.

The U. S. Geological Survey Design Color and Turbidity Determining Instruments based on the Platinum-Cobalt methods of color measurement devised by Allen Hazen, C. E., make possible at small cost the scientific determination of color and turbidity of water.

We are prepared to furnish complete sets of these instruments packed in neat, pocket-size cases ready for immediate use in the field.

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"WATCH DOG"

WATER METERS

Accurate
Durable
Efficient

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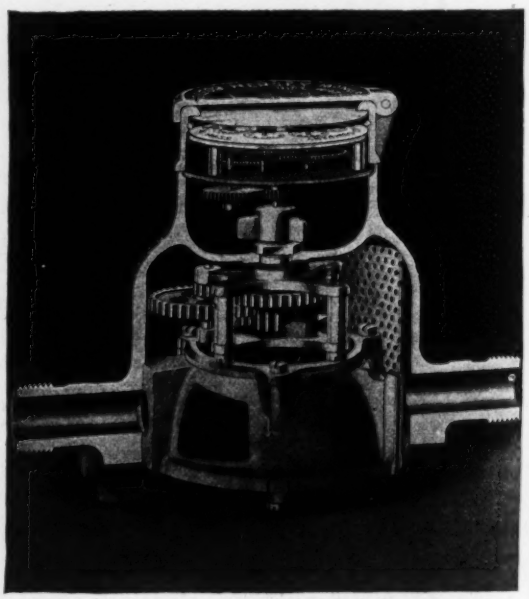
GAMON METER COMPANY
Main Office and Works:
NEWARK, NEW JERSEY



HERSEY DISC METER, MODEL HF which is the Highest type of Frost protected Meter and HERSEY DISC METER, MODEL HD which is the Highest type of Divided or split-case Meter, are the product of thirty-five years' experience and refinement in the manufacture of Water Meters. These Models excel all Meters of all makes in all those essentials which go toward making exceptionally desirable Meters.

HERSEY MANUFACTURING COMPANY
Boston, New York, Chicago, Columbus, O., Philadelphia, Atlanta
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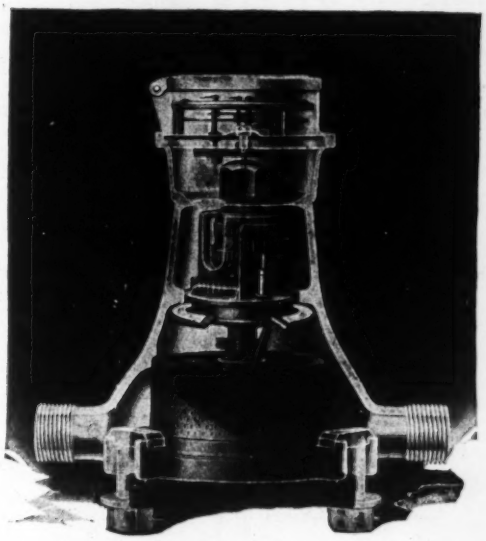
Trident Meters



Made where the Spirit of Craftsmanship dominates automatic machinery

A series of eight human-interest letters describing every step in the making of Trident Meters—get acquainted with these famous "Bill to Jim" letters—send for your copies today.

Neptune Meter Company

Pioneers in Meter Progress

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Boston Chicago San Francisco Atlanta Los Angeles Seattle Portland St. Louis, Mo.

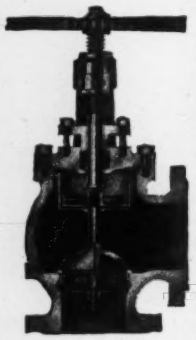
Made for maximum service not merely the average

TRADE JENKINS MARK

Jenkins Bros

Automatic Equalizing Stop and Check Valves

(Also known as "Non-Return" Valves)



Sectional view, Fig. 293. Extra Heavy Iron Body Automatic Equalizing Stop and Check Valve, Angle Pattern.

This valve automatically shuts off the flow of steam from header to boiler in case a tube should burst or other internal rupture occur, thereby suddenly reducing the pressure in that boiler. They prevent one boiler from working at a lower pressure than another.

Their installation makes it impossible to accidentally turn steam into a boiler which is being cleaned, because the valve can be opened only by the pressure in the boiler to which it is attached.

Made in extra Heavy Globe and Angle Patterns — Iron Body for working steam pressures up to 250 pounds; Cast Steel up to 350 pounds.

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Always marked with the "Diamond"

Jenkins Valves

SINCE 1864

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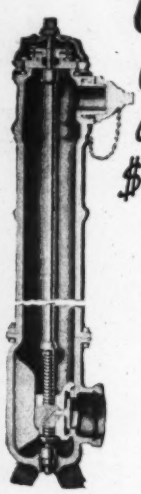
Over 3,000 cities and towns are guarding against $1,000 a minute fire loss!



They were Ludlow Fire Hydrants—because of their simple construction, non-freezing feature, freedom from binding and water hammer, and the patented device which prevents flooding, should they be broken. As can be seen, the Ludlow Fire Hydrant is of the gate type.

Get the Ludlow Catalog on Valves and Hydrants.

The Ludlow Valve Mfg. Co.

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BRANCHES: New York, 62 Gold Street; Boston, 112 Water Street; Philadelphia, Harrison Building; Pittsburgh, First National Bank Building; Chicago, 633-635 The Rookery; Kansas City Office, R. A. Long Building; San Francisco, Calif., W. P. Horn Co., Rialto Building; Los Angeles, Calif., W. P. Horn Co., Kerckhoff Building.

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KEYSTONE
COMPOUND

EUREKA
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KEYSTONE
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PITTSBURGH METER COMPANY
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COLUMBIA—1433 Main St.
SEATTLE—4038 Arcade Bldg.
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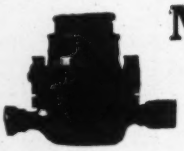
WORTHINGTON

Meters



Meter frozen, showing compression of frost clamps

The upkeep cost of 35,000 Worthington Model "G" meters was four cents a year. Worthington frost clamps save money in winter, too. Ask for proof.

WORTHINGTON PUMP AND MACHINERY CORPORATION
Executive Offices: 115 Broadway, New York City
Branch Offices in 24 Large Cities W.68

Easily Carried By One Man

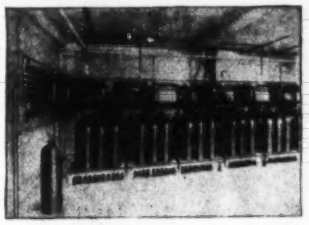
This light, durable machine will be sent on approval for 30 days trial If not as represented, send it back.

Corporation Tapping Machine

Write for latest bulletins of this and other waterworks appliances.

The A. P. Smith Mfg. Co.
East Orange, N. J.

CHLORINATION BREVITIES



340,000,000 Gallons of Water are Sterilized Each Day at the Dunwoodie Installation of W & T Apparatus for New York City's Water Supply

BEFORE chlorination the typhoid fever death rate in the cities of the United States was over 25 per 100,000.

Now with chlorination it is less than 5.

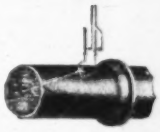
The only safe water supply is one that is sterilized.

WALLACE & TIERNAN
COMPANY, INCORPORATED
Manufacturers of Chlorine Control Apparatus
NEWARK, NEW JERSEY

8

Number Two of a series of four advertisements explaining the adaptability of Simplex Pitot Tube Meter as an accurate hydraulic measuring device.

THE SIMPLEX PITOT TUBE METER



Cut shows standard Simplex Meter Register connected to a Simplex Pitot tube which is inserted in the pipe line.

is adapted for use in water mains of any size, and for the measurement of water at any pressure and at any velocity down to ½ foot per second. It is widely employed for metering flow in:

Discharge mains from pumping station and filtration plants:

Pipe lines from storage dams and reservoirs:

Distribution mains within city limits:

Water supply lines in industrial establishments for recording the total water supplied to the entire plant, to sections of the plant, or the water supplied for special purposes, as for condensing.

Interesting data on "Pitot tubes and their practical application" sent upon request—

"Simplex Installations Give Satisfaction."

Simplex Valve and Meter Company
300 Fidelity Building, Philadelphia
MANUFACTURERS OF METERS AND RATE CONTROLLERS OF THE VENTURI TYPE, GAUGES AND OTHER WATER WORKS DEVICES

Clean Water Mains
Deliver Full Capacity

We are glad to confer with municipal officials or Water Companies.

National Methods are patented

National Water Main Cleaning Company, 54 Church Street New York

DEAN

ELECTRIC CONTROL UNIT
FOR THE MOTOR OPERATION OF LARGE
GATE AND GLOBE VALVES
Write for Bulletins
PAYNE DEAN LIMITED
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Steel Tank and Plate Work
HEADQUARTERS
Steel Tanks and Steel Plate Work

Water Softeners, Filters and Heaters

Water Softeners for Boiler Feed-Water. Hot Process, Cold Continuous, and Zeolite Softeners. Pressure and Gravity Filters. Water Heaters. We make all successful types.

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Liquid Chlorine
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PIONEER MANUFACTURERS of LIQUID CHLORINE
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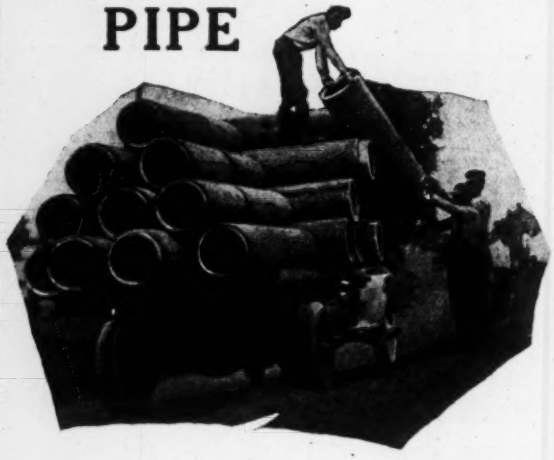
WATER-*fit for use*
Filtration and Water Softening Plants
ROBERTS FILTER MFG. CO.
DARBY, PA. *New York Office Flat Iron Bldg.*

CHLORIDE OF LIME
For Purifying Water
Pennsylvania Salt Mfg. Company, Philadelphia, Pa., U. S. A.

MICHIGAN PIPE



Puts Real Pipe Value Into the Trench

Low Initial Cost — **Exceptional Performance**
Low Labor Cost — **Shipment from Stock**

Said a waterworks engineer: "My investigation brought to my knowledge a waterworks in Indiana with 28 miles of Michigan Pipe, with an extremely low maintenance account."

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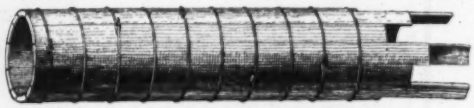
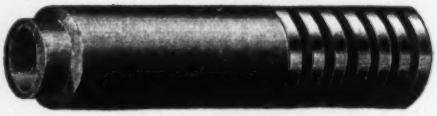
Oklahoma City, Okla., 105 W. 16th St.; New York City, N. Y., 522 Fifth Ave.; Chicago, Ill., Leiter Bldg., 15 E. Van Buren; Boston, Mass., Room 1121, Oliver Bldg.; Cleveland, Ohio, 919 Ulmer Bldg.; Chattanooga, Tenn., 702 James Bldg.; Philadelphia, Pa., 318 Widener Bldg.; Pittsburgh, Pa., 323 Fulton Bldg.



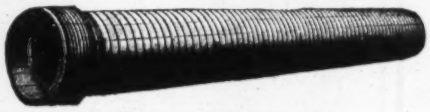
Douglas Fir Continuous Stave
WOOD PIPE



"Standard" Wood Pipe

STANDARD WOOD PIPE CO.
Williamsport, Penn.

PACIFIC REDWOOD AND DOUGLAS FIR **PIPE**



Made in all sizes from 2 inch to 14 feet in diameter

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INTERNATIONAL FILTER CO.
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AMERICAN WATER SOFTENER COMPANY
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No affiliation or working agreement with any of our competitors

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(Plain and Creosoted)
CREO-WOOD FLUME — WOOD CONDUIT
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Standard Capacities up to 60,000 pounds

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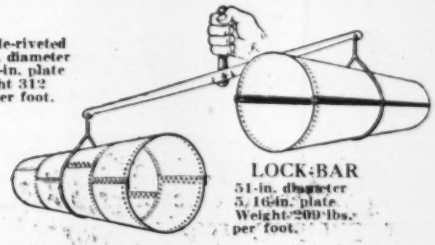
Gate, Foot and Check

Cast Iron Pipe and Fittings, Special Castings

For Water, Gas and High Pressure Service



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Altogether, a fine investment. See our full page ads. every other issue for detailed discussions. Send business card for 200-page "Handbook of Pipe."

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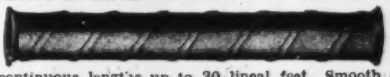
Before *Closing*

STRONG AS THE PLATE ITSELF

LOCK-SEAM SPIRAL PIPE For Low Pressure Service



Made in continuous lengths up to 30 lineal feet. Smooth on inside and true to diameter. We specialize in dredging pipe. We also make welded Spiral-Seam pipe of special analysis hard sheet steel for heavy duty service. Write for particulars.

For By-Products Recovery Pipes, Water Supply Lines, Irrigation, Sluicing and Dredging

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Pipe Specialists for 48 years
Abendroth & Root Mfg. Co.
Works: Newburgh, N. Y.
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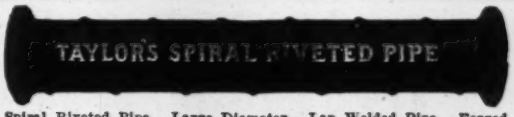

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Sizes 1¼ in. and Up

Standard fittings used. Catalog N.
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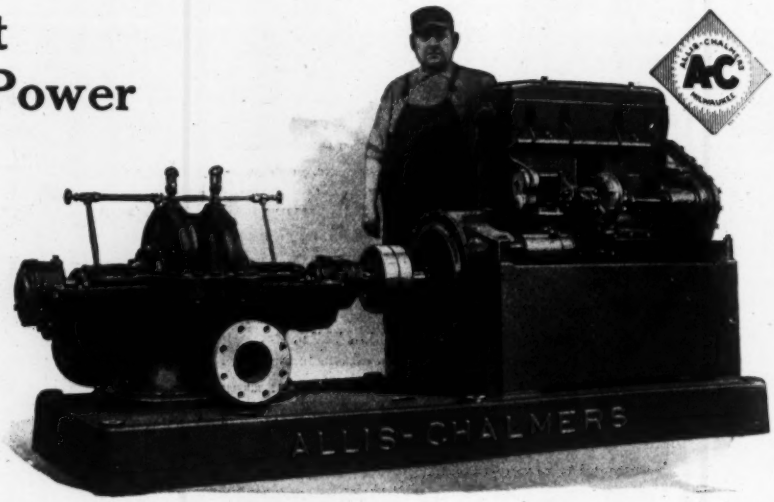

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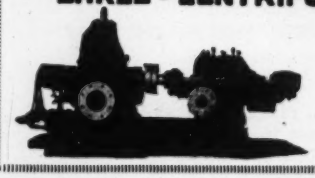

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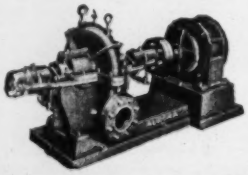

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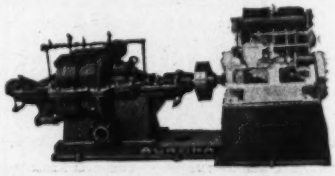

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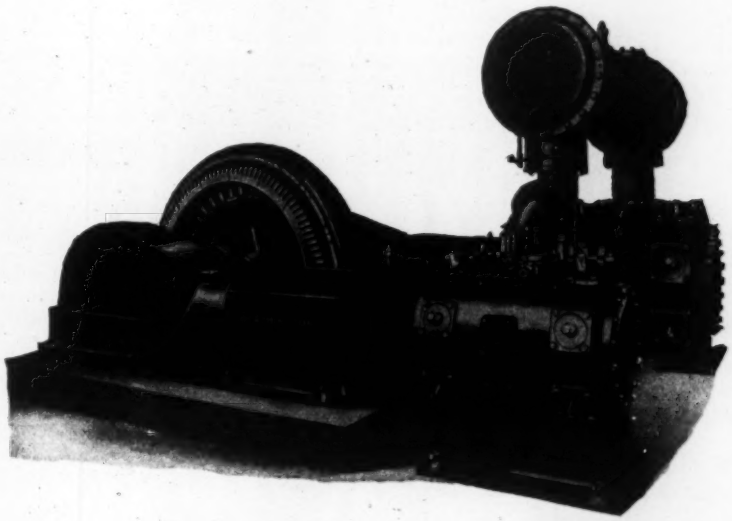

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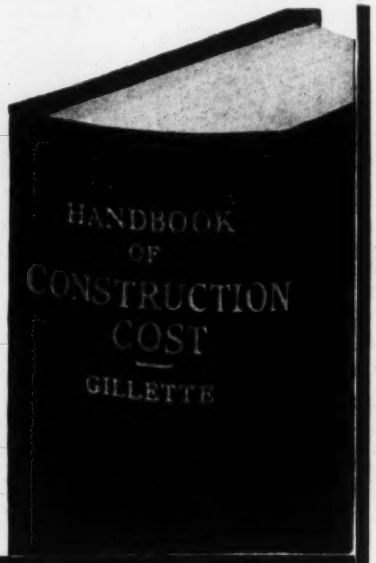

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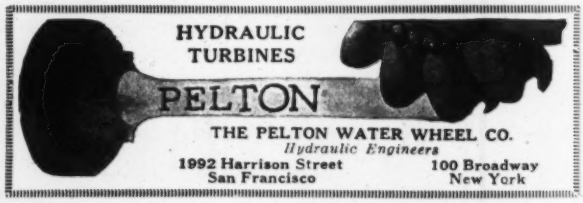

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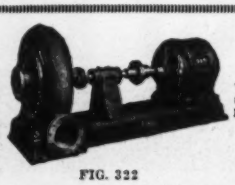

FIG. 322

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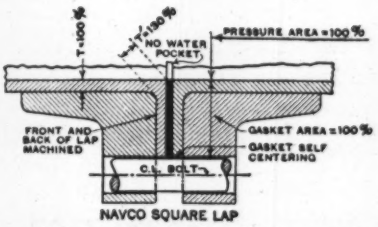

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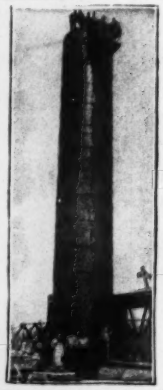

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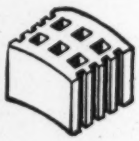

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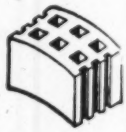

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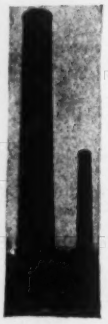

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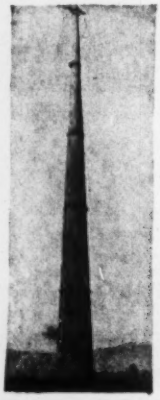

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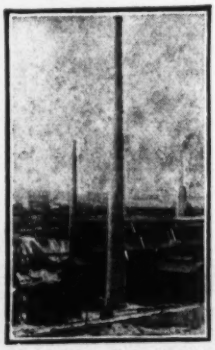

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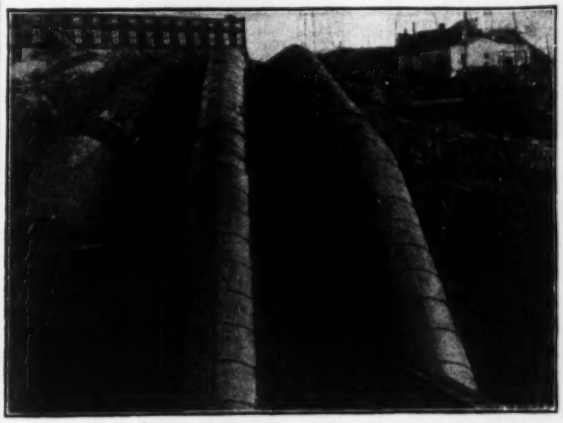

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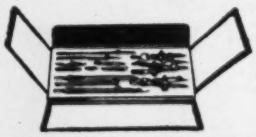

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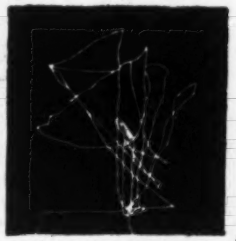

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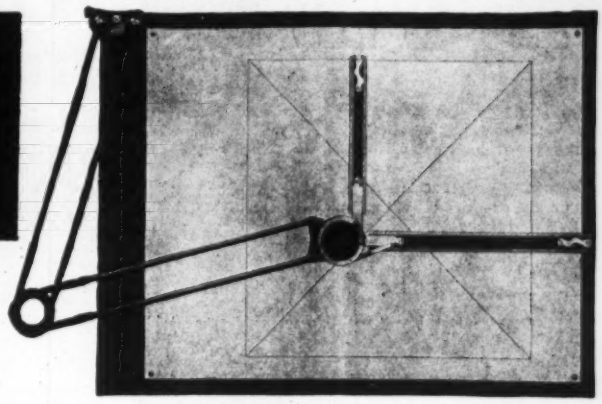

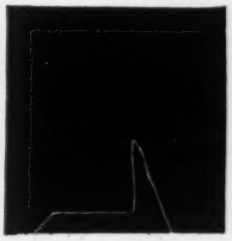

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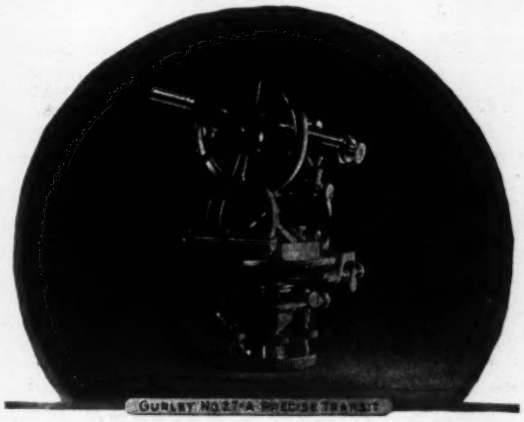

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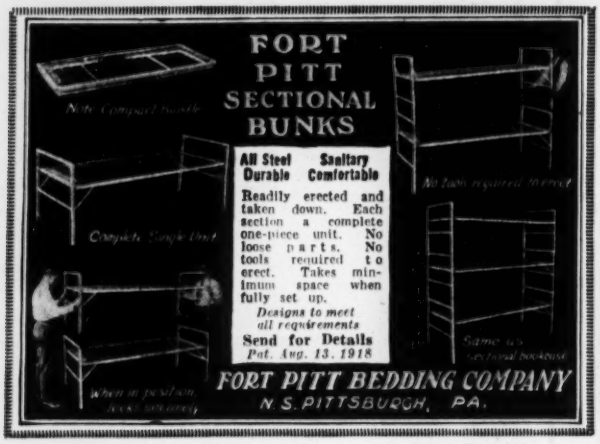

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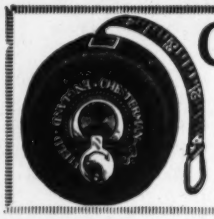

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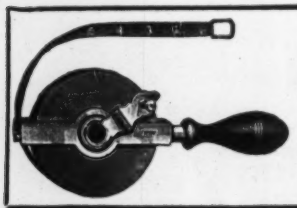

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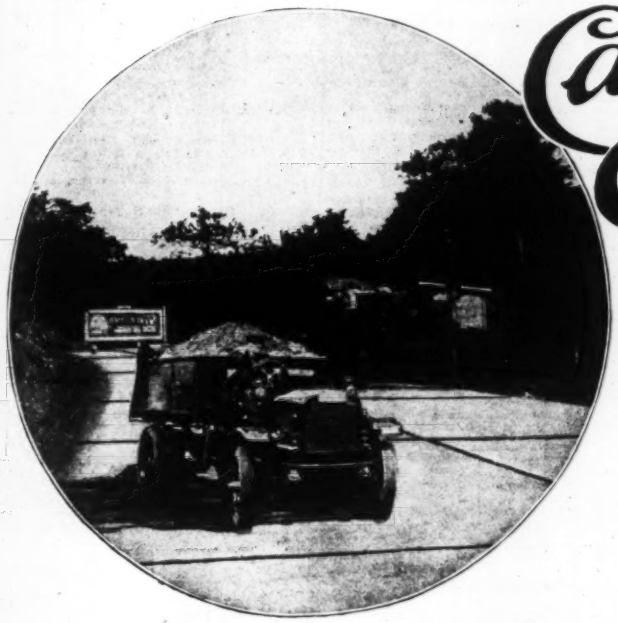

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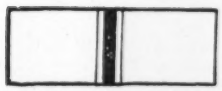

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7-22R

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Engineers and Contractors
Atlantic Gulf & Pacific Co.
Cement-Gun Constr. Co.
Parsons, Klapp, Brinckerhoff & Douglas
Raymond Concrete Pile Co.
Spencer, White & Prentis
Terry & Tench Co., Inc.
Wellman-Seaver-Morgan Co.
(See Directory of Engineers)

Engineers' and Draftsmen's Instruments and Supplies
Beckmann Co., L.
Dietzgen Co., Eugene
Hamilton Mfg. Co.
Gurley, W. & L. E.
Keuffel & Esser Co.
Lufkin Rule Co.
Pease Co., C. F.
White Co., Inc., David
Wiebusch & Hilger, Ltd.

Engines, Gas, Gasoline & Oil
Allis-Chalmers Mfg. Co.
Chicago Pneumatic Tool Co.
Ingersoll-Rand Co.
Worthington Pump & Mchy. Corp.

Engines, High Duty Water-Works
Morris Machine Works

Engines, Hoisting
(See Hoists)

Engines, Steam
Chicago Pneumatic Tool Co.

Engines, Traction
Best Tractor Co., C. L.

Excavator, Cableway
Clyde Iron Works Sales Co.
Lidgerwood Mfg. Co.
Mundy Hoist. Eng. Co., J. S.
Sauerman Bros.

Excavators, Ditch & Trench
Austin Mchy. Corp.
Bay City Dredge Works
Buckeye Traction Ditcher Co.
Erie Steam Shovel Co.
Keystone Driller Co.
Marion Steam Shovel Co.
Moore Trench Mch. Co.
Northwest Engineering Co.
Osgood Company
Parsons Co.
Potter Mfg. Co., The
Thew Shovel Co.

Excavators, Dragline
Austin Machinery Corp.
Bay City Dredge Works
Byers Mach. Co.
Erie Steam Shovel Co.
Hayward Co.
Marion Steam Shovel Co.
McMyler-Interstate Co.
Northwest Engineering Co.
Osgood Company
Sauerman Bros.

Expanded Metal
Berger Mfg. Co.
Consolidated Expanded Metal Cos.
Northwestern Expanded Metal Co.
Truscon Steel Co.

Expansion Bolts
National Lead Co.

Explosives
du Pont de Nemours & Co.

Filters, Water, Municipal and Industrial
Amer. Water Softener Co.
California Filter Co.
International Filter Co.
Roberts Filter Mfg. Co.

Fireproofing Material & Construction
Berger Mfg. Co.
Marks Corp., H. E.
Truscon Steel Co.

Floor, Asphalt Mastic
Standard Oil Co. of N. Y.

Floor Hardener, Concrete
(See Conc. Floor Hardener)

Floor, Wood Block
Barrett Company
Jennison-Wright Co.

Flooring, Fireproof
Irving Iron Works
Marks Corp., H. E.
Universal Safety Tread Co.

Flumes
American Wood Pipe Co.

Flumes, Iron & Steel
Armco Culvert & Flume Mfrs. Assn.
Blaw-Knox Co.
Hardesty Mfg. Co., R.

Forgings
Bethlehem Steel Co.
Carnegie Steel Co.

Form Clamps
Concrete Steel Co.
Insley Mfg. Co.
Pyle-Rogers Co.
Universal Form Clamp Co.

Form Tighteners
Concrete Steel Co.
Marion Malleable Iron Wks.

Forms, Culvert, Road, Sewer, Tunnel, etc.
Blaw-Knox Co.
Foote Concrete Machy. Co.
Heltzel Steel Form & Ir. Co.
Lakewood Engr. Co.
Metal Forms Corp.

Forms for Curb and Gutter
Blaw-Knox Co.
Metal Forms Corp.

Forms for Walls, Building Construction, etc.
Berger Mfg. Co.
Blaw-Knox Co.
Concrete Steel Co.
Heltzel Steel Form & Ir. Co.
Metal Forms Corp.

Foundations
McArthur Concrete Pile & Foundation Co.
New England Fd. Co., Inc.
Raymond Concrete Pile Co.
Spencer, White & Prentis.
Underpinning & Found. Co.

Frogs and Switches, Railway
Bethlehem Steel Co.
Foster Co., L. B.
Ramapo Ajax Corp.

Furnaces, Annealing and Tempering
American Bridge Co.

Garbage Disposal Apparatus
Jeffrey Mfg. Co.

Gas Producers
Blaw-Knox Co.

Gates, Sluice
Chapman Valve Mfg. Co.
Coffin Valve Co.
Coldwell-Wilcox Co.
Hardesty Mfg. Co., R.

Gauges, Loss of Head
Simplex Valve & Meter Co.

Gauges, Rates of Flow
Simplex Valve & Meter Co.

Gears
Earle Gear & Mach. Co.

Generators, Electric
Allis-Chalmers Mfg. Co.
General Electric Co.
Kerr Turbine Co.

Glass, Fireproof
(See Wire Glass)

Governors, Waterwheel
Woodward Governor Co.
Worthington Pump & Machy. Corp.

Graders, Road
Adams & Co., J. D.
Austin Mfg. Co.
Austin-Western Rd.Mchy.Co.
Erie Steam Shovel Co.
Good Roads Mchy. Co.
Koehring Company
Western Wheeled Scraper Co.

Granite
Granite Paving Block Mfrs.'

Graphite
Detroit Graphite Co.

Gratings, Subway
Irving Iron Works
Mitchell-Tappen Co.
Universal Safety Tread Co.

Gravel Washing Plants
Sauerman Bros.

Gypsum
Keystone Gypsum Fireproofing Co.
Marks Corp., H. E.

Hammers, Pneumatic
Chicago Pneumatic Tool Co.

Hammers, Steam Pile
(See Pile Hammers, Steam)

Heaters, Tar & Asphalt
Honhorst Co., The Jos.
Littleford Bros.

Hoists, Concrete Tower
Clyde Iron Wks. Sales Co.
Insley Manufacturing Co.
Lakewood Engr. Co.
National Hoisting Eng. Co.

Hoists, Contractors' Electric
Allis-Chalmers Mfg. Co.
Bay City Dredge Works
Byers Mach. Co.
Clyde Iron Wks. Sales Co.
Dobbie Foundry & Mach.Co.
Lidgerwood Mfg. Co.
Mundy Hoist. Eng. Co., J. S.
National Hoisting Eng. Co.
Porter Co., H. K.
Ransome Concrete Mchy. Co.
Stroudsburg Engine Works
Vulcan Iron Works of Pa.
Yale & Towne Mfg. Co.

Hoists, Contractors' Gasoline
Clyde Iron Wks. Sales Co.
Lidgerwood Mfg. Co.
Mundy Hoist. Eng. Co., J. S.
National Hoisting Eng. Co.
Stroudsburg Engine Works
Van Dorn Iron Works Co.

Hoists, Contractors' Steam
Allis-Chalmers Mfg. Co.
Byers Mach. Co.
Clyde Iron Wks. Sales Co.
Ingersoll-Rand Co.
Lidgerwood Mfg. Co.
Mead-Morrison Mfg. Co.
Mundy Hoist Eng. Co., J. S.
National Hoisting Eng. Co.
Stroudsburg Engine Works
Vulcan Iron Works of Pa.

Hoists, Hydraulic Head Gates
Dilts Machine Wks., Inc.

Hoists, Motor, Truck
Wood Hyd. Hoist & Body Co.

Hoists, Pneumatic
Chicago Pneumatic Tool Co.
Ingersoll-Rand Co.
Stroudsburg Engine Works
Sullivan Machinery Co.

Hoppers, Concrete
Insley Manufacturing Co.
Ransome Concrete Mchy. Co.

Hoppers, Steel
Heltzel Steel Form & Ir. Co.
Honhorst Co., The Jos.

Horses, Steel
Economy Scaffold Co.

Hose, Air
Chicago Pneumatic Tool Co.

Hydrants
Chapman Valve Mfg. Co.
Ludlow Valve Mfg. Co.
Smith Mfg. Co., A. P.
Wood & Co., R. D.

Incinerators
Powers Specialty Co.

Inserts, Concrete
Concrete Steel Co.
Truscon Steel Co.

Inspecting Laboratories
(See Directory of Engineers)

Instruments, Drawing
Keuffel & Esser Co.

Instruments, Surveying
Ainsworth & Sons, Wm.
Berger & Sons, C. L.
Buff & Buff Mfg. Co.
Gurley, W. & L. E.
Keuffel & Esser Co.
Lietz Co., A
White Co., Inc., David

Iron Work, Structural and Ornamental
Hendrick Mfg. Co.
Irving Iron Works
Ryerson & Son, Jos. T.
Snead Architect. Iron Wks.
Universal Safety Tread Co.

Jacks, Lifting
McKiernan-Terry Drill Co.
Norton, Inc., A. O.

Joints, Expansion Paving
Barrett Company
Carey Co., The Philip
Servicized Products Co.
Truscon Steel Co.

Joints, Filler Paving
Barrett Company
Servicised Products Co.
Standard Oil Co. of N. Y.

Joints, Flexible Pipe
Central Foundry Co.
U.S. Cast Ir. Pipe & Fdy. Co.

Kilns, Rotary
Vulcan Iron Works of Pa.

Lamps, Arc & Incandescent
General Electric Co.

Lamps, Flood
General Electric Co.

Lath, Expanded Metal
Armco Culvert & Flume Mfrs. Assn.
Berger Mfg. Co.
Mitchell-Tappen Co.
Northwest'n Exp. Metal Co.
Truscon Steel Co.

Leadite
Leadite Co., Inc., The

Lead Pencils
Koh-I-Noor Pencil Co.

Lights, Contractors'
Carbic Manufacturing Co.
Milburn Co., Alexander

Loaders, Wagon
(See Wagon Loaders)

Locomotives, Compressed Air
Baldwin Locomotive Co.

Locomotives, Electric
Amer. Locomotive Co.
Baldwin Locomotive Co.
General Electric Co.
Jeffrey Mfg. Co.

Locomotives, Gasoline
Baldwin Locomotive Co.
Fate Root Heath Co.
Hadfield-Penfield Steel Co.
Milwaukee Loco. Mfg. Co.
Vulcan Iron Works of Pa.

Locomotives, Steam
Amer. Locomotive Co.
Baldwin Locomotive Co.
Davenport Locomotive Wks.
Vulcan Iron Works of Pa.

Locomotives, Storage Battery
General Electric Co.
Ironton Engine Co.
Jeffrey Mfg. Co.

Lumber
Eppinger & Russell Co.
Lawson & MacMurray

Manhole Covers
Central Foundry Co.

Manometers
Simplex Valve & Meter Co.

Meter Boxes
Pittsburgh Meter Co.

Meter Provers
Hersey Mfg. Co.
Pittsburgh Meter Co.

Meters, Boiler Feed Water
Builders Iron Foundry

Meters, Current
General Electric Co.
Gurley, W. & L. E.

Meters, Gas and Steam
Builders Iron Foundry
General Electric Co.
Wallace & Tiernan Co., Inc.

Meters, Venturi
Builders Iron Foundry

Meters, Water, Oil, etc.
Builders Iron Foundry
Gamon Meter Co.
General Electric Co.
Hersey Mfg. Co
Neptune Meter Co.
Pittsburgh Meter Co.
Simplex Valve & Meter Co.
Worthington Pump & Machy. Corp.

Mixers, Asphalt
(See Mixers, Hot)

Mixers, Concrete
Austin Machinery Corp.
Cement-Gun Co.
Chain Belt Co.
Foote Concrete Mchy. Co
Koehring Company
Lakewood Engineering Co.
Ransome Concrete Mchy Co.

Mixers, Grout
Austin Machinery Corp.
Ransome Concrete Mchy Co.
Union Iron Works

Mixers, Hot
Austin Machinery Corp.
Koehring Company

Mixers, Mortar
Austin Machinery Corp.
Ransome Concrete Mchy Co.

Mixers, Paving
Austin Machinery Corp.
Chain Belt Co.
Construction Mchy. Co.
Foote Concrete Machy. Co.
Koehring Company
Ransome Concrete Mchy. Co.

Mixers, Pneumatic
Ransome Concrete Mchy. Co.

Motors, Electric
Allis-Chalmers Mfg. Co.
General Electric Co.
Westinghouse Tr. Brake Co.

Motor-Truck Bodies
Van Dorn Iron Works Co.
Wood Hyd. Hoist & Body Co.

Motor Trucks
(See Trucks, Motor)

Nitrogen
Linde Air Products Co.

Oxygen
Linde Air Products Co.

Oxy-Acetylene Process
Blaw-Knox Co.
Linde Air Products Co

Packing, Water Pipe
Jenkins Bros.

Paints, Graphite
Detroit Graphite Co.
du Pont de Nemours & Co.
Truscon Laboratories

Paints, Light Reflecting
Cheesman & Elliot Co.
Detroit Graphite Co.
du Pont de Nemours & Co.
Truscon Laboratories

Paints, Metal Protective
Barrett Company
Carey Co., The Philip
Cheesman & Elliot Co.
Detroit Graphite Co.
du Pont de Nemours & Co.
National Lead Co.
Nolene Cmopany, The
Protexol Corp.
Servicised Products Co.
Toch Brothers
Truscon Laboratories

Pavement Breakers
Buckeye Traction Ditcher Co.

Paving, Asphalt
Carey Co., Philip
Standard Oil Co. of N. Y

Paving Blocks, Creosoted Wood
See Creosoted Block Timber Poles, Cross-Arms, Lumber

Paving Blocks, Granite
Granite Paving Block Mfrs.'

Paving Breakers
Ingersoll-Rand Co.

Paving, Cold Patching
Standard Oil Co. of N. Y.

Paving Guards, Steel
Godwin Co., Inc., W. S.
International Steel Tie Co.

Paving Joint Filler
Servicised Products Co.

Penstocks
Blaw-Knox Co.

Pile Drivers
McKiernan-Terry Drill Co.
McMyler Interstate Co.
Union Iron Works

Pile Hammers, Steam
McKiernan-Terry Drill Co.
National Hoisting Eng. Co.
Union Iron Works
Vulcan Iron Works of Chic

Piles, Concrete
MacArthur Concrete Pile & Foundation Co.
New England Fd. Co., Inc.
Raymond Concrete Pile Co.

Piles, Creosoted Wood
Jennison-Wright Co.

Piling, Interlocking Steel
Bethlehem Steel Co.
Carnegie Steel Co.

Pipe, Bends
East Jersey Pipe Co.
National Valve & Mfg. Co.

Pipe, Cast Iron
Amer. Cast Iron Pipe Co.
Central Foundry Co.
Fox & Co., John
Glamorgan Pipe & Fdry. Co.
McWane Cast Iron Pipe Co.
U. S. Cast Ir. Pipe & Fdry. Co.
Warren Fdry. & Pipe Co.
Wood & Co., R. D.

Pipe, Concrete
Lock Joint Pipe Co.

Pipe, Corrugated
Austin-Western Rd.Mch.Co.
Canton Culvert & Silo Co.
Hardesty Mfg. Co., The R.
Newport Culvert Co.

Pipe Covering, Asbestos
Carey Co., The Philip

Pipe Covering, Wood
American Wood Pipe
Michigan Pipe Co.
Standard Wood Pipe Co.
Wyckoff & Son Co., A.

Pipe Fittings
Builders Iron Foundry
Central Foundry Co.
U.S. Cast Ir. Pipe & Fdy. Co.
Westinghouse Tr. Brake Co

Pipe Joint Compounds
Leadite Co., Inc., The

Pipe, Lock Bar
East Jersey Pipe Co.

Pipe, Lock Joint
Lock Joint Pipe Co.

Pipe, Reinforced Concrete
Austin Machinery Corp.

Pipe, Riveted Steel
American Spiral Pipe Wks.
Blaw-Knox Co.
East Jersey Pipe Co.
Hardesty Mfg. Co., The R.
Petroleum Iron Wks. Co.
Tippett & Wood

To do your work *best* at *least* expense

THE du Pont Company manufactures a complete line of explosives to meet every one of the varying requirements of blasting work. Du Pont business is built on the principle of furnishing the explosive to each customer that will do his particular work best at least expense. For example—

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Dumorite will save you money if your work is adapted for it. It runs 135 to 140 sticks to the case as against 100 for "40%" and shoots stick for stick with it under ordinary conditions. Dumorite is non-freezing and non-headache, and is being used successfully in most kinds of blasting operations.

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Plastic and absolutely waterproof, du Pont Gelatin is unequalled for close shooting underground, for hard and tight places and intensive work. Recent improvements have reduced the fumes materially, increasing production time and lowering output costs. Now practically non-freezing.

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Its splendid all-around qualities have made Red Cross the most popular of all high explosives. Used successfully in practically every type of operation. Now manufactured on a new "low freezing" formula—which should be called "non-freezing" as our laboratories have not been able to freeze Red Cross yet at any atmosphere.

Nitroglycerin, ammonia, gelatin and other types of explosives designed to meet every blasting requirement at least expense.

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Explosives Department
Wilmington, Delaware
Du Pont Products Exhibit, Atlantic City, N. J.

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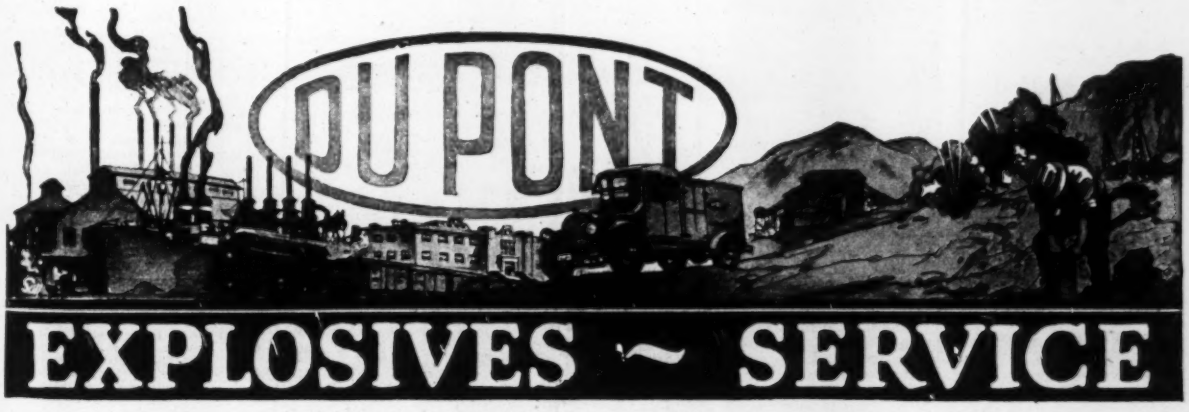
St. Louis, Mo.
Springfield, Ill.
San Francisco, Cal.
Scranton, Pa.
Seattle, Wash.
Spokane, Wash.



Pipe, Sewer
Dickey Clay Mfg. Co.

Pipe Shoes
Marion Malleable Iron Wks.

Pipe, Spiral
Abendroth & Root Mfg. Co.
American Spiral Pipe Wks.
Blaw-Knox Co.
Robertson Bros. Mfg. Co.

Pipe, Tap Welded
American Spiral Pipe Wks.

Pipe, Wood
American Wood Pipe Co.
Continental Pipe Mfg. Co.
Michigan Pipe Co.
Pacific Tank & Pipe Co.
Standard Wood Pipe Co.
Wyckoff & Son Co., A.

Poles, Creosoted Wood
Amer. Creosoting Co. (Ky.)
Colonial Creosoting Co.
Georgia Creosoting Co.

Poles, Steel Structural
Blaw-Knox Co.

Powder
du Pont de Nemours & Co.

Pressed Steel Products
Berger Mfg. Co.
Blaw-Knox Co.
International Steel Tie Co.
Truscon Steel Co.
Van Dorn Iron Works Co.

Pulverizers
Jeffrey Mfg. Co.

Pumps, Air Lift
Chicago Pneumatic Tool Co.
Ingersoll-Rand Co.
Sullivan Machinery Co.
Traylor Engr. & Mfg. Co.

Pumps, Boiler Feed, Steam
Earle Gear & Machine Co.
Ingersoll-Rand Co.

Pumps, Centrifugal and Multi-Stage High Lift
Aurora Pump & Mfg. Co.
Earle Gear & Machine Co.
Erie Pump & Engine Co.
Ingersoll-Rand Co.
Keystone Driller Co.
LeCourtenay Co.
Manistee Iron Works
Morris Machine Works

Pumps, Contractors'
Construction Mchy. Co.
Ingersoll-Rand Co.
Pulsometer Steam Pump Co.

Pumps, Deep Well
Aurora Pump & Mfg. Co.
Cook, A. D.
Keystone Driller Co.

Pumps, Diaphragm
Boston & Lockport Bl. Co.
Manistee Iron Works

Pumps, Dredging and Sand
Erie Pump & Engine Co.
Marion Steam Shovel Co.
Morris Machine Works
Worthington Pump & Machy. Corp.

Pumps, Power
Cook, A. D.
LeCourtenay Co.

Pumps, Turbine
Kerr Turbine Co.

Pumps, Underwriters' Centrifugal
Allis-Chalmers Mfg. Co.
Earle Gear & Machine Co.

Pyrometers
Taylor Instrument Cos.

Rail and Rail Joints, Fastening & Specialties
Carnegie Steel Co.
Foster Co., L. B.
Rail Joint Co.

Railroad Ditchers
Erie Steam Shovel Co.
Marion Steam Shovel Co.

Recorders, Water Stage
Gurley, W. & L. E.

Reinforcing Bar Couplings
Concrete Steel Co.
Marion Malleable Iron Wks.

Reinforcing Concrete
(See Conc. Reinforcement)

Reinforcing Metal for Concrete Work
Amer. Steel & Wire Co.
Berger Mfg. Co.
Concrete Steel Co.
Corrugated Bar Co.
Truscon Steel Co.

River and Harbor Work
Raymond Concrete Pile Co.

Riveting Machines
Allen, John F.
Chicago Pneumatic Tool Co.

Road Finishers, Concrete
Austin Machy. Corp.
Dunn Road Machry. Co.
Koehring Company
Lakewood Engr. Co.

Road Oilers, Pressure
Austin-Western Rd. Mch.Co.

Road Oils & Preservatives
Barrett Company
Standard Oil of N. Y.
Universal Road Machy. Co.

Road Rollers, Gas. & Steam
Austin Mfg. Co.
Austin-Western Rd. Mch.Co.
Buffalo-Springfield Roll. Co.
Good Roads Machy. Co.

Rolls, Crushing
Allis-Chalmers Mfg. Co.
Jeffrey Mfg. Co.

Roofing, Gypsum
Marks Corp., The H. E.

Roofing, Metal
Amer. Sheet & Tin Plate Co.
Berger Mfg. Co.

Roofing, Prepared
Barrett Company
Carey Co., The Philip

Roofing, Tile
Federal Cement Tile Co.
Keystone Gypsum Fireproofing Co.
Truscon Laboratories

Rope, Wire, Transmission Hoisting or Haulage
American Steel & Wire Co.
Leschen & Sons Rope Co.
Roeblings Sons Co., J. A.

Sash Operating Apparatus
Allison Steel Products Co.
Truscon Steel Co.

Sash Steel, Window
(See Window Sash)

Scales, Automatic
Toledo Scale Co.

Schools & Colleges
(See Directory of Engineers)

Scrapers, Scarifiers, Plows
Adams & Co., J. D.
Austin Mfg. Co.
Austin-Western Rd. Mch.Co.
Western Wheeled Scraper Co.

Screens, Revolving
Good Roads Mchy. Co.

Screens, Sand, Gravel and Coal
Austin Mfg. Co.
Austin-Western Rd. Mch.Co.
Chain Belt Co.
Haiss Mfg. Co., Inc., Geo.
Hendrick Mfg. Co.
Link-Belt Co.

Screens, Water Intake
Chain Belt Co.

Searchlights
General Electric Co.

Second-Hand Equipment
See Searchlight Section

Sewage Disinfection
Wallace & Tiernan Co., Inc.

Sewage Disposal Apparatus
Dorr Company, The

Shafting
Ryerson & Son, Joseph T.

Sharpening Mach. Drill Bit
Ingersoll-Rand Co.

Sheaves
Haiss Mfg. Co., Inc., Geo.

Sheets, Iron and Steel
Amer. Sheet & Tin Plate Co.
Armco Culvert & Flume Mfrs. Assn.
Bethlehem Steel Co.
Ryerson & Son, Joseph T.

Sheets, Roofing and Siding
Amer. Sheet & Tin Plate Co.
Armco Culvert & Flume Mfrs. Assn.
Ryerson & Son, Joseph T.

Shelving Steel
Berger Mfg. Co.

Shovels, Electric
Erie Steam Shovel Co.
Keystone Driller Co.
Marion Steam Shovel Co.
Northwest Engineering Co.
Thew Shovel Co.

Shovels, Gasoline
Marion Steam Shovel Co.
Northwest Engineering Co.
Thew Shovel Co.

Shovels, Steam
Erie Steam Shovel Co.
Keystone Driller Co.
Marion Steam Shovel Co.
Osgood Company

Skips, Stone
Insley Manufacturing Co
Thew Shovel Co.

Slabs, Cement Roofing
Federal Cement Tile Co

Slag
Carnegie Steel Co.

Slate, Structural
Structural Slate Co.

Sprinklers and Sweepers Street
Austin Machinery Corp.
Austin Mfg. Co.
Austin-Western Rd. Mch.Co.

Standpipes
Blaw-Knox Co.
Chicago Bridge & Iron Wks.
Pacific Tank & Pipe Co.
Pittsb'gh-Des Moines St. Co.
Tippett & Wood

Steam Specialties
Jenkins Bros.

Steel
Ryerson & Son, Joseph T.

Steel, Curb & Gutter Forms
Heltzel Steel Form & Ir. Co.

Steel Plate Construction
Bethlehem Steel Co.
Blaw-Knox Co
Chicago Bridge Iron Wks.
East Jersey Pipe Co.
Heltzel Steel Form & Tr. Co.
Honhorst Co., The Jos.
Littleford Bros.
Petroleum Iron Wks. Co.
Pittsb'gh-Des Moines St. Co.
Riter-Conley Co.
Union Iron Works
Williams Co., G. H.

Steel, Rock Drill
Ingersoll-Rand Co.

Steel, Structural
American Bridge Co.
Belmont Iron Works
Berlin Construction Co.
Bethlehem Steel Co.
Blaw-Knox Co.
Boston Bridge Works
Carnegie Steel Co.
Eastern Bridge & Struc. Co.
Eichleay Jr. Co., John
Fort Pitt Bridge Works
Kenwood Bridge Co.
McClintic Marshall Co.
Milwaukee Bridge Co.
Minneapolis Steel & Mch. Co.
Miss. Valley Struc. Steel Co.
Morava Construction Co.
Mount Vernon Bridge Co.
Penn Bridge Co. (Pa.)
Phoenix Bridge Co.
Pittsb'gh-Des Moines St. Co.
Riverside Bridge Co.
Shoemaker Bridge Co.
Snare Corp., Frederick
Snead Architect. Iron Wks.
Virginia Bridge & Iron Co.
Wisconsin Bridge & Iron Co.

Steel, Tool
Bethlehem Steel Co.
Carnegie Steel Co.
Ryerson & Son Co., Jos. T.

Stokers
Babcock & Wilcox Co.

Strainers, Well
Cook, A. D.

Subgraders
Lakewood Engr. Co.

Superheaters
Babcock & Wilcox Co.
Power Specialty Co.

Switchboards
General Electric Co.

Tables and Boards, Drawing
Dietzgen Co., Eugene
Economy Drg. Table & Mfg. Co.
Hamilton Mfg. Co.
Pease Co., C. F.
Weber Co., F.

Tanks, Air Compressor
Chicago Pneumatic Tool Co.
East Jersey Pipe Co.
Westinghouse Tr. Brake Co.

Tanks, Elevated Steel
Chicago Bridge & Iron Wks.
Graver Corp.
Littleford Bros.
Petroleum Iron Wks. Co.
Pittsb'gh-Des Moines St. Co.

Tanks, Elevated, Wood
American Wood Pipe Co.
Continental Pipe Mfg. Co.
Pacific Tank & Pipe Co.

Tanks, Oil
American Bridge Co.
Blaw-Knox Co.
Riter-Conley Co.

Tanks, Septic
Dickey Clay Mfg. Co.

Tanks, Welded and Riveted
Hardesty Mfg. Co., The R.

Tapes, Steel and Metallic
Dietzgen Co., Eugene
Hamilton Mfg. Co.
Keuffel & Esser Co.
Lufkin Rule Co.
Wiebusch & Hilger, Ltd.

Tar
Barrett Company

Testing Laboratories
(See Engineers' Directory)

Thermometers
Taylor Instrument Cos.

Ties, Creosoted Wood
Amer. Creosoting Co. (Ky.)
Colonial Creosoting Co.
Georgia Creosoting Co.
Jennison-Wright Co.

Ties, Steel
Carnegie Steel Co.
International Steel Tie Co.

Tile, Concrete Bldg.
Federal Cement Tile Co.
Truscon Laboratories

Tile, Roof Cement
Federal Cement Tile Co.
Truscon Laboratories

Tin Plate
Amer. Sheet & Tin Plate Co.
Bethlehem Steel Co.

Tools, Pneumatic
Chicago Pneumatic Tool Co.
Ingersoll-Rand Co.

Towers, Concrete
(See Hoists, Conc. Tower)

Towers, Radio
Blaw-Knox Co.

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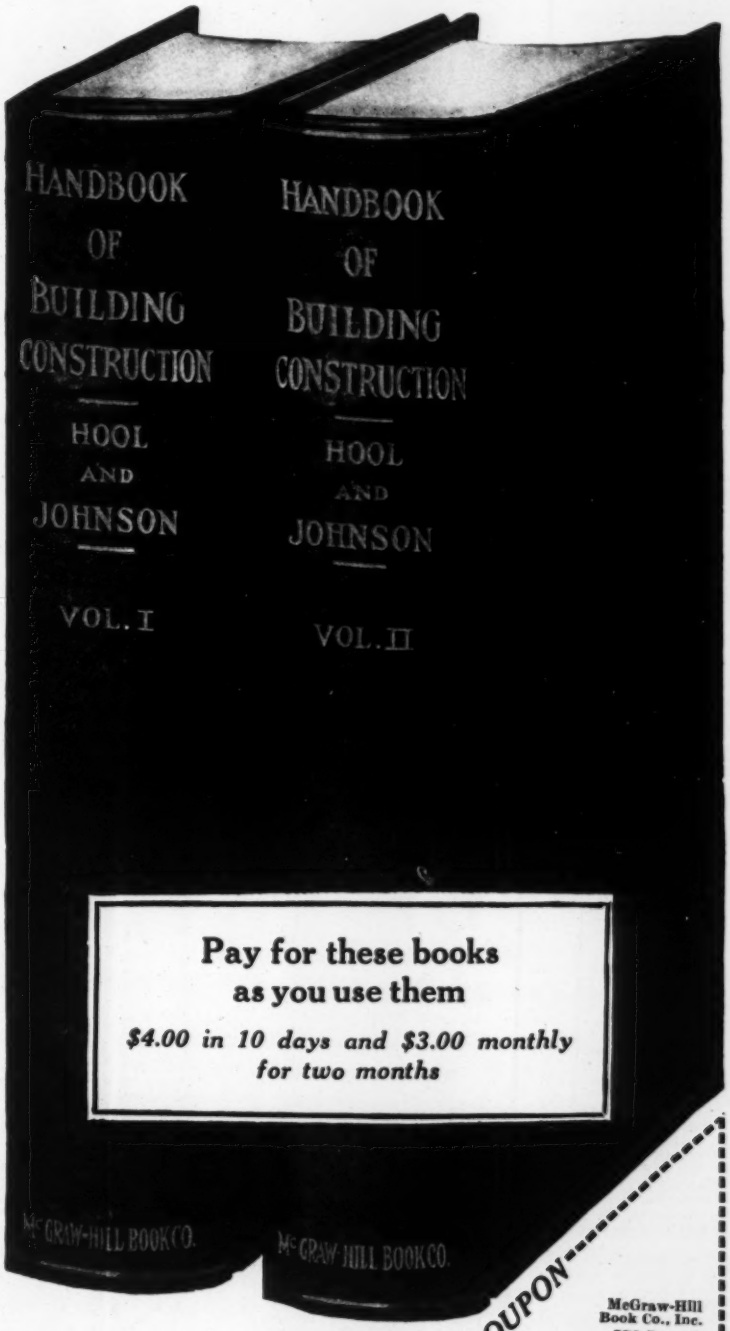

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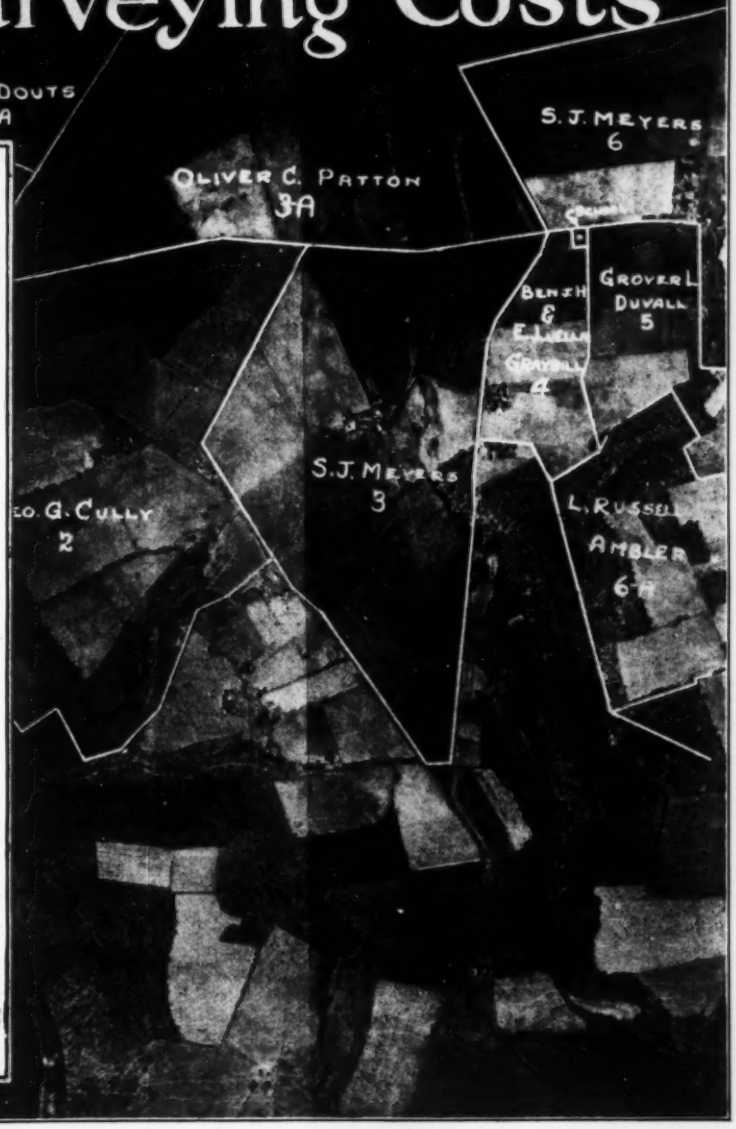

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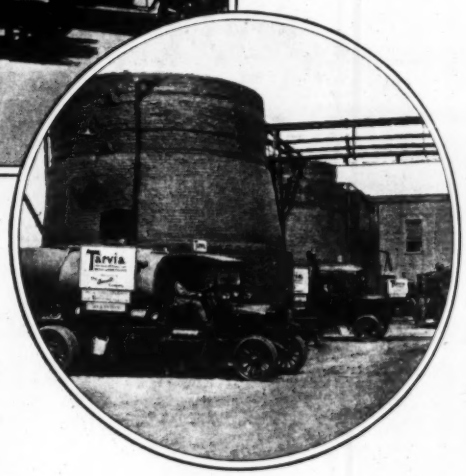

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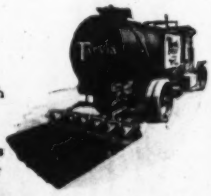

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